APPENDIX A

Field Data

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): IB-56-C Core Sample ID: AAB-173

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
6.0			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	VFS	N	AAB-205	top of core very soft, soupy and disrupted black mottling at 0.3 to 0.5 ft numerous worms and tubes in upper 2 ft
	1					S							
	2											AAB-206	fewer worm tubes below 2 ft
	3												
	4												
	4.6												Section 1/2
													Section 2/2
	5											AAB-207	some settling at top of core
	6											AAB-269	very homogeneous gray clay; few worm tubes
	7												
	8												
14.4	8.4												
	9												

Radioisotope samples:

0-2 cm	AAB-318
10-12 cm	AAB-319
20-22 cm	AAB-320
30-32 cm	AAB-321
40-42 cm	AAB-322
50-52 cm	AAB-323
60-62 cm	AAB-324
70-72 cm	AAB-325
80-82 cm	AAB-326
90-92 cm	AAB-327

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): IB-59-C Core Sample ID: AAB-172

Logged by: P. White Date: 05/23/2001 Page 2 of 22

Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
6.0			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	FS	N	AAB-247	homogeneous gray clay, few worm tubes
	1									VFS			
	2											AAB-248	
	3					S							
	4												Section 1/2 Section 2/2
	5											AAB-249	
	6												
	7				5Y2.5/1 black							AAB-283	
14.0	8												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): PA-40-C Core Sample ID: AAB-184

Logged by: P. White Date: 05/23/2001 Page 3 of 22

Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
3.3	1		N/A	SC	5Y3/1 v. dark gray	VS	N	H	N/A	VCS	N	AAB-244	mixture of sand and clay, subangular sand grains, some black staining, gritty sand with black appearance
	2											AAB-245	rocks and pebbles below 2 ft
	3												chunk of rock at 3 ft
7.3	4												pebbles, clast of Bay mud
	5												samples for hazardous waste characterization: 0-2 ft AAB-244N 2-4 ft AAB-245N
	6												
	7												
	8												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): PA-41-C Core Sample ID: AAB-167

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
12.0			N/A	CL → SC → SW → CL → SW → CL	5Y4/1 dark gray → black → 5Y3/1 v.dk.gray	VS → S	N	H (2 sand layers)	N/A	CS → FS → CS → FS	Fishy N	AAB-196	chunk of gravel in 10-12 cm 1 in black sand angular coarse sand 1 in black sand angular coarse sand
	1												
	2											AAB-197	1.7 - 3.5 ft - broad 2-in bands of lighter and darker dark gray clay clam shell in 42-44 cm interval
	3												
	4												Section 1/2 Section 2/2
	5											AAB-198	
	6												
	7											AAB-266	thin layer of flat, angular rock chips (shaly) Radioisotope samples: 0-2 cm AAB-288 10-12 cm AAB-290 20-22 cm AAB-289 30-32 cm AAB-291 42-44 cm AAB-292 50-52 cm AAB-293 60-62 cm AAB-294 70-72 cm AAB-295 80-82 cm AAB-296 90-92 cm AAB-297
20.0	8												
	9								moved below sandy layer				

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): PA-44-C Core Sample ID: AAB-169

Logged by: P. White Date: 05/22/2001 Page 5 of 22

Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
37.0			N/A	CL	5Y3/1 very dark gray	VS ↓ S	N	H	N/A	MS ↓ VFS	N	AAB-226	sandier clay in upper 6 in uniform silty clay below
	1												
	2											AAB-227	
	3												
	3.5												Section 1/2
													Section 2/2
	4							↓ few sand laminae				AAB-228	uniform silty clay with few fine sand laminae
	5												
	6											AAB-276	
	7												
44.5	7.5												
	8												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): PA-47-C Core Sample ID: AAB-168

Logged by: P. White Date: 05/22/2001 Page 6 of 22

Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
62.0			N/A	CL	5Y3/1 very dark gray (black)	VS S	N	H	N/A	MS Z	N	AAB-223	sandy clay - upper 1 ft; uniform clay below shell fragments in upper 1 ft
	1												1 in black layer with shell fragments
	2											AAB-224	very uniform gray silty clay
	3												
	4												
	4.5												Section 1/2
													Section 2/2
	5											AAB-225	
	6												abundant shell fragments from 5.8 to 6.4 ft
	7											AAB-275	more consolidated with depth but still soft
	8												
70.4	8.4												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): PA-49-C Core Sample ID: AAB-171

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
39.0			N/A	CL	5Y4/1 dark gray	VS	N	H	N/A	FS	N		numerous worm tubes and worms, 0 to 1.2 ft
	1				5Y3/1 very dark gray	S						AAB-232	laminae of fine sand in silty clay
	2												
	3											AAB-233	some black mottling at 3 to 4 ft
	4												Section 1/2
	4.2												Section 2/2
										VFS		AAB-234	no sand laminae from 4.8 to 6.1 ft
	5												laminae to 6.5 ft and 7.1 to 7.8 ft
	6									FS			small pieces of shells in laminae
										VFS		AAB-278	
	7									FS			shell fragment
										VFS			
	8												
47.2	8.2												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): PA-52-C Core Sample ID: AAB-170

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
63.0			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	FS	N		slightly oxidized at top of core; soupy
		λ λ				S				Z		AAB-229	uniform silty clay
	1									FS			few wood fibers and black staining at 0.5 ft
	2											AAB-230	fine sand laminae from 1.5 to 5.7 ft not well developed
	3												
	3.7												Section 1/2
													Section 2/2
	4											AAB-231	
	5									Z			gradational change to homogeneous silty clay
	6											AAB-277	
	7												
70.7	7.7												
	8												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): EW-31-C Core Sample ID: AAB-183

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
3.5			N/A	SC	5Y3/1 very dark gray	S	N	H	N/A	CS	N		sediment in core liner settled 4 in
	1											AAB-238	clayey sand with abundant shell fragments and local shell hash
	2					F							sharp change in consistency from S to F
	3											AAB-239	
	4												Section 1/2 Section 2/2
												AAB-240	sediment settled 3 in at top of Section 2
	5										S		shell hash 4.5 to 4.8 ft
	6											AAB-280	clay content increasing below 6 ft
	7												
	8			CL									sandy silty clay
11.7	8.2												
	9												did not sample radioisotopes as planned because sediment is sandy.

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): EW-36-C Core Sample ID: AAB-190

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
6.0	1 2 3 4 5		N/A	SC SP	5Y3/2 dark olive gray 5Y3/1 v. dk. gray	F	N	H S H	N/A	CS MS FS	N	AAB-262 AAB-263 AAB-264	clayey sand, subangular sand grains and small shell fragments clam shells and fragments abundant finer sand at 1.3 ft crushed shell hash fine sand layers of fine sand and shell hash fine sand with small crushed shell fragments
11.3	5.3 6 7 8 9												Section 1/1 sediment in core settled 5 in of space at top

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): OR-24-C Core Sample ID: AAB-191

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
5.5			N/A	CL	5Y3/1 very dark gray	S	N	H	N/A	VFS	S		
	1											AAB-241	
	2												
	3											AAB-242	gray clay with abundant clam shells and shell fragments
	4												fewer shells below 3.5 ft
	4.8												Section 1/2
	5											AAB-243	Section 2/2
	6									Z			stickier clay than in other areas
	7											AAB-281	shell hash at 7.5 ft
	8												
	9												considered sampling this core for radioisotopes but location is too close to shore
15.3	9.8												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): OR-28-C Core Sample ID: AAB-166

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
7.0			N/A	CL	5Y3/1 dark gray (black)	VS	N	H,M	N/A	VFS	N	AAB-220	black mottling in upper 1 ft
	1					S		H					worms and worm tubes in upper 1 ft 2 in
	2				(black)							AAB-221	band of black coloration at 2.3 to 2.4 ft
	3												clam shell fragments abundant from 3.8 to 5.5 ft
	4												0 to 4.5 ft is Section 1/2
	4.5												Section 1/2 / Section 2/2
	5										Strong S	AAB-222	4.5 to 8.5 ft is Section 2/2
	6												sparse shells below 5.5 ft
	7											AAB-274	
	8												
15.5	8.5												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-01-C Core Sample ID: AAB-188

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
3.5			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	MS	N	AAB-259	black streaking, few pebbles and shell fragments, sandy clay
	1					S					HC		2.5 in layer of black sed. with strong HC odor; chunk of tile in core
	tile				5Y2.5/1						N		
					5Y3/1								
	2				5Y2.5/1					FS	HC		
					5Y3/1 very dark gray						N	AAB-260	5 in black layer with HC odor
	3												silty clay
													worm tubes
													shell hash at 3.5 ft
	4									VFS			abundant clam shells at 4-4.5 ft
	4.5												Section 1/2
													Section 2/2
	5											AAB-261	clam shells and fragments in bottom part of core
	6												
	7											AAB-287	
	8												
	9												
13.0	9.5												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-03-C Core Sample ID: AAB-189

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
3.7			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	FS	N	AAB-208	very mucky in upper 2 ft, some black streaking
	1												
	2					S						AAB-209	clam shells and fragments starting at 2.2 ft
	3									VFS			
	4											AAB-210	
	5										strong S		Section 1/2 Section 2/2
	6											AAB-270	replacement for radioisotopes originally planned for EW-31-C
	7												
	8												Radioisotope samples: 0-2 cm AAB-328 10-12 cm AAB-329 20-22 cm AAB-330 30-32 cm AAB-331 40-42 cm AAB-332 50-52 cm AAB-333 60-62 cm AAB-334 70-72 cm AAB-335 80-82 cm AAB-336 90-92 cm AAB-337
	9												
13.2	9.5												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-06-C Core Sample ID: AAB-182

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
2.5			N/A	CL	5Y3/1 v. dk. gray	VS	N	H	N/A	FS	N	AAB-202	some black streaking in upper 1 ft some worm tubes in upper 3.5 ft
	1					S							
	2											AAB-203	
	3									VFS			layer of shell hash at 3.2 ft shell fragments at 3.5 to 4.3 ft
	4												
	4.5										S		Section 1/2 Section 2/2
	5											AAB-204	sparse worm tubes and shell fragments
	6												
	7											AAB-268	more shell fragments below 7 to 8 ft
	8												Radioisotope samples: 0-2 cm AAB-308 10-12 cm AAB-309 20-22 cm AAB-310 30-32 cm AAB-311 40-42 cm AAB-312 50-52 cm AAB-313 60-62 cm AAB-314 70-72 cm AAB-315 80-82 cm AAB-316 90-92 cm AAB-317
	9												
12.0	9.5												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-07-C Core Sample ID: AAB-181

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
2.0			N/A	CL	5Y3/1 v. dk. gray	VS	N	H	N/A	FS	S	AAB-235	worm tubes and shell fragments in upper 1 ft black mottling locally
	1				5Y2.5/1 black	S							
	2											AAB-236	
					5Y3/1 v. dk. gray								
	3									VFS			worm tubes, layer of shell hash, whole clam shell
	4												numerous shell fragments from 4.0 to 4.8 ft
	4.8											AAB-237	Section 1/2
	5										strong S		Section 2/2
	6												shell fragments
	7											AAB-279	
	8												clam shells and fragments more abundant below 8 ft
	9												
11.3	9.3												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-12-C Core Sample ID: AAB-180

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
3.9			N/A	CL	5Y3/1 v. dk. gray	VS	N	H	N/A	FS	strong S		few worm tubes and shell fragments in upper 1.5 ft
	1				5Y2.5/1 black	S						AAB-199	some black mottling
	2											AAB-200	black with some gray mottling
	3				5Y3/1 v. dk. gray					VFS			concentration of clam shells at 3.8 and 4.2 ft
	4												
	4.3												Section 1/2
													Section 2/2
	5											AAB-201	homogeneous gray clay with shell fragments (clam)
	6												
	7											AAB-267	Radioisotope samples:
	8												0-2 cm AAB-298 10-12 cm AAB-299 20-22 cm AAB-300 30-32 cm AAB-301 40-42 cm AAB-302 50-52 cm AAB-303
	9												60-62 cm AAB-304
13.2	9.3												70-72 cm AAB-305 80-82 cm AAB-306 90-92 cm AAB-307

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-16-C Core Sample ID: AAB-187

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
4.1			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	VFS	N	AAB-256	abundant shells and shell fragments (clam)
	1					S							
	2											AAB-257	
	3												shell hash at 3.5 ft
	4												
	4.7												Section 1/2
													Section 2/2
	5										S	AAB-258	
	6												clam shells and fragments throughout core
	7											AAB-286	
	8												
	9												
13.7	9.7												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-20-C Core Sample ID: AAB-185

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
4.0			N/A	CL	5Y3/1 very dark gray	S	N	H	N/A	FS	S	AAB-250	worms in upper 1 ft numerous worm tubes, few shell fragments
	1												
	2											AAB-251	black from ~ 1.9 to 2.0 ft
	3												
	3.6												Section 1/2
													Section 2/2
	4									VFS		AAB-252	firmer (but still soft) fewer worm tubes more shells and shell fragments
	5												
	6											AAB-284	
	7												hazardous waste samples: 0 to 2 ft AAB-250-N 2 to 4 ft AAB-251-N
11.5	7.5												
	8												
	9												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): SB-22-C Core Sample ID: AAB-186

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
4.2			N/A	CL	5Y3/1 v. dk. gray	VS	N	H	N/A	FS	N	AAB-253	few worm tubes and shell fragments
	1					S							some black streaking
	2				5Y2.5/1 black							AAB-254	
	3												
	4				5Y3/1 v. dk. gray					VFS		AAB-255	clam shell, worm tubes
	5										strong S		Section 1/2 Section 2/2
	6												more clam shells and fragments below 4 ft
	7											AAB-285	concentration of shell fragments at 7.5 ft
	8												
	9												
13.7	9.5												

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Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): YC-68-C Core Sample ID: AAB-192

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Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
1.5			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	FS	N	N/A	few shell fragments in upper 2.2 ft
	1				5Y2.5/1 black	S					HC		worms in upper 1 ft
										MS	N		thin medium sand layer
	2				5Y3/1 very dark gray								clam shell fragments
	3			SC									
										VCS			mixture of shell hash and clayey sand
	4			CL						FS			
5.9	4.4												
	5												Radioisotopes only:
													0-2 cm AAB-338
													10-12 cm AAB-339
													20-22 cm AAB-340
	6												30-32 cm AAB-341
													40-42 cm AAB-342
													50-52 cm AAB-343
													60-62 cm AAB-344
	7												70-72 cm AAB-345
													80-82 cm AAB-346
													90-92 cm AAB-347
	8												
	9												

Battelle
. . . Putting Technology To Work

Survey ID: AAB
Facility Name: Hunters Point Shipyard
Project Title: Parcel F Validation Study

Core Descriptor (Station): YC-69-C Core Sample ID: AAB-193

Logged by: P. White Date: 05/24/2001 Page 22 of 22

Depth below water surface (ft)	Depth below mudline (ft)	Lithology	Dilatancy	Type	Color	Consistency	Cementation	Structure	HCl reaction	Maximum particle size	Odor	Samples	Comments
2.4			N/A	CL	5Y3/1 very dark gray	VS	N	H	N/A	FS	N	N/A	worms
	1				5Y2.5/1 black	S					strong HC		
	2										N		
	3				5Y3/1 very dark gray								clam shells and fragments
6.3	3.9												
	4												Radioisotopes only:
	5												0-2 cm AAB-348
													10-12 cm AAB-349
													20-22 cm AAB-350
													30-32 cm AAB-351
													40-42 cm AAB-352
	6												50-52 cm AAB-353
													60-62 cm AAB-354
													70-72 cm AAB-355
	7												80-82 cm AAB-356
													90-92 cm AAB-357
	8												
	9												

Table A-1. Sediment-Water Interface Core Sampling Information, Hunters Point Shipyard Validation Study

Area	Station ID	Station Coordinates NAD 83/WGS 84 Lat Long (dmm)		SWIC Descriptor	Unique Sample ID -reps	Date Collected	Time Collected[a]	Collection Method[b]	Water Depth (ft)
		Lat (N)	Long (W)						
India Basin									
Area I	IB-54	37º 43.992'	122º 22.154'	IB-54-SWI	AAB-027 -01 thru -06	05/01/01	0900	PC	6.4
Area I	IB-55	37º 43.930'	122º 22.150'	IB-55-SWI	AAB-028 -01 thru -06	05/01/01	1040	PC	3.3
Area I	IB-56	37º 43.961'	122º 22.110'	IB-56-SWI	AAB-029 -01 thru -06	05/01/01	1215	PC	3.2
Area I	IB-57	37º 43.993'	122º 22.069'	IB-57-SWI	AAB-030 -01 thru -06	05/01/01	1258	PC	2.5
Area I	IB-58	37º 43.955'	122º 22.032'	IB-58-SWI	AAB-033 -01 thru -06	05/04/01	0816	PC	6.4
Area I	IB-59	37º 43.934'	122º 22.024'	IB-59-SWI	AAB-034 -01 thru -06	05/04/01	0919	PC	7.0
Point Avisadero									
Area III	PA-38	37º 43.816'	122º 21.676'	PA-38-SWI	AAB-048 -01 thru -06	05/09/01	0840	VG	1.9
Area III	PA-39	37º 43.817'	122º 21.662'	PA-39-SWI	AAB-046 -01 thru -06	05/06/01	1305	VG	8.7
Area III	PA-40	37º 43.836'	122º 21.663'	PA-40-SWI	AAB-047 -01 thru -06	05/08/01	0952	VG	3.3
Area III	PA-41	37º 43.847'	122º 21.643'	PA-41-SWI	AAB-021 -01 thru -06	05/09/01	1148	VG	11
Area III	PA-42	37º 43.877'	122º 21.660'	PA-42-SWI	AAB-015 -01 thru -06	05/06/01	0940	VG	33
Area III	PA-43	37º 43.881'	122º 21.622'	PA-43-SWI	AAB-016 -01 thru -06	05/06/01	1405	VG	38
Area III	PA-44	37º 43.855'	122º 21.587'	PA-44-SWI	AAB-020 -01 thru -06	05/09/01	0829	VG	32
Area III	PA-45	37º 43.831'	122º 21.610'	PA-45-SWI	AAB-044 -01 thru -06	05/04/01	1155	VG	14
Area III	PA-46	37º 43.836'	122º 21.557'	PA-46-SWI	AAB-045 -01 thru -06	05/05/01	1320	VG	47.5
Area III	PA-47	37º 43.831'	122º 21.526'	PA-47-SWI	AAB-018 -01 thru -06	05/07/01	1125	VG	64
Area III	PA-48	37º 43.857'	122º 21.540'	PA-48-SWI	AAB-017 -01 thru -06	05/07/01	0856	VG	47
Area III	PA-49	37º 43.886'	122º 21.569'	PA-49-SWI	AAB-012 -01 thru -06	05/04/01	1124	VG	44
Area III	PA-50	37º 43.906'	122º 21.592'	PA-50-SWI	AAB-011 -01 thru -06	05/04/01	0833	VG	37
Area III	PA-51	37º 43.894'	122º 21.534'	PA-51-SWI	AAB-014 -01 thru -06	05/05/01	1115	VG	52
Area III	PA-52	37º 43.866'	122º 21.503'	PA-52-SWI	AAB-013 -01 thru -06	05/05/01	0918	VG	62
Area III	PA-53	37º 43.836'	122º 21.482'	PA-53-SWI	AAB-019 -01 thru -06	05/08/01	0930	VG	69

Table A-1. Sediment-Water Interface Core Sampling Information, Hunters Point Shipyard Validation Study (continued)

Area	Station ID	Station Coordinates NAD 83/WGS 84 Lat Long (dmm)		SWIC Descriptor	Unique Sample ID -reps	Date Collected	Time Collected[a]	Collection Method[b]	Water Depth (ft)
		Lat (N)	Long (W)						
Eastern Wetland									
Area VIII	EW-30	37º 42.985'	122º 21.990'	EW-30-SWI	AAB-064 -01 thru -06	05/19/01	1142	VG	5.5
Area VIII	EW-31	37º 42.961'	122º 22.016'	EW-31-SWI	AAB-058 -01 thru -06	05/18/01	1026	VG	19
Area VIII	EW-32	37º 42.918'	122º 22.035'	EW-32-SWI	AAB-022 -01 thru -06	05/14/01	1202	VG	8.5
Area VIII	EW-33	37º 42.962'	122º 21.974'	EW-33-SWI	AAB-063 -01 thru -06	05/19/01	0950	VG	6.0
Area VIII	EW-34	37º 42.954'	122º 21.972'	EW-34-SWI	AAB-036 -01 thru -06	05/04/01	1051	PC	8.4
Area VIII	EW-35	37º 42.912'	122º 21.996'	EW-35-SWI	AAB-037 -01 thru -06	05/04/01	1156	PC	11
Area VIII	EW-36	37º 42.945'	122º 21.956'	EW-36-SWI	AAB-062 -01 thru -06	05/19/01	0825	VG	6.5
Area VIII	EW-37	37º 42.905'	122º 21.951'	EW-37-SWI	AAB-038 -01 thru -06	05/04/01	1244	PC	10.2
Oil Reclamation									
Area IX	OR-24	37º 43.122'	122º 22.428'	OR-24-SWI	AAB-065 -01 thru -06	05/21/01	0758	VG	1.6
Area IX	OR-25	37º 43.073'	122º 22.435'	OR-25-SWI	AAB-057 -01 thru -06	05/18/01	0837	VG	7
Area IX	OR-26	37º 43.122'	122º 22.392'	OR-26-SWI	AAB-066 -01 thru -06	05/21/01	0910	VG+PC	3.7
Area IX	OR-27	37º 43.107'	122º 22.403'	OR-27-SWI	AAB-067 -01 thru -06	05/21/01	0958	VG	6.0
Area IX	OR-28	37º 43.069'	122º 22.361'	OR-28-SWI	AAB-023 -01 thru -06	05/15/01	0906	VG	7
Area IX	OR-29	37º 43.100'	122º 22.334'	OR-29-SWI	AAB-068 -01 thru -06	05/21/01	1040	VG+PC	5.0
South Basin									
Area X	SB-01	37º 43.280'	122º 22.891'	SB-01-SWI	AAB-071 -01 thru -06	05/19/01	0900	PC	3
Area X	SB-02	37º 43.276'	122º 22.845'	SB-02-SWI	AAB-072 -01 thru -06	05/19/01	0925	PC	4
Area X	SB-03	37º 43.282'	122º 22.781'	SB-03-SWI	AAB-073 -01 thru -06	05/19/01	0948	PC	5
Area X	SB-04	37º 43.328'	122º 22.757'	SB-04-SWI	AAB-074 -01 thru -06	05/19/01	1016	PC	5
Area X	SB-05	37º 43.329'	122º 22.697'	SB-05-SWI	AAB-052 -01 thru -06	05/15/01	1042	PC+VG	2.1
Area X	SB-06	37º 43.325'	122º 22.651'	SB-06-SWI	AAB-061 -01 thru -06	05/18/01	1114	PC	5.5
Area X	SB-07	37º 43.363'	122º 22.746'	SB-07-SWI	AAB-060 -01 thru -06	05/18/01	1053	PC	4.6
Area X	SB-08	37º 43.363'	122º 22.700'	SB-08-SWI	AAB-056 -01 thru -06	05/18/01	0920	PC	5.6
Area X	SB-09	37º 43.401'	122º 22.729'	SB-09-SWI	AAB-055 -01 thru -06	05/18/01	0855	PC	3.3
Area X	SB-10	37º 43.432'	122º 22.673'	SB-10-SWI	AAB-054 -01 thru -06	05/18/01	0830	PC	3.1
Area X	SB-11	37º 43.410'	122º 22.647'	SB-11-SWI	AAB-050 -01 thru -06	05/15/01	0815	PC	3.5

Table A-1. Sediment-Water Interface Core Sampling Information, Hunters Point Shipyard Validation Study (continued)

Area	Station ID	Station Coordinates NAD 83/WGS 84 Lat Long (dmm)		SWIC Descriptor	Unique Sample ID -reps	Date Collected	Time Collected[a]	Collection Method[b]	Water Depth (ft)
		Lat (N)	Long (W)						
South Basin (continued)									
Area X	SB-12	37º 43.384'	122º 22.649'	SB-12-SWI	AAB-051 -01 thru -06	05/16/01	0925	PC	2.9
Area X	SB-13	37º 43.363'	122º 22.622'	SB-13-SWI	AAB-075 -01 thru -06	05/19/01	1120	PC	5
Area X	SB-14	37º 43.364'	122º 22.638'	SB-14-SWI	AAB-049 -01 thru -06	05/14/01	1110	VG	0.5
Area X	SB-15	37º 43.325'	122º 22.615'	SB-15-SWI	AAB-076 -01 thru -06	05/19/01	1145	PC	5
Area X	SB-16	37º 43.337'	122º 22.581'	SB-16-SWI	AAB-025 -01 thru -06	05/17/01	1245	PC	2
Area X	SB-17	37º 43.293'	122º 22.572'	SB-17-SWI	AAB-059 -01 thru -06	05/18/01	1020	PC	5.5
Area X	SB-18[c]	37º 43.436'	122º 22.628'	SB-18-SWI	AAB-042 -01 thru -06	05/17/01	1150	PC	1
Area X	SB-19[d]	37º 43.420'	122º 22.609'	SB-19-SWI	AAB-077 -01 thru -06	05/21/01	0515	PC	0
Area X	SB-20	37º 43.402'	122º 22.620'	SB-20-SWI	AAB-053 -01 thru -06	05/17/01	1320	PC	1
Area X	SB-21[d]	37º 43.393'	122º 22.596'	SB-21-SWI	AAB-024 -01 thru -06	05/17/01	1120	PC	3
Area X	SB-22	37º 43.378'	122º 22.597'	SB-22-SWI	AAB-026 -01 thru -06	05/17/01	1305	PC	2
Area X	SB-23[d]	37º 43.368'	122º 22.577'	SB-23-SWI	AAB-043 -01 thru -06	05/17/01	1210	PC	2
Reference Sites									
Paradise Cove	PC-63	37º 53.940'	122º 27.823'	PC-63-SWI	AAB-031 -01 thru -06	05/02/01	0901	PC	9.4
Alcatraz Environs	AL-64	various[e]	various	AL-64-SWI	AAB-041 -01 thru -06	05/17/01	0818	Comp	51-76
Red Rock	RR-65	37º 55.001	122º 25.970'	RR-65-SWI	AAB-032 -01 thru -06	05/02/01	0800	Comp	34.1
Alameda Buoy	AB-67	37º 44.845'	122º 19.845'	AB-67-SWI	AAB-040 -01 thru -06	05/06/01	1000	VG	32.9
Bay Farm Borrow Pit	BF-66	various	various	BF-66-SWI	AAB-039 -01 thru -06	05/05/01	1030	VG	29.6-33.4

[a]Time is for earliest replicate collected

[b]SWIC Sampling Methods: VG = from van Veen grab, PC = push cored, comp = composited sediment placed in tubes.

[c]Coordinates are for planned location; sample was collected at stakes set approximately 5-6 m south of planned location (coordinates not recorded at time of sampling).

[d]Coordinates are planned locations; samples were collected at stakes set within 2 m of planned location (coordinates not recorded at time of sampling).

[e]Samples were collected at several locations in the reference site (see Table 3-2, sediment sampling positions)

37º 43.337' 122º 22.582'

Table A-2. Station Coordinates and Sampling Dates for Surface and Subsurface Sediment Grab Samples

Area	Station ID	Actual Sampled Coordinates in NAD 83/WGS 84 Lat Long (dmm)		Collection Date and Time[a]		Collection Method[b]	Water Depth (ft)	Salinity (‰)	Comments
		Lat (N)	Long (W)						
India Basin									
Area I	IB-54	37º 43.994'	122º 22.155'	05/07/01	0900	VG	2.5	30	
Area I	IB-55	37º 43.928'	122º 22.153'	05/07/01	1330	VG	5.5	29	
Area I	IB-56	37º 43.960'	122º 22.109'	05/07/01	0935	VG	3.3	30	
Area I	IB-57	37º 43.993'	122º 22.072'	05/07/01	0847	VG	2.5	28	
Area I	IB-58	37º 43.959'	122º 22.034'	05/07/01	1108	VG	5.8	30	
Area I	IB-59	37º 43.935'	122º 22.023'	05/07/01	1345	VG	7.4	32	Collected field duplicate here.
Point Avisadero									
Area III	PA-38	37º 43.816'	122º 21.676'	05/09/01	0840	VG	1.9	30	Moved 9 m out (NW) from planned location to avoid riprap, rocks.
Area III	PA-39	37º 43.817'	122º 21.662'	05/06/01	1130	VG	8.7	N/A[c]	Moved 19 m out (N) to avoid rocks, riprap, and get into penetrable sediment. Salinity not measured--left station and could not return because of increasing wind. Estimate salinity at 27-28‰ based on other PA stations. Collected field duplicate here.
Area III	PA-40	37º 43.836'	122º 21.663'	05/08/01	1147	VG	3.3	30	Station position moved 35 m N of actual sampled location of PA-39 so that relative positioning is maintained. Collected subsurface sample for TIE here.
Area III	PA-41	37º 43.847'	122º 21.643'	05/09/01	1148	2VG	11	29	Collected subsurface sample for TIE here.
Area III	PA-42	37º 43.877'	122º 21.660'	05/06/01	0940	2VG	33	29	
Area III	PA-43	37º 43.881'	122º 21.622'	05/06/01	1255	2VG	38	29	
Area III	PA-44	37º 43.855'	122º 21.587'	05/09/01	0829	2VG	32	29	

Table A-2. Station Coordinates and Sampling Dates for Surface and Subsurface Sediment Grab Samples (con't)

Area	Station ID	Actual Sampled Coordinates in NAD 83/WGS 84 Lat Long (dmm)		Collection Date and Time[a]		Collection Method[b]	Water Depth (ft)	Salinity (‰)	Comments
		Lat (N)	Long (W)						
Point Avisadero (continued)									
Area III	PA-45	37º 43.831'	122º 21.610'	05/04/01	1155	VG	14	25	Planned position is in riprap, edge of water at a +5 ft tide; moved ~17 m out from planned to avoid riprap & debris. Used SWI 4x4" spatula for sediment collection as had no utensils on board.
Area III	PA-46	37º 43.836'	122º 21.557'	05/05/01	1035	VG	53	28	Repositioned outside westernmost concrete tiedown, 36 m NE of planned position.
Area III	PA-47	37º 43.831'	122º 21.526'	05/07/01	1125	2VG	64	30	Boat moved ~6 m N at 1255 to avoid debris
Area III	PA-48	37º 43.857'	122º 21.540'	05/07/01	0856	2VG	47	26	
Area III	PA-49	37º 43.886'	122º 21.569'	05/04/01	1124	2VG	44	29	
Area III	PA-50	37º 43.907'	122º 21.593'	05/10/01	0924	2VG	33	29	
Area III	PA-51	37º 43.894'	122º 21.534'	05/05/01	1115	2VG	52	29	GPS display failed; borrowed spare from Sea Dog
Area III	PA-52	37º 43.866'	122º 21.503'	05/05/01	0918	2VG	62	29	
Area III	PA-53	37º 43.836'	122º 21.482'	05/08/01	0912	2VG	69	29	
Area III	PA-70	37º 43.813'	122º 21.701'	05/09/01	1325	VG	8.0	30	Difficult to position in strong current. PA-70, 71, 72 will not be exactly on planned location but will be collected at appropriate distance and direction relative to each other.
Area III	PA-71	37º 43.824'	122º 21.698'	05/09/01	1248	VG	8.0	N/A	No overlying water on grab; salinity not measured.
Area III	PA-72	37º 43.844'	122º 21.681'	05/09/01	1210	VG	6.8	30	PA-70, 71, 72 sediment placed in two Teflon bags that were then placed in a plastic tub.

Table A-2. Station Coordinates and Sampling Dates for Surface and Subsurface Sediment Grab Samples (con't)

Area	Station ID	Actual Sampled Coordinates in NAD 83/WGS 84 Lat Long (dmm)		Collection Date and Time[a]		Collection Method[b]	Water Depth (ft)	Salinity (‰)	Comments
		Lat (N)	Long (W)						
Eastern Wetland									
Area VIII	EW-30	37º 42.985'	122º 21.990'	05/19/01	1142	2VG	5.5	29	Sampled 15 m S of planned.
Area VIII	EW-31	37º 42.961'	122º 22.016'	05/18/01	1026	2VG	19	30	
Area VIII	EW-32	37º 42.918'	122º 22.035'	05/14/01	1202	2VG	8.5	30	
Area VIII	EW-33	37º 42.962'	122º 21.974'	05/19/01	0950	2VG	6.0	29	Sampled 19 m SE of planned location to avoid rocks, debris. Lots of brown algae interfering with grab; moved out slightly to avoid. Collected field duplicate here.
Area VIII	EW-34	37º 42.957'	122º 21.974'	05/20/01	0807	2VG	3.9	29	
Area VIII	EW-35	37º 42.911'	122º 21.996'	05/15/01	1046	2VG	7.5	30	
Area VIII	EW-36	37º 42.945'	122º 21.956'	05/19/01	0825	2VG	6.5	29	Sampled 16 m out from planned to avoid debris
Area VIII	EW-37	37º 42.906'	122º 21.954'	05/15/01	1320	VG	7.3	29	
Oil Reclamation									
Area IX	OR-24	37º 43.122'	122º 22.428'	05/21/01	0758	2VG	1.6	29	Position is approximately 15 m E of planned.
Area IX	OR-25	37º 43.073'	122º 22.435'	05/18/01	0837	2VG	7	30	
Area IX	OR-26	37º 43.122'	122º 22.392'	05/21/01	0910	2VG	3.7	30	
Area IX	OR-27	37º 43.107'	122º 22.403'	05/21/01	0953	2VG	6.0	30	Station is 2 m out from planned location.
Area IX	OR-28	37º 43.069'	122º 22.361'	05/15/01	0906	2VG	7	30	
Area IX	OR-29	37º 43.100'	122º 22.334'	05/21/01	1040	2VG	5.0	30	Position is 24 m out from original planned position, which is on gravelly, rocky bar. Actual sampled location is softer but still lumpy and very firm. Collected field duplicate here.

Table A-2. Station Coordinates and Sampling Dates for Surface and Subsurface Sediment Grab Samples (con't)

Area	Station ID	Actual Sampled Coordinates in NAD 83/WGS 84 Lat Long (dmm)		Collection Date and Time[a]		Collection Method[b]	Water Depth (ft)	Salinity (‰)	Comments
		Lat (N)	Long (W)						
South Basin									
Area X	SB-01	37º 43.279'	122º 22.890'	05/22/01	1132	2VG	4.3	31	
Area X	SB-02	37º 43.275'	122º 22.845'	05/22/01	1100	2VG	4.0	30	
Area X	SB-03	37º 43.280'	122º 22.780'	05/22/01	0908	2VG	1.3	29	
Area X	SB-04	37º 43.328'	122º 22.756'	05/22/01	0943	2VG	2.5	28	No overlying water on grab; salinity taken over side of boat.
Area X	SB-05	37º 43.329'	122º 22.697'	05/15/01	1040	VG	2.1	29	
Area X	SB-06	37º 43.325'	122º 22.652'	05/22/01	0835	2VG	1.4	28	
Area X	SB-07	37º 43.365'	122º 22.748'	05/22/01	1016	2VG	2.0	30	No overlying water on grab; salinity taken over side of boat.
Area X	SB-08[d]	37º 43.363'	122º 22.700'	05/20/01	1349	2VG	4.5	29	Sea Dog GPS not working: used coordinates for location staked when doing SWICs on 05/18/01.
Area X	SB-09	37º 43.401'	122º 22.729'	05/18/01	1226	VG	2.0	32	
Area X	SB-10	37º 43.432'	122º 22.673'	05/18/01	1207	VG	2.5	32	
Area X	SB-11	37º 43.410'	122º 22.647'	05/15/01	0815	VG	3.5	29	
Area X	SB-12	37º 43.384'	122º 22.649'	05/15/01	0921	VG	2.9	29	Collected field duplicate here.
Area X	SB-13	37º 43.364'	122º 22.624'	05/20/01	1220	2VG	5.6	29	Sampled at original planned location; did not revise in field as discussed with J. Leather on 05/02/01
Area X	SB-14	37º 43.364'	122º 22.638'	05/14/01	1110	VG	0.5	30	Ran aground and sampled about 27 m NE of planned location.
Area X	SB-15[d]	37º 43.325'	122º 22.615'	05/20/01	1254	2VG	5.5	30	Surface sediment collected at spot marked with stake where SWICs were collected.
Area X	SB-16	37º 43.338'	122º 22.579'	05/20/01	1142	2VG	5.0	29	
Area X	SB-17	37º 43.293'	122º 22.572'	05/18/01	1146	VG	4.2	32	
Area X	SB-18[e]	37º 43.436'	122º 22.628'	05/17/01	1357	H	0	N/A	
Area X	SB-19[f]	37º 43.420'	122º 22.609'	05/17/01	1401	H	0	N/A	
Area X	SB-20	37º 43.402'	122º 22.622'	05/20/01	0912	2VG	3.8	29	Collected subsurface TIE sample here.
Area X	SB-21[f]	37º 43.393'	122º 22.596'	05/17/01	1416	H	0	N/A	

Table A-2. Station Coordinates and Sampling Dates for Surface and Subsurface Sediment Grab Samples (con't)

Area	Station ID	Actual Sampled Coordinates in NAD 83/WGS 84 Lat Long (dmm)		Collection Date and Time[a]		Collection Method[b]	Water Depth (ft)	Salinity (‰)	Comments
		Lat (N)	Long (W)						
South Basin (continued)									
Area X	SB-22	37º 43.377'	122º 22.594'	05/20/01	1036	2VG	4.7	29	
Area X	SB-23[f]	37º 43.368'	122º 22.577'	05/17/01	1353	H	0	N/A	
Reference Sites									
Paradise Cove	PC-63	37º 53.939'	122º 27.820'	05/08/01	1015	SD	9.4	28	
Alcatraz Environs	AL-64-A	37º 49.753'	122º 25.882'	05/17/01	0818	SD	72	32	Composited surface sediment from all Alcatraz Environs stations
Alcatraz Environs	AL-64-D	37º 49.273'	122º 25.880'	05/17/01	0832	SD	76	32	
Alcatraz Environs	AL-64-G	37º 48.830'	122º 25.879'	05/17/01	0845	SD	66	32	
Alcatraz Environs	AL-64-H	37º 48.832'	122º 25.570'	05/17/01	0859	SD	51	32	
Alcatraz Environs	AL-64-I	37º 48.832'	122º 24.902'	05/17/01	0912	SD	56	32	
Alcatraz Environs	AL-64-C	37º 49.755	122º 24.902	05/17/01	0932	SD	68	32	
Red Rock	RR-65	37º 55.001	122º 25.970'	05/02/01	0800	SD	34.1	31	
Bay Farm	BF-66-3	37º 44.340'	122º 16.749'	05/05/01	0930	VG	29.6	28	Composited surface sediment from all Bay Farm stations
Bay Farm	BF-66-4	37º 44.380'	122º 16.600'	05/05/01	~1000	VG	33.4	28	
Bay Farm	BF-66-5	37º 44.500'	122º 16.601'	05/05/01	~1020	VG	31.7	28	
Alameda Buoy	AB-67	37º 44.845'	122º 19.396'	05/06/01	1000	VG	32.9	31	

[a]Time is generally for earliest grab sample collected.
[b]Sediment Sampling Methods: VG = single van Veen grab, 2VG = double van Veen grab, SD = sediment drag or sled, H = by hand
[c]N/A – Not applicable
[d]GPS not working: used coordinates for SB-08 and SB-15 locations staked when collecting SWICs (see Table 3-1).
[e]Coordinates are for planned location; sample was collected at stakes set approximately 5-6 m south of planned location (coordinates not recorded at time of sampling).
[f]Coordinates are planned locations; samples were collected at stakes set within 2 m of planned location (coordinates not recorded at time of sampling).

Table A-3. Bulk Sediment Sample Identifiers, Volume Collected, and Sediment Characteristics

Area	Station ID	Sediment Sample Descriptor	Unique Sample ID	Volume Collected (gal)	Number of Containers	Sediment Characteristics, Comments
India Basin						
Area I	IB-54	IB-54-SS1	AAB-158	8	2	Gray-brown silt/clay; few worms+tubes.
Area I	IB-55	IB-55-SS1	AAB-160	8	2	Brown sand/gravel with silt, black below; Ampelisca amphipods, few worms+tubes.
Area I	IB-56	IB-56-SS1	AAB-159	8	2	Gray-brown silt/clay; few worms+tubes.
Area I	IB-57	IB-57-SS1	AAB-129	8	2	Olive green-gray fine silty mud, anoxic layer obvious at ~5 cm; some worms.
Area I	IB-58	IB-58-SS1	AAB-130	8	2	Olive green-gray fine silty mud, anoxic layer obvious at ~5 cm; some worms.
Area I	IB-59	IB-59-SS1	AAB-161	8	2	Brown sand/silt, black below; tubes+worms and some clams.
Area I	IB-59	IB-59-SS2	AAB-163	2.5	1	Field Duplicate.
Point Avisadero						
Area III	PA-38	PA-38-SS1	AAB-133	15	4	Fine soft gray brown silt/clay.
Area III	PA-39	PA-39-SS1	AAB-128	16	4	Gray-brown medium sand and silt, some rocks; few worms, overall fewer organisms than PA-45, 46
Area III	PA-39	PA-39-SS2	AAB-155	2	1	Field duplicate. Change from light gray to black stiffer silt below 4 cm.
Area III	PA-40	PA-40-SS1	AAB-132	13	3	Consistently fine gray-brown silt/clay; worms+tubes.
Area III	PA-40	PA-40-SS2	AAB-131	7	2	Subsurface TIE sample. Gray to black clayey silt; some black sand noted >10cm.
Area III	PA-41	PA-41-SS1	AAB-092	14	4	Gray silt/clay, few worms & tubes.
Area III	PA-41	PA-41-SS2	AAB-093	8	2	Subsurface TIE sample. Dark gray clay+silt.
Area III	PA-42	PA-42-SS1	AAB-086	8	2	Gray fine sand with silt/clay, some shell hash; small crabs and some worms+tubes. Large chunks of metal and rock.

Table A-3. Bulk Sediment Sample Identifiers, Volume Collected, and Sediment Characteristics (con't)

Area	Station ID	Sediment Sample Descriptor	Unique Sample ID	Volume Collected (gal)	Number of Containers	Sediment Characteristics, Comments
Point Avisadero						
Area III	PA-43	PA-43-SS1	AAB-087	8	2	Gray fine sand with silt/clay; small crabs, fish, and many worms+tubes.
Area III	PA-44	PA-44-SS1	AAB-091	8	2	Gray silt/clay; some worms+tubes, mussels, anemone.
Area III	PA-45	PA-45-SS1	AAB-126	8	2	Gray-brown sand with silt at surface, rocks & pebbles; worm tubes, shells, small sea anemone.
Area III	PA-46	PA-46-SS1	AAB-127	9	3	Dark gray-brown silty sand on top of rockier sand; crab, worms, small sea anemones.
Area III	PA-47	PA-47-SS1	AAB-089	8	2	Gray gravel and sand with rocks, some silt/clay. Worms+tubes, amphipods, crabs observed. Also much various debris (asphalt, glass, metal, plastic, shell casings).
Area III	PA-48	PA-48-SS1	AAB-088	8	2	Gray silt/clay, many worms+tubes, some amphipods and anemones.
Area III	PA-49	PA-49-SS1	AAB-083	8	2	Gray silt/clay; many worms+tubes.
Area III	PA-50	PA-50-SS1	AAB-082	8	2	Gray silt/clay; many worm tubes.
Area III	PA-50	PA-50-SS1	AAB-094	8	2	Resampled for bulk sed only on 05/10/01
Area III	PA-51	PA-51-SS1	AAB-085	8	2	Gray silt/clay; anemone, small crabs, goby
Area III	PA-52	PA-52-SS1	AAB-084	8	2	Gray fine sand with silt/clay; some worms and anemones.
Area III	PA-53	PA-53-SS1	AAB-090	8	2	Gray silt/clay; few worms+tubes.
Area III	PA-70	PA-70-SS1	AAB-137	0.7	1	Soft brown silt; gray below 5 cm. 1-2 worms.
Area III	PA-71	PA-71-SS1	AAB-136	0.7	1	Soft fine gray-brown silt clay. Few worms.
Area III	PA-72	PA-72-SS1	AAB-135	0.7	1	Gray-brown silt/clay; diatom mat on surface.

Table A-3. Bulk Sediment Sample Identifiers, Volume Collected, and Sediment Characteristics (con't)

Area	Station ID	Sediment Sample Descriptor	Unique Sample ID	Volume Collected (gal)	Number of Containers	Sediment Characteristics, Comments
Eastern Wetland						
Area VIII	EW-30	EW-30-SS1	AAB-107	8	2	Coarse gray-brown sand with fine shell hash at surface, black silt lenses at 4-5 cm; very few worms.
Area VIII	EW-31	EW-31-SS1	AAB-104	8	2	Coarse gray sand with black streaks; stringy red algae, skeleton shrimp, pipefish observed.
Area VIII	EW-32	EW-32-SS1	AAB-095	8	2	Gray silt+clay, many worm tubes.
Area VIII	EW-33	EW-33-SS1	AAB-124	12	3	Coarse gray sand with broken shells, black silt; few worms.
Area VIII	EW-33	EW-33-SS2	AAB-106	2	1	Field duplicate
Area VIII	EW-34	EW-34-SS1	AAB-108	8	2	Coarse gray sand with shell hash, some black silt streaks; stringy red algae, worms, few gobies.
Area VIII	EW-35	EW-35-SS1	AAB-097	8	2	Dark gray silt/clay; some small fish, many worm tubes.
Area VIII	EW-36	EW-36-SS1	AAB-105	8	2	Coarse gray sand with shell bits; very few worms.
Area VIII	EW-37	EW-37-SS1	AAB-142	8	2	Med-fine gray sand with silt, slight sulfur/anoxic odor; dark gray to black (anoxic) at 4-5 cm. Few large worms.
Oil Reclamation						
Area IX	OR-24	OR-24-SS1	AAB-125	12	3	Gray-brown med-fine sand with silt; few worms, broken shells.
Area IX	OR-25	OR-25-SS1	AAB-103	8	2	Gray silt/clay with diatom mats, worms+tubes.
Area IX	OR-26	OR-26-SS1	AAB-116	8	2	Gray-brown med-fine sand with soft silt on top; few worms.
Area IX	OR-27	OR-27-SS1	AAB-117	8	2	Fine brown silt over sand; few worms.
Area IX	OR-28	OR-28-SS1	AAB-096	8	2	Gray-brown silt/clay, many worms+tubes.
Area IX	OR-29	OR-29-SS1	AAB-118	8	2	Gray-brown med-fine sand with soft silt on top; few worms, slight sulfur odor.
Area IX	OR-29	OR-29-SS2	AAB-123	2	1	Field duplicate

Table A-3. Bulk Sediment Sample Identifiers, Volume Collected, and Sediment Characteristics (con't)

Area	Station ID	Sediment Sample Descriptor	Unique Sample ID	Volume Collected (gal)	Number of Containers	Sediment Characteristics, Comments
South Basin						
Area X	SB-01	SB-01-SS1	AAB-148	8	2	Dark gray-black silt+clay with sand; many amphipods, opisthobranchs, fewer worms.
Area X	SB-02	SB-02-SS1	AAB-143	8	2	Dark gray-black silt+clay; many amphipods, grassy seaweed, diatom mats.
Area X	SB-03	SB-03-SS1	AAB-122	8	2	Dark gray-black silt+clay; worms, diatom mats, amphipods, goby.
Area X	SB-04	SB-04-SS1	AAB-121	8	2	Dark gray-black silt+clay; worms, diatom mats, amphipods, goby.
Area X	SB-05	SB-05-SS1	AAB-141	8	2	Gray-brown silt/clay; fewer amphipods than shallower stations, few big worms. Subsurface is darker at 5 cm.
Area X	SB-06	SB-06-SS1	AAB-120	8	2	Dark gray-black silt+clay; worms, diatom mats, amphipods, goby, sculpin.
Area X	SB-07	SB-07-SS1	AAB-119	8	2	Dark gray-black silt+clay; worms, diatom mats.
Area X	SB-08	SB-08-SS1	AAB-115	8	2	Gooey gray-dark gray silt/clay; worms, amphipods present.
Area X	SB-09	SB-09-SS1	AAB-145	8	2	Gray-brown med sand with silt/clay; some worms & clams.
Area X	SB-10	SB-10-SS1	AAB-144	8	2	Gray-brown silt, slight H2S odor; some worms & clams.
Area X	SB-11	SB-11-SS1	AAB-139	8	2	Gray-brown silt/clay; many amphipods, few worms.
Area X	SB-12	SB-12-SS1	AAB-154	8	2	Gray-brown silt/clay; many amphipods, few worms.
Area X	SB-12	SB-12-SS2	AAB-140	2	1	Field duplicate.
Area X	SB-13	SB-13-SS1	AAB-113	8	2	Gray to dark gray silt+clay; worms, amphipods.
Area X	SB-14	SB-14-SS1	AAB-138	8	2	Gray-brown silt/clay; amphipods, 1 mussel. No worms visible.

Table A-3. Bulk Sediment Sample Identifiers, Volume Collected, and Sediment Characteristics (con't)

Area	Station ID	Sediment Sample Descriptor	Unique Sample ID	Volume Collected (gal)	Number of Containers	Sediment Characteristics, Comments
South Basin (continued)						
Area X	SB-15	SB-15-SS1	AAB-114	8	2	Dense, gooey dark gray silt/clay; worms, amphipods.
Area X	SB-16	SB-16-SS1	AAB-112	8	2	Gray to dark gray silt+clay; some worms, diatom mats, and amphipods.
Area X	SB-17	SB-17-SS1	AAB-146	8	2	Dark gray to brown silt/clay; polychaetes.
Area X	SB-18	SB-18-SS1	AAB-100	13	3	Gray silt/clay with worms+tubes.
Area X	SB-19	SB-19-SS1	AAB-101	13	3	Gray fine sand with silt/clay.
Area X	SB-20	SB-20-SS1	AAB-109	13	4	Gray to dark gray silt+clay; some worms, diatom mats, and amphipods.
Area X	SB-20	SB-20-SS2	AAB-110	8	2	Subsurface TIE sample.
Area X	SB-21	SB-21-SS1	AAB-102	13	3	Gray fine sand with silt/clay.
Area X	SB-22	SB-22-SS1	AAB-111	13	4	Gray to dark gray silt+clay; some worms, diatom mats, and amphipods.
Area X	SB-23	SB-23-SS1	AAB-099	13	3	Gray sand with shells, metal; some worms present.
Reference Sites						
Paradise Cove	PC-63	PC-63-SS1	AAB-162	20	4	Brown silt; no odor or organisms noted.
Alcatraz Environs	AL-64	AL-64-SS1	AAB-098	12	3	Brown sand w/shells. No organisms noted.
Red Rock	RR-65	RR-65-SS1	AAB-165	13	3	Dark gray-black sand, silt, & clay, some shell hash.
Bay Farm	BF-66	BF-66-SS1	AAB-156	10	3	Dark gray silt; many tubes+worms.
Alameda Buoy	AB-67	AB-67-SS1	AAB-157	12	3	Dark gray sand and silt; tubes+worms.

Table A-4. Vibracore Sampling Information, Hunters Point Shipyard Validation Study

Area	Station ID	Station Coordinates NAD 83/WGS 84 Lat Long (dmm)		Sample ID	Total Core Collected (ft)	Number of Sections	Section Intervals	Date Collected	Time Collected	Water Depth (ft)	Comments
		Lat (N)	Long (W)								
India Basin											
Area I	IB-56	37º 43.960'	122º 22.120'	AAB-173	8.8	2	0-4.8', 4.8-8.8'	05/17/01	0801	6	Core collected as close to planned location as possible. Very rocky bottom.
Area I	IB-59	37º 43.961'	122º 22.023'	AAB-172	8.1	2	0-4.1', 4.1-8.1'	05/17/01	0733	6	Core collected as close to planned location as possible.
Point Avisadero											
Area III	PA-40	37º 43.836'	122º 21.660'	AAB-184	4.1	1	0-4.1'	05/16/01	1353	3.3	Sampled at SS1/SWIC location. Sample is depth of penetration before hitting hard object.
Area III	PA-41	37º 43.845'	122º 21.642'	AAB-167	8.2	2	0-4.2', 4.2-8.2'	05/15/01	1309	12	
Area III	PA-44	37º 43.855'	122º 21.584'	AAB-169	7.5	2	0-4.0', 4.0-7.5'	05/16/01	0935	37	
Area III	PA-47	37º 43.828'	122º 21.526'	AAB-168	8.4	2	0-4.0', 4.0-8.4'	05/16/01	0817	62	
Area III	PA-49	37º 43.890'	122º 21.568'	AAB-171	8.2	2	0-4.0', 4.0-8.2'	05/16/01	1132	39	Worms+tubes in top 12 inches.
Area III	PA-52	37º 43.866'	122º 21.499'	AAB-170	7.7	2	0-4.0', 4.0-7.7'	05/16/01	1048	63	Softer sediment than other Area III cores.

Table A-4. Vibracore Sampling Information, Hunters Point Shipyard Validation Study (con't)

Area	Station ID	Station Coordinates NAD 83/WGS 84 Lat Long (dmm)		Sample ID	Total Core Collected (ft)	Number of Sections	Section Intervals	Date Collected	Time Collected	Water Depth (ft)	Comments
		Lat (N)	Long (W)								
Eastern Wetland											
Area IX	OR-24	37º 43.121'	122º 22.426'	AAB-191	9.8	2	0-4.8', 4.8-9.8'	05/18/01	0931	5.5	Hard gravelly sand; station repositioned 15 m at 260º off original.
Area IX	OR-28	37º 43.069'	122º 22.361'	AAB-166	8.5	2	0-4.5', 4.5-8.5'	05/15/01	0810	7	
Oil Reclamation											
Area VIII	EW-31	37º 42.958'	122º 22.021'	AAB-183	8.9	2	0-4.4', 4.4-8.9'	05/16/01	1252	3.5	Gray sandy material.
Area VIII	EW-36	37º 42.945'	122º 21.953'	AAB-190	5.8	1	0-5.8'	05/18/01	0820	6.0	
South Basin											
Area X	SB-01	37º 43.279'	122º 22.891'	AAB-188	9.5	2	0-4.5', 4.5-9.5'	05/17/01	1040	3.5	
Area X	SB-03	37º 43.283'	122º 22.781'	AAB-189	9.5	2	0-5.0', 5.0-9.5'	05/17/01	1137	3.7	Depth is approximately -0.7 ft MLLW here.
Area X	SB-06	37º 43.324'	122º 22.651'	AAB-182	9.5	2	0-4.5', 4.5-9.5'	05/16/01	1120	2.5	Depth is only -0.2 to -0.3 ft MLLW
Area X	SB-07	37º 43.365'	122º 22.744'	AAB-181	9.3	2	0-4.8', 4.8-9.3'	05/16/01	1042	2.0	
Area X	SB-12	37º 43.383'	122º 22.644'	AAB-180	9.3	2	0-4.3', 4.3-9.3'	05/16/01	1000	3.5	
Area X	SB-16	37º 43.337'	122º 22.582'	AAB-187	9.7	2	0-4.7', 4.7-9.7'	05/17/01	0940	4.1	
Area X	SB-20	37º 43.402'	122º 22.620'	AAB-185	7.6	2	0-3.6', 3.6-7.6'	05/17/01	0800	4.0	Marked Stations 18, 19, 21, 23 after coring at 20.

Table A-4. Vibracore Sampling Information, Hunters Point Shipyard Validation Study (con't)

Area	Station ID	Station Coordinates NAD 83/WGS 84 Lat Long (dmm)		Sample ID	Total Core Collected (ft)	Number of Sections	Section Intervals	Date Collected	Time Collected	Water Depth (ft)	Comments
		Lat (N)	Long (W)								
South Basin (continued)											
Area X	SB- 22	37º 43.378'	122º 22.597'	AAB-186	9.5	2	0-5.0', 5.0-9.5'	05/17/01	0900	4.2	Marked with stake for SS1/SWI sampling.
Yosemite Cr.	YC- 68	37º 43.400'	122º 23.068'	AAB-192	4.4	1	0-4.4'	05/18/01	1037	1.5	Revised location is 170 m upstream of revised YC-69. Center channel, very shallow.
Yosemite Cr.	YC- 69	37º 43.338'	122º 22.978'	AAB-193	3.9	1	0-3.9'	05/18/01	1059	2.4	Coordinates not correct--position plots on SW shore inland of creek. Visually revised YC-69 position to center channel at mouth of creek. Very black soft muck.

Table A-5. Invertebrate Sampling Information, Hunters Point Shipyard Validation Study

Sampling Coordinates NAD 83/WGS 84 Lat Long (dmm)		Invertebrate Sample Descriptor	Sample ID	Description	Approximate Weight (g)	Date Collected	Time Collected[1]	Comments
Lat (N)	Long (W)							
Area I India Basin								
37º 43.935'	122º 22.023'	IB-00-SBI	AAB-368	Polychaetes	75	05/09/01	0855	Collected by hand/shovel, sieved through 5-mm then 1-mm screen. Most worms collected near Station IB-59 (within 15-20 m).
37º 43.935'	122º 22.023'	IB-00-SBI	AAB-370	Polychaetes	220	05/09/01	0855	
37º 43.923'	122º 22.053'	IB-00-HBI	AAB-369	Bivalves	130	05/09/01	0930	Collected by hand/shovel, sieved through 5-mm then 1-mm screen. Most clams were *Macoma nasuta* and *Tapes japonica*.
Area III Point Avisadero								
37º 43.849' 37º 43.849' 37º 43.854' 37º 43.845' 37º 43.855' 37º 43.856' 37º 43.854' 37º 43.856' 37º 43.850' 37º 43.846' 37º 43.862' 37º 43.831' 37º 43.825'	122º 21.660' 122º 21.631' 122º 21.641' 122º 21.622' 122º 21.654' 122º 21.637' 122º 21.645' 122º 21.651' 122º 21.637' 122º 21.649' 122º 21.619' 122º 21.625' 122º 21.672'	PA-00-SBI	AAB-460	Polychaetes	225	06/26/01	0838	Collected by grab/sediment drag sieved through 5-mm then 1-mm mesh; approximately 20-30 g of polychaetes collected at each point. *Nephtys caecoides* found next to outfall along with other larger worms (mostly *Nereis* sp.). No bivalves or signs of bivalves, no shell hash seen in any Area III grabs during invertebrate sampling. No shell hash observed during surface sediment sampling.

Table A-5. Invertebrate Sampling Information, Hunters Point Shipyard Validation Study (con't)

Sampling Coordinates NAD 83/WGS 84 Lat Long (dmm)		Invertebrate Sample Descriptor	Sample ID	Description	Approximate Weight (g)	Date Collected	Time Collected[1]	Comments
Lat (N)	Long (W)							
Area VIII Eastern Wetland								
37º 42.965' 37º 42.912'	122º 22.004' 122º 22.000'	EW-00-SBI	AAB-372	Polychaetes	175	05/15/01	0839	Collected by grab/sediment drag sieved through 5-mm then 1-mm mesh; multiple grabs within 40 m of coordinates.
37º 42.972'	122º 21.990'	EW-00-HBI	AAB-377	Bivalves	2270	05/15/01	1300	Collected by hand/shovel, sieved through 5-mm then 1-mm screen. Collected close to shore.
Area IX Oil Reclamation								
37º 43.112' 37º 43.118'	122º 22.330' 122º 22.330'	OR-00-SBI	AAB-456	Polychaetes	205	06/25/01	1050	Collected at low tide. Numerous plainfin midshipmen (fish) observed under rocks.
37º 43.112' 37º 43.118'	122º 22.330' 122º 22.330'	OR-00-HBI	AAB-458 AAB-459	Bivalves	1400	06/25/01	1050	Collected at low tide.
Area X South Basin								
37º 43.400' 37º 43.379' 37º 43.407'	122º 22.606' 122º 22.583' 122º 22.620'	SB-00-SBI	AAB-453	Polychaetes	>170	06/25/01	0845	Collected worms at low tide from under rocks and around tires.
37º 43.371' 37º 43.396'	122º 22.588' 122º 22.597'	SB-00-HBI	AAB-454 AAB-455	Bivalves	1300	06/25/01	0810	Collected clams at low tide from under rocks and tires between coordinates.

[1] Collection time is earliest time for sample type recorded on invertebrate sampling data sheet.

Table A-6. Forage Fish Sampling Information, Hunters Pont Validation Study

Sampling Method, Event #	Sampling Coordinates NAD 83/WGS 84 Lat Long (dmm)		Date Collected	Time Collected[1]	Comments
	Lat (N)	Long (W)			
Area I India Basin					
Trap 1	37º 43.965'	122º 22.141'	05/10/01	1043	All traps were deployed in India Basin 05/09/01 at 1203; checked at 1306 but no fish in any traps. Traps left overnight to check morning of 05/10/01. Caught one bay pipefish and several shrimp *(Crangon* sp).
Trap 2	37º 43.962'	122º 22.140'	05/10/01	1043	
Trap 3	37º 43.958'	122º 22.138'	05/10/01	1043	
Trap 4	37º 43.959'	122º 22.136'	05/10/01	1043	
Trap 5	37º 43.959'	122º 22.132'	05/10/01	1043	
Trap 6	37º 43.959'	122º 22.132'	05/10/01	1043	
Trap 7	37º 43.957'	122º 22.128'	05/10/01	1043	
Trap 8	37º 43.956'	122º 22.126'	05/10/01	1043	
Trap 9	37º 43.956'	122º 22.126'	05/10/01	1043	
Trap 10	37º 43.950'	122º 22.115'	05/10/01	1043	
Beach Seine 1	37º 43.929'	122º 22.154'	05/11/01	0910	Samples collected within 30 m of coordinates.
Beach Seine 2	37º 43.929'	122º 22.154'	05/11/01	0945	Samples collected within 30 m of coordinates.
Beach Seine 3	37º 43.929'	122º 22.154'	05/11/01	1007	Samples collected within 30 m of coordinates.
Area III Point Avisadero					
Trap 1	37º 43.831'	122º 21.643'	06/28/01	0755	All traps were deployed in Point Avisadero 06/26/01 between 1130 and 1147. Traps were retrieved 06/28/01. One crevice kelpfish in Trap 4 was released. Trap 6 was lost in the strong current and was not recovered.
Trap 2	37º 43.833'	122º 21.642'	06/28/01	0756	
Trap 3	37º 43.831'	122º 21.633'	06/28/01	0758	
Trap 4	37º 43.828'	122º 21.614'	06/28/01	0800	
Trap 5	37º 43.828'	122º 21.613'	06/28/01	0801	
Trap 7	37º 43.825'	122º 21.588'	06/28/01	0803	
Trap 8	37º 43.826'	122º 21.595'	06/28/01	0805	
Trap 9	37º 43.827'	122º 21.609'	06/28/01	0807	
Trap 10	37º 43.827'	122º 21.617'	06/28/01	0808	

Table A-6. Forage Fish Sampling Information, Hunters Pont Validation Study (con't)

Sampling Method, Event #	Sampling Coordinates		Date Collected	Time Collected[1]	Comments
Trawl 1 start	37º 43.828'	122º 21.617'	06/28/01	0824	Trawl 1 approximately 0.8 k in W direction at approximately 12.5 ft maximum depth
Trawl 1 end	37º 43.844'	122º 21.650'	06/28/01	0827	
Trawl 2 start	37º 43.833'	122º 21.613'	06/28/01	0837	Trawl 2 was approximately 0.8 k in W direction at approximately 12 ft maximum depth.
Trawl 2 end	37º 43.842'	122º 21.663'	06/28/01	0840	
Trawl 3 start	37º 43.834'	122º 21.627'	06/28/01	0856	Trawl 3 was approximately 1 k in various directions (net W) at approximately12 ft maximum depth.
Trawl 3 end	37º 43.847'	122º 21.662'	06/28/01	0858	
Area VIII Eastern Wetland					
Beach Seines (multiple)	37º 42.972'	122º 21.990'	05/13/01	1003	Many *Crangon* shrimp in area.
Trawl 1 start	37º 42.905'	122º 22.016'	05/13/01	1010	Trawl 1 was approximately 100 m at 2-3 k in SE direction at approximately 9.4 ft depth.
Trawl 1 end	37º 42.920'	122º 21.959'	05/13/01	1014	
Trawl 2 start	37º 42.919'	122º 22.020'	05/13/01	1034	Trawl 2 was approximately 100 m at 2-3 k in SE direction at approximately 6.4 ft depth.
Trawl 2 end	37º 42.930'	122º 21.954'	05/13/01	1038	
Area IX Oil Reclamation					
Trawl 1 start	37º 43.090'	122º 22.396'	06/27/01	0847	Trawl 1 was approximately 1.3 k in various directions (net E) at approximately 5.5 ft maximum depth.
Trawl 1 end	37º 43.088'	122º 22.343'	06/27/01	0850	
Trawl 2 start	37º 43.077'	122º 22.329'	06/27/01	0857	Trawl 2 was approximately 1.3 k in various directions (net W) at approximately 5.5 ft maximum depth.
Trawl 2 end	37º 43.095'	122º 22.360'	06/27/01	0859	
Trawl 3 start	37º 43.089'	122º 22.321'	06/27/01	0908	Trawl 3 was approximately 1.3 k in various directions (net W) at approximately 5.5 ft maximum depth.
Trawl 3 end	37º 43.097'	122º 22.375'	06/27/01	0911	
Area X South Basin					
Trawl 1 start	37º 43.308'	122º 22.705'	06/27/01	0750	Trawl 1 was approximately 1.3 k in various directions (net NE) at approximately 4.8 ft maximum depth.
Trawl 1 end	37º 43.342'	122º 22.651'	06/27/01	0756	
Trawl 2 start	37º 43.333'	122º 22.648'	06/27/01	0809	Trawl 2 was approximately 1.3 k in various directions (net N) at approximately 4.5 ft maximum depth.
Trawl 2 end	37º 43.365'	122º 22.648'	06/27/01	0812	
Trawl 3 start	37º 43.340'	122º 22.667'	06/27/01	0824	Trawl 3 was approximately 1.3 k in various directions (net N) at approximately 4.5 ft maximum depth.
Trawl 3 end	37º 43.372'	122º 22.654'	06/27/01	0828	

[1] Collection time is time of retrieval for trap or net.

Table A-7. Forage Fish Catch Records, Hunters Point Shipyard Validation Study

Sampling Method, Event #	Species	Size Class (cm)	Number Caught	Approx. Whole Body Weight (g)	Sample Descriptor	Forage Fish Sample ID	Comments
Area I India Basin							
Trap Beach Seine 1	Bay Pipefish	10-20	1	<5	IB- 00 -FF	AAB- 385	
	Shiner surfperch	10-20	1	40	IB- 00 -FF	AAB- 386	
	Dwarf surfperch	5-10	2	20	IB- 00 -FF	AAB- 386	Combined all surfperch
	English sole	5-10	10	50	IB- 00 -FF	AAB- 387	
	English sole	0-5	28	35	IB- 00 -FF	AAB- 388	
	Staghorn sculpin	5-10	10	85	IB- 00 -FF	AAB- 389	
	Cheekspot goby	0-5	12	20	IB- 00 -FF	AAB- 390	
Beach Seine 2	English sole	5-10	8	25	IB- 00 -FF	AAB- 391	
	English sole	0-5	21	35	IB- 00 -FF	AAB- 392	
	Staghorn sculpin	5-10	12	75	IB- 00 -FF	AAB- 393	
	Gobies (cheekspot & bay)	5-10	2	10	IB- 00 -FF	AAB- 394	
	Gobies (cheekspot, arrow, & bay)	0-5	8	<5	IB- 00 -FF	AAB- 394	Combined all gobies
Beach Seine 3	English sole	5-10	22	75	IB- 00 -FF	AAB- 383	
	English sole	0-5	31	30	IB- 00 -FF	AAB- 383	Combined all English sole
	Staghorn sculpin	5-15	16	180	IB- 00 -FF	AAB- 396	
	Gobies (cheekspot, arrow, & bay)	4-6	22	30	IB- 00 -FF	AAB- 397	
	Yellowfin goby	10-20	2	45	IB- 00 -FF	AAB- 384	
	Surfperch (mixed *Embiotocidae)*	5-20	7	225	IB- 00 -FF	AAB- 395	

Table A-7. Forage Fish Catch Records, Hunters Point Shipyard Validation Study (con't)

Sampling Method, Event #	Species	Size Class (cm)	Number Caught	Approx. Whole Body Weight (g)	Sample Descriptor	Forage Fish Sample ID	Comments
Area III Point Avisadero							
Trawls 1, 2, &3 and Traps	Surfperch (mixed *Embiotocidae)*	0-5	25	28	PA- 00 -HSP	AAB- 471	Combined all surfperch
	Surfperch (mixed *Embiotocidae)*	5-10	27	125	PA- 00 -HSP	AAB- 471	
	Shiner surfperch	10-15	3	66	PA- 00 -HSP	AAB- 471	
	English sole, speckled sanddabs	0-5	28	30	PA- 00 -FF	AAB- 470	Combined all flatfish
	English sole, speckled sanddabs	5-10	50	175	PA- 00 -FF	AAB- 470	
	Gobies	0-5	6	5	PA- 00 -FF	AAB- 468	Combined gobies and sculpins <15 cm
	Gobies	5-10	57	187	PA- 00 -FF	AAB- 468	
	Staghorn sculpin	5-10	2	23	PA- 00 -FF	AAB- 468	
	Staghorn sculpin	10-15	2	50	PA- 00 -FF	AAB- 468	
	Staghorn sculpin	21	1	125	PA- 00 -FF	AAB- 467	
	Plainfin midshipman	10-15	2	25	PA- 00 -FF	AAB- 469	
Area VIII Eastern Wetland[a]							
Beach Seines	Shiner surfperch	10-20	4	120	EW- 00 -FF	AAB- 540	Combined all surfperch
	Dwarf surfperch	10-20	1	40	EW- 00 -FF	AAB- 540	
	Topsmelt	5-10	4	30	EW- 00 -FF	AAB- 539	
	Gobies (all arrow)	0-5	4	<5	EW- 00 -FF	AAB- 538	
	Staghorn sculpin	5-10	2	20	EW- 00 -FF	AAB- 537	
Trawls	Gobies (12 bay, 1 arrow)	0-10	13	20	EW- 00 -FF	AAB- 538	
	English sole	0-5	6	12	EW- 00 -FF	AAB- 541	Combined all flatfish <10 cm
	Speckled sanddab	0-10	2	18	EW- 00 -FF	AAB- 541	

Table A-7. Forage Fish Catch Records, Hunters Point Shipyard Validation Study (con't)

Sampling Method, Event #	Species	Size Class (cm)	Number Caught	Approx. Whole Body Weight (g)	Sample Descriptor	Forage Fish Sample ID	Comments
Area IX Oil Reclamation							
Trawls 1,2, & 3	Shiner surfperch	0-5	14	16	OR- 00 -FF	AAB- 464	Combined all surfperch.
	Shiner surfperch	5-10	7	18	OR- 00 -FF	AAB- 464	
	Shiner surfperch	10-15	4	74	OR- 00 -FF	AAB- 464	
	Black surfperch	5-10	2	16	OR- 00 -FF	AAB- 464	
	Staghorn sculpin	5-10	1	6	OR- 00 -FF	AAB- 463	Combined gobies and sculpins
	Staghorn sculpin	10-15	10	186	OR- 00 -FF	AAB- 463	
	Gobies (cheekspot, arrow, & bay)	0-5	6	2	OR- 00 -FF	AAB- 463	
	Chameleon goby	5-10	1	4	OR- 00 -FF	AAB- 457	
Area X South Basin							
Trawls 1,2, & 3	Gobies (cheekspot, arrow, & bay)	0-5	21	11	SB- 00 -FF	AAB- 465	Combined gobies and sculpins
	Staghorn sculpin	5-10	10	94	SB- 00 -FF	AAB- 465	
	Staghorn sculpin	10-15	11	223	SB- 00 -FF	AAB- 465	
	Shiner surfperch	5-10	3	5	SB- 00 -FF	AAB- 466	Combined all surfperch
	Shiner surfperch	10-15	3	60	SB- 00 -FF	AAB- 466	

[a] The Area VIII forage fish composite for analysis includes all species caught. Forage fish composites in all other areas consist of gobies and sculpins only.

Table A-8. Fish Species Encountered during Hunters Point Shipyard Validation Study and Human Health Evaluation Sampling

Common Name	Scientific Name
Bay Goby	*Lepidogobius lepidus*
Arrow Goby	*Clevelandia ios*
Cheekspot Goby	*Ilypnus gilberti*
Yellowfin Goby	*Acanthogobius flavimanus*
Staghorn Sculpin	*Leptocottus armatus*
Cabezon	*Scorpaenichthys marmoratus*
English Sole	*Parophrys vetulus*
Speckled Sanddab	*Citharichthys stigmaeus*
Shiner Surfperch	*Cymatogaster aggregata*
Black Surfperch	*Embiotoca jacksoni*
White Surfperch	*Phanerodon furcatus*
Dwarf Surfperch	*Micrometrus minimus*
Walleye Surfperch	*Hyperprosopon argenteum*
Silver Surfperch	*Hyperprosopon ellipticum*
Jacksmelt	*Atherinopsis califoniensis*
Topsmelt	*Atherinops affinis*
Crevice Kelpfish	*Gibbonsia montereyensis*
Bay Pipefish	*Syngnathus leptorhynchus*
Plainfin Midshipman	*Porichthys notatus*
Chinook (King) Salmon, juvenile	*Oncorhynchus tshawytscha*
Pacific Herring	*Clupea harengus*
Leopard Shark	*Triakis semifasciata*
Pacific Sardine	*Sardinops sagax caeruleus*
Northern Anchovy	*Engraulis mordax*

Table A-9. Fish Sampling Information, Hunters Point Shipyard Human Health Evaluation

Sampling Method, Event #	Sampling Coordinates NAD 83/WGS 84 Lat Long (dmm)		Date Collected	Time Collected	Comments
	Lat (N)	Long (W)			
HPS North (near Point Avisadero)					
Hook & Line 1	37º 43.860'	122º 21.733'	05/12/01	1030-1215	3 fishers using hook &line, baited with pile worms and Nereid worms.
Hook & Line 2	37º 43.894'	122º 21.703'	05/13/01	1100-1350	3 fishers; fished corner of pier among pilings, 3-8 ft depth.
HPS East					
Hook & Line 1	37º 43.446'	122º 21.600'	05/19/01	0900-0937	25 ft depth.
Hook & Line 2	not recorded		05/19/01	0940-1125	22 ft depth
Hook & Line 3	37º 43.105'	122º 21.752'	05/19/01	1130-1145	9 ft depth
Hook & Line 4	37º 43.050'	122º 21.681'	05/19/01	1150-1330	27.5 ft depth
Hook & Line 5	No coordinates recorded; fished eastern region, Areas VI and VII		05/20/01	1145-1245	Targeted croaker & halibut in deeper water (30-40 ft); none caught. Landed & released 7 leopard sharks.
Hunters Point South					
Hook & Line 1	37º 42.875'	122º 21.845'	05/16/01	1000-1030	3 walleye surfperch.
Hook & Line 2	37º 42.895'	122º 21.877'	05/16/01	1030-1255	Caught & released 1 leopard shark, 3 juvenile salmonids (<10 cm); caught but didn't land several bat rays
Hook & Line 3	No coordinates recorded; fished southern region, Areas VIII, IX, and X		05/20/01	0930-1102	Targeted croaker & halibut in shallows and flats (15-25 ft depth); none caught.
Hook & Line 4	No coordinates recorded; fished southern region, Areas VIII, IX, and X		05/20/01	1245-1445	Targeted halibut; trolling/drifting in shallows of South Basin.
Trawl 1 start	37º 43.055'	122º 22.391'	05/20/01	1102	Trawl 1 was approximately 1.5-2 k in NW direction at approximately 8.5 ft depth.
Trawl 1 end	37º 43.124'	122º 22.518'	05/20/01	1112	
Trawl 2 start	37º 42.950'	122º 22.290'	05/20/01	1121	Trawl 2 was approximately 1.5-2 k in NW direction at approximately 8.5-10.5 ft depth. Trawl catches primarily netted juvenile English sole, sculpin, shiner surfperch, shrimp. No target HHE fish in appropriate size range caught in trawls.
Trawl 2 end	37º 43.062'	122º 22.433'	05/20/01	1131	
San Francisco Pier 7 Reference					
Hook & Line 1	37º 48.072'	122º 23.725'	05/21/01	0830-1200	No trawling conducted due to abundant debris and pilings. Fished adjacent piers & pilings but this is only location where fish were caught

Table A-9. Fish Sampling Information, Hunters Point Shipyard Human Health Evaluation (cont'd)

Sampling Method, Event #	Sampling Coordinates NAD 83/WGS 84 Lat Long (dmm)		Date Collected	Time Collected	Comments
	Lat (N)	Long (W)			
Berkeley Pier Reference					
Hook & Line 1	not recorded		05/22/01	0820-0900	One jacksmelt caught. Location is halfway between H&L 2 and H&L 3 along south side of ruined pier.
Hook & Line 2	37º 51.063'	122º 21.034'	05/22/01	0910-1000	Two jacksmelt caught.
Hook & Line 3	37º 51.581'	122º 19.520'	05/22/01	1100-1130	No fish caught at this location.
Hook & Line 4	37º 50.526'	122º 18.633'	05/22/01	1140-1300	Topsmelt caught.
Trawl 1 start	37º 51.002'	122º 20.905'	05/22/01	1010	16' balloon trawl, 1/2" mesh. Trawl 1 1.6 k in E direction, approximately 12.5 ft depth. No surfperch, smelt, or croaker in trawl.
Trawl 1 end	37º 50.981'	122º 20.645'	05/22/01	1020	
Trawl 2 start	37º 50.863'	122º 20.159'	05/22/01	1029	16' balloon trawl, 1/2" mesh. Trawl 2 1.6k to 2k in E direction, approximately 11.7 ft depth. No surfperch, smelt, or croaker in trawl.
Trawl 2 end	37º 50.824'	122º 19.847'	05/22/01	1039	
San Mateo Bridge Reference					
Hook & Line 1	37º 34.755'	122º 15.331'	05/23/01	0815-1015	19 ft depth; caught jacksmelt, topsmelt.
Hook & Line 2	37º 35.508'	122º 14.336'	05/23/01	1030-1200	9.5 ft depth; caught surfperch spp, jacksmelt, chameleon goby
Bay Farm Reference					
Hook & Line 1	37º 43.954'	122º 15.638'	06/13/01	0745-0825	6 ft depth; caught 2 large black surfperch, 4 small topsmelt; caught & released juvenile leopard shark.
Hook & Line 2	37º 43.980'	122º 15.845'	06/13/01	0855-0910	4.5 ft dept; 1 topsmelt only.
Hook & Line 3	37º 44.180'	122º 15.443'	06/13/01	0940-1105	11.5 ft depth, dock off of Bay Farm Island. Rich diversity: jacksmelt and shiner, walleye, and black surfperches

Table A-10. Fish Catch Records, Hunters Point Shipyard Human Health Evaluation

Sampling Method, Event #	Species	Size Class (cm)	Number Caught	Approx. Whole Body Weight (g)	Sample Descriptor[a]	Sample ID	Comments
Hunters Point North							
Hook & Line 1	Jacksmelt	>20	2	430	PA-00-HJS	AAB-413	
Hook & Line 2	Jacksmelt	>20	4	1220	PA-00-HJS	AAB-417	Combined all H&L2 jacksmelt
Hook & Line 2	Jacksmelt	>20	4	780	PA-00-HJS	AAB-417	
Hook & Line 1	Shiner surfperch	10-15	14	360	PA-00-HSP	AAB-415	
Hook & Line 2	Shiner surfperch	>8	24	630	PA-00-HSP	AAB-420	
Hook & Line 1	Black surfperch	18	1	120	PA-00-HOE	AAB-416	Combined all other H&L 1 Embiotocids (surfperch).
Hook & Line 1	Black surfperch	26	1	305	PA-00-HOE	AAB-416	
Hook & Line 1	White surfperch	27	1	275	PA-00-HOE	AAB-416	
Hook & Line 2	Black surfperch	10->20	2	490	PA-00-HOE	AAB-419	Combined all other H&L 2 Embiotocids (surfperch).
Hook & Line 2	Walleye surfperch	10-20	6	540	PA-00-HOE	AAB-419	
Hook & Line 1	Topsmelt	10-20	1	40	PA-00-HTS	AAB-414	
Hook & Line 2	Topsmelt	10-20	2	40	PA-00-HTS	AAB-418	
Hunters Point East							
Hook & Line 2, 4	Jacksmelt	>20	3	750	ER-00-HJS	AAB-426	
Hook & Line 2, 4	Jacksmelt	>20	5	1410	ER-00-HJS	AAB-427	
Hook & Line 2, 4	Jacksmelt	>20	6	1560	ER-00-HJS	AAB-428	
Hook & Line 1, 2	Shiner surfperch	>8	14	380	ER-00-HSP	AAB-432	
Hook & Line 3	Black surfperch	>20	2	820	ER-00-HOE	AAB-429	
Hook & Line 1, 2, 4	Walleye surfperch	>8	18	1420	ER-00-HOE	AAB-430	
Hook & Line 1, 2, 4	Walleye surfperch	>8	15	1130	ER-00-HOE	AAB-431	
Hook & Line 2	Black surfperch	>8	1	140	ER-00-HOE	AAB-431	
Hunters Point South							
Hook & Line 2	Jacksmelt	>20	1	270	EW-00-HJS	AAB-421	
Hook & Line 2	Jacksmelt	>20	1	260	EW-00-HJS	AAB-421	
Hook & Line 2	Jacksmelt	>20	5	1375	EW-00-HJS	AAB-421	Combined all jacksmelt

Table A-10. Fish Catch Records, Hunters Point Shipyard Human Health Evaluation (cont'd)

Sampling Method, Event #	Species	Size Class (cm)	Number Caught	Approx. Whole Body Weight (g)	Sample Descriptor[a]	Sample ID	Comments
Hunters Point South(continued)							
Hook & Line 2	Shiner surfperch	>8	9	220	EW-00-HSP	AAB-423	
Hook & Line 2	Black surfperch	>8	5	795	EW-00-HOE	AAB-422	
Hook & Line 1	Walleye surfperch	>8	3	195	EW-00-HOE	AAB-424	
Hook & Line 2	Staghorn sculpin	>10	1	20	EW-00-HOS	AAB-425	
Hook & Line 2	Topsmelt	10-20	1	30	EW-00-HOS	AAB-425	Combined nontarget species
San Francisco Pier 7 Reference							
Hook & Line 1	Jacksmelt	>20	4	400	SF-00-HJS	AAB-433	
Hook & Line 1	Jacksmelt	>20	14	1615	SF-00-HJS	AAB-433	Combined all jacksmelt
Hook & Line 1	Shiner surfperch	>8	2	40	SF-00-HSP	AAB-435	
Hook & Line 1	Silver surfperch	>8	1	110	SF-00-HOE	AAB-434	
Hook & Line 1	Silver surfperch	>8	1	100	SF-00-HOE	AAB-434	
Hook & Line 1	Silver surfperch	>8	3	390	SF-00-HOE	AAB-434	Combined all other surfperch
Berkeley Pier Reference							
Hook & Line 1, 2	Jacksmelt	>20	3	630	BP-00-HJS	AAB-436	
Hook & Line 4	Topsmelt	>5	22	420	BP-00-HTS	AAB-437	
San Mateo Bridge Reference							
Hook & Line 1, 2	Jacksmelt	>20	17	3250	SM-00-HJS	AAB-440	
Hook & Line 2	Shiner surfperch	>8	1	30	SM-00-HOE	AAB-438	Combined with all black surfperch
Hook & Line 2	Black surfperch	>8	1	100	SM-00-HOE	AAB-438	
Hook & Line 2	Black surfperch	>8	1	170	SM-00-HOE	AAB-438	
Hook & Line 2	Black surfperch	>8	1	120	SM-00-HOE	AAB-438	
Hook & Line 2	Walleye surfperch	>8	4	630	SM-00-HOE	AAB-439	
Hook & Line 1	Topsmelt	>8	4	130	SM-00-HTS	AAB-442	

Table A-10. Fish Catch Records, Hunters Point Shipyard Human Health Evaluation (cont'd)

Sampling Method, Event #	Species	Size Class (cm)	Number Caught	Approx. Whole Body Weight (g)	Sample Descriptor[a]	Sample ID	Comments
Bay Farm Reference							
Hook & Line 3	Jacksmelt	>20	5	920	BF-00 -HJS	AAB-445	
Hook & Line 3	Shiner surfperch	>8	1	20	BF-00 -HSP	AAB-446	
Hook & Line 1, 3	Black surfperch	>8	3	1060	BF-00 -HOE	AAB-443	
Hook & Line 3	Walleye surfperch	>8	1	80	BF-00 -HOE	AAB-447	
Hook & Line 1, 2	Topsmelt	>8	7	120	BF-00 -HTS	AAB-444	

[a]In descriptor, suffix definitions are: HJS=HHE jacksmelt, HSP=HHE shiner surfperch, HTS=HHE topsmelt, HOE=HHE other Embiotocids, HOS=other species.

APPENDIX B

Sediment Chemistry Data

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Table B-1. Grain Size in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Samp_ Type	Lab_ Batch	Percent Gravel	Percent Sand	Percent Silt	Percent Clay	Percent Fines
India Basin Area I	IB-54	SA	AAB-158	SA	82956	0	1.8	53.3	44.9	98.2
India Basin Area I	IB-55	SA	AAB-160	SA	82956	1	17.1	45.5	36.4	81.9
India Basin Area I	IB-56	SA	AAB-159	SA	82956	0	1.8	53.7	44.5	98.2
India Basin Area I	IB-57	SA	AAB-129	SA	82956	0	1	57.7	41.3	99
India Basin Area I	IB-58	SA	AAB-130	SA	82956	0	1.1	56.2	42.7	98.9
India Basin Area I	IB-59	SA	AAB-161	SA	82956	8.4	6.5	43.4	41.7	85.1
Point Avisadero Area III	PA-38	SA	AAB-133	SA	82956	0	3	58	39	97
Point Avisadero Area III	PA-39	SA	AAB-128	SA	82956	0	3.5	61.8	34.7	96.5
Point Avisadero Area III	PA-40	SA	AAB-131	SA	82956	4.7	9.8	45	40.5	85.5
Point Avisadero Area III	PA-40	SA	AAB-132	SA	82956	0	3.6	48	48.4	96.4
Point Avisadero Area III	PA-41	SA	AAB-092	SA	82956	0	20	43.5	36.5	80
Point Avisadero Area III	PA-41	SA	AAB-093	SA	82956	6.2	22.1	38.5	33.2	71.7
Point Avisadero Area III	PA-42	SA	AAB-086	SA	82956	0	29.8	37.8	32.4	70.2
Point Avisadero Area III	PA-43	SA	AAB-087	SA	82956	0	28.5	35.5	36	71.5
Point Avisadero Area III	PA-44	SA	AAB-091	SA	82956	1.6	44.1	26.2	28.1	54.3
Point Avisadero Area III	PA-45	SA	AAB-126	SA	82917	1.1	35.2	38	25.7	63.7
Point Avisadero Area III	PA-46	SA	AAB-127	SA	82956	7.6	33.4	27.8	31.2	59
Point Avisadero Area III	PA-47	SA	AAB-089	SA	82956	1	36.5	29.3	33.2	62.5
Point Avisadero Area III	PA-48	SA	AAB-088	SA	82956	0	32.3	31.1	36.6	67.7
Point Avisadero Area III	PA-49	SA	AAB-083	SA	82917	0	33.2	36	30.8	66.8
Point Avisadero Area III	PA-50	SA	AAB-094	SA	82956	0	21.5	37.4	41.1	78.5
Point Avisadero Area III	PA-51	SA	AAB-085	SA	82956	0	34.9	34	31.1	65.1
Point Avisadero Area III	PA-52	SA	AAB-084	SA	82956	0	30.7	39.7	29.6	69.3
Point Avisadero Area III	PA-53	SA	AAB-090	SA	82956	0	20.8	43	36.2	79.2
Point Avisadero Area III	PA-70	SA	AAB-137	SA	82956	0	1.8	61.1	37.1	98.2
Point Avisadero Area III	PA-71	SA	AAB-136	SA	82956	0	1.1	59.6	39.3	98.9
Point Avisadero Area III	PA-72	SA	AAB-135	SA	82956	0	1.2	53	45.8	98.8
Eastern Wetland Area VIII	EW-30	SA	AAB-107	SA	83164	0	90.1	4.1	5.8	9.9
Eastern Wetland Area VIII	EW-31	SA	AAB-104	SA	83115	0	87	4.5	8.5	13
Eastern Wetland Area VIII	EW-32	SA	AAB-095	SA	83115	0	2.7	39	58.3	97.3
Eastern Wetland Area VIII	EW-33	SA	AAB-124	SA	83164	0	85.6	6.2	8.2	14.4
Eastern Wetland Area VIII	EW-34	SA	AAB-108	SA	83164	0	86.5	5.4	8.1	13.5
Eastern Wetland Area VIII	EW-35	SA	AAB-097	SA	83115	0	2.3	48.5	49.2	97.7
Eastern Wetland Area VIII	EW-36	SA	AAB-105	SA	83164	0	82.4	5.1	12.5	17.6
Eastern Wetland Area VIII	EW-37	SA	AAB-142	SA	83115	0	29.9	27.7	42.4	70.1
Oil Reclamation Area IX	OR-24	SA	AAB-125	SA	83164	0	46.1	20.1	33.8	53.9
Oil Reclamation Area IX	OR-25	SA	AAB-103	SA	83115	0	1.3	50.7	48	98.7
Oil Reclamation Area IX	OR-26	SA	AAB-116	SA	83164	0	8.7	43.9	47.4	91.3
Oil Reclamation Area IX	OR-27	SA	AAB-117	SA	83164	0	11.4	41.1	47.5	88.6
Oil Reclamation Area IX	OR-28	SA	AAB-096	SA	83115	0	2.2	50.9	46.9	97.8
Oil Reclamation Area IX	OR-29	SA	AAB-118	SA	83164	2.7	42.7	16	38.6	54.6
South Basin Area X	SB-01	SA	AAB-148	SA	83164	0	35.7	32.6	31.7	64.3
South Basin Area X	SB-02	SA	AAB-143	SA	83164	0	11.5	42	46.5	88.5
South Basin Area X	SB-03	SA	AAB-122	SA	83164	0	0.4	41.8	57.8	99.6
South Basin Area X	SB-04	SA	AAB-121	SA	83164	0	0.4	43	56.6	99.6
South Basin Area X	SB-05	SA	AAB-141	SA	83115	0	1.4	50.2	48.4	98.6
South Basin Area X	SB-06	SA	AAB-120	SA	83164	0	0.6	40.5	58.9	99.4
South Basin Area X	SB-07	SA	AAB-119	SA	83164	0	6.3	47.7	46	93.7
South Basin Area X	SB-08	SA	AAB-115	SA	83164	0	1.3	52.4	46.3	98.7
South Basin Area X	SB-09	SA	AAB-145	SA	83115	0	59.3	20.6	20.1	40.7
South Basin Area X	SB-10	SA	AAB-144	SA	83115	0	31.1	45.1	23.8	68.9
South Basin Area X	SB-11	SA	AAB-139	SA	83115	0	4.9	51.9	43.2	95.1
South Basin Area X	SB-12	SA	AAB-154	SA	83115	0	2.8	50	47.2	97.2
South Basin Area X	SB-13	SA	AAB-113	SA	83164	0	2.9	49.7	47.4	97.1
South Basin Area X	SB-14	SA	AAB-138	SA	83115	0	2.6	46.5	50.9	97.4
South Basin Area X	SB-15	SA	AAB-114	SA	83164	0	1.1	51.9	47	98.9

Table B-1. Grain Size in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Samp_ Type	Lab_ Batch	Percent Gravel	Percent Sand	Percent Silt	Percent Clay	Percent Fines
South Basin Area X	SB-16	SA	AAB-112	SA	83164	0	52.6	27.8	19.6	47.4
South Basin Area X	SB-17	SA	AAB-146	SA	83115	0	16.7	48.1	35.2	83.3
South Basin Area X	SB-18	SA	AAB-100	SA	83115	0	84.2	10.1	5.7	15.8
South Basin Area X	SB-19	SA	AAB-101	SA	83115	3.6	87.8	2.5	6.1	8.6
South Basin Area X	SB-20	SA	AAB-109	SA	83164	0	7.3	51	41.7	92.7
South Basin Area X	SB-20	SA	AAB-110	SA	83164	0	7.3	50.5	42.2	92.7
South Basin Area X	SB-21	SA	AAB-102	SA	83115	0.3	71.5	15.9	12.3	28.2
South Basin Area X	SB-22	SA	AAB-111	SA	83164	0	12.6	54.2	33.2	87.4
South Basin Area X	SB-23	SA	AAB-099	SA	83115	0	80.8	8.3	10.9	19.2
Alameda Buoy	AB-67	SA	AAB-157	SA	82956	0	22.9	33.8	43.3	77.1
Alcatraz Environs	AL-64	SA	AAB-098	SA	83115	0.6	96.6	1	1.8	2.8
Bay Farm Borrow Pit	BF-66	SA	AAB-156	SA	82956	0	0.3	33.1	66.6	99.7
Paradise Cove	PC-63	SA	AAB-162	SA	82956	0	1.7	59.5	38.8	98.3
Red Rock	RR-65	SA	AAB-165	SA	82917	0	79.7	8.6	11.7	20.3

Table B-2. Total Organic Carbon in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Total Organic Carbon in Sediment (mg/kg dry weight) Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	G1E150196	11600		
India Basin Area I	IB-55	SA	AAB-160	G1E150196	12900		
India Basin Area I	IB-56	SA	AAB-159	G1E150196	9640		
India Basin Area I	IB-57	SA	AAB-129	G1E150196	10500		
India Basin Area I	IB-58	SA	AAB-130	G1E150196	10700		
India Basin Area I	IB-59	SA	AAB-161	G1E150196	14100		
Point Avisadero Area III	PA-38	SA	AAB-133	G1E150196	11000		J
Point Avisadero Area III	PA-39	SA	AAB-128	G1E150196	8770		
Point Avisadero Area III	PA-40	SA	AAB-132	G1E150196	11300		J
Point Avisadero Area III	PA-41	SA	AAB-092	G1E150196	11200		J
Point Avisadero Area III	PA-42	SA	AAB-086	G1E150196	9430		
Point Avisadero Area III	PA-43	SA	AAB-087	G1E150196	9180		
Point Avisadero Area III	PA-44	SA	AAB-091	G1E150196	8430		J
Point Avisadero Area III	PA-45	SA	AAB-126	G1E110302	7770		
Point Avisadero Area III	PA-46	SA	AAB-127	G1E150196	10400		
Point Avisadero Area III	PA-47	SA	AAB-089	G1E150196	11100		
Point Avisadero Area III	PA-48	SA	AAB-088	G1E150196	9010		
Point Avisadero Area III	PA-49	SA	AAB-083	G1E110302	8160		
Point Avisadero Area III	PA-50	SA	AAB-094	G1E150196	11900		J
Point Avisadero Area III	PA-51	SA	AAB-085	G1E150196	9500		
Point Avisadero Area III	PA-52	SA	AAB-084	G1E150196	8810		
Point Avisadero Area III	PA-53	SA	AAB-090	G1E150196	11400		J
Point Avisadero Area III	PA-70	SA	AAB-137	G1E150196	11100		J
Point Avisadero Area III	PA-71	SA	AAB-136	G1E150196	10700		J
Point Avisadero Area III	PA-72	SA	AAB-135	G1E150196	12500		J
Eastern Wetland Area VIII	EW-30	SA	AAB-107	G1E300233	2030		J
Eastern Wetland Area VIII	EW-31	SA	AAB-104	G1E240181	3320		
Eastern Wetland Area VIII	EW-32	SA	AAB-095	G1E240181	12800		
Eastern Wetland Area VIII	EW-33	SA	AAB-124	G1E300233	8940		J
Eastern Wetland Area VIII	EW-34	SA	AAB-108	G1E300233	8450		J
Eastern Wetland Area VIII	EW-35	SA	AAB-097	G1E240181	12100		
Eastern Wetland Area VIII	EW-36	SA	AAB-105	G1E300233	6340		J
Eastern Wetland Area VIII	EW-37	SA	AAB-142	G1E240181	10400		
Oil Reclamation Area IX	OR-24	SA	AAB-125	G1E300233	17500		J
Oil Reclamation Area IX	OR-25	SA	AAB-103	G1E240181	11900		
Oil Reclamation Area IX	OR-26	SA	AAB-116	G1E300233	14300		J
Oil Reclamation Area IX	OR-27	SA	AAB-117	G1E300233	13000		J
Oil Reclamation Area IX	OR-28	SA	AAB-096	G1E240181	13200		
Oil Reclamation Area IX	OR-29	SA	AAB-118	G1E300233	24600		J
South Basin Area X	SB-01	SA	AAB-148	G1E300233	13500		J
South Basin Area X	SB-02	SA	AAB-143	G1E300233	15300		J
South Basin Area X	SB-03	SA	AAB-122	G1E300233	18700		J
South Basin Area X	SB-04	SA	AAB-121	G1E300233	15600		J
South Basin Area X	SB-05	SA	AAB-141	G1E240181	15200		
South Basin Area X	SB-06	SA	AAB-120	G1E300233	16400		J
South Basin Area X	SB-07	SA	AAB-119	G1E300233	13800		J
South Basin Area X	SB-08	SA	AAB-115	G1E300233	15900		J
South Basin Area X	SB-09	SA	AAB-145	G1E240181	7860		
South Basin Area X	SB-10	SA	AAB-144	G1E240181	11100		
South Basin Area X	SB-11	SA	AAB-139	G1E240181	17000		
South Basin Area X	SB-12	SA	AAB-154	G1E240181	16800		
South Basin Area X	SB-13	SA	AAB-113	G1E300233	15800		J
South Basin Area X	SB-14	SA	AAB-138	G1E240181	15200		
South Basin Area X	SB-15	SA	AAB-114	G1E300233	15700		J

Table B-2. Total Organic Carbon in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Total Organic Carbon in Sediment (mg/kg dry weight)		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
South Basin Area X	SB-16	SA	AAB-112	G1E300233	13600		J
South Basin Area X	SB-17	SA	AAB-146	G1E240181	12600		
South Basin Area X	SB-18	SA	AAB-100	G1E240181	4340		
South Basin Area X	SB-19	SA	AAB-101	G1E240181	3260		
South Basin Area X	SB-20	SA	AAB-109	G1E300233	16300		J
South Basin Area X	SB-21	SA	AAB-102	G1E240181	6890		
South Basin Area X	SB-22	SA	AAB-111	G1E300233	17000		J
South Basin Area X	SB-23	SA	AAB-099	G1E240181	6960		
Alameda Buoy	AB-67	SA	AAB-157	G1E150196	8880		
Alcatraz Environs	AL-64	SA	AAB-098	G1E240181	650		
Bay Farm Borrow Pit	BF-66	SA	AAB-156	G1E150196	14700		
Paradise Cove	PC-63	SA	AAB-162	G1E150196	9950		J
Red Rock	RR-65	SA	AAB-165	G1E110302	3720		

J Estimated value.

Table B-3. Metals in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Metals in Sediment (mg/kg dry weight)																															
					Ag			Al			As			Ba			Cd			Co			Cr			Cu			Fe			Hg		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	SDG 2	0.291			72500			9.69			459			0.218	J	J	15.5			163			45.3		J	42600			0.241		
India Basin Area I	IB-55	SA	AAB-160	SDG 2	0.286			63500			10.3			533			0.264	J	J	16.9			319			65.7		J	39800			0.407		
India Basin Area I	IB-56	SA	AAB-159	SDG 2	0.268			71400			10.6			462			0.228	J	J	15.8			163			43.7		J	42400			0.312		
India Basin Area I	IB-57	SA	AAB-129	SDG 2	0.253			71300			10.2			468			0.2	J	J	15.3			163			40		J	41200			0.34		
India Basin Area I	IB-58	SA	AAB-130	SDG 2	0.257			70200			10.8			456			0.201	J	J	15.9			156			41.4		J	41300			0.251		
India Basin Area I	IB-59	SA	AAB-161	SDG 2	0.321			66400			11.4			438			0.24	J	J	21.4			271			117		J	43700			0.318		
Point Avisadero Area III	PA-38	SA	AAB-133	SDG 2	0.287			70500			10.9			496			0.287	J	J	16.7			194			95.4		J	40700			0.441		
Point Avisadero Area III	PA-39	SA	AAB-128	SDG 3	0.316		J	68400			10.7			438			0.244	J		17.7			165			57.7			39900			1		J
Point Avisadero Area III	PA-40	SA	AAB-132	SDG 2	0.285			72000			11.2			471			0.222	J	J	16.6			163			57.7		J	42500			0.257		
Point Avisadero Area III	PA-41	SA	AAB-092	SDG 2	0.293			66500			11.3			568			0.329	J	J	16.5			349			525		J	42500			0.478		
Point Avisadero Area III	PA-42	SA	AAB-086	SDG 3	0.276		J	62800			10.7			469			0.209	J		16.2			277			397			40000			0.425		J
Point Avisadero Area III	PA-43	SA	AAB-087	SDG 2	0.177			65600			8.74			448			0.185	J	J	14			189			89.4		J	39500			0.145		
Point Avisadero Area III	PA-44	SA	AAB-091	SDG 2	0.326			64800			14.3			497			0.282	J	J	16.8			275			163		J	39600			1.51		
Point Avisadero Area III	PA-45	SA	AAB-126	SDG 3	0.299		J	59100			10.7			404			0.255	J		21.6			351			157			41900			0.691		J
Point Avisadero Area III	PA-46	SA	AAB-127	SDG 3	0.272		J	61200			12.5			431			0.359	J		20			391			289			46500			1.07		J
Point Avisadero Area III	PA-47	SA	AAB-089	SDG 2	0.434			62300			18.2			470			0.76		J	18.2			291			1050		J	40600			7.47		
Point Avisadero Area III	PA-48	SA	AAB-088	SDG 2	0.223			67500			12.1			467			0.237	J	J	17.6			245			40.6		J	40800			0.827		
Point Avisadero Area III	PA-49	SA	AAB-083	SDG 3	0.249		J	65700			11.4			425			0.213	J		17.1			187			32.7			40100			0.661		J
Point Avisadero Area III	PA-50	SA	AAB-094	SDG 2	0.267			71200			11.6			474			0.266	J	J	19.5			203			42.2		J	43500			0.396		
Point Avisadero Area III	PA-51	SA	AAB-085	SDG 3	0.22		J	64300			11.3			415			0.194	J		17.2			173			36.6			38700			0.214		J
Point Avisadero Area III	PA-52	SA	AAB-084	SDG 3	0.211		J	66100			11			428			0.204	J		16.8			170			34.1			39000			0.407		J
Point Avisadero Area III	PA-53	SA	AAB-090	SDG 2	0.252			69000			12			476			0.228	J	J	16.4			178			53.5		J	40700			0.234		
Point Avisadero Area III	PA-70	SA	AAB-137	SDG 2	0.262			71100			10.7			481			0.305	J	J	16			176			50.1		J	41300			0.402		
Point Avisadero Area III	PA-71	SA	AAB-136	SDG 2	0.286			71200			11.6			476			0.219	J	J	17.9			163			46.4		J	41500			0.274		
Point Avisadero Area III	PA-72	SA	AAB-135	SDG 2	0.274			71900			11.6			463			0.238	J	J	17.8			162			42.6		J	42900			0.268		
Eastern Wetland Area VIII	EW-30	SA	AAB-107	SDG 3	0.066	U	UJ	45000			5.18			335			0.247	J		12.7			400			32.9			28800			0.0808		J
Eastern Wetland Area VIII	EW-31	SA	AAB-104	SDG 1	0.235		J	42000			10.4			332			0.184	J	J	18.8			158			12		J	22100			0.0988		J
Eastern Wetland Area VIII	EW-32	SA	AAB-095	SDG 2	0.397			74900			11.1			458			0.271	J	J	18.4			169			52.8		J	46500			0.286		
Eastern Wetland Area VIII	EW-33	SA	AAB-124	SDG 3	0.0732	J	J	43500			6.12			372			0.264	J		12.8			225			20.8			27200			0.142		J
Eastern Wetland Area VIII	EW-34	SA	AAB-108	SDG 4	0.0841	J	J	50000			6.55		J	384			0.189	J		13.2			300			19.9			30900			0.093		J
Eastern Wetland Area VIII	EW-35	SA	AAB-097	SDG 2	0.347			71600			10.5			442			0.257	J	J	18.4			170			49.6		J	44200			0.276		
Eastern Wetland Area VIII	EW-36	SA	AAB-105	SDG 3	0.0768	J	J	47800			6.35			370			0.195	J		13.1			246			21.5			27200			0.0914		J
Eastern Wetland Area VIII	EW-37	SA	AAB-142	SDG 2	0.247			65600			8.76			439			0.263	J	J	16.7			217			39		J	39900			0.216		
Oil Reclamation Area IX	OR-24	SA	AAB-125	SDG 4	0.356		J	57300			10.9		J	381			0.341	J		19.8			434			97.5			45600			0.484		J
Oil Reclamation Area IX	OR-25	SA	AAB-103	SDG 1	0.12	J	J	73000			10.6			450			0.223	J	J	22.6			167			55.1		J	42400			0.38		J
Oil Reclamation Area IX	OR-26	SA	AAB-116	SDG 4	0.397		J	68300			13.6		J	396			0.399	J		19.4			254			86.4			48700			0.602		J
Oil Reclamation Area IX	OR-27	SA	AAB-117	SDG 4	0.415		J	66400			12.7		J	376			0.359	J		18.3			464			64.5			47400			0.451		J
Oil Reclamation Area IX	OR-28	SA	AAB-096	SDG 2	0.435			71900			11.2			458			0.384	J	J	18.4			187			57.8		J	44200			0.371		
Oil Reclamation Area IX	OR-29	SA	AAB-118	SDG 4	0.229		J	52000			8.9		J	293			0.297	J		17.5			414			55.1			41200			0.303		J
South Basin Area X	SB-01	SA	AAB-148	SDG 5	0.523		J	61900			8.15			501			0.845			12.7			202			69.8			36200			0.553		J
South Basin Area X	SB-02	SA	AAB-143	SDG 5	0.491		J	69800			9.23			474			0.63			14.5			189			85.1			43100			0.559		J
South Basin Area X	SB-03	SA	AAB-122	SDG 5	0.425		J	73200			9.33			445			0.371			15.3			171			74.4			45800			0.466		J
South Basin Area X	SB-04	SA	AAB-121	SDG 5	0.455		J	74000			8.52			456			0.323			15.3			185			74			46500			0.447		J
South Basin Area X	SB-05	SA	AAB-141	SDG 2	0.544			73900			11.3			458			0.413	J	J	17.8			189			78		J	47200			0.595		
South Basin Area X	SB-06	SA	AAB-120	SDG 4	0.566		J	71600			10.8		J	400			0.36	J		17.2			198			76.9			46800			0.497		J
South Basin Area X	SB-07	SA	AAB-119	SDG 5	0.504		J	70500			10.6			475			0.467			15.5			209			80.1			45600			0.647		J
South Basin Area X	SB-08	SA	AAB-115	SDG 4	0.538		J	74100			11.7		J	434			0.348	J		17.1			202			80.9			47800			0.491		J
South Basin Area X	SB-09	SA	AAB-145	SDG 1	0.423		J	57500			10.5			543			0.624		J	14.2			219			75.5		J	35600			0.266		J
South Basin Area X	SB-10	SA	AAB-144	SDG 1	0.315		J	62100			14.3			560			0.219	J	J	21.7			251			110		J	38200			1.32		J
South Basin Area X	SB-11	SA	AAB-139	SDG 2	0.709			69600			13.1			514			0.636		J	18.5			232			111		J	43600			0.719		
South Basin Area X	SB-12	SA	AAB-154	SDG 2	0.615			71100			12.5			483			0.522	J	J	17.5			212			95.5		J	45000			0.62		
South Basin Area X	SB-13	SA	AAB-113	SDG 4	0.583		J	72100			11.6		J	432			0.454	J		17.8			207			94.9			46800			0.617		J
South Basin Area X	SB-14	SA	AAB-138	SDG 2	2.8			71700			11.7			472			0.403	J	J	17.9			205			89.1		J	45500			0.571		
South Basin Area X	SB-15	SA	AAB-114	SDG 4	0.521		J	73500			11.4		J	414			0.272	J		17.7			197			78.8			47800			0.506		J
South Basin Area X	SB-16	SA	AAB-112	SDG 4	0.683		J	53900			11.3		J	490			0.705			19.4			451			173			39200			0.79		J
South Basin Area X	SB-17	SA	AAB-146	SDG 1	0.412		J	65000			11.2			458			0.278	J	J	21.3			273			102		J	42400			0.769		J
South Basin Area X	SB-18	SA	AAB-100	SDG 1	0.257		J	49200			5.86			458			0.428	J	J	11.3			175			66.1		J	25500			0.232		J
South Basin Area X	SB-19	SA	AAB-101	SDG 1	0.139		J	39100			11.5			893			0.252	J	J	18.4			167			285		J	15700			0.959		J
South Basin Area X	SB-20	SA	AAB-109	SDG 4	0.634		J	68600			11.3		J	469			0.682			17.6			225			133			44600			1.06		J
South Basin Area X	SB-21	SA	AAB-102	SDG 1	0.144		J	46400			9.95			761			0.262	J	J	21.9			338			319		J	31000			1.47		J

Table B-3. Metals in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Metals in Sediment (mg/kg dry weight)																																
					Ag			Al			As			Ba			Cd			Co			Cr			Cu			Fe			Hg		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-22	SA	AAB-111	SDG 4	0.695		J	65300			12.9		J	459			0.567	J		18.2			256			163			42600			1.26		J
South Basin Area X	SB-23	SA	AAB-099	SDG 1	0.37		J	47900			7.03			726			0.395	J	J	10.5			292			277		J	21000			0.844		J
Alameda Buoy	AB-67	SA	AAB-157	SDG 3	0.538		J	69700			10.8			428			0.447	J		17.8			176			42.7			42100			0.384		J
Alcatraz Environs	AL-64	SA	AAB-098	SDG 1	0.066	U	UJ	44300			6.69			501			0.841		J	10.3			103			16.5		J	20600			0.0252		J
Bay Farm Borrow Pit	BF-66	SA	AAB-156	SDG 3	0.342		J	75900			12.1			405			0.156	J		18.4			161			47.9			49500			0.303		J
Paradise Cove	PC-63	SA	AAB-162	SDG 2	0.242			72100			11.5			472			0.192	J	J	17.2			161			40.1		J	41200			0.289		
Red Rock	RR-65	SA	AAB-165	SDG 3	0.123	J	J	59700			9.65			417			0.18	J		22.6			169			19.2			40900			0.0716		J

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected.
The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-3. Metals in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Metals in Sediment (mg/kg dry weight)																							
					Mn			Mo			Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	SDG 2	411			1.15			93.6		J	23.1		J	0.726			0.328	J		140			122		
India Basin Area I	IB-55	SA	AAB-160	SDG 2	441			0.858			172		J	126		J	1.07			0.273	J		121			130		
India Basin Area I	IB-56	SA	AAB-159	SDG 2	421			1.63			89.8		J	25.4		J	0.807			0.39	J		141			111		
India Basin Area I	IB-57	SA	AAB-129	SDG 2	421			0.841			83.6		J	21.6		J	0.911			0.289	J		136			120		
India Basin Area I	IB-58	SA	AAB-130	SDG 2	424			0.763			87.1		J	22.4		J	0.7			0.311	J		138			115		
India Basin Area I	IB-59	SA	AAB-161	SDG 2	450			0.925			232		J	28.2		J	1.24			0.43	J		141			136		
Point Avisadero Area III	PA-38	SA	AAB-133	SDG 2	439			0.957			88.7		J	29.2		J	0.964			0.525	J		139			122		
Point Avisadero Area III	PA-39	SA	AAB-128	SDG 3	423			1.01			95.4			27.1			1.09			0.337	J		134			112		
Point Avisadero Area III	PA-40	SA	AAB-132	SDG 2	476			0.897			90.5		J	23.6		J	0.779			0.367	J		144			115		
Point Avisadero Area III	PA-41	SA	AAB-092	SDG 2	494			1.12			119		J	109		J	1.09			0.51	J		128			207		
Point Avisadero Area III	PA-42	SA	AAB-086	SDG 3	502			1.47			88.7			30.4			1.23			0.347	J		121			110		
Point Avisadero Area III	PA-43	SA	AAB-087	SDG 2	516			0.877			84		J	18.9		J	0.554			0.3	J		108			97.1		
Point Avisadero Area III	PA-44	SA	AAB-091	SDG 2	531			1.07			93.6		J	25.9		J	16.8			0.306	J		127			108		
Point Avisadero Area III	PA-45	SA	AAB-126	SDG 3	520			0.855			242			33.8			0.706			0.313	J		127			109		
Point Avisadero Area III	PA-46	SA	AAB-127	SDG 3	546			1.11			250			54.8			1.85			0.329	J		127			156		
Point Avisadero Area III	PA-47	SA	AAB-089	SDG 2	506			1.03			117		J	275		J	2.14			0.365	J		128			322		
Point Avisadero Area III	PA-48	SA	AAB-088	SDG 2	615			1.06			87.7		J	23.6		J	0.824			0.269	J		139			101		
Point Avisadero Area III	PA-49	SA	AAB-083	SDG 3	565			0.814			86.6			18.9			0.604			0.314	J		135			94.9		
Point Avisadero Area III	PA-50	SA	AAB-094	SDG 2	500			0.881			100		J	28.8		J	0.778			0.362	J		157			113		
Point Avisadero Area III	PA-51	SA	AAB-085	SDG 3	502			0.7			86.8			18.1			0.586			0.222	J		130			90.8		
Point Avisadero Area III	PA-52	SA	AAB-084	SDG 3	501			0.611			85.1			18.2			0.722			0.288	J		124			94.3		
Point Avisadero Area III	PA-53	SA	AAB-090	SDG 2	475			0.675			89.6		J	20		J	0.696			0.273	J		128			102		
Point Avisadero Area III	PA-70	SA	AAB-137	SDG 2	458			0.889			93.2		J	29.6		J	0.701			0.855	J		135			109		
Point Avisadero Area III	PA-71	SA	AAB-136	SDG 2	449			1.16			86.3		J	23.5		J	0.842			0.396	J		150			109		
Point Avisadero Area III	PA-72	SA	AAB-135	SDG 2	458			0.864			89		J	24.3		J	0.764			0.357	J		150			108		
Eastern Wetland Area VIII	EW-30	SA	AAB-107	SDG 3	567			0.641			62.8			20.6			1.41			0.126	U		87.2			89.8		
Eastern Wetland Area VIII	EW-31	SA	AAB-104	SDG 1	483			0.693			62.2			19.5		J	0.68			0.126	U		128			47		J
Eastern Wetland Area VIII	EW-32	SA	AAB-095	SDG 2	445			1.17			97.5		J	29.8		J	0.946			0.407	J		162			127		
Eastern Wetland Area VIII	EW-33	SA	AAB-124	SDG 3	579			0.494			59.6			18.5			3.64			0.126	U		82.6			79.5		
Eastern Wetland Area VIII	EW-34	SA	AAB-108	SDG 4	540			0.381		J	63.4			17.3			0.874		J	0.126	U		81.4			84.7		
Eastern Wetland Area VIII	EW-35	SA	AAB-097	SDG 2	428			1.16			96.6		J	27.7		J	0.814			0.471	J		159			123		
Eastern Wetland Area VIII	EW-36	SA	AAB-105	SDG 3	474			0.447			64.9			15.7			0.642			0.126	U		82.5			69.3		
Eastern Wetland Area VIII	EW-37	SA	AAB-142	SDG 2	441			0.919			85.5		J	21.8		J	0.705			0.305	J		135			104		
Oil Reclamation Area IX	OR-24	SA	AAB-125	SDG 4	624			1.41		J	160			60.1			2.38		J	0.239	J		134			179		
Oil Reclamation Area IX	OR-25	SA	AAB-103	SDG 1	386			0.83			100			11.9		J	0.587			0.348	J		171			125		J
Oil Reclamation Area IX	OR-26	SA	AAB-116	SDG 4	505			1.68		J	116			48			2.35		J	0.341	J		154			159		
Oil Reclamation Area IX	OR-27	SA	AAB-117	SDG 4	485			1.71		J	121			51.4			3.17		J	0.357	J		149			145		
Oil Reclamation Area IX	OR-28	SA	AAB-096	SDG 2	400			1.39			100		J	38.9		J	1.36			0.406	J		163			133		
Oil Reclamation Area IX	OR-29	SA	AAB-118	SDG 4	567			1.08		J	94.9			32.9			2.25		J	0.233	J		139			114		
South Basin Area X	SB-01	SA	AAB-148	SDG 5	437			1.18			76.6			121			1.61			0.227	J		101			188		
South Basin Area X	SB-02	SA	AAB-143	SDG 5	416			1.15			92.9			94.3			1.56			0.387	J		121			189		
South Basin Area X	SB-03	SA	AAB-122	SDG 5	404			1.27			104			69.3			1.5			0.41	J		131			164		
South Basin Area X	SB-04	SA	AAB-121	SDG 5	416			1.13			103			67.2			1.62			0.386	J		130			166		
South Basin Area X	SB-05	SA	AAB-141	SDG 2	412			1.47			105		J	65.4		J	1.56			0.444	J		157			205		
South Basin Area X	SB-06	SA	AAB-120	SDG 4	431			1.05		J	104			65.3			1.73		J	0.322	J		153			185		
South Basin Area X	SB-07	SA	AAB-119	SDG 5	430			1.34			104			88.9			2.08			0.364	J		126			186		
South Basin Area X	SB-08	SA	AAB-115	SDG 4	439			0.963		J	107			76.4			2.2		J	0.321	J		151			182		
South Basin Area X	SB-09	SA	AAB-145	SDG 1	468			1.83			81.6			118		J	4.55			0.304	J		106			210		J
South Basin Area X	SB-10	SA	AAB-144	SDG 1	465			1.08			128			29.3		J	0.824			0.378	J		154			242		J
South Basin Area X	SB-11	SA	AAB-139	SDG 2	451			1.39			109		J	114		J	3.46			0.411	J		152			221		
South Basin Area X	SB-12	SA	AAB-154	SDG 2	440			1.09			107		J	90.8		J	2.69			0.418	J		146			199		
South Basin Area X	SB-13	SA	AAB-113	SDG 4	457			1		J	110			84.2			2.52		J	0.331	J		150			189		
South Basin Area X	SB-14	SA	AAB-138	SDG 2	468			0.988			107		J	86.3		J	2.4			0.399	J		147			181		
South Basin Area X	SB-15	SA	AAB-114	SDG 4	437			1.24		J	109			70			2.03		J	0.333	J		155			171		
South Basin Area X	SB-16	SA	AAB-112	SDG 4	580			1.03		J	199			139			10.6		J	0.225	J		112			228		
South Basin Area X	SB-17	SA	AAB-146	SDG 1	499			1.12			162			73.6		J	5.77			0.34	J		121			195		J
South Basin Area X	SB-18	SA	AAB-100	SDG 1	357			0.704			92.8			122		J	3.95			0.151	J		77.5			209		J
South Basin Area X	SB-19	SA	AAB-101	SDG 1	271			0.875			72.5			11		J	0.485			0.126	U		146			175		J
South Basin Area X	SB-20	SA	AAB-109	SDG 4	444			1.14		J	118			106			4.29		J	0.457	J		139			215		
South Basin Area X	SB-21	SA	AAB-102	SDG 1	453			0.773			161			11.8		J	0.654			0.178	J		172			297		J

Table B-3. Metals in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Metals in Sediment (mg/kg dry weight)																							
					Mn			Mo			Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-22	SA	AAB-111	SDG 4	446			1.5		J	130			142			7.43		J	0.363	J		141			243		
South Basin Area X	SB-23	SA	AAB-099	SDG 1	305			0.826			123			114		J	7.26			0.199	J		50.9			212		J
Alameda Buoy	AB-67	SA	AAB-157	SDG 3	448			0.851			85.8			29.7			0.929			0.412	J		148			115		
Alcatraz Environs	AL-64	SA	AAB-098	SDG 1	390			0.293			39.8			12.3		J	0.361			0.126	U		62.7			42.5		J
Bay Farm Borrow Pit	BF-66	SA	AAB-156	SDG 3	577			0.782			101			27.8			0.854			0.498	J		159			130		
Paradise Cove	PC-63	SA	AAB-162	SDG 2	554			0.821			86.9		J	21.6		J	0.773			0.292	J		139			105		
Red Rock	RR-65	SA	AAB-165	SDG 3	634			0.461			78.3			15.9			0.398			0.124	J		142			81.3		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected.
The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-4. Polychlorinated Biphenyls as Congeners in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

Polychlorinated Biphenyls as Congeners in Sediment (ug/kg dry weight)

					Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110)			Cl5(118)			Cl5(126)	
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
India Basin Area I	IB-54	SA	AAB-158	01-212	0.19	U	UJ	0.09	U	UJ	0.12	J		0.13	J		0.24	J		0.17	J		0.19	U		0.49	J		0.2	J		0.77	J	J	0.57	J		0.16	U
India Basin Area I	IB-55	SA	AAB-160	01-212	0.18	U	UJ	0.17	J	J	0.23	J		0.6	J		1.08			0.25	J		0.18	U		2.75			0.79	J		3.38		J	1.92			0.16	U
India Basin Area I	IB-56	SA	AAB-159	01-212	0.19	U	UJ	0.09	U	UJ	0.23	J		0.14	J		0.36	J		0.14	U		0.19	U		0.88	J		0.17	J		0.86	J	J	0.4	J		0.16	U
India Basin Area I	IB-57	SA	AAB-129	01-212	0.17	U	UJ	0.08	U	UJ	0.13	J		0.1	J		0.33	J		0.12	U		0.17	U		0.42	J		0.17	J		0.62	J	J	0.49	J		0.15	U
India Basin Area I	IB-58	SA	AAB-130	01-212	0.17	U	UJ	0.08	J	J	0.15	J		0.19	J		0.28	J		0.12	U		0.17	U		0.55	J		0.26	J		0.79	J	J	0.59	J		0.15	U
India Basin Area I	IB-59	SA	AAB-161	01-212	0.19	U	UJ	0.14	J	J	0.3	J		0.32	J		0.62	J		0.19	J		0.19	U		1.53			0.7	J		2.38		J	1.18			0.17	U
Point Avisadero Area III	PA-38	SA	AAB-133	01-213	0.27	J	J	0.16	J		0.23	J		0.42	J	J	10.11			0.13	U		0.18	U		16.57	D	J	0.21	J		5.66		J	3.98			0.15	U
Point Avisadero Area III	PA-39	SA	AAB-128	01-212	0.84	J	J	1.4		J	1.77			2.03			3.47			1.25			0.17	U		10.38			1.74			7.58		J	5.12			0.15	U
Point Avisadero Area III	PA-40	SA	AAB-132	01-213	0.18	U	UJ	0.08	J		0.25	J		0.46	J	J	0.95	J		0.13	U		0.19	U		1.72			0.44	J		1.62		J	1.15			0.16	U
Point Avisadero Area III	PA-41	SA	AAB-092	01-213	1.07		J	0.74	J		1.16			1.64		J	4			0.12	U		0.16	U		20.32	D	J	0.09	U		8.24		J	6.39			0.14	U
Point Avisadero Area III	PA-42	SA	AAB-086	01-212	0.69	J	J	0.21	J	J	0.52	J		0.81	J		4.73			0.3	J		0.15	U		29.99			0.08	U		15.39		J	8.39			0.13	U
Point Avisadero Area III	PA-43	SA	AAB-087	01-333	0.16	U	UJ	1.11		J	0.31	J	J	0.43	J	J	0.98		J	0.12	U	UJ	0.16	U	UJ	1.06		J	0.4	J	J	0.92		J	0.62	J	J	0.14	U
Point Avisadero Area III	PA-44	SA	AAB-091	01-213	0.56	J	J	0.23	J	J	0.68	J	J	0.89		J	4.01		J	0.1	U	UJ	0.15	U	UJ	5.49		J	0.78	J	J	2.22		J	1.28		J	0.13	U
Point Avisadero Area III	PA-45	SA	AAB-126	01-212	0.8		J	0.61	J	J	0.93			0.8			5.97			0.35	J		0.14	U		70.14	D		0.08	U		33.21	D	J	17.79			0.12	U
Point Avisadero Area III	PA-46	SA	AAB-127	01-212	0.27	J	J	0.68	J	J	0.23	J		0.56	J		10.59			0.1	U		0.15	U		8.48			0.08	U		5.11		J	2.16			0.13	U
Point Avisadero Area III	PA-47	SA	AAB-089	01-212	0.15	U		0.28	J	J	0.74	J	J	1		J	5.82		J	0.24	J	J	0.15	U		6.01		J	1.46		J	4.2		J	2.36		J	0.13	U
Point Avisadero Area III	PA-48	SA	AAB-088	01-212	0.15	U	UJ	0.07	U	UJ	0.23	J		0.24	J		0.56	J		0.11	U		0.16	U		0.82	J		0.22	J		0.86		J	0.75	J		0.14	U
Point Avisadero Area III	PA-49	SA	AAB-083	01-212	0.15	U	UJ	0.07	U	UJ	0.24	J		0.14	J		0.1	U		0.11	U		0.16	U		0.48	J		0.14	J		0.76	J	J	0.35	J		0.14	U
Point Avisadero Area III	PA-50	SA	AAB-094	01-213	0.17	U	UJ	0.07	J		0.21	J		0.27	J	J	0.35	J		0.12	U		0.17	U		0.66	J		0.19	J		0.76	J	J	0.51	J		0.15	U
Point Avisadero Area III	PA-51	SA	AAB-085	01-212	0.15	U	UJ	0.07	U	UJ	0.13	J		0.09	U		0.25	J		0.11	U		0.16	U		0.51	J		0.14	J		0.87		J	0.34	J		0.13	U
Point Avisadero Area III	PA-52	SA	AAB-084	01-212	0.15	U	UJ	0.07	U	UJ	0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.76	J		0.15	J		0.99		J	0.56	J		0.13	U
Point Avisadero Area III	PA-53	SA	AAB-090	01-213	0.17	U	UJ	0.15	J	J	0.41	J	J	2.2		J	5		J	0.12	U		0.17	U		8.96		J	2.06		J	5.19		J	4.69		J	0.15	U
Point Avisadero Area III	PA-70	SA	AAB-137	01-213	0.39	J	J	0.06	J		0.18	J		0.32	J	J	1.23			0.13	U		0.18	U		3.38			0.34	J		1.65		J	1.05			0.15	U
Point Avisadero Area III	PA-71	SA	AAB-136	01-213	0.17	U	UJ	0.06	J		0.12	J		0.24	J	J	0.52	J		0.13	U		0.18	U		1.11			0.25	J		0.79	J	J	0.59	J		0.15	U
Point Avisadero Area III	PA-72	SA	AAB-135	01-213	0.19	U	UJ	0.05	J		0.11	J		0.12	U	UJ	0.29	J		0.14	U		0.2	U		0.45	J		0.16	J		0.55	J	J	0.33	J		0.17	U
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-333	0.1	U	UJ	0.05	U	UJ	0.07	U	UJ	0.06	U	UJ	0.07	U	UJ	0.08	U	UJ	0.11	U	UJ	0.54	J	J	0.09	J	J	0.33	J	J	0.27	J	J	0.09	U
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-230	0.1	U	UJ	0.05	U	UJ	0.07	U		0.06	U		0.13	J		0.08	U		0.11	U		0.31	J		0.08	J		0.25	J	J	0.14	J		0.09	U
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-229	0.2	U	UJ	0.06	J		0.16	J		0.29	J		0.43	J		0.15	U		0.21	U		1.2			0.29	J		0.95	J		0.78	J		0.18	U
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-239	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.13	J		0.08	U		0.11	U		0.51	J		0.11	J		0.6		J	0.31	J		0.09	U
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-239	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.08	J		0.08	U		0.11	U		0.49	J		0.12	J		0.52	J	J	0.39	J		0.09	U
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-229	0.17	J	J	0.06	J		0.15	J		0.26	J		0.36	J		0.14	U		0.2	U		1.07	J		0.27	J		0.94	J		0.69	J		0.18	U
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-239	0.11	U	UJ	0.05	U		0.08	U		0.07	U		0.1	J		0.08	U		0.11	U		0.79			0.16	J		0.7		J	0.54	J		0.1	U
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-229	0.16	J	J	0.05	J		0.14	J		0.21	J		0.32	J		0.12	U		0.17	U		0.88	J		0.21	J		0.81	J		0.53	J		0.15	U
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-240	0.15	U	UJ	0.09	J	J	0.29	J	J	0.8		J	1.97		J	0.11	U	UJ	0.15	U	UJ	12.93		J	1.08		J	6.75		J	4.6		J	0.13	U
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-230	0.19	U	UJ	0.09	U	UJ	0.27	J		0.32	J		0.83	J		0.14	U		0.2	U		3.42			0.67	J		2.79		J	2.12			0.17	U
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-240	0.17	U	UJ	0.11	J		0.26	J		0.72	J		1.73			0.13	U		0.18	U		9.21			1.11			5.84			4.78			0.15	U
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-240	0.18	U	UJ	0.16	J		0.21	J		0.88	J		1.35			0.13	U		0.18	U		7.52			1.07			4.9			4.13			0.16	U
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-229	0.21	J	J	0.09	J		0.23	J		0.41	J		0.7	J		0.14	U		0.19	U		3.03			0.52	J		2.05			1.63			0.17	U
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-240	0.13	U	UJ	0.08	J		0.11	J		0.3	J		0.73			0.1	U		0.13	U		3.58			0.63	J		2.32			2.02			0.12	U
South Basin Area X	SB-01	SA	AAB-148	01-240	1.29		J	0.58	J		1.35		J	4.74			6.34		J	0.13	U		0.18	U		23.62		J	4.31			19.1			17.15		J	0.15	U
South Basin Area X	SB-02	SA	AAB-143	01-240	1.12		J	0.96			1.74			8.3			11.21			0.1	U		0.15	U		41.13	D		7.33			30.43	D		27.32	D		0.13	U
South Basin Area X	SB-03	SA	AAB-122	01-240	0.54	J	J	0.19	J		0.46	J		1	J		1.64			0.14	U		0.2	U		6.47			1.44			4.95			4.49			0.17	U
South Basin Area X	SB-04	SA	AAB-121	01-240	0.81	J	J	0.28	J		0.74	J		1.71			2.89			0.13	U		0.19	U		11.16			2.29			8.62			8.23			0.16	U
South Basin Area X	SB-05	SA	AAB-141	01-229	0.29	J	J	0.15	J		0.6	J		0.84	J		2.11			0.14	U		0.2	U		9.49			1.82			6.47			5.92			0.17	U
South Basin Area X	SB-06	SA	AAB-120	01-240	0.21	U	UJ	0.09	J		0.19	J		0.47	J		0.93	J		0.15	U		0.21	U		3.83			0.9	J		2.98			2.72			0.18	U
South Basin Area X	SB-07	SA	AAB-119	01-240	0.9	J	J	0.26	J		0.94	J		2.35			4.26			0.13	U		0.18	U		17.56			3.26			12.46			12.11			0.15	U
South Basin Area X	SB-08	SA	AAB-115	01-240	0.7	J	J	0.21	J		0.6	J		1.66			3.31			0.14	U		0.2	U		13.74		J	2.89			10.58		J	9.62		J	0.17	U
South Basin Area X	SB-09	SA	AAB-145	01-230	0.22	J	J	0.25	J	J	0.51	J		2.66			5.41			2.07			0.13	U		18.81			4.35			15.13		J	13.15			0.11	U
South Basin Area X	SB-10	SA	AAB-144	01-230	0.89		J	0.57	J	J	1.23			3.9			7.59			3.17			0.14	U		26.55	D		6.05			24.03	D	J	19.67	D		0.12	U
South Basin Area X	SB-11	SA	AAB-139	01-229	0.85	J	J	0.47	J		1.35			5.18			10.43			3.35			0.18	U		43.44	D		7.97			33.07	D		29.18	D		0.15	U
South Basin Area X	SB-12	SA	AAB-154	01-229	0.67	J	J	0.35	J		1.01			3.4			6.57			2.58			0.19	U		27.54	D		5.3			21.13	D		19	D		0.16	U
South Basin Area X	SB-13	SA	AAB-113	01-239	0.48	J	J	0.37	J		0.75	J		1.88			4.62			1.75			0.19	U		22.43	D		4.1			16.98	D	J	13.68			0.17	U
South Basin Area X	SB-14	SA	AAB-138	01-229	0.89	J	J	0.26	J		0.87	J		5.77		J	4.82			1.72			0.2	U		20.91	D		3.76			15.3	D		13.31			0.17	U
South Basin Area X	SB-15	SA	AAB-114	01-239	0.2	U	UJ	0.1	U		0.14	U		1.46		J	2.79		J	1.04	J		0.2	U		14.54		J	2.24		J	10.46		J	8.25		J	0.18	U
South Basin Area X	SB-16	SA	AAB-112	01-239	0.41	J	J	0.33	J	J	0.61	J	J	1.48		J	5.11		J	1.35		J	0.13	U	R	41.66	D	J	3.42		J	26.94	D	J	17.18	D	J	0.12	U
South Basin Area X	SB-17	SA	AAB-146	01-230	0.33	J	J	0.31	J	J	0.56	J		1.58			3.54			0.12	U		0.17	U		24.16			4.07			16.38		J	11.73			0.14	U
South Basin Area X	SB-18	SA	AAB-100	01-230	0.48	J	J	0.35	J	J	0.73			2.3			5.22			1.45			0.11	U		25.74	D		2.57			16.89		J	11.41			0.09	U
South Basin Area X	SB-19	SA	AAB-101	01-230	0.12	J	J	0.39	J	J	0.15	J		0.82			5.33			0.08	U		0.11	U		72.18	D		0.06	U		40.17	D	J	17.49			0.09	U
South Basin Area X	SB-20	SA	AAB-109	01-239	0.55	J	J	0.46	J		1.05			2.59			7.74			2.45			0.18	U		42.33	D		6.01			29.6	D	J	23.76	D		0.16	U
South Basin Area X	SB-21	SA	AAB-102	01-230	0.12	U	UJ	0.3	J	J	0.57	J	J	1.85		J	7.7		J	1.24		J	0.12	U	UJ	124.87	D	J	14.12		J	65.87	D	J	33.85		J	0.1	U

Table B-4. Polychlorinated Biphenyls as Congeners in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls as Congeners in Sediment (ug/kg dry weight)																																		
					Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110)			Cl5(118)			Cl5(126)	
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
South Basin Area X	SB-22	SA	AAB-111	01-239	0.44	J	J	0.41	J	J	0.82	J	J	2.58		J	7.22		J	2.29		J	0.17	U	UJ	54.87	D	J	5.3		J	37.59	D	J	25.2	D	J	0.14	U
South Basin Area X	SB-23	SA	AAB-099	01-230	0.17	J	J	0.12	J	J	0.19	J	J	0.69		J	2.96		J	1.6	U		2.2	U		85.86	D		1.2	U		39.26	D		26.96		J	2	U
Alameda Buoy	AB-67	SA	AAB-157	01-212	0.16	U	UJ	0.21	J		0.41	J	J	0.43	J		0.64	J		0.14	J		0.17	U		1.67			0.41	J		1.75		J	1.35			0.14	U
Alcatraz Environs	AL-64	SA	AAB-098	01-230	0.1	U	UJ	0.05	U	UJ	0.07	U		0.06	U		0.07	U		0.07	U		0.1	U		0.06	U		0.06	U		0.07	U	UJ	0.07	U		0.09	U
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-212	0.21	U	UJ	0.1	U	UJ	0.2	J		0.15	J		0.25	J		0.15	U		0.21	U		0.4	J		0.15	J		0.75	J	J	0.55	J		0.19	U
Paradise Cove	PC-63	SA	AAB-162	01-213	0.17	U	UJ	0.08	U	UJ	0.12	U	UJ	0.11	U	UJ	0.11	U	UJ	0.12	U	UJ	0.17	U	UJ	0.12	J	J	0.09	U	UJ	0.16	J	J	0.11	J	J	0.15	U
Paradise Cove	PC-63	SA	AAB-162	01-333	0.17	U	UJ	0.08	U	UJ	0.12	U	UJ	0.11	U	UJ	0.11	U	UJ	0.13	U	UJ	0.18	U	UJ	0.29	J	J	0.11	J	J	0.35	J	J	0.33	J	J	0.15	U
Red Rock	RR-65	SA	AAB-165	01-212	0.12	U	UJ	0.05	U	UJ	0.08	U		0.07	U		0.19	J		0.08	U		0.12	U		0.16	J		0.06	U		0.13	J	J	0.08	J		0.1	U

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected.
The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table B-4. Polychlorinated Biphenyls as Congeners in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls as Congeners in Sediment (ug/kg dry weight)																															
					)	Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	01-212		0.22	U		0.09	U		1.07			1.55			0.44	J		1.22			0.63	J		0.16	J	J	0.29	J	J	0.62	J	J
India Basin Area I	IB-55	SA	AAB-160	01-212		0.57	J		0.09	U		6.12			9.81			2.62			5.73			4.08			0.69	J	J	0.75	J	J	3.05		J
India Basin Area I	IB-56	SA	AAB-159	01-212		0.22	U		0.09	U		1.26			1.38			0.28	J		1.12			0.56	J		0.13	J	J	0.23	J	J	0.34	J	J
India Basin Area I	IB-57	SA	AAB-129	01-212		0.2	U		0.09	U		0.86	J		1.08			0.12	J		0.95			0.6	J		0.12	J	J	0.09	U	UJ	0.1	U	UJ
India Basin Area I	IB-58	SA	AAB-130	01-212		0.2	U		0.09	U		1.01			1.34			0.33	J		0.98			0.47	J		0.1	J	J	0.13	J	J	0.24	J	J
India Basin Area I	IB-59	SA	AAB-161	01-212		0.34	J		0.09	U		5.25			8.43			3.15			6.37			4.17			0.71	J	J	0.97	J	J	1.71		J
Point Avisadero Area III	PA-38	SA	AAB-133	01-213		2.85			0.09	U		42.76	D	J	72.33	D	J	34.47	D	J	62.31	D	J	33.17	D	J	6.03		J	2.14			0.1	U	
Point Avisadero Area III	PA-39	SA	AAB-128	01-212		2.11			0.08	U		32.19			43.61			17.56			33.92			16.89			3.12		J	1.62		J	0.61	J	J
Point Avisadero Area III	PA-40	SA	AAB-132	01-213		0.31	J		0.09	U		1.77			2.45			1.03			1.49			0.84	J		0.14	J	J	0.13	J		0.1	U	
Point Avisadero Area III	PA-41	SA	AAB-092	01-213		4.86			0.08	U		60.26	D	J	88.86	D	J	41.19	D	J	71.66	D	J	34.87	D	J	5.02		J	1.48			0.09	U	
Point Avisadero Area III	PA-42	SA	AAB-086	01-212		6.57			0.07	U		99.21	D		154.02	D		55.24	D		112.42	D		58.06	D		10.31		J	6.6		J	1.44		J
Point Avisadero Area III	PA-43	SA	AAB-087	01-333	UJ	0.19	U	UJ	0.08	U	UJ	1.1		J	1.67		J	0.4	J	J	0.86	J	J	0.46	J	J	0.09	J	J	0.33	J	J	0.15	J	J
Point Avisadero Area III	PA-44	SA	AAB-091	01-213	UJ	0.32	J	J	0.07	U	UJ	3.06		J	6.1		J	1.95		J	3.32		J	2.39		J	0.53	J	J	0.08	U	UJ	0.08	U	UJ
Point Avisadero Area III	PA-45	SA	AAB-126	01-212		15.09			4.2			226.65	D		310.67	D		133.28	D		257.42	D		122.5	D		22.22		J	8.66		J	0.35	J	J
Point Avisadero Area III	PA-46	SA	AAB-127	01-212		1.54			0.07	U		26.44			41.4			18.13			35.77			19.69			3.63		J	3.33		J	0.37	J	J
Point Avisadero Area III	PA-47	SA	AAB-089	01-212		0.83		J	0.07	U		6.8		J	10.96		J	3.1		J	6.27		J	3.54		J	0.94		J	0.78	J	J	0.55	J	J
Point Avisadero Area III	PA-48	SA	AAB-088	01-212		0.18	U		0.08	U		1.18			1.7			0.09	J		1.09			0.44	J		0.08	U	UJ	0.08	U	UJ	0.09	U	UJ
Point Avisadero Area III	PA-49	SA	AAB-083	01-212		0.18	U		0.08	U		0.63	J		1.04			0.18	J		0.1	U		0.66	J		0.1	J	J	0.17	J	J	0.54	J	J
Point Avisadero Area III	PA-50	SA	AAB-094	01-213		0.2	U		0.08	U		0.44	J		1			0.63	J		0.84	J		0.58	J		0.11	J	J	0.09	U		0.1	U	
Point Avisadero Area III	PA-51	SA	AAB-085	01-212		0.18	U		0.08	U		0.35	J		0.96			0.27	J		0.84			0.47	J		0.08	U	UJ	0.67	J	J	1.03		J
Point Avisadero Area III	PA-52	SA	AAB-084	01-212		0.17	U		0.07	U		0.8	J		1.62			0.18	J		1.45			0.82			0.08	U	UJ	0.08	U	UJ	0.09	U	UJ
Point Avisadero Area III	PA-53	SA	AAB-090	01-213		0.88	J	J	0.08	U		4.42		J	6.3		J	1.39		J	2.03		J	1.52		J	0.17	J	J	0.22	J	J	0.1	U	
Point Avisadero Area III	PA-70	SA	AAB-137	01-213		0.39	J		0.09	U		5.45			9.17			3.81			6.88			3.51			0.61	J	J	0.3	J		0.1	U	
Point Avisadero Area III	PA-71	SA	AAB-136	01-213		0.2	U		0.09	U		1.47			2.35			1.35			1.9			1.01			0.17	J	J	0.09	U		0.1	U	
Point Avisadero Area III	PA-72	SA	AAB-135	01-213		0.22	U		0.1	U		0.65	J		1.03	J		0.75	J		0.93	J		0.49	J		0.08	J	J	0.12	J		0.11	U	
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-333	UJ	0.12	U	UJ	0.05	U	UJ	1.05		J	1.69		J	0.56	J	J	1.17		J	0.85		J	0.13	J	J	0.13	J	J	0.07	J	J
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-230		0.12	U		0.05	U		0.97			1.36			0.59			0.92			0.62			0.14	J	J	0.19	J	J	0.18	J	J
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-229		0.23	U		0.1	U		2.09			2.93			1.17			2.29			1.31			0.23	J	J	0.14	J	J	0.16	J	
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-239		0.22	J		0.05	U		1.77			2.58			0.81			1.65			1.06			0.18	J	J	0.18	J	J	0.16	J	J
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-239		0.13	J		0.05	U		1.79			2.43			0.73			1.55			1.03			0.18	J	J	0.21	J	J	0.08	J	J
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-229		0.23	U		0.1	U		2.01			2.79			1.46			2.29			1.29			0.25	J	J	0.18	J	J	0.14	J	
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-239		0.16	J		0.06	U		2.69			3.6			1.16			2.57			1.64			0.32	J	J	0.49	J	J	1.31		J
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-229		0.19	U		0.08	U		1.56			2.28			1.26			1.97			1.1			0.21	J	J	0.15	J	J	0.11	J	
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-240	UJ	2.61		J	0.07	U	UJ	34.87	D	J	59.15	D	J	17.55		J	42.6	D	J	23.1	D	J	2.7		J	1.01		J	0.27	J	J
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-230		0.68	J		0.1	U		8.51			11.48			4.52			8.06			4.97			0.78	J	J	0.74	J	J	0.48	J	J
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-240		2.11			0.09	U		27.36			44.64			13.76		J	28.56			16.72			2.26			1.12		J	0.38	J	
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-240		1.89			0.09	U		23.3			37.53			12.4		J	25.76			14.7			2.14			0.98		J	0.57	J	
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-229		0.64	J		0.09	U		6.95			9.84			4.27			7.48			4.14			0.81	J	J	0.4	J	J	0.18	J	
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-240		0.83			0.07	U		11.11			19.17			6.71		J	13.42			7.57			1.25			0.7	J	J	0.44	J	
South Basin Area X	SB-01	SA	AAB-148	01-240		4.67			0.09	U		43.2	D	J	72.27	D	J	15.07		J	36.76	D		23.84		J	2.39			1.17		J	0.46	J	
South Basin Area X	SB-02	SA	AAB-143	01-240		6.93			0.07	U		71.22	D		133.13	D		18.69		J	59.62	D		45.21	D		2.95			1.29		J	0.38	J	
South Basin Area X	SB-03	SA	AAB-122	01-240		1.56			0.1	U		14.87			22.99			6.76		J	12.63			7.8			1.15			0.73	J	J	0.32	J	
South Basin Area X	SB-04	SA	AAB-121	01-240		2.76			0.09	U		25.35			42.9			10.93		J	21.47			13.64			1.81			1.05		J	0.48	J	
South Basin Area X	SB-05	SA	AAB-141	01-229		2.43			0.1	U		26.23	D		34.95	D		10.16			24.42	D		11.03			1.87		J	0.93	J	J	0.42	J	
South Basin Area X	SB-06	SA	AAB-120	01-240		1.03	J		0.1	U		9.46			13.17			5		J	8.91			5.11			0.85	J		0.47	J	J	0.17	J	
South Basin Area X	SB-07	SA	AAB-119	01-240		3.97			0.09	U		34.74	D		51.41	D		14.71		J	31.39	D		18.37			2.32			1.1		J	0.49	J	
South Basin Area X	SB-08	SA	AAB-115	01-240		3.43			0.1	U		30.66		J	47.58		J	13.42		J	27.12		J	16.22		J	2.06			0.94	J	J	0.4	J	
South Basin Area X	SB-09	SA	AAB-145	01-230		3.71			0.06	U		30.1	D		39.91	D		8.99			17.17			9.74			1.73		J	1.18		J	0.73		J
South Basin Area X	SB-10	SA	AAB-144	01-230		5.89			0.07	U		61	D		78.98	D		27.65	D		50.66	D		28.83	D		4.74		J	3.09		J	7.01		J
South Basin Area X	SB-11	SA	AAB-139	01-229		10.49			0.09	U		94.81	D		132.15	D		46.47	D		83.39	D		45.61	D		5.4		J	1.98		J	0.66	J	
South Basin Area X	SB-12	SA	AAB-154	01-229		7.26			0.09	U		54.83			74.79	D		29.31	D		51.21	D		29.09	D		4.11		J	1.79		J	0.65	J	
South Basin Area X	SB-13	SA	AAB-113	01-239		5.57			0.09	U		59.34	D		81.45	D		33.75	D		68.06	D		37.25	D		7.76		J	7.09		J	2.41		J
South Basin Area X	SB-14	SA	AAB-138	01-229		6.07			0.1	U		45.01	D	J	66.39	D	J	24.41	D	J	44.32	D		24.56	D		3.4		J	1.42		J	0.69	J	
South Basin Area X	SB-15	SA	AAB-114	01-239		3.3		J	0.1	U		35.83		J	47.81		J	17.1		J	33.98		J	19.34		J	3.33		J	1.91		J	1.44		J
South Basin Area X	SB-16	SA	AAB-112	01-239	R	12.94	D	J	0.07	U	R	150.33	D	J	205.26	D	J	99.88	D	J	192.77	D	J	98.39	D	J	21.33	D	J	8.67		J	4.83		J
South Basin Area X	SB-17	SA	AAB-146	01-230		6.25			0.08	U		77.98	D		108.77	D		43.09			85.17	D		44.18			8.67		J	5.78		J	3.3		J
South Basin Area X	SB-18	SA	AAB-100	01-230		5.96			0.05	U		75.58	D		104.55	D		38.04	D		74.07	D		39.5	D		6.04		J	2.86		J	1.26		J
South Basin Area X	SB-19	SA	AAB-101	01-230		18.6			0.05	U		280.81	D		399.1	D		158.45	D		329.95	D		168.81	D		29.68	D	J	13.81		J	1.59		J
South Basin Area X	SB-20	SA	AAB-109	01-239		9.83			0.09	U		128.53	D		185.1	D		77.84	D		151.18	D		85.51	D		16.95	D	J	9.1		J	1.69		J
South Basin Area X	SB-21	SA	AAB-102	01-230	UJ	28.65		J	0.06	U	UJ	441.77	D	J	637.92	D	J	291.55	D	J	569.33	D	J	288.01	D	J	59.62	D	J	22.87		J	2.75		J

Table B-4. Polychlorinated Biphenyls as Congeners in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls as Congeners in Sediment (ug/kg dry weight)																															
					)	Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-22	SA	AAB-111	01-239	UJ	14.04	D	J	0.08	U	UJ	159.8	D	J	216.7	D	J	88.5	D	J	172.19	D	J	92.32	D	J	18.41	D	J	7.81		J	1.98		J
South Basin Area X	SB-23	SA	AAB-099	01-230		18.33		J	4.17		J	277.11	D		510.04	D		190.63	D		387.26	D		240.75	D		43.19	D		23.42		J	2.64		J
Alameda Buoy	AB-67	SA	AAB-157	01-212		0.19	U		0.08	U		3.27			4.06			1.16			2.31			1.54			0.23	J	J	0.84	J	J	0.81	J	J
Alcatraz Environs	AL-64	SA	AAB-098	01-230		0.12	U		0.05	U		0.06	U		0.09	U		0.06	U		0.06	U		0.06	U		0.06	U	UJ	0.05	U	UJ	0.06	U	UJ
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-212		0.24	U		0.11	U		1.17			1.09	J		0.14	J		1.54			0.38	J		0.11	U	UJ	0.11	U	UJ	0.12	U	UJ
Paradise Cove	PC-63	SA	AAB-162	01-213	UJ	0.2	U	UJ	0.09	U	UJ	0.19	J	J	0.25	J	J	0.36	J	J	0.19	J	J	0.09	J	J	0.02	J	J	0.09	U	UJ	0.1	U	UJ
Paradise Cove	PC-63	SA	AAB-162	01-333	UJ	0.2	U	UJ	0.09	U	UJ	0.56	J	J	0.59	J	J	0.22	J	J	0.42	J	J	0.17	J	J	0.09	U	UJ	0.09	U	UJ	0.1	U	UJ
Red Rock	RR-65	SA	AAB-165	01-212		0.13	U		0.06	U		0.21	J		0.25	J		0.07	U		0.07	U		0.07	U		0.06	U	UJ	0.06	U	UJ	0.07	U	UJ

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected.
The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.
R Quality control indicates the data are not useable.

Table B-5. Polychlorinated Biphenyls as Aroclors in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls as Aroclors in Sediment (ug/kg dry weight)																			
					Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	01-212	12.71	U		12.71	U		12.71	U		12.71	U		12.71	U		12.71	U		12.71	U	
India Basin Area I	IB-55	SA	AAB-160	01-212	12.21	U		12.21	U		12.21	U		12.21	U		12.21	U		12.21	U		12.21	U	
India Basin Area I	IB-56	SA	AAB-159	01-212	12.73	U		12.73	U		12.73	U		12.73	U		12.73	U		12.73	U		12.73	U	
India Basin Area I	IB-57	SA	AAB-129	01-212	11.65	U		11.65	U		11.65	U		11.65	U		11.65	U		11.65	U		11.65	U	
India Basin Area I	IB-58	SA	AAB-130	01-212	11.71	U		11.71	U		11.71	U		11.71	U		11.71	U		11.71	U		11.71	U	
India Basin Area I	IB-59	SA	AAB-161	01-212	12.83	U		12.83	U		12.83	U		12.83	U		12.83	U		12.83	U		12.83	U	
Point Avisadero Area III	PA-38	SA	AAB-133	01-213	11.87	U		11.87	U		11.87	U		11.87	U		11.87	U		11.87	U		608.53		
Point Avisadero Area III	PA-39	SA	AAB-128	01-212	11.33	U		11.33	U		11.33	U		11.33	U		11.33	U		11.33	U		355.96		
Point Avisadero Area III	PA-40	SA	AAB-132	01-213	12.43	U		12.43	U		12.43	U		12.43	U		12.43	U		12.43	U		12.43	U	
Point Avisadero Area III	PA-41	SA	AAB-092	01-213	11.05	U		11.05	U		11.05	U		11.05	U		11.05	U		11.05	U		738.78	D	J
Point Avisadero Area III	PA-42	SA	AAB-086	01-212	12.24	U		12.24	U		12.24	U		12.24	U		12.24	U		12.24	U		1,159.87		
Point Avisadero Area III	PA-43	SA	AAB-087	01-333	10.9	U	UJ	10.9	U	UJ	10.9	U	UJ	10.9	U	UJ	10.9	U	UJ	10.9	U	UJ	10.9	U	UJ
Point Avisadero Area III	PA-44	SA	AAB-091	01-213	9.81	U	UJ	9.81	U	UJ	9.81	U	UJ	9.81	U	UJ	9.81	U	UJ	9.81	U	UJ	47.22		J
Point Avisadero Area III	PA-45	SA	AAB-126	01-212	9.67	U		9.67	U		9.67	U		9.67	U		9.67	U		9.67	U		2,544.19	D	
Point Avisadero Area III	PA-46	SA	AAB-127	01-212	9.88	U		9.88	U		9.88	U		9.88	U		9.88	U		9.88	U		348.6		
Point Avisadero Area III	PA-47	SA	AAB-089	01-212	10.11	U		10.11	U		10.11	U		10.11	U		10.11	U		10.11	U		10.11	U	
Point Avisadero Area III	PA-48	SA	AAB-088	01-212	10.56	U		10.56	U		10.56	U		10.56	U		10.56	U		10.56	U		10.56	U	
Point Avisadero Area III	PA-49	SA	AAB-083	01-212	10.51	U		10.51	U		10.51	U		10.51	U		10.51	U		10.51	U		10.51	U	
Point Avisadero Area III	PA-50	SA	AAB-094	01-213	11.57	U		11.57	U		11.57	U		11.57	U		11.57	U		11.57	U		11.57	U	
Point Avisadero Area III	PA-51	SA	AAB-085	01-212	10.42	U		10.42	U		10.42	U		10.42	U		10.42	U		10.42	U		10.42	U	
Point Avisadero Area III	PA-52	SA	AAB-084	01-212	10.16	U		10.16	U		10.16	U		10.16	U		10.16	U		10.16	U		10.16	U	
Point Avisadero Area III	PA-53	SA	AAB-090	01-213	11.48	U		11.48	U		11.48	U		11.48	U		11.48	U		79.12		J	11.48	U	
Point Avisadero Area III	PA-70	SA	AAB-137	01-213	11.92	U		11.92	U		11.92	U		11.92	U		11.92	U		11.92	U		75.21		
Point Avisadero Area III	PA-71	SA	AAB-136	01-213	11.89	U		11.89	U		11.89	U		11.89	U		11.89	U		11.89	U		11.89	U	
Point Avisadero Area III	PA-72	SA	AAB-135	01-213	13.2	U		13.2	U		13.2	U		13.2	U		13.2	U		13.2	U		13.2	U	
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-333	7.14	U	UJ	7.14	U	UJ	7.14	U	UJ	7.14	U	UJ	7.14	U	UJ	7.14	U	UJ	7.14	U	UJ
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-230	7.09	U		7.09	U		7.09	U		7.09	U		7.09	U		7.09	U		7.09	U	
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-229	13.82	U		13.82	U		13.82	U		13.82	U		13.82	U		13.82	U		13.82	U	
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-239	7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U	
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-239	7.14	U		7.14	U		7.14	U		7.14	U		7.14	U		7.14	U		7.14	U	
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-229	13.56	U		13.56	U		13.56	U		13.56	U		13.56	U		13.56	U		13.56	U	
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-239	7.62	U		7.62	U		7.62	U		7.62	U		7.62	U		7.62	U		7.62	U	
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-229	11.36	U		11.36	U		11.36	U		11.36	U		11.36	U		11.36	U		11.36	U	
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-240	9.92	U	UJ	9.92	U	UJ	9.92	U	UJ	9.92	U	UJ	9.92	U	UJ	9.92	U	UJ	402.84		J
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-230	13.14	U		13.14	U		13.14	U		13.14	U		13.14	U		13.14	U		92.85		
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-240	11.96	U		11.96	U		11.96	U		11.96	U		11.96	U		11.96	U		300.85		
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-240	12.11	U		12.11	U		12.11	U		12.11	U		12.11	U		12.11	U		259.55		
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-229	12.9	U		12.9	U		12.9	U		12.9	U		12.9	U		12.9	U		82.08		
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-240	9.06	U		9.06	U		9.06	U		9.06	U		9.06	U		9.06	U		130.5		
South Basin Area X	SB-01	SA	AAB-148	01-240	11.87	U		11.87	U		11.87	U		11.87	U		11.87	U		11.87	U		472.14	D	J
South Basin Area X	SB-02	SA	AAB-143	01-240	9.88	U		9.88	U		9.88	U		9.88	U		9.88	U		9.88	U		821.17	D	
South Basin Area X	SB-03	SA	AAB-122	01-240	13.51	U		13.51	U		13.51	U		13.51	U		13.51	U		13.51	U		148.25		
South Basin Area X	SB-04	SA	AAB-121	01-240	12.66	U		12.66	U		12.66	U		12.66	U		12.66	U		12.66	U		250.06		
South Basin Area X	SB-05	SA	AAB-141	01-229	13.46	U		13.46	U		13.46	U		13.46	U		13.46	U		13.46	U		216.48		
South Basin Area X	SB-06	SA	AAB-120	01-240	14.28	U		14.28	U		14.28	U		14.28	U		14.28	U		14.28	U		102.16		
South Basin Area X	SB-07	SA	AAB-119	01-240	11.85	U		11.85	U		11.85	U		11.85	U		11.85	U		11.85	U		333.93		
South Basin Area X	SB-08	SA	AAB-115	01-240	13.1	U		13.1	U		13.1	U		13.1	U		13.1	U		13.1	U		309.68		
South Basin Area X	SB-09	SA	AAB-145	01-230	8.53	U		8.53	U		8.53	U		8.53	U		8.53	U		8.53	U		237.01		
South Basin Area X	SB-10	SA	AAB-144	01-230	9.24	U		9.24	U		9.24	U		9.24	U		9.24	U		9.24	U		511.74		
South Basin Area X	SB-11	SA	AAB-139	01-229	11.95	U		11.95	U		11.95	U		11.95	U		11.95	U		11.95	U		994.31	D	
South Basin Area X	SB-12	SA	AAB-154	01-229	12.5	U		12.5	U		12.5	U		12.5	U		12.5	U		12.5	U		541.01		
South Basin Area X	SB-13	SA	AAB-113	01-239	12.95	U		12.95	U		12.95	U		12.95	U		12.95	U		12.95	U		648.9		
South Basin Area X	SB-14	SA	AAB-138	01-229	13.31	U		13.31	U		13.31	U		13.31	U		13.31	U		13.31	U		480.06		

Table B-5. Polychlorinated Biphenyls as Aroclors in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls as Aroclors in Sediment (ug/kg dry weight)																			
					Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-15	SA	AAB-114	01-239	13.72	U		13.72	U		13.72	U		13.72	U		13.72	U		13.72	U		364.73		J
South Basin Area X	SB-16	SA	AAB-112	01-239	8.97	U	R	8.97	U	R	8.97	U	R	8.97	U	R	8.97	U	R	8.97	U	R	1,660.72		J
South Basin Area X	SB-17	SA	AAB-146	01-230	11.15	U		11.15	U		11.15	U		11.15	U		11.15	U		11.15	U		836.9		
South Basin Area X	SB-18	SA	AAB-100	01-230	7.12	U		7.12	U		7.12	U		7.12	U		7.12	U		7.12	U		689.16		
South Basin Area X	SB-19	SA	AAB-101	01-230	7.12	U		7.12	U		7.12	U		7.12	U		7.12	U		7.12	U		3,265.93	D	
South Basin Area X	SB-20	SA	AAB-109	01-239	12.27	U		12.27	U		12.27	U		12.27	U		12.27	U		12.27	U		1,422.05		
South Basin Area X	SB-21	SA	AAB-102	01-230	8.06	U	UJ	8.06	U	UJ	8.06	U	UJ	8.06	U	UJ	8.06	U	UJ	8.06	U	UJ	5,394.06	D	J
South Basin Area X	SB-22	SA	AAB-111	01-239	11.18	U	UJ	11.18	U	UJ	11.18	U	UJ	11.18	U	UJ	11.18	U	UJ	11.18	U	UJ	1,631.93		J
South Basin Area X	SB-23	SA	AAB-099	01-230	152.8	U		152.8	U		152.8	U		152.8	U		152.8	U		152.8	U		3,988.51	D	
Alameda Buoy	AB-67	SA	AAB-157	01-212	11.17	U		11.17	U		11.17	U		11.17	U		11.17	U		11.17	U		11.17	U	
Alcatraz Environs	AL-64	SA	AAB-098	01-230	6.96	U		6.96	U		6.96	U		6.96	U		6.96	U		6.96	U		6.96	U	
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-212	14.42	U		14.42	U		14.42	U		14.42	U		14.42	U		14.42	U		14.42	U	
Paradise Cove	PC-63	SA	AAB-162	01-213	11.65	U	UJ	11.65	U	UJ	11.65	U	UJ	11.65	U	UJ	11.65	U	UJ	11.65	U	UJ	11.65	U	UJ
Paradise Cove	PC-63	SA	AAB-162	01-333	11.96	U	UJ	11.96	U	UJ	11.96	U	UJ	11.96	U	UJ	11.96	U	UJ	11.96	U	UJ	11.96	U	UJ
Red Rock	RR-65	SA	AAB-165	01-212	7.88	U		7.88	U		7.88	U		7.88	U		7.88	U		7.88	U		7.88	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.
R Quality control indicates the data are not useable.

Table B-6. Chlorinated Pesticides in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Chlorinated Pesticides in Sediment (ug/kg dry weight)																																					
					2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	01-212	0.12	U		0.15	U		0.14	U		1.17			1.37			0.49	J		0.07	J		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
India Basin Area I	IB-55	SA	AAB-160	01-212	0.12	U		0.15	U		0.14	U		1.92			1.06			0.75	J		0.5	J		0.11	U		0.11	U		0.1	U		0.08	U		0.09	U	
India Basin Area I	IB-56	SA	AAB-159	01-212	0.12	U		0.15	U		0.14	U		1.03			1.33			0.83	J		0.08	J		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
India Basin Area I	IB-57	SA	AAB-129	01-212	0.11	U		0.14	U		0.13	U		0.66	J		0.89	J		0.1	U		0.1	J		0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
India Basin Area I	IB-58	SA	AAB-130	01-212	0.11	U		0.14	U		0.13	U		0.9	J		1.15			0.28	J		0.08	J		0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
India Basin Area I	IB-59	SA	AAB-161	01-212	0.12	U		0.15	U		0.14	U		1.44			1.84			0.43	J		0.26	J		0.11	U		0.11	U		0.1	U		0.14	J		0.09	U	
Point Avisadero Area III	PA-38	SA	AAB-133	01-213	0.11	U		0.14	U		0.13	U	UJ	1.26			1.52			0.19	J		0.09	J		0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
Point Avisadero Area III	PA-39	SA	AAB-128	01-212	0.11	U		0.13	U		0.13	U		1.41			1.21			0.51	J		0.07	U		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Point Avisadero Area III	PA-40	SA	AAB-132	01-213	0.12	U		0.15	U		0.14	U	UJ	1.22			1.32			0.32	J		0.12	J		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
Point Avisadero Area III	PA-41	SA	AAB-092	01-213	0.1	U		0.13	U		0.12	U	UJ	1.74			1.48			0.64	J		0.19	J		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Point Avisadero Area III	PA-42	SA	AAB-086	01-212	0.1	U		0.12	U		0.11	U		1.67			1.23			0.08	U		0.19	J		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-43	SA	AAB-087	01-333	0.1	U	UJ	0.13	U	UJ	0.12	U	UJ	0.63	J	J	0.71	J	J	0.09	U	UJ	0.08	J	J	0.09	U	UJ	0.1	U	UJ	0.09	U	UJ	0.08	U	UJ	0.08	U	UJ
Point Avisadero Area III	PA-44	SA	AAB-091	01-213	0.09	U	UJ	0.12	U	UJ	0.11	U	UJ	1.11		J	1.14		J	0.84		J	0.37	J	J	0.08	U	UJ	0.09	U	UJ	0.08	U	UJ	0.07	U	UJ	0.07	U	UJ
Point Avisadero Area III	PA-45	SA	AAB-126	01-212	0.09	U		0.12	U		0.11	U		1.19			1.11			0.27	J		0.06	U		0.08	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-46	SA	AAB-127	01-212	0.09	U		0.12	U		0.11	U		1.18			0.75	J		0.41	J		0.06	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-47	SA	AAB-089	01-212	0.1	U		0.12	U		0.11	U		1.7		J	1.43		J	0.08	U		0.21	J	J	0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-48	SA	AAB-088	01-212	0.1	U		0.13	U		0.12	U		0.9			0.99			0.09	U		0.03	J		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-49	SA	AAB-083	01-212	0.84	J		0.13	U		0.12	U		0.72	J		0.64	J		0.09	U		0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-50	SA	AAB-094	01-213	0.11	U		0.14	U		0.13	U	UJ	1			1.54			0.18	J		0.12	J		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Point Avisadero Area III	PA-51	SA	AAB-085	01-212	0.1	U		0.12	U		0.12	U		0.57	J		0.48	J		0.09	U		0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-52	SA	AAB-084	01-212	0.1	U		0.12	U		0.11	U		0.84			0.58	J		0.08	U		0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-53	SA	AAB-090	01-213	0.11	U		0.14	U		0.13	U	UJ	1.51		J	1.38		J	0.59	J	J	0.21	J	J	0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Point Avisadero Area III	PA-70	SA	AAB-137	01-213	0.11	U		0.14	U		0.13	U	UJ	1.1			1			0.23	J		0.14	J		0.1	U		0.11	U		0.09	U		0.08	U		0.09	U	
Point Avisadero Area III	PA-71	SA	AAB-136	01-213	0.11	U		0.14	U		0.13	U	UJ	0.93	J		0.96			0.14	J		0.11	J		0.1	U		0.11	U		0.09	U		0.08	U		0.09	U	
Point Avisadero Area III	PA-72	SA	AAB-135	01-213	0.13	U		0.16	U		0.15	U	UJ	0.84	J		0.77	J		0.11	U		0.08	J		0.11	U		0.12	U		0.1	U		0.09	U		0.1	U	
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-333	0.07	U	UJ	0.08	U	UJ	0.08	U	UJ	0.34	J	J	0.23	J	J	0.06	U	UJ	0.05	U	UJ	0.06	U	UJ	0.06	U	UJ	0.06	U	UJ	0.05	U	UJ	0.05	U	UJ
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-230	0.07	U		0.08	U		0.08	U		0.06	U		0.2	J		0.06	U	UJ	0.05	U		0.06	U		0.06	U		0.06	U		0.02	J		0.05	U	
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-229	0.13	U		0.16	U		0.15	U		1.03	J		1.19			0.32	J	J	0.15	J		0.12	U		0.12	U		0.11	U		0.1	U		0.1	U	
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-239	0.07	U		0.08	U		0.08	U		0.27	J		0.31	J		0.06	U	UJ	0.05	U		0.06	U		0.06	U		0.06	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-239	0.07	U		0.08	U		0.08	U		0.21	J		0.22	J		0.06	U	UJ	0.05	U		0.06	U		0.06	U		0.06	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-229	0.13	U		0.16	U		0.15	U		0.95	J		1.11			0.12	J	J	0.15	J		0.12	U		0.12	U		0.11	U		0.09	U		0.1	U	
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-239	0.07	U		0.09	U		0.09	U		0.07	U		0.51	J		0.06	U	UJ	0.05	U		0.07	U		0.07	U		0.06	U		0.05	U		0.06	U	
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-229	0.11	U		0.14	U		0.13	U		0.82	J		0.94			0.53	J	J	0.11	J		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-240	0.09	U	UJ	0.12	U	UJ	0.11	U	UJ	3.08		J	0.33	J	J	0.78	J	J	0.41	J	J	0.44	J	J	0.09	U	UJ	0.08	U	UJ	0.41	J	J	0.07	U	UJ
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-230	0.12	U		0.16	U		0.15	U		1.16			1.18			0.11	U	UJ	0.14	J		0.11	U		0.12	U		0.1	U		0.1	J		0.1	U	
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-240	0.11	U		0.14	U		0.13	U		2.71			1.5			0.67	J		0.38	J		0.1	U		0.11	U		0.09	U		0.34	J		0.09	U	
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-240	0.12	U		0.14	U		0.14	U		2.36			0.94	J		0.57	J		0.29	J		0.1	U		0.11	U		0.09	U		0.42	J		0.09	U	
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-229	0.12	U		0.15	U		0.14	U		1.09			1.15			0.12	J	J	0.24	J		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-240	0.09	U		0.11	U		0.1	U		0.91			0.79			0.17	J		0.16	J		0.08	U		0.08	U		0.07	U		0.08	J		0.07	U	
South Basin Area X	SB-01	SA	AAB-148	01-240	0.11	U		0.14	U		0.13	U		6.89			9.12			1.16			3.56		J	4.21			0.1	U		0.09	U		6.29		J	0.09	U	
South Basin Area X	SB-02	SA	AAB-143	01-240	0.09	U		0.12	U		0.11	U		15.64			18.4			1.33			5.36			10.41			0.09	U		0.08	U		10.53			0.07	U	
South Basin Area X	SB-03	SA	AAB-122	01-240	0.13	U		0.16	U		0.15	U		1.91			2.16			0.39	J		0.67	J		0.12	U		0.12	U		0.11	U		0.54	J		0.1	U	
South Basin Area X	SB-04	SA	AAB-121	01-240	0.12	U		0.15	U		0.14	U		2.87			3.56			0.48	J		0.97	J		0.83	J		0.11	U		0.1	U		0.98	J		0.09	U	
South Basin Area X	SB-05	SA	AAB-141	01-229	0.13	U		0.16	U		0.15	U		2.32			2.92			0.26	J	J	0.94	J		0.12	U		0.12	U		0.11	U		1.1			0.1	U	
South Basin Area X	SB-06	SA	AAB-120	01-240	0.14	U		0.17	U		0.16	U		0.97	J		1.06	J		0.42	J		0.2	J		0.12	U		0.13	U		0.11	U		0.17	J		0.1	U	
South Basin Area X	SB-07	SA	AAB-119	01-240	0.11	U		0.14	U		0.13	U		3.7			5.25			0.54	J		1.28			1.33			0.1	U		0.09	U		1.7			0.09	U	
South Basin Area X	SB-08	SA	AAB-115	01-240	0.12	U	J	0.16	U		0.15	U		4.26			2.92			0.85	J		0.95	J		0.85	J		0.12	U		0.1	U		0.95	J		0.1	U	
South Basin Area X	SB-09	SA	AAB-145	01-230	0.08	U		0.1	U		0.1	U		1.8			6.64			0.07	U	UJ	0.41	J		0.07	U		0.08	U		0.07	U		0.71			0.06	U	
South Basin Area X	SB-10	SA	AAB-144	01-230	0.09	U		0.11	U		0.1	U		3.84			12.38			1.67		J	1.32			2.27			0.08	U		0.07	U		2.5			0.07	U	
South Basin Area X	SB-11	SA	AAB-139	01-229	0.11	U		0.14	U		0.13	U		5.91			9.95	D		1.34		J	1.67			2.79			0.11	U		0.09	U		3.01			0.09	U	
South Basin Area X	SB-12	SA	AAB-154	01-229	0.12	U		0.15	U		0.14	U		4.39			7.65			1.06		J	1.33			2.11			0.11	U		0.1	U		1.84			0.09	U	
South Basin Area X	SB-13	SA	AAB-113	01-239	0.12	U		0.15	U		0.14	U		32.71	D		5.23			0.53	J	J	0.87	J		1.36			0.11	U		0.1	U		1.25			0.09	U	
South Basin Area X	SB-14	SA	AAB-138	01-229	0.13	U		0.16	U		0.15	U		5.11			6.56			2.64		J	5.47		J	1.7			0.12	U		0.1	U		7.26		J	2.13		
South Basin Area X	SB-15	SA	AAB-114	01-239	0.13	U		0.16	U		0.15	U		2.06			3.25		J	0.39	J	J	0.54	J	J	0.75	J		0.12	U		0.11	U		0.75	J	J	0.1	U	
South Basin Area X	SB-16	SA	AAB-112	01-239	0.09	U	R	0.11	U	R	0.1	U	R	4.19		J	0.07	U	R	0.9		J	0.77		J	0.08	U	R	0.08	U	R	0.07	U	R	1.55		J	0.07	U	R
South Basin Area X	SB-17	SA	AAB-146	01-230	0.11	U		0.13	U		0.12	U		25.4			3.6			1.29		J	0.68	J		0.1	U		0.1	U		0.09	U		1.01			0.08	U	
South Basin Area X	SB-18	SA	AAB-100	01-230	0.07	U		0.08	U		0.08	U		4.05			6.51			0.06	U	UJ	0.7			1.25			0.06	U		0.06	U		2.01			0.05	U	
South Basin Area X	SB-19	SA	AAB-101	01-230	0.07	U		0.08	U		0.08	U		2.02			1.58			0.06	U	UJ	0.54	J		0.77			0.06	U		0.06	U		0.79			0.05	U	
South Basin Area X	SB-20	SA	AAB-109	01-239	0.12	U		0.15	U		0.14	U		5.38			9.52			0.93	J	J	2.37			3.63			0.11	U		0.1	U		3.6			0.09	U	
South Basin Area X	SB-21	SA	AAB-102	01-230	0.08	U	UJ	0.1	U	UJ	0.09	U	UJ	43.61	D	J	5.55		J	3.6		J	0.7		J	0.07	U	UJ	0.07	U	UJ	0.06	U	UJ	0.86		J	0.06	U	UJ
South Basin Area X	SB-22	SA	AAB-111	01-239	0.11	U	UJ	0.13	U	UJ	0.12	U	UJ	5.11		J	4.29		J	0.78	J	J	1.38		J	2.75		J	0.1	U	UJ	0.09	U	UJ	2.35		J	0.08	U	UJ
South Basin Area X	SB-23	SA	AAB-099	01-230	1.4	U		1.8	U		1.8	U		3.56		J	1.2	U		2.08		J	0.29	J	J	1.4	U		1.4	U		1.2	U		0.37	J	J	1.2	U	
Alameda Buoy	AB-67	SA	AAB-157	01-212	0.11	U		0.13	U		0.12	U		1.63			0.93			0.09	U		0.07	U		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Alcatraz Environs	AL-64	SA	AAB-098	01-230	0.07	U		0.08	U		0.08	U		0.06	U		0.06	U		0.06	U	UJ	0.05	U		0.06	U		0.06	U		0.05	U		0.05	U		0.05	U	
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-212	0.14	U		0.17	U		0.16	U		0.87	J		0.78	J		0.12	U		0.12	J		0.12	U		0.13	U		0.11	U		0.1	U		0.11	U	
Paradise Cove	PC-63	SA	AAB-162	01-213	0.11	U	UJ	0.14	U	UJ	0.13	U	UJ	0.43	J	J	0.33	J	J	0.1	U	UJ	0.02	J	J	0.1	U	UJ	0.1	U	UJ	0.09	U	UJ	0.08	U	UJ	0.09	U	UJ
Paradise Cove	PC-63	SA	AAB-162	01-333	0.11	U	UJ	0.14	U	UJ	0.13	U	UJ	3.11		J	0.71	J	J	1.65		J	0.08	U	UJ	0.1	U	UJ	0.11	U	UJ	0.09	U	UJ	0.08	U	UJ	0.09	U	UJ

Table B-6. Chlorinated Pesticides in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Chlorinated Pesticides in Sediment (ug/kg dry weight)																																		
					2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Red Rock	RR-65	SA	AAB-165	01-212	0.07	U		0.09	U		0.09	U		0.41	J		0.31	J		0.06	U		0.05	U		0.07	U		0.07	U		0.06	U		0.05	U		0.06	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.
R Quality control indicates the data are not useable.

Table B-7. Polycyclic Aromatic Hydrocarbons in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in Sediment (ug/kg dry weight)																				
					2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	01-212	6.66	B		4.92			9.12			34.47			8.45			12.93	B		78.77	B	
India Basin Area I	IB-55	SA	AAB-160	01-212	9.13	B		9.09			12.61			55.2			13.44			15.59	B		125.12	B	
India Basin Area I	IB-56	SA	AAB-159	01-212	6.17	B		6.52			8.79			43.66			8.76			12.24	B		86.96	B	
India Basin Area I	IB-57	SA	AAB-129	01-212	6.36	B		6.1			7.36			52.15			12.48			12.79	B		105.84	B	
India Basin Area I	IB-58	SA	AAB-130	01-212	6.72	B		7.64			10.85			53.57			11.46			12.52	B		102.85	B	
India Basin Area I	IB-59	SA	AAB-161	01-212	12.98	B		11.82			13.18			228.23			32.71			19.27	B		167.24	B	
Point Avisadero Area III	PA-38	SA	AAB-133	01-213	7.05	B		14.74			10.47			75.32			16.97			12.74	B		175.88	B	
Point Avisadero Area III	PA-39	SA	AAB-128	01-212	7.09	B		10.41			9.94			64.13			15.39			14.56	B		149.84	B	
Point Avisadero Area III	PA-40	SA	AAB-132	01-213	6.6	B		7.42			9.13			57.38			12.49			12.2	B		112	B	
Point Avisadero Area III	PA-41	SA	AAB-092	01-213	20.36	B		181.82			18.03			142.74			92.42			18.24	B		751.28	B	
Point Avisadero Area III	PA-42	SA	AAB-086	01-212	18.16	B		21.28			11.73			489.33			61.61			24.76	B		273.39	B	
Point Avisadero Area III	PA-43	SA	AAB-087	01-333	4.13			6.84			12.03			56.9			10.34			9.15			157.85		
Point Avisadero Area III	PA-44	SA	AAB-091	01-213	8.78	B		40.64			14.05			100.64			22.38			18.54	B		354.58	B	
Point Avisadero Area III	PA-45	SA	AAB-126	01-212	10.97	B		25.65			21.51			101.3			27.94			27.52	B		326.69	B	
Point Avisadero Area III	PA-46	SA	AAB-127	01-212	8.21	B		16.31			10.18			71.86			21.26			16.48	B		203.8	B	
Point Avisadero Area III	PA-47	SA	AAB-089	01-212	16.09	B		44.97			49.19			135.58			44.29			31.48	B		435.54	B	
Point Avisadero Area III	PA-48	SA	AAB-088	01-212	13.51	B		36.6			33.13			111.88			31.23			34.48	B		354.72	B	
Point Avisadero Area III	PA-49	SA	AAB-083	01-212	7.15	B		15.23			27.6			141.33			24.51			19.65	B		358.54	B	
Point Avisadero Area III	PA-50	SA	AAB-094	01-213	7.59	B		21.18			27.45			91.06			18.33			19.54	B		305.32	B	
Point Avisadero Area III	PA-51	SA	AAB-085	01-212	10.2	B		26.29			43.26			206.21			33.77			28.59	B		456.72	B	
Point Avisadero Area III	PA-52	SA	AAB-084	01-212	16.94	B		26.89			37.38			237.67		J	59.13			45.73	B		763.13	B	
Point Avisadero Area III	PA-53	SA	AAB-090	01-213	12.95	B		42.51			58.06		J	246.03		J	57			32.9	B	J	690.81	B	
Point Avisadero Area III	PA-70	SA	AAB-137	01-213	6.95	B		9.41			13.4			77.08			15.65			14.1	B		134.28	B	
Point Avisadero Area III	PA-71	SA	AAB-136	01-213	6.05	B		7.78			9.77			72.91			14.06			11.85	B		101.5	B	
Point Avisadero Area III	PA-72	SA	AAB-135	01-213	4.25	B		4.44			6.98			36.25			8.2			7.72	B		72.75	B	
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-333	2.05			1.15			8.54			41.79			6.02			4.63			132.93		
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-230	1.98			0.68	J		3.26			9.46			1.87			4.64			24.94		
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-229	6.39			6.24			8.11			34.25		J	8.61			12.89			100.75		
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-239	1.59			1.63			1.09			4.87			1.55			3.51		U	18.63		
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-239	4.56			0.99			1.70			2.91			1.29			15.95			11.84		
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-229	5.51			5.81			4.77			20.89		J	7.31			11.15			71.12		
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-239	1.77			0.84			2.03			6.39			1.62			4.10		U	16.02		
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-229	4.88			4.82			7.02			43.16		J	6.33			11.33			85.16		
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-240	9.85			7.62			10.17			60.85			11.34			14.95	B		135.24		
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-230	7.72			5.23			9.70			27.97			7.09			15.85			84.47		
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-240	8.13			3.29			6.66			27.34			7.24			13.85	B		64.95		
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-240	6.24			2.34			5.9			16.79			4.58			10.72	B		54.03		
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-229	6.77			3.74			6.53			24.51		J	6.4			14.37			73.33		
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-240	5.23			2.13			4.71			11.38			3.27			10.37	B		40.37		
South Basin Area X	SB-01	SA	AAB-148	01-240	26.85			6.4		J	11.41			37.13			10.07			28.15	B		120.79		
South Basin Area X	SB-02	SA	AAB-143	01-240	49.04			11.61			11.84			51.29			18.97			46.44	B		208.75		
South Basin Area X	SB-03	SA	AAB-122	01-240	8.32			4.03			7.9			23.86			5.76			14.85	B		74.25		
South Basin Area X	SB-04	SA	AAB-121	01-240	11.23			5.16			9.66			25.68			7.68			17.78	B		92.03		
South Basin Area X	SB-05	SA	AAB-141	01-229	11.29			3.75			6.22			17.89		J	6.46			19.94			70.57		
South Basin Area X	SB-06	SA	AAB-120	01-240	3.7			1.08	J		2.9			6.99			2.02			7.7	B	U	22.01		
South Basin Area X	SB-07	SA	AAB-119	01-240	19.77			7.94			11.11			53.12			12.38			27.31	B		135.53		
South Basin Area X	SB-08	SA	AAB-115	01-240	11.23			10.44			9.55			26.74			7.65			19.14	B		76.91		
South Basin Area X	SB-09	SA	AAB-145	01-230	12.19			3.37			7.05			21.41			6.59			26.64			67.45		
South Basin Area X	SB-10	SA	AAB-144	01-230	28.04			11.17			12.83			102.57			17.33			58.7			157.29		
South Basin Area X	SB-11	SA	AAB-139	01-229	22.01			6.1			10.91			32.8		J	9.83			41.56			125.15		
South Basin Area X	SB-12	SA	AAB-154	01-229	16.32			4.68			8.99			27.04		J	8.07			26.33			93.34		
South Basin Area X	SB-13	SA	AAB-113	01-239	15.74			6.02			7.55			31.46			9.53			28.73			103.81		
South Basin Area X	SB-14	SA	AAB-138	01-229	15.67			5.67			10.65			36.50		J	9.36			25.08			101		
South Basin Area X	SB-15	SA	AAB-114	01-239	16.49		J	8.91		J	7.30		J	34.80		J	10.26		J	27.59		J	101.82		J
South Basin Area X	SB-16	SA	AAB-112	01-239	14.92			6.89			8.99			54.27			12.07			24.83			153.61		
South Basin Area X	SB-17	SA	AAB-146	01-230	15.07			9.07			15.82			48.59			12.01			27.17			144.14		
South Basin Area X	SB-18	SA	AAB-100	01-230	20.96			11.43			13.07			51.16			15.87			57.12			153.04		
South Basin Area X	SB-19	SA	AAB-101	01-230	8.13			3.22			2.26			8.48			3.56			8.27			48.04		
South Basin Area X	SB-20	SA	AAB-109	01-239	20.47			7.70			10.97			42.59			11.54			40.31			147.11		
South Basin Area X	SB-21	SA	AAB-102	01-230	27.03			21.31			30.76			234.34			81.46			40.92			667.95		
South Basin Area X	SB-22	SA	AAB-111	01-239	24.01			6.97			12.36			34.53			10.54			42.45			103.63		
Alameda Buoy	AB-67	SA	AAB-157	01-212	7.15	B		12.37			12.03			42.47			10.93			16.5	B		142.36	B	
Alcatraz Environs	AL-64	SA	AAB-098	01-230	1.17		J	1.43			4.97			12.49			2.6			3.68		J	32.12		J
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-212	5.86	B		2.85			4.42			11.31			5.12			12.04	B		47.15	B	
Paradise Cove	PC-63	SA	AAB-162	01-333	3.88			2.51			5			15.89			4.11			8.34			50.99		

Table B-7. Polycyclic Aromatic Hydrocarbons in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in Sediment (ug/kg dry weight)																				
					2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Red Rock	RR-65	SA	AAB-165	01-212	1.19	B		1.04			1.02			2.73			1.06			3.17	B	U	14.22	B	

B Analyte found in both sample and associated blank. The "B" will be reported on the result associated with the field samples, not the blank.
U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-7. Polycyclic Aromatic Hydrocarbons in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in Sediment (ug/kg dry weight)																															
					Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	01-212	97.76	B		172.77			123.31			158.59	B		108.75			125.77	B		17.54		J	217.51			144.94			288.61	B	
India Basin Area I	IB-55	SA	AAB-160	01-212	149.1	B		218.79			160.43			183.59	B		148.93			200.61	B		30.37		J	284.04			171.31			348.09	B	
India Basin Area I	IB-56	SA	AAB-159	01-212	105.4	B		177.07			124.34			149.94	B		121.85			137.29	B		18.56		J	225.05			140.54			294.39	B	
India Basin Area I	IB-57	SA	AAB-129	01-212	100.85	B		170.2			114.21			150.71	B		104.51			129.15	B		16.74		J	235.74			136.35			303.01	B	
India Basin Area I	IB-58	SA	AAB-130	01-212	116.37	B		185.2			122.25			155.75	B		123.73			153.62	B		18.86		J	251.75			144.88			319.64	B	
India Basin Area I	IB-59	SA	AAB-161	01-212	236.43	B		299.1			264.6			220.87	B		255.37			375.15	B		42.79		J	418.93			223.81			436.74	B	
Point Avisadero Area III	PA-38	SA	AAB-133	01-213	217.31			279.79			211.56			221.71	B		217.35			264.26			34.52		J	475.83			213.82			513.6	B	
Point Avisadero Area III	PA-39	SA	AAB-128	01-212	172.56	B		239.35			174.34			197.56	B		171.53			212.72	B		28.16		J	378.75			188.25			446.23	B	
Point Avisadero Area III	PA-40	SA	AAB-132	01-213	116.06			179.19			120.28			156.61	B		120.18			147.19			18.62		J	253.07			147.78			321.89	B	
Point Avisadero Area III	PA-41	SA	AAB-092	01-213	600.94			705.9			549.87			480.99	B		546.19			715.32			94.77		J	1,214.32			506.13			1,339.19	B	
Point Avisadero Area III	PA-42	SA	AAB-086	01-212	500.77	B		517.8			467			285.19	B		431.87			657.58	B		66.16		J	935.37			313.09			678.15	B	
Point Avisadero Area III	PA-43	SA	AAB-087	01-333	135.18			190.72			127.88			133.65			123.74			156.42			18.85			311.95			129.13			384.54		J
Point Avisadero Area III	PA-44	SA	AAB-091	01-213	316.03			322.9			256.19			224.88	B		257.3			327.75			41.4		J	781.9			224.86			764.42	B	
Point Avisadero Area III	PA-45	SA	AAB-126	01-212	313.84	B		455.41			313.4			362.06	B		315.64			364.34	B		56.81		J	660.13			353.17			787.43	B	
Point Avisadero Area III	PA-46	SA	AAB-127	01-212	212.92	B		310.39			225.62			245	B		222.54			286.68	B		45.9		J	372.78			242.06			470.83	B	
Point Avisadero Area III	PA-47	SA	AAB-089	01-212	405.69	B		589.56			455.7			443.02	B		443.59			440.01	B		88.82		J	760.33			455.27			1,000.08	B	
Point Avisadero Area III	PA-48	SA	AAB-088	01-212	253.26	B		370.13			218.58			280.62	B		223.27			282.42	B		38.66		J	563.19			268.17			734.45	B	
Point Avisadero Area III	PA-49	SA	AAB-083	01-212	318.71	B		460.58			267.3			358.92	B		269.39			340.96	B		44.28		J	704.33			336.29			908.26	B	
Point Avisadero Area III	PA-50	SA	AAB-094	01-213	246.23			382.48			217.35			310.07	B		231.4			261.72			34.86		J	617.03			302.31			760.61	B	
Point Avisadero Area III	PA-51	SA	AAB-085	01-212	438.86	B		644.91			367.19			500.1	B		380.43			500.68	B		68.07		J	879.4			478.68			1,107.6	B	
Point Avisadero Area III	PA-52	SA	AAB-084	01-212	535.24	B		701.53			403.42			526.86	B		412.92			613.72	B		78.79		J	1,012.79			501.06			1,386.92	B	
Point Avisadero Area III	PA-53	SA	AAB-090	01-213	529.92			754.2			414.16			551.65	B		457.24			572.12			77.35		J	1,144.25			536.28			1,467.7	B	
Point Avisadero Area III	PA-70	SA	AAB-137	01-213	169.28			234.49			171.36			185.45	B		171.76			228.96			26.49		J	358.12			174.43			417.79	B	
Point Avisadero Area III	PA-71	SA	AAB-136	01-213	137.76			188.85			139.25			150.92	B		137.16			190.64			19.32		J	302.83			146.47			334.4	B	
Point Avisadero Area III	PA-72	SA	AAB-135	01-213	81.25			124.36			85.76			107.3	B		83.35			103.79			12.24		J	186.23			99.82			224.84	B	
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-333	106.4			106.17			59.03			56.26			74.57			120.97			10.61			198.12			53.48			254.69		
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-230	32.98			66.25			38			63.02			38.19			39.72			5.03		J	87.76			57.81			115.65		
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-229	100.21			169.71			109.08			154			109.08			123.53			15.56			221.8			140.68			300.32		
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-239	12.77			21.60			13.63			21.05			15.62			17.27			1.64			38.10			17.23			46.44		
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-239	10.89			26.07			14.97			28.47			19.06			16.39			1.49			37.09			21.21			49.38		
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-229	81.97			151.16			98.93			145.13			95.90			102.17			12.18			177.14			127.59			240.27		
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-239	16.72			32.90			20.71			34.79			22.88			21.57			2.66			46.48			28.11			62.80		
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-229	127.50			197.44			117.69			165.65			129.05			156.02			15.58			276.45			149.86			359.34		
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-240	151.48			201.64			149.28			169.71			169.11			262.04			24.81			291.17			147.79		J	328.02		
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-230	101.55			203.56			130.29			193.17			124.05			125.04			20.63		J	210.52			180.95			295.77		
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-240	75.01			115.94			82.76			114.57			91.25			156.27			13.39			143.19			96.58		J	179.29		
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-240	66.06			121.67			80.53			121.88			91.27			90.84			11.78			143.15			97.82		J	180.57		
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-229	100.5			193.51			127.91			186.17			125.35			129.56			17.33			211.54			168.48			289.13		
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-240	51.3			109.24			68.26			113.11			72.97			70.65			8.82			131.97			89.9		J	170.57		
South Basin Area X	SB-01	SA	AAB-148	01-240	133.89			267.61			176.63			282.9			192.18			189.91			31.68			268			227.78		J	365.89		
South Basin Area X	SB-02	SA	AAB-143	01-240	189.01			344.69			248.33			343.26			252.87			247.26			47.68			374.52			288.79		J	445.15		
South Basin Area X	SB-03	SA	AAB-122	01-240	81.68			158.65			99.03			156.69			113			112.75			12.94			188.94			120.04		J	244.35		
South Basin Area X	SB-04	SA	AAB-121	01-240	101.21			213.51			139.84			227.01			153.46			146.35			19.95			231.25			183.21		J	306.41		
South Basin Area X	SB-05	SA	AAB-141	01-229	91.82			179.18			129.28			186.14			126.53			117.3			18.82			190.68			166.81			260.92		
South Basin Area X	SB-06	SA	AAB-120	01-240	25.84			53.23			34.72			55.35			40.84			39.44			4.03			59.71			43.92		J	79.82		
South Basin Area X	SB-07	SA	AAB-119	01-240	125.69			244.21			164.83			256.2			177.17			178.65			24.45			295.02			208.44		J	378.3		
South Basin Area X	SB-08	SA	AAB-115	01-240	94.17			187.91			126.82			193.19		J	139.32			130.42			18.41			233.8			161.56		J	283.4		J
South Basin Area X	SB-09	SA	AAB-145	01-230	87.97			166.69			116.97			154.19			112.95			121.87			22.82		J	129.77			138.99			191.26		
South Basin Area X	SB-10	SA	AAB-144	01-230	194.81			282.03			221.71			248.1			208.98			259.98			41.86		J	332.78			228.95			384.24		
South Basin Area X	SB-11	SA	AAB-139	01-229	155.57			279.8			214.85			273.73			202.05			199.35			38.11			294.23			254.21			378.41		
South Basin Area X	SB-12	SA	AAB-154	01-229	132.45			240.1			173.8			240.61			182.81			174.53			29.93			253.5			219.89			320.01		
South Basin Area X	SB-13	SA	AAB-113	01-239	126.84			231.61			169.62			237.34			175.80			190.96361			28.56972			302.25727			202.26717			357.59106		
South Basin Area X	SB-14	SA	AAB-138	01-229	130.14			222.21			174.00			211.16			159.15			181.84			29.88			231.21		J	199.22			317.44		
South Basin Area X	SB-15	SA	AAB-114	01-239	118.35		J	217.88		J	147.91		J	225.64		J	155.68		J	170.4488		J	24.74357		J	243.49227		J	192.04198		J	316.29137		J
South Basin Area X	SB-16	SA	AAB-112	01-239	354.73			445.71			359.24			365.08			380.83			470.16009			68.35144			526.13409			357.95544			544.1152		
South Basin Area X	SB-17	SA	AAB-146	01-230	245.68			353.46			284.17			297.86			267.85			314.78			51.7		J	412.18			294.1			473.62		
South Basin Area X	SB-18	SA	AAB-100	01-230	293.25			314.63			276.54			193.69			290.23			452.82			52.1		J	465.51			205.77			518		
South Basin Area X	SB-19	SA	AAB-101	01-230	67.28			77.99			76.18			71.61			73.66			95.64			15.52		J	112.86			70.19			113.58		
South Basin Area X	SB-20	SA	AAB-109	01-239	186.37			296.96			238.74			296.13			248.32			275.8223			35.58148			405.70918			243.34107			465.57194		
South Basin Area X	SB-21	SA	AAB-102	01-230	628.91			631.88			484.48			384.42			499.56			743.88			104.19		J	952.57			412.76			1,064.74		
South Basin Area X	SB-22	SA	AAB-111	01-239	198.78			343.32			254.21			318.80			260.33			269.15266			45.73654			319.92146			280.59719			405.66177		
Alameda Buoy	AB-67	SA	AAB-157	01-212	125.45	B		239.91			146.93			221.08	B		145.08			139.66	B		24.52		J	306.43			200.03			383.27	B	
Alcatraz Environs	AL-64	SA	AAB-098	01-230	42.37			54.77			30.79			37.42			37.74			60.92			4.23		J	90.83			34			128.77		
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-212	47.78	B		118.66			82.43			136.44	B		71.78			65.75	B		12.42		J	125.92			116.81			164.24	B	
Paradise Cove	PC-63	SA	AAB-162	01-333	46.02			97.2			62.3			87.7			60.81			64.67			8.09			117.53			80.41			152.13		

Table B-7. Polycyclic Aromatic Hydrocarbons in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in Sediment (ug/kg dry weight)																															
					Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Red Rock	RR-65	SA	AAB-165	01-212	12.47	B		23.31			16.7			20.93	B		14.52			15.38	B		2.06		J	34.24			21			44.9	B	

B Analyte found in both sample and associated blank. The "B" will be reported on the result associated with the field samples, not the blank.
U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-8. Diesel Range Organics Total Petroleum Hydrocarbons in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Diesel Range Organics TPH (C10-C25) (mg/kg dry weight)		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ ID	Lab_Batch	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-30	SA	AAB-107	E1E300180	9	U	
Eastern Wetland Area VIII	EW-31	SA	AAB-104	E1E240218	16		
Eastern Wetland Area VIII	EW-32	SA	AAB-095	E1E240218	17	U	UJ
Eastern Wetland Area VIII	EW-33	SA	AAB-124	E1E300180	9	U	
Eastern Wetland Area VIII	EW-34	SA	AAB-108	E1E300180	11	J	
Eastern Wetland Area VIII	EW-35	SA	AAB-097	E1E240218	17	U	UJ
Eastern Wetland Area VIII	EW-36	SA	AAB-105	E1E300180	10	U	UJ
Eastern Wetland Area VIII	EW-37	SA	AAB-142	E1E240218	14	U	UJ
India Basin Area I	IB-54	SA	AAB-158	E1E150256	43		
India Basin Area I	IB-55	SA	AAB-160	E1E150256	81		
India Basin Area I	IB-56	SA	AAB-159	E1E150256	24	J	
India Basin Area I	IB-57	SA	AAB-129	E1E150256	22		
India Basin Area I	IB-58	SA	AAB-130	E1E150256	46		
India Basin Area I	IB-59	SA	AAB-161	E1E150256	54		
Oil Reclamation Area IX	OR-24	SA	AAB-125	E1E300180	13	U	
Oil Reclamation Area IX	OR-25	SA	AAB-103	E1E240218	49		
Oil Reclamation Area IX	OR-26	SA	AAB-116	E1E300180	15	U	
Oil Reclamation Area IX	OR-27	SA	AAB-117	E1E300180	15	U	
Oil Reclamation Area IX	OR-28	SA	AAB-096	E1E240218	36		J
Oil Reclamation Area IX	OR-29	SA	AAB-118	E1E300180	12	U	
Point Avisadero Area III	PA-38	SA	AAB-133	E1E150256	46		
Point Avisadero Area III	PA-39	SA	AAB-128	E1E150256	49		
Point Avisadero Area III	PA-40	SA	AAB-132	E1E150256	44		
Point Avisadero Area III	PA-41	SA	AAB-092	E1E150256	90		
Point Avisadero Area III	PA-42	SA	AAB-086	E1E150256	86		
Point Avisadero Area III	PA-43	SA	AAB-087	E1E150256	31		
Point Avisadero Area III	PA-44	SA	AAB-091	E1E150256	51		
Point Avisadero Area III	PA-45	SA	AAB-126	E1E100247	42		
Point Avisadero Area III	PA-46	SA	AAB-127	E1E150256	57		
Point Avisadero Area III	PA-47	SA	AAB-089	E1E150256	130		
Point Avisadero Area III	PA-48	SA	AAB-088	E1E150256	28		
Point Avisadero Area III	PA-49	SA	AAB-083	E1E100247	13	U	
Point Avisadero Area III	PA-50	SA	AAB-094	E1E150256	34		
Point Avisadero Area III	PA-51	SA	AAB-085	E1E150256	63		
Point Avisadero Area III	PA-52	SA	AAB-084	E1E150256	45		J
Point Avisadero Area III	PA-53	SA	AAB-090	E1E150256	34		
Point Avisadero Area III	PA-70	SA	AAB-137	E1E150256	48		
Point Avisadero Area III	PA-71	SA	AAB-136	E1E150256	42		
Point Avisadero Area III	PA-72	SA	AAB-135	E1E150256	54		
South Basin Area X	SB-01	SA	AAB-148	E1E300180	61		
South Basin Area X	SB-02	SA	AAB-143	E1E300180	47		J
South Basin Area X	SB-03	SA	AAB-122	E1E300180	17	U	
South Basin Area X	SB-04	SA	AAB-121	E1E300180	17	U	
South Basin Area X	SB-05	SA	AAB-141	E1E240218	24	J	J
South Basin Area X	SB-06	SA	AAB-120	E1E300180	18	U	
South Basin Area X	SB-07	SA	AAB-119	E1E300180	15	U	
South Basin Area X	SB-08	SA	AAB-115	E1E300180	16	U	
South Basin Area X	SB-09	SA	AAB-145	E1E240218	77		
South Basin Area X	SB-10	SA	AAB-144	E1E240218	110		
South Basin Area X	SB-11	SA	AAB-139	E1E240218	49		J
South Basin Area X	SB-12	SA	AAB-154	E1E240218	69		J
South Basin Area X	SB-13	SA	AAB-113	E1E300180	17	U	
South Basin Area X	SB-14	SA	AAB-138	E1E240218	24	J	J
South Basin Area X	SB-15	SA	AAB-114	E1E300180	16	U	
South Basin Area X	SB-16	SA	AAB-112	E1E300180	18	J	
South Basin Area X	SB-17	SA	AAB-146	E1E240218	89		
South Basin Area X	SB-18	SA	AAB-100	E1E240218	41		J

Table B-8. Diesel Range Organics Total Petroleum Hydrocarbons in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Diesel Range Organics TPH (C10-C25) (mg/kg dry weight)		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ ID	Lab_Batch	Result	Lab Qual	Final Qual
South Basin Area X	SB-19	SA	AAB-101	E1E240218	46		J
South Basin Area X	SB-20	SA	AAB-109	E1E300180	17	J	
South Basin Area X	SB-21	SA	AAB-102	E1E240218	150		
South Basin Area X	SB-22	SA	AAB-111	E1E300180	14	U	
South Basin Area X	SB-23	SA	AAB-099	E1E240218	77		J
Alameda Buoy	AB-67	SA	AAB-157	E1E150256	32		
Alcatraz Environs	AL-64	SA	AAB-098	E1E240218	9	U	UJ
Bay Farm Borrow Pit	BF-66	SA	AAB-156	E1E150256	51		
Paradise Cove	PC-63	SA	AAB-162	E1E150256	15	U	UJ
Red Rock	RR-65	SA	AAB-165	E1E100247	10	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.

Table B-9. Butyltins in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Butyltins in Sediment (ug/kg dry weight)											
					Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	SA	AAB-158	01-214	1.18	U		2.23	U		1.59	U		2.79	U	
India Basin Area I	IB-55	SA	AAB-160	01-214	1.08	U		2.05	U		1.46	U		2.56	U	
India Basin Area I	IB-56	SA	AAB-159	01-214	1.16	U		2.19	U		1.56	U		2.74	U	
India Basin Area I	IB-57	SA	AAB-129	01-214	1.07	U		2.03	U		1.45	U		2.54	U	
India Basin Area I	IB-58	SA	AAB-130	01-214	1.10	U		2.07	U		1.48	U		2.60	U	
India Basin Area I	IB-59	SA	AAB-161	01-214	1.16	U		10.86			17.73			2.76	U	
Point Avisadero Area III	PA-38	SA	AAB-133	01-215	1.05	U	UJ	19.73			87.28			2.50	U	
Point Avisadero Area III	PA-39	SA	AAB-128	01-214	1.00	U		33.55			131.21			2.38	U	
Point Avisadero Area III	PA-40	SA	AAB-132	01-215	1.14	U	UJ	21.51			72.86			2.70	U	
Point Avisadero Area III	PA-41	SA	AAB-092	01-215	1.00	U	UJ	57.38			207.60	D		2.36	U	
Point Avisadero Area III	PA-42	SA	AAB-086	01-214	0.95	U		33.24			110.96			2.25	U	
Point Avisadero Area III	PA-43	SA	AAB-087	01-214	0.99	U		12.98			25.47			2.34	U	
Point Avisadero Area III	PA-44	SA	AAB-091	01-215	0.88	U	UJ	24.19			103.13			2.08	U	
Point Avisadero Area III	PA-45	SA	AAB-126	01-214	0.86	U		30.44			110.72			2.04	U	
Point Avisadero Area III	PA-46	SA	AAB-127	01-214	0.94	U		29.89			76.26			2.22	U	
Point Avisadero Area III	PA-47	SA	AAB-089	01-214	0.92	U		35.67			113.93			2.18	U	
Point Avisadero Area III	PA-48	SA	AAB-088	01-214	0.97	U		1.84	U		1.31	U		2.30	U	
Point Avisadero Area III	PA-49	SA	AAB-083	01-214	0.96	U	UJ	1.82	U		1.29	U		2.28	U	
Point Avisadero Area III	PA-50	SA	AAB-094	01-215	1.02	U	UJ	1.92	U		1.37	U		2.41	U	
Point Avisadero Area III	PA-51	SA	AAB-085	01-214	0.95	U		1.80	U		1.28	U		2.25	U	
Point Avisadero Area III	PA-52	SA	AAB-084	01-214	0.94	U		1.77	U		1.26	U		2.22	U	
Point Avisadero Area III	PA-53	SA	AAB-090	01-215	1.03	U	UJ	1.94	U		1.38	U		2.43	U	
Point Avisadero Area III	PA-70	SA	AAB-137	01-215	1.07	U	UJ	16.31			38.64			2.54	U	
Point Avisadero Area III	PA-71	SA	AAB-136	01-215	1.07	U	UJ	2.02	U		14.70		J	2.53	U	
Point Avisadero Area III	PA-72	SA	AAB-135	01-215	1.17	U	UJ	2.22	U		1.58	U		2.78	U	
Eastern Wetland Area VIII	EW-30	SA	AAB-107	01-241	0.65	U	UJ	1.23	U		0.87	U		1.54	U	
Eastern Wetland Area VIII	EW-31	SA	AAB-104	01-227	0.63	U	UJ	1.20	U		0.85	U		1.50	U	
Eastern Wetland Area VIII	EW-32	SA	AAB-095	01-226	1.29	U	UJ	4.82			6.82			3.07	U	
Eastern Wetland Area VIII	EW-33	SA	AAB-124	01-241	0.66	U	UJ	1.25	U		0.89	U		1.56	U	
Eastern Wetland Area VIII	EW-34	SA	AAB-108	01-241	0.67	U	UJ	1.26	U		0.90	U		1.58	U	
Eastern Wetland Area VIII	EW-35	SA	AAB-097	01-226	1.26	U	UJ	5.36			6.27			2.97	U	
Eastern Wetland Area VIII	EW-36	SA	AAB-105	01-241	0.69	U	UJ	1.31	U		0.93	U		1.64	U	
Eastern Wetland Area VIII	EW-37	SA	AAB-142	01-226	1.07	U	UJ	3.80			4.52			2.54	U	
Oil Reclamation Area IX	OR-24	SA	AAB-125	01-242	2.69		J	20.75			65.91			2.20	U	
Oil Reclamation Area IX	OR-25	SA	AAB-103	01-227	1.26	U	UJ	6.57			7.88			2.99	U	
Oil Reclamation Area IX	OR-26	SA	AAB-116	01-242	1.09	U	UJ	16.66			27.98			2.58	U	
Oil Reclamation Area IX	OR-27	SA	AAB-117	01-242	1.07	U	UJ	9.66			14.18			2.54	U	
Oil Reclamation Area IX	OR-28	SA	AAB-096	01-226	1.24	U	UJ	5.60			10.08			2.94	U	
Oil Reclamation Area IX	OR-29	SA	AAB-118	01-242	0.80	U	UJ	2.69			3.30			1.90	U	
South Basin Area X	SB-01	SA	AAB-148	01-242	2.08		J	2.72			3.08			2.57	U	
South Basin Area X	SB-02	SA	AAB-143	01-242	0.89	U	UJ	9.71			11.07			2.11	U	
South Basin Area X	SB-03	SA	AAB-122	01-242	1.26	U	UJ	3.78			3.08			2.97	U	
South Basin Area X	SB-04	SA	AAB-121	01-242	1.22	U	UJ	12.59			12.47			2.88	U	
South Basin Area X	SB-05	SA	AAB-141	01-226	1.26	U	UJ	15.83			13.20			2.99	U	
South Basin Area X	SB-06	SA	AAB-120	01-242	1.30	U	UJ	11.43			15.00			3.09	U	
South Basin Area X	SB-07	SA	AAB-119	01-242	1.12	U	UJ	10.09			12.65			2.64	U	
South Basin Area X	SB-08	SA	AAB-115	01-242	1.21	U	UJ	12.29			17.04			2.88	U	
South Basin Area X	SB-09	SA	AAB-145	01-236	0.77	U		3.00			3.46			1.82	U	

Table B-9. Butyltins in Sediment Grab Samples, Hunters Point Shipyard Parcel F Validation Study

					Butyltins in Sediment (ug/kg dry weight)											
					Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Field_ QC_ Code	Client_ Samp_ ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-10	SA	AAB-144	01-227	0.90	U	UJ	9.74			11.76			2.12	U	
South Basin Area X	SB-11	SA	AAB-139	01-226	1.13	U	UJ	16.82			16.07			2.67	U	
South Basin Area X	SB-12	SA	AAB-154	01-226	1.16	U	UJ	17.06			15.35			2.75	U	
South Basin Area X	SB-13	SA	AAB-113	01-241	1.19	U	UJ	16.32			18.31			2.81	U	
South Basin Area X	SB-14	SA	AAB-138	01-226	1.24	U	UJ	19.49			22.46			2.93	U	
South Basin Area X	SB-15	SA	AAB-114	01-241	1.28	U	UJ	13.63			17.00			3.02	U	
South Basin Area X	SB-16	SA	AAB-112	01-241	1.17		J	6.49			11.09			1.97	U	
South Basin Area X	SB-17	SA	AAB-146	01-227	1.05	U	UJ	28.88			40.92			2.48	U	
South Basin Area X	SB-18	SA	AAB-100	01-227	0.65	U	UJ	11.20			17.16			1.55	U	
South Basin Area X	SB-19	SA	AAB-101	01-227	3.30		J	17.15			16.08			1.57	U	
South Basin Area X	SB-20	SA	AAB-109	01-241	1.13	U	UJ	19.48			27.60			2.69	U	
South Basin Area X	SB-21	SA	AAB-102	01-227	0.74	U	UJ	29.57			56.49			1.76	U	
South Basin Area X	SB-22	SA	AAB-111	01-241	1.06	U	UJ	37.22			57.56			2.50	U	
South Basin Area X	SB-23	SA	AAB-099	01-227	0.69	U	R	51.17			129.34	D		1.64	U	
Alameda Buoy	AB-67	SA	AAB-157	01-214	0.99	U		1.88	U		1.34	U		2.35	U	
Alcatraz Environs	AL-64	SA	AAB-098	01-227	0.62	U	UJ	1.32			4.04			1.48	U	
Bay Farm Borrow Pit	BF-66	SA	AAB-156	01-214	1.37	U		2.60	U		1.85	U		3.25	U	
Paradise Cove	PC-63	SA	AAB-162	01-215	1.07	U	UJ	2.03	U		1.44	U		2.54	U	
Red Rock	RR-65	SA	AAB-165	01-214	0.71	U		1.34	U		0.96	U		1.68	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-10. Grain Size in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Percent Gravel	Percent Sand	Percent Silt	Percent Clay	Percent Fines
India Basin Area I	IB-56	0	2	SA	AAB-205	83124	0	3.4	59.1	37.5	96.6
India Basin Area I	IB-56	2	4	SA	AAB-206	83124	0	1.6	50.8	47.6	98.4
India Basin Area I	IB-56	4	6	SA	AAB-207	83124	0	1.1	45.1	53.8	98.9
India Basin Area I	IB-59	0	2	SA	AAB-247	83124	0	0.9	45.8	53.3	99.1
India Basin Area I	IB-59	2	4	SA	AAB-248	83124	0	0.5	38.5	61	99.5
India Basin Area I	IB-59	4	6	SA	AAB-249	83124	0	1.6	48.5	49.9	98.4
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	83124	6	65.5	14.6	13.7	28.3
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	83124	5	65.2	16.1	13.6	29.7
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	83115	1	33.9	36.3	28.9	65.2
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	83115	0	10.4	44.6	45	89.6
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	83115	0	7.4	42.6	50	92.6
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	83115	0	7.4	43.7	48.9	92.6
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	83115	0	2	44.9	53.1	98
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	83115	0	3.3	41.7	55	96.7
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	83115	6	24.3	30.8	38.7	69.5
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	83115	0	5.1	40.9	54	94.9
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	83115	0	7.6	43.5	48.9	92.4
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	83115	0	19.8	35.1	45.1	80.2
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	83115	0	8	34.4	57.6	92
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	83115	0	4.1	42.9	52.9	95.8
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	83115	0	50.9	21.6	27.5	49.1
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	83115	0	45.6	26.9	27.5	54.4
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	83115	0	33.6	31.8	34.6	66.4
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	83124	1	71.9	10	17.6	27.6
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	83124	0	71.4	17.1	11.5	28.6
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	83124	0	87.1	4.9	8	12.9
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	83124	0	85.2	6.9	7.9	14.8
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	83124	0	78.2	12.6	9.2	21.8
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	83124	0	85.2	9.7	5.1	14.8
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	83124	0	7.9	43.4	48.7	92.1
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	83124	0	6.5	45.2	48.3	93.5
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	83124	0	1.8	47.2	51	98.2
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	83115	0	3.7	48	48.3	96.3
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	83115	0	3.5	46	50.5	96.5
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	83115	0	3	44.9	52.1	97
South Basin Area X	SB-01	0	2	SA	AAB-259	83124	3	28	39.2	30.3	69.5
South Basin Area X	SB-01	2	4	SA	AAB-260	83124	0	2.4	52	45.6	97.6
South Basin Area X	SB-01	4	6	SA	AAB-261	83124	0	11.9	50.6	37.5	88.1
South Basin Area X	SB-03	0	2	SA	AAB-208	83124	0	1.2	50.1	48.7	98.8
South Basin Area X	SB-03	2	4	SA	AAB-209	83124	0	2.6	44.3	53.1	97.4
South Basin Area X	SB-03	4	6	SA	AAB-210	83124	0	3.9	50.9	45.2	96.1
South Basin Area X	SB-06	0	2	SA	AAB-202	83124	0	1.2	39.6	59.2	98.8
South Basin Area X	SB-06	2	4	SA	AAB-203	83124	0	2.5	38.8	58.7	97.5
South Basin Area X	SB-06	4	6	SA	AAB-204	83124	0	2.7	51.6	45.7	97.3
South Basin Area X	SB-07	0	2	SA	AAB-235	83124	0	2.9	38.5	58.6	97.1
South Basin Area X	SB-07	2	4	SA	AAB-236	83124	0	2	35.9	62.1	98
South Basin Area X	SB-07	4	6	SA	AAB-237	83124	0	2.4	52.9	44.7	97.6
South Basin Area X	SB-12	0	2	SA	AAB-199	83115	0	2.8	45.1	52.1	97.2
South Basin Area X	SB-12	2	4	SA	AAB-200	83115	0	2.5	33.3	64.2	97.5
South Basin Area X	SB-12	4	6	SA	AAB-201	83115	0	1.9	54.4	43.7	98.1
South Basin Area X	SB-16	0	2	SA	AAB-256	83124	0	13.1	47.2	39.7	86.9
South Basin Area X	SB-16	2	4	SA	AAB-257	83124	0	8.7	48.1	43.2	91.3
South Basin Area X	SB-16	4	6	SA	AAB-258	83124	0	1.3	43.8	54.9	98.7
South Basin Area X	SB-20	0	2	SA	AAB-250	83124	0	5.4	46.2	48.4	94.6
South Basin Area X	SB-20	2	4	SA	AAB-251	83124	0	3	39.2	57.8	97
South Basin Area X	SB-20	4	6	SA	AAB-252	83124	0	2.6	56.2	41.2	97.4
South Basin Area X	SB-22	0	2	SA	AAB-253	83124	0	3.9	39.6	56.5	96.1
South Basin Area X	SB-22	2	4	SA	AAB-254	83124	0	1	47.6	51.4	99
South Basin Area X	SB-22	4	6	SA	AAB-255	83124	0	2.6	47.4	50	97.4

Table B-11. Total Organic Carbon in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Total Organic Carbon (mg/kg dry weight)		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	G1E250223	9530		J
India Basin Area I	IB-56	2	4	SA	AAB-206	G1E250223	9620		J
India Basin Area I	IB-56	4	6	SA	AAB-207	G1E250223	8270		J
India Basin Area I	IB-59	0	2	SA	AAB-247	G1E250223	10900		
India Basin Area I	IB-59	2	4	SA	AAB-248	G1E250223	11100		
India Basin Area I	IB-59	4	6	SA	AAB-249	G1E250223	11700		
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	G1E250223	8640		
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	G1E250223	9610		
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	G1E240181	14400		
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	G1E240181	12800		
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	G1E240181	11500		
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	G1E240181	10800		
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	G1E240181	10200		
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	G1E240181	11000		
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	G1E240181	11800		
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	G1E240181	15400		
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	G1E240181	12500		
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	G1E240181	11200		
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	G1E240181	13300		
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	G1E240181	13500		
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	G1E240181	7730		
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	G1E240181	6940		
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	G1E240181	8990		
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	G1E250223	3660		
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	G1E250223	3680		
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	G1E250223	2310		
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	G1E250223	5740		
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	G1E250223	9360		
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	G1E250223	3970		J
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	G1E250223	9880		
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	G1E250223	9340		
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	G1E250223	10400		
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	G1E240181	10900		
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	G1E240181	9960		
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	G1E240181	10800		
South Basin Area X	SB-01	0	2	SA	AAB-259	G1E250223	16600		J
South Basin Area X	SB-01	2	4	SA	AAB-260	G1E250223	13500		J
South Basin Area X	SB-01	4	6	SA	AAB-261	G1E250223	9560		J
South Basin Area X	SB-03	0	2	SA	AAB-208	G1E250223	14800		J
South Basin Area X	SB-03	2	4	SA	AAB-209	G1E250223	10500		J
South Basin Area X	SB-03	4	6	SA	AAB-210	G1E250223	10800		J

Table B-11. Total Organic Carbon in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Total Organic Carbon (mg/kg dry weight)		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
South Basin Area X	SB-06	0	2	SA	AAB-202	G1E250223	16800		
South Basin Area X	SB-06	2	4	SA	AAB-203	G1E250223	10600		
South Basin Area X	SB-06	4	6	SA	AAB-204	G1E250223	10200		
South Basin Area X	SB-07	0	2	SA	AAB-235	G1E250223	19300		
South Basin Area X	SB-07	2	4	SA	AAB-236	G1E250223	15000		
South Basin Area X	SB-07	4	6	SA	AAB-237	G1E250223	10600		
South Basin Area X	SB-12	0	2	SA	AAB-199	G1E240181	21400		
South Basin Area X	SB-12	2	4	SA	AAB-200	G1E240181	16600		
South Basin Area X	SB-12	4	6	SA	AAB-201	G1E240181	10400		
South Basin Area X	SB-16	0	2	SA	AAB-256	G1E250223	9180		J
South Basin Area X	SB-16	2	4	SA	AAB-257	G1E250223	9160		J
South Basin Area X	SB-16	4	6	SA	AAB-258	G1E250223	10300		J
South Basin Area X	SB-20	0	2	SA	AAB-250	G1E250223	21300		
South Basin Area X	SB-20	2	4	SA	AAB-251	G1E250223	24200		
South Basin Area X	SB-20	4	6	SA	AAB-252	G1E250223	10300		
South Basin Area X	SB-22	0	2	SA	AAB-253	G1E250223	13500		
South Basin Area X	SB-22	2	4	SA	AAB-254	G1E250223	13300		J
South Basin Area X	SB-22	4	6	SA	AAB-255	G1E250223	9400		J

J Estimated value.

Table B-12. Metals in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Metals in Sediment (mg/kg dry weight)

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Ag Result	Ag Lab Qual	Ag Final Qual	Al Result	Al Lab Qual	Al Final Qual	As Result	As Lab Qual	As Final Qual	Ba Result	Ba Lab Qual	Ba Final Qual	Cd Result	Cd Lab Qual	Cd Final Qual	Co Result	Co Lab Qual	Co Final Qual	Cr Result	Cr Lab Qual	Cr Final Qual	Cu Result	Cu Lab Qual	Cu Final Qual	Fe Result	Fe Lab Qual	Fe Final Qual	Hg Result	Hg Lab Qual	Hg Final Qual	Mn Result	Mn Lab Qual	Mn Final Qual	Mo Result	Mo Lab Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	SDG 3	0.633		J	72200			12.7			462			0.429	J		18.5			191			66.2			42600			0.391		J	389			1.56	
India Basin Area I	IB-56	2	4	SA	AAB-206	SDG 1	0.637		J	78000			16.5			458			0.764		J	19.7			182			68.5		J	45000			0.719		J	478			1.76	
India Basin Area I	IB-56	4	6	SA	AAB-207	SDG 1	0.165		J	78600			14.2			428			0.241	J	J	18.4			151			46		J	42500			0.324		J	576			1.37	
India Basin Area I	IB-59	0	2	SA	AAB-247	SDG 1	0.471		J	77300			12.7			445			0.165	J	J	19			164			53.9		J	45800			0.346		J	417			1.31	
India Basin Area I	IB-59	2	4	SA	AAB-248	SDG 1	0.493		J	79200			13			445			0.289	J	J	20.8			167			62.7		J	48200			0.352		J	442			1.4	
India Basin Area I	IB-59	4	6	SA	AAB-249	SDG 1	0.804		J	75500			13			458			0.509	J	J	19.2			190			77.5		J	45300			0.55		J	421			1.48	
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	SDG 1	0.341		J	52400			16.8			941			0.226	J	J	14.7			368			490		J	48400			0.369		J	462			6.94	
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	SDG 1	0.369		J	45500			12.6			631			0.412	J	J	23			913			326		J	41800			0.433		J	568			3.54	
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	SDG 1	0.58		J	70800			14.4			823			0.667		J	22.9			430			1980		J	46200			2.09		J	541			1.97	
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	SDG 1	0.607		J	70300			17.8			485			0.768		J	16.4			205			2150		J	42100			1.84		J	458			1.17	
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	SDG 1	0.473		J	74100			15			445			0.604		J	18.6			173			199		J	44500			0.846		J	530			1.06	
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	SDG 1	0.14		J	77300			6.43			457			0.421	J	J	8.51			167			125		J	47100			2.1		J	818			1.79	
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	SDG 1	0.183		J	80600			10.8			471			0.304	J	J	21.9			159			43.1		J	49500			0.0866		J	934			0.981	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	SDG 1	0.514		J	82400			10.3			481			0.575	J	J	16.3			159			43.9		J	50700			0.0739		J	1090			1.48	
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	SDG 1	0.265		J	64000			32			420			0.734		J	19.7			330			780		J	42800			43.1		J	539			1.98	
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	SDG 1	0.125	J	J	72400			12.4			431			0.261	J	J	19			152			31.2		J	45500			0.124		J	755			0.801	
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	SDG 1	0.0708	J	J	69200			6.05			410			0.193	J	J	13.3			175			29.6		J	43600			0.082		J	632			0.398	
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	SDG 1	0.327		J	73200			9.74			461			0.541	J	J	15.7			172			50.8		J	43100			0.198		J	492			3.32	
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	SDG 1	0.295		J	73200			11.5			427			0.358	J	J	17.3			151			29.5		J	46100			0.0715		J	676			0.827	
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	SDG 1	0.107	J	J	75600			12.3			452			0.176	J	J	17.6			153			29		J	45100			0.0709		J	560			0.664	
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	SDG 1	0.367		J	65300			10.5			455			0.436	J	J	16.5			150			34.7		J	36300			0.263		J	442			1.27	
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	SDG 1	0.136		J	65900			19			454			0.566	J	J	20.2			159			38.7		J	36600			0.421		J	454			4.14	
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	SDG 1	0.264		J	69100			9.76			462			0.212	J	J	17			149			58.2		J	40900			0.598		J	532			0.705	
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	SDG 1	0.0826	J	J	43100			6.56			319			0.145	J	J	12.7			175			20		J	23700			0.159		J	519			0.464	
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	SDG 1	0.066	U	UJ	50200			7.61			391			0.104	J	J	14.6			160			14.1		J	25800			0.112		J	570			0.578	
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	SDG 1	0.066	U	UJ	45900			8.58			355			0.115	J	J	14.9			145			10.6		J	23100			0.292		J	581			0.666	
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	SDG 3	0.066	U	UJ	44800			5.8			396			0.117	J		12.4			236			31			27000			0.13		J	630			0.423	
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	SDG 2	0.066	U		42300			10.1			342			0.204	J	J	17.3			199			10		J	23300			0.143			550			0.621	
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	SDG 2	0.567			49700			6.53			407			0.161	J	J	15.3			221			9.82		J	25200			0.0547			510			0.46	
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	SDG 1	0.13		J	71400			13.6			409			0.372	J	J	17			161			31.7		J	46400			0.144		J	484			3.07	
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	SDG 3	0.17		J	68900			11.2			385			0.341	J		16.1			151			30.5			46900			0.0555		J	469			2.58	
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	SDG 3	0.238		J	76200			13.7			426			0.363	J		19.3			179			42.2			47800			0.218		J	449			1.84	
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	SDG 2	0.445			72900			12.6			454			0.4	J	J	20.8			210			60.6		J	46800			0.525			453			1.28	
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	SDG 2	0.31			78100			15.3			472			0.341	J	J	19.8			177			49		J	46400			0.589			425			1.32	
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	SDG 2	0.158			69500			12.8			412			0.381	J	J	18.1			157			31.1		J	46400			0.0884			477			2.66	
South Basin Area X	SB-01	0	2	SA	AAB-259	SDG 2	0.892			63100			13			675			4.69		J	18.1			336			129		J	38900			1.11			420			2.4	
South Basin Area X	SB-01	2	4	SA	AAB-260	SDG 3	0.623		J	75800			17.5			483			2.28			18.7			278			84.3			50500			0.709		J	407			2.7	
South Basin Area X	SB-01	4	6	SA	AAB-261	SDG 2	0.168			68300			15.6			437			0.563	J	J	17.9			181			29.3		J	50600			0.0929			549			3.34	
South Basin Area X	SB-03	0	2	SA	AAB-208	SDG 2	0.891			73800			16.8			504			2.15		J	20.1			302			114		J	48800			0.845			415			2.38	
South Basin Area X	SB-03	2	4	SA	AAB-209	SDG 3	0.29		J	74300			15.7			426			0.827			17.8			194			46.6			49900			0.328		J	425			2.57	
South Basin Area X	SB-03	4	6	SA	AAB-210	SDG 3	0.141		J	70200			15.6			406			0.502	J		16.8			170			30			52100			0.0734		J	493			3.08	
South Basin Area X	SB-06	0	2	SA	AAB-202	SDG 3	0.892		J	73300			14			448			2.05			18.3			466			122			47700			0.856		J	415			2.62	
South Basin Area X	SB-06	2	4	SA	AAB-203	SDG 3	0.457		J	72400			14.2			408			1.1			18.1			211			56.7			48500			0.436		J	425			2.65	
South Basin Area X	SB-06	4	6	SA	AAB-204	SDG 1	0.127	J	J	73000			14.9			445			0.397	J	J	16.8			161			30.7		J	50100			0.0749		J	495			2.98	
South Basin Area X	SB-07	0	2	SA	AAB-235	SDG 3	1.08		J	73400			16.7			502			3.21			19.6			448			156			50100			1.12		J	423			2.38	
South Basin Area X	SB-07	2	4	SA	AAB-236	SDG 3	0.626		J	77400			17			453			1.85			18.7			285			76.7			51100			0.668		J	408			2.43	
South Basin Area X	SB-07	4	6	SA	AAB-237	SDG 3	0.198		J	70700			15.7			412			0.429	J		16.9			160			30.7			52200			0.0827		J	484			3.11	
South Basin Area X	SB-12	0	2	SA	AAB-199	SDG 1	0.733		J	74700			15.2			603			2.21		J	18.6			792			196		J	47000			1.31		J	439			2.52	
South Basin Area X	SB-12	2	4	SA	AAB-200	SDG 1	0.113	J	J	79400			11.3			483			0.223	J	J	18.5			364			104		J	49100			0.925		J	434			0.805	
South Basin Area X	SB-12	4	6	SA	AAB-201	SDG 1	0.989		J	69600			13.9			427			3.76		J	18.4			154			28.8		J	48100			0.09		J	481			3.25	
South Basin Area X	SB-16	0	2	SA	AAB-256	SDG 3	0.22		J	67400			11.5			418			0.509	J		15.9			218			92			47400			0.314		J	556			2.65	
South Basin Area X	SB-16	2	4	SA	AAB-257	SDG 3	0.14		J	68300			13			383			0.501	J		17			208			34.5			47100			0.111		J	481			2.71	
South Basin Area X	SB-16	4	6	SA	AAB-258	SDG 3	0.203		J	74100			14.4			417			0.613			17.8			198			41.3			51300			0.2		J	462			3.01	
South Basin Area X	SB-20	0	2	SA	AAB-250	SDG 3	1.19		J	68000			14.9			513			3.74			20.2			593			242			45100			1.64		J	404			3.17	
South Basin Area X	SB-20	2	4	SA	AAB-251	SDG 3	1.35		J	77700			15.2			475			3.03			18.7			576			154			51200			1.59		J	423			3.11	
South Basin Area X	SB-20	4	6	SA	AAB-252	SDG 3	0.15		J	69200			17.3			407			0.484	J		17.6			168			31			49700			0.127		J	444			3.4	
South Basin Area X	SB-22	0	2	SA	AAB-253	SDG 3	0.689		J	74400			15.9			463			1.8			20			348			160			50900			1.1		J	453			2.55	
South Basin Area X	SB-22	2	4	SA	AAB-254	SDG 3	0.493		J	78200			15.1			440			2.05			19.7			338			77.1			53300			0.635		J	446			1.98	
South Basin Area X	SB-22	4	6	SA	AAB-255	SDG 3	0.176		J	73700			16.3			423			0.465	J		17.6			174			37.4			50600			0.226		J	457			2.79	

J Estimated value.
U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-12. Metals in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	SDG 3	
India Basin Area I	IB-56	2	4	SA	AAB-206	SDG 1	
India Basin Area I	IB-56	4	6	SA	AAB-207	SDG 1	
India Basin Area I	IB-59	0	2	SA	AAB-247	SDG 1	
India Basin Area I	IB-59	2	4	SA	AAB-248	SDG 1	
India Basin Area I	IB-59	4	6	SA	AAB-249	SDG 1	
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	SDG 1	
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	SDG 1	
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	SDG 1	
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	SDG 1	
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	SDG 1	
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	SDG 1	
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	SDG 1	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	SDG 1	
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	SDG 1	
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	SDG 1	
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	SDG 1	
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	SDG 1	
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	SDG 1	
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	SDG 1	
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	SDG 1	
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	SDG 1	
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	SDG 1	
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	SDG 1	
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	SDG 1	
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	SDG 1	
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	SDG 3	
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	SDG 2	
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	SDG 2	
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	SDG 1	
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	SDG 3	
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	SDG 3	
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	SDG 2	
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	SDG 2	
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	SDG 2	
South Basin Area X	SB-01	0	2	SA	AAB-259	SDG 2	
South Basin Area X	SB-01	2	4	SA	AAB-260	SDG 3	
South Basin Area X	SB-01	4	6	SA	AAB-261	SDG 2	
South Basin Area X	SB-03	0	2	SA	AAB-208	SDG 2	
South Basin Area X	SB-03	2	4	SA	AAB-209	SDG 3	
South Basin Area X	SB-03	4	6	SA	AAB-210	SDG 3	
South Basin Area X	SB-06	0	2	SA	AAB-202	SDG 3	
South Basin Area X	SB-06	2	4	SA	AAB-203	SDG 3	
South Basin Area X	SB-06	4	6	SA	AAB-204	SDG 1	
South Basin Area X	SB-07	0	2	SA	AAB-235	SDG 3	
South Basin Area X	SB-07	2	4	SA	AAB-236	SDG 3	
South Basin Area X	SB-07	4	6	SA	AAB-237	SDG 3	
South Basin Area X	SB-12	0	2	SA	AAB-199	SDG 1	
South Basin Area X	SB-12	2	4	SA	AAB-200	SDG 1	
South Basin Area X	SB-12	4	6	SA	AAB-201	SDG 1	
South Basin Area X	SB-16	0	2	SA	AAB-256	SDG 3	
South Basin Area X	SB-16	2	4	SA	AAB-257	SDG 3	
South Basin Area X	SB-16	4	6	SA	AAB-258	SDG 3	
South Basin Area X	SB-20	0	2	SA	AAB-250	SDG 3	
South Basin Area X	SB-20	2	4	SA	AAB-251	SDG 3	
South Basin Area X	SB-20	4	6	SA	AAB-252	SDG 3	
South Basin Area X	SB-22	0	2	SA	AAB-253	SDG 3	
South Basin Area X	SB-22	2	4	SA	AAB-254	SDG 3	
South Basin Area X	SB-22	4	6	SA	AAB-255	SDG 3	

J Estimated value.
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Table B-12. Metals in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Metals in Sediment (mg/kg dry weight)																	
							Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	SDG 3	118			70.2			1.67			0.377	J		146			135		
India Basin Area I	IB-56	2	4	SA	AAB-206	SDG 1	112			83.2		J	1.96			0.394	J		165			138		J
India Basin Area I	IB-56	4	6	SA	AAB-207	SDG 1	90.5			34.4		J	0.947			0.529	J		166			88.4		J
India Basin Area I	IB-59	0	2	SA	AAB-247	SDG 1	105			34.4		J	0.842			0.402	J		163			126		J
India Basin Area I	IB-59	2	4	SA	AAB-248	SDG 1	116			37.4		J	1.13			0.438	J		176			133		J
India Basin Area I	IB-59	4	6	SA	AAB-249	SDG 1	125			106		J	1.48			0.628	J		157			149		J
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	SDG 1	90.6			120		J	3.62			0.201	J		79.6			425		J
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	SDG 1	223			583		J	1.64			0.155	J		76.8			214		J
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	SDG 1	153			153		J	3.97			0.47	J		137			557		J
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	SDG 1	131			103		J	6.27			0.469	J		134			260		J
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	SDG 1	118			56.6		J	2.74			0.48	J		150			154		J
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	SDG 1	105			161		J	9.94			0.413	J		45.8			93.8		J
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	SDG 1	110			17.7		J	0.636			0.461	J		169			93.2		J
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	SDG 1	113			247		J	18.8			0.391	J		87			96.5		J
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	SDG 1	154			101		J	5.2			0.371	J		141			367		J
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	SDG 1	96.3			11.2		J	0.444			0.468	J		150			83.5		J
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	SDG 1	136			11.1		J	0.54			0.438	J		76			79.7		J
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	SDG 1	106			93		J	2.84			0.509	J		126			102		J
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	SDG 1	100			21.4		J	0.758			0.341	J		139			84.1		J
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	SDG 1	98.6			11.2		J	0.475			0.442	J		146			83.1		J
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	SDG 1	102			39.8		J	1.05			0.262	J		151			95.1		J
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	SDG 1	98.1			12.4		J	0.571			0.221	J		157			95.8		J
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	SDG 1	101			21.4		J	0.611			0.368	J		120			104		J
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	SDG 1	68.7			15.1		J	0.386			0.134	J		69.3			53.1		J
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	SDG 1	81.3			7.1		J	0.401			0.153	J		80.5			45.3		J
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	SDG 1	78.6			5.73		J	0.3			0.126	U		76.7			38.5		J
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	SDG 3	82			20.2			9.26			0.126	U		73			84.7		
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	SDG 2	68.8		J	6.24		J	0.321			0.126	U		82			40.8		
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	SDG 2	70.9		J	11.2		J	0.382			0.126	U		87.1			45.1		
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	SDG 1	93.1			12		J	0.519			0.509	J		135			82		J
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	SDG 3	84.8			9.66			0.427			0.495	J		132			81.7		
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	SDG 3	98.4			19.6			0.711			0.467	J		160			99.4		
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	SDG 2	116		J	43.8		J	1.33			0.429	J		163			138		
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	SDG 2	98.5		J	29.8		J	1.1			0.435	J		164			119		
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	SDG 2	86.5		J	10.9		J	0.459			0.581	J		144			87		
South Basin Area X	SB-01	0	2	SA	AAB-259	SDG 2	96.2		J	408		J	4.28			1.15	J		144			481		
South Basin Area X	SB-01	2	4	SA	AAB-260	SDG 3	106			149			2.47			0.628	J		164			268		
South Basin Area X	SB-01	4	6	SA	AAB-261	SDG 2	79.7		J	11		J	0.445			0.541	J		147			84.5		
South Basin Area X	SB-03	0	2	SA	AAB-208	SDG 2	110		J	200		J	2.91			0.675	J		170			302		
South Basin Area X	SB-03	2	4	SA	AAB-209	SDG 3	98.9			34.5			1.13			0.509	J		156			133		
South Basin Area X	SB-03	4	6	SA	AAB-210	SDG 3	85.4			10.7			0.409			0.528	J		138			84.5		
South Basin Area X	SB-06	0	2	SA	AAB-202	SDG 3	115			153			3.17			0.739	J		159			293		
South Basin Area X	SB-06	2	4	SA	AAB-203	SDG 3	99.1			47.8			1.57			0.504	J		160			160		
South Basin Area X	SB-06	4	6	SA	AAB-204	SDG 1	93.5			10.5		J	0.435			0.42	J		132			81.8		J
South Basin Area X	SB-07	0	2	SA	AAB-235	SDG 3	121			284			6.59			0.829	J		180			451		
South Basin Area X	SB-07	2	4	SA	AAB-236	SDG 3	108			100			2.21			0.647	J		166			243		
South Basin Area X	SB-07	4	6	SA	AAB-237	SDG 3	86.1			11.1			0.47			0.554	J		136			84.5		
South Basin Area X	SB-12	0	2	SA	AAB-199	SDG 1	140			128		J	2.71			0.978	J		165			430		J
South Basin Area X	SB-12	2	4	SA	AAB-200	SDG 1	123			11.4		J	0.46			0.539	J		153			288		J
South Basin Area X	SB-12	4	6	SA	AAB-201	SDG 1	88.8			272		J	5.95			0.508	J		148			77.3		J
South Basin Area X	SB-16	0	2	SA	AAB-256	SDG 3	106			46.2			2.43			0.45	J		125			137		
South Basin Area X	SB-16	2	4	SA	AAB-257	SDG 3	90.1			15.7			0.491			0.426	J		141			89.7		
South Basin Area X	SB-16	4	6	SA	AAB-258	SDG 3	101			25.6			0.738			0.524	J		150			109		
South Basin Area X	SB-20	0	2	SA	AAB-250	SDG 3	138			316			9.16			0.935	J		158			467		
South Basin Area X	SB-20	2	4	SA	AAB-251	SDG 3	124			172			3.41			0.678	J		170			441		
South Basin Area X	SB-20	4	6	SA	AAB-252	SDG 3	83.7			14.8			0.531			0.516	J		141			85.7		
South Basin Area X	SB-22	0	2	SA	AAB-253	SDG 3	131			133			4.19			0.556	J		164			275		
South Basin Area X	SB-22	2	4	SA	AAB-254	SDG 3	123			93.5			2.05			0.47	J		172			210		
South Basin Area X	SB-22	4	6	SA	AAB-255	SDG 3	91.9			20.8			0.68			0.548	J		146			103		

J Estimated value.
U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-13. Polychlorinated Biphenyls as Congeners in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Polychlorinated Biphenyls as Congeners in Sediment (ug/kg dry weight)

Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Cl2(8) Result	Cl2(8) Lab Qual	Cl2(8) Final Qual	Cl3(18) Result	Cl3(18) Lab Qual	Cl3(18) Final Qual	Cl3(28) Result	Cl3(28) Lab Qual	Cl3(28) Final Qual	Cl4(44) Result	Cl4(44) Lab Qual	Cl4(44) Final Qual	Cl4(52) Result	Cl4(52) Lab Qual	Cl4(52) Final Qual	Cl4(66) Result	Cl4(66) Lab Qual	Cl4(66) Final Qual	Cl4(77) Result	Cl4(77) Lab Qual	Cl4(77) Final Qual	Cl5(101) Result	Cl5(101) Lab Qual	Cl5(101) Final Qual	Cl5(105) Result	Cl5(105) Lab Qual	Cl5(105) Final Qual	Cl5(110) Result	Cl5(110) Lab Qual	Cl5(110) Final Qual	Cl5(118) Result	Cl5(118) Lab Qual	Cl5(118) Final Qual	C Result
India Basin Area I	IB-56	0	2	SA	AAB-205	01-234	0.41	J	J	0.47	J	J	0.66	J		1.03		J	1.66		J	0.2	J	J	0.15	U		4.93			0.9		J	3.58		J	2.23		J	0.13
India Basin Area I	IB-56	2	4	SA	AAB-206	01-234	0.66	J	J	0.55	J		0.79	J		1.54			2.68			0.33	J		0.16	U		5.4			1.03			4.56		J	2.88			0.14
India Basin Area I	IB-56	4	6	SA	AAB-207	01-398	0.16	U	UJ	0.08	U		0.11	U		0.1	U		0.1	U		0.12	U		0.16	U		0.1	U		0.09	U		0.11	U		0.11	U		0.14
India Basin Area I	IB-59	0	2	SA	AAB-247	01-234	0.19	U	UJ	0.09	U		0.13	U		0.19	J		0.41	J		0.14	U		0.19	U		0.91	J		0.38	J		1.25		J	0.9	J		0.16
India Basin Area I	IB-59	2	4	SA	AAB-248	01-234	0.18	U	UJ	0.09	U		0.23	J		0.3	J		0.47	J		0.13	U		0.19	U		1.08			0.34	J		1.31		J	0.81	J		0.16
India Basin Area I	IB-59	4	6	SA	AAB-249	01-234	0.35	J	J	0.41	J		0.87	J		0.94			2.06			0.6	J		0.17	U		5.02			0.95			4.81		J	3.3			0.15
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-234	0.66		J	1.26			1.16			1.51			2.86			0.92			0.11	U		3.79			0.97			3.73		J	2.46			0.09
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-234	1.07		J	2.52			3.21			4.62			8.4			3.43			0.11	U		6.39			1.62			5.2		J	3.34			0.1
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-229	1.7		J	2.05			2.96			4.74			47.8	D		0.1	U		0.14	U		12.38			2.14			9.68			5.61			0.13
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-229	0.14	U	UJ	0.42	J	J	0.51	J	J	1.25		J	11.84		J	0.11	U	UJ	0.15	U	UJ	11.97		J	0.89		J	6.22		J	2.64		J	0.13
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-398	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.23	J		0.08	U		0.1	U		0.11	U		0.13
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-229	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.95			0.11	U		0.15	U		0.88			0.11	J		0.55	J		0.13	J		0.13
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-229	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.09	U		0.08	U		0.1	U		0.11	U		0.13
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-230	0.16	U	UJ	0.07	U	UJ	0.11	U		0.1	U		0.1	U		0.11	U		0.16	U		0.1	U		0.09	U		0.11	U	UJ	0.11	U		0.14
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-229	0.57	J	J	0.29	J	J	0.63	J	J	1.1		J	2.61		J	0.1	U		0.14	U		3.36		J	0.58	J	J	2.37		J	1.21		J	0.12
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-229	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.09	U		0.08	U		0.04	J		0.11	U		0.13
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-229	0.14	U	UJ	0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.14	U		0.09	U		0.08	U		0.1	U		0.1	U		0.13
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-230	0.15	U		0.1	J		0.18	J		0.14	J		0.42	J		0.11	U		0.16	U		0.77	J		0.25	J		0.98			0.47	J		0.14
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-230	0.16	U	UJ	0.08	U	UJ	0.11	U		0.1	U		0.1	U		0.12	U		0.16	U		0.1	U		0.09	U		0.11	U	UJ	0.11	U		0.14
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-230	0.17	U	UJ	0.08	U	UJ	0.12	U		0.11	U		0.11	U		0.12	U		0.18	U		0.11	U		0.09	U		0.12	U	UJ	0.12	U		0.15
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-230	0.13	U	UJ	0.06	U	UJ	0.09	U		0.08	U		0.09	U		0.1	U		0.14	U		0.61	J		0.07	U		0.89		J	0.31	J		0.12
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-230	0.13	U	UJ	0.06	U	UJ	0.09	U		0.35	J		0.08	U		0.09	U		0.13	U		1.69			0.28	J		1.42		J	0.7	J		0.11
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-230	0.14	U	UJ	0.07	U	UJ	0.1	U	UJ	0.35	J	J	0.09	U	UJ	0.1	U	UJ	0.14	U	UJ	1.76		J	0.36	J	J	1.7		J	0.91		J	0.12
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-234	0.11	U	UJ	0.05	U		0.08	U		0.07	U		0.07	U		0.08	U		0.11	U		1.16			0.15	J		0.98		J	0.52	J		0.1
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-234	0.11	U	UJ	0.05	U		0.07	U		0.07	U		0.07	U		0.08	U		0.11	U		0.13	J		0.06	U		0.07	U	UJ	0.08	U		0.09
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-234	0.11	U	UJ	0.05	U	UJ	0.07	U	UJ	0.07	U	UJ	0.07	U	UJ	0.08	U	UJ	0.11	U	UJ	0.07	U	UJ	0.06	U	UJ	0.07	U	UJ	0.08	U	UJ	0.09
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-235	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.06	U		0.07	U		0.1	U		0.21	J		0.39	J		0.53	J	J	0.36	J		0.09
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-235	0.1	U	UJ	0.05	U		0.17	J	J	0.06	U		0.07	U		0.08	U		0.11	U		0.06	U		0.06	U		0.07	U	UJ	0.07	U		0.09
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-235	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.07	U		0.07	U		0.1	U		0.06	U		0.06	U		0.07	U	UJ	0.07	U		0.09
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-234	0.14	U	UJ	0.07	U		0.1	U		0.08	U		0.09	U		0.1	U		0.14	U		0.19	J		0.08	U		0.17	J	J	0.1	U		0.12
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-234	0.13	U	UJ	0.06	U		0.09	U		0.08	U		0.09	U		0.1	U		0.14	U		0.08	U		0.07	U		0.09	U	UJ	0.09	U		0.12
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-234	0.14	U	UJ	0.07	U		0.1	U		0.08	U		0.09	U		0.1	U		0.14	U		0.99			0.08	U		0.74	J	J	0.21	J		0.12
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-229	0.26	J	J	0.06	J		0.25	J		0.51	J		0.91			0.12	U		0.17	U		4.08			0.71	J		2.6			2.06			0.14
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-229	0.17	U	UJ	0.08	U		0.12	U		0.1	U		0.11	U		0.12	U		0.17	U		1.06			0.11	J		0.78	J		0.41	J		0.15
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-229	0.16	U	UJ	0.07	U		0.11	U		0.1	U		0.1	U		0.11	U		0.16	U		0.1	U		0.09	U		0.11	U		0.11	U		0.14
South Basin Area X	SB-01	0	2	SA	AAB-259	01-235	1.55		J	2.25		J	3.54		J	73.11	D	J	131.7	D	J	40.51	D	J	0.14	U	UJ	346.7	D	J	51.56	D	J	222.44	D	J	217.79	D	J	0.13
South Basin Area X	SB-01	2	4	SA	AAB-260	01-235	0.22	J	J	0.77	J	J	0.53	J	J	6.82		J	21.27		J	4.18		J	0.17	U		46.62	D	J	16.64		J	33.07	D	J	29.97	D	J	0.15
South Basin Area X	SB-01	4	6	SA	AAB-261	01-235	0.14	U	UJ	0.07	U		0.1	U		0.07	J		0.24	J		0.1	U		0.14	U		0.36	J		0.08	J		0.29	J	J	0.29	J		0.12
South Basin Area X	SB-03	0	2	SA	AAB-208	01-235	1.95		J	1.77			1.93			18.46			19.86			5.14			0.17	U		69.96	D		14.89			59.72	D	J	47.91	D		0.15
South Basin Area X	SB-03	2	4	SA	AAB-209	01-235	0.16	U	UJ	0.07	J		0.07	J		0.48	J		1.3			0.12	U		0.16	U		3.11			0.53	J		2.2		J	1.74			0.14
South Basin Area X	SB-03	4	6	SA	AAB-210	01-235	0.14	U	UJ	0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.14	U		0.07	J		0.08	U		0.1	J	J	0.09	J		0.12
South Basin Area X	SB-06	0	2	SA	AAB-202	01-234	0.67	J	J	1.02		J	1.52		J	10.15		J	20.36	D	J	5.5		J	0.18	U	UJ	60.77	D	J	16.19		J	53.8	D	J	43.42	D	J	0.16
South Basin Area X	SB-06	2	4	SA	AAB-203	01-234	0.16	U	UJ	0.08	U		0.11	U		0.35	J		1			0.18	J		0.17	U		2.17			0.6	J		2.03		J	1.45			0.14
South Basin Area X	SB-06	4	6	SA	AAB-204	01-234	0.14	U	UJ	0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.14	U		0.09	U		0.08	U		0.1	U	UJ	0.1	U		0.12
South Basin Area X	SB-07	0	2	SA	AAB-235	01-234	0.18	U	UJ	0.77	J		1.4			12.62			31.1		J	7.37			0.18	U		73.6	D	J	19.73		J	50.62	D	J	44.22	D	J	0.16
South Basin Area X	SB-07	2	4	SA	AAB-236	01-234	0.18	U	UJ	0.38	J		0.22	J		2.05			6.28			1.35			0.18	U		16.42			3.55			12.82		J	10.93			0.16
South Basin Area X	SB-07	4	6	SA	AAB-237	01-234	0.14	U	UJ	0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.15	U		0.09	U		0.08	U		0.1	U	UJ	0.1	U		0.13
South Basin Area X	SB-12	0	2	SA	AAB-199	01-230	1.91		J	2.38		J	3.8		J	32.82		J	70.83	D	J	13.21		J	0.18	U	UJ	153.87	D	J	40.81	D	J	141.74	D	J	120.45	D	J	0.16
South Basin Area X	SB-12	2	4	SA	AAB-200	01-230	0.18	U	UJ	0.3	J	J	0.27	J	J	1.92		J	5.77		J	1.49		J	0.19	U	UJ	11.85		J	2.95		J	9.7		J	8.47		J	0.16
South Basin Area X	SB-12	4	6	SA	AAB-201	01-230	0.14	U	UJ	0.07	U	UJ	0.1	U		0.09	U		0.09	U		0.1	U		0.14	U		0.09	U		0.08	U		0.1	U	UJ	0.1	U		0.12
South Basin Area X	SB-16	0	2	SA	AAB-256	01-235	0.31	J	J	0.33	J	J	0.24	J	J	0.9		J	2.37		J	0.1	U	UJ	0.14	U	UJ	19.46	D	J	1.19		J	101.33	D	J	6.79		J	0.12
South Basin Area X	SB-16	2	4	SA	AAB-257	01-235	0.13	U	UJ	0.06	U		0.09	U		0.08	U		0.31	J		0.1	U		0.13	U		1.97			0.07	U		0.93		J	0.44	J		0.12
South Basin Area X	SB-16	4	6	SA	AAB-258	01-235	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		1.59			0.08	U		0.83		J	0.35	J		0.13
South Basin Area X	SB-20	0	2	SA	AAB-250	01-235	1.67		J	2.56			3			46.65	D		108.26	D		9.63			0.18	U		270.69	D		68.4	D		229.14	D	J	192.02	D		0.16
South Basin Area X	SB-20	2	4	SA	AAB-251	01-235	0.2	U	UJ	1	J		0.7	J		3.74			12.35			0.15	U		0.2	U		21.19			10.5			56.38		J	37.97			0.18
South Basin Area X	SB-20	4	6	SA	AAB-252	01-235	0.14	U	UJ	0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.15	U		0.42	J		0.08	U		0.21	J	J	0.09	J		0.13
South Basin Area X	SB-22	0	2	SA	AAB-253	01-235	0.62	J	J	0.73	J		0.73	J		3.95			9.97			0.12	U		0.17	U		54.58	D		6.1			35.21	D	J	32.42			0.15
South Basin Area X	SB-22	2	4	SA	AAB-254	01-235	0.19	U	UJ	0.36	J		0.13	U		0.32	J		3.27			0.14	U		0.19	U		5.06			0.1	U		2.35		J	1.71			0.17
South Basin Area X	SB-22	4	6	SA	AAB-255	01-235	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.3	J		0.08	U		0.3	J	J	0.12	J		0.13

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-13. Polychlorinated Biphenyls as Congeners in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Polychlorinated Biphenyls as Congeners in Sediment (ug/kg dry weight)

Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	:5(126) Lab Qual	:5(126) Final Qual	Cl6(128) Result	Cl6(128) Lab Qual	Cl6(128) Final Qual	Cl6(129) Result	Cl6(129) Lab Qual	Cl6(129) Final Qual	Cl6(138) Result	Cl6(138) Lab Qual	Cl6(138) Final Qual	Cl6(153) Result	Cl6(153) Lab Qual	Cl6(153) Final Qual	Cl7(170) Result	Cl7(170) Lab Qual	Cl7(170) Final Qual	Cl7(180) Result	Cl7(180) Lab Qual	Cl7(180) Final Qual	Cl7(187) Result	Cl7(187) Lab Qual	Cl7(187) Final Qual	Cl8(195) Result	Cl8(195) Lab Qual	Cl8(195) Final Qual	Cl9(206) Result	Cl9(206) Lab Qual	Cl9(206) Final Qual	Cl10(209) Result	Cl10(209) Lab Qual	Cl10(209) Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	01-234	U		0.45	J		0.07	U		7.82			11.69			3.33			8.14			5.02			0.97		J	1		J	1.13		J
India Basin Area I	IB-56	2	4	SA	AAB-206	01-234	U		0.18	U		0.08	U		6.74			10.5			2.3			5.72			4.04			0.86	J	J	0.85	J	J	2.37		J
India Basin Area I	IB-56	4	6	SA	AAB-207	01-398	U		0.18	U		0.08	U		0.09	U		0.14	U		0.09	U		0.18	J		0.09	U		0.09	U	UJ	0.08	U		0.09	U	UJ
India Basin Area I	IB-59	0	2	SA	AAB-247	01-234	U		0.22	U		0.09	U		1.76			2.38			0.35	J		1.28			0.83	J		0.14	J	J	0.42	J	J	0.5	J	J
India Basin Area I	IB-59	2	4	SA	AAB-248	01-234	U		0.21	U		0.09	U		2.05			3.04			0.47	J		1.74			1.01			0.23	J	J	0.37	J	J	0.45	J	J
India Basin Area I	IB-59	4	6	SA	AAB-249	01-234	U		0.8	J		0.08	U		8.85			13.46			4.02			8.33			5.48			1.04		J	1.17		J	1.04		J
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-234	U		0.52	J		0.05	U		5.42			9.52			3.39			6.55			4.02			0.87		J	0.68		J	0.2	J	J
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-234	U		0.66			0.05	U		4.38			7.06			1.58			3.21			2.18			0.48	J	J	0.93		J	0.54	J	J
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-229	U		0.16	U		0.07	U		13.97			24.05	D		6.17			12.49			8.93			1.29		J	0.62	J	J	0.55	J	
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-229	U	UJ	0.17	U	UJ	0.07	U	UJ	18.27		J	8		J	11.87		J	7.65		J	5.34		J	7.5		J	9.68		J	2.46		J
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-398	U		0.17	U		0.07	U		0.62	J		0.88			0.18	J	J	0.53	J		0.23	J		0.08	U	UJ	0.08	U		0.08	U	UJ
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-229	U		0.17	U		0.07	U		0.65	J		1.15			0.18	J		0.38	J		0.28	J		0.08	U	UJ	0.08	U	UJ	0.09	U	
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-229	U		0.17	U		0.07	U		0.09	U		0.13	U		0.09	U		0.09	U		0.09	U		0.08	U	UJ	0.08	U	UJ	0.09	U	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-230	U		0.18	U		0.08	U		0.09	U		0.55	J		0.09	U		0.1	U		0.09	U		0.08	U	UJ	0.08	U	UJ	0.09	U	UJ
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-229	U		0.16	U		0.07	U		2.03		J	4.2		J	1.3		J	2.1		J	1.76		J	0.26	J	J	0.23	J	J	0.31	J	J
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-229	U		0.17	U		0.07	U		0.09	U		0.13	U		0.09	U		0.09	U		0.09	U		0.08	U	UJ	0.08	U	UJ	0.09	U	
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-229	U		0.16	U		0.07	U		0.08	U		0.13	U		0.08	U		0.09	U		0.08	U		0.08	U	UJ	0.08	U	UJ	0.08	U	
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-230	U		0.18	U		0.08	U		1.21			1.97			0.55	J		1.06			0.8	J		0.14	J		0.08	U		0.09	U	
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-230	U		0.19	U		0.08	U		0.1	U		0.14	U		0.09	U		0.1	U		0.09	U		0.09	U	UJ	0.09	U	UJ	0.09	U	UJ
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-230	U		0.2	U		0.09	U		0.1	U		0.15	U		0.1	U		0.11	U		0.1	U		0.09	U	UJ	0.09	U	UJ	0.1	U	UJ
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-230	U		0.16	U		0.07	U		0.35	J		0.12	U		0.2	J		0.92			0.6	J		0.07	U	UJ	0.07	U	UJ	0.25	J	J
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-230	U		0.15	U		0.06	U		1.44			3.04			0.39	J		1.9			1.39			0.58	J	J	0.3	J	J	1.04		J
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-230	U	UJ	0.16	U	UJ	0.07	U	UJ	1.27		J	2.66		J	0.77		J	2.27		J	1.62		J	0.66	J	J	0.32	J	J	0.8		J
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-234	U		0.13	U		0.05	U		1.79			3.44			0.81			1.99			1.77			0.27	J	J	0.11	J	J	0.12	J	J
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-234	U		0.12	U		0.05	U		0.06	U		0.09	U		0.06	U		0.27	J		0.06	U		0.06	U	UJ	0.06	U	UJ	0.06	U	UJ
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-234	U	UJ	0.12	U	UJ	0.05	U	UJ	0.06	U	UJ	0.1	U	UJ	0.06	U	UJ	0.07	U	UJ	0.06	U	UJ	0.06	U	UJ	0.06	U	UJ	0.06	U	UJ
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-235	U		0.11	U		0.05	U		1.59			2.84		J	1.27			1.84			1.11			0.18	J		0.28	J	J	0.09	J	
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-235	U		0.12	U		0.05	U		0.06	U		0.09	U	UJ	0.47	J	J	0.46	J	J	0.12	J	J	0.06	U		0.06	U	UJ	0.06	U	
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-235	U		0.12	U		0.05	U		0.06	U		0.09	U	UJ	0.06	U		0.19	J	J	0.04	J		0.06	U		0.05	U	UJ	0.06	U	
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-234	U		0.16	U		0.07	U		0.56	J		0.82			0.19	J		0.52	J		0.25	J		0.07	U	UJ	0.07	U	UJ	0.08	U	UJ
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-234	U		0.15	U		0.07	U		0.08	U		0.12	U		0.08	U		0.08	U		0.08	U		0.07	U	UJ	0.07	U	UJ	0.08	U	UJ
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-234	U		0.16	U		0.07	U		1.7			3.51			0.62	J		2.07			1.35			0.35	J	J	0.24	J	J	0.63	J	J
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-229	U		0.19	U		0.08	U		8.46			13.52			4.6			8.3			4.95			0.88	J	J	0.46	J	J	0.31	J	
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-229	U		0.2	U		0.08	U		0.73	J		2.13			0.25	J		1.63			1.46			0.15	J	J	0.07	J	J	0.1	J	
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-229	U		0.18	U		0.08	U		0.09	U		0.14	U		0.09	U		0.1	U		0.09	U		0.08	U	UJ	0.08	U	UJ	0.09	U	
South Basin Area X	SB-01	0	2	SA	AAB-259	01-235	U	UJ	52.15	D	J	0.07	U	UJ	445.13	D	J	736.89	D	J	178.19	D	J	364	D	J	210.53	D	J	12.97		J	4.37		J	1.44		J
South Basin Area X	SB-01	2	4	SA	AAB-260	01-235	U		10.17		J	0.08	U		52.02	D	J	73.5	D	J	17.88		J	40.18		J	31.34		J	2.31		J	1.45		J	1.27		J
South Basin Area X	SB-01	4	6	SA	AAB-261	01-235	U		0.16	U		0.07	U		0.69	J		0.82		J	0.36	J		0.46	J		0.14	J		0.04	J		0.04	J	J	0.08	U	
South Basin Area X	SB-03	0	2	SA	AAB-208	01-235	U		21.09			0.09	U		140.45	D		222.73	D	J	45.51			111.19	D		62.16	D		5.25			1.92		J	1.29		
South Basin Area X	SB-03	2	4	SA	AAB-209	01-235	U		0.19	U		0.08	U		4.24			6.7		J	1.8			3.62			2.26			0.35	J		0.44	J	J	0.43	J	
South Basin Area X	SB-03	4	6	SA	AAB-210	01-235	U		0.16	U		0.07	U		0.22	J		0.22	J	J	0.12	J		0.15	J		0.08	U		0.07	U		0.07	U	UJ	0.08	U	
South Basin Area X	SB-06	0	2	SA	AAB-202	01-234	U	UJ	12.89	D	J	0.09	U	UJ	104.82	D	J	132.02	D	J	39.1	D	J	76.52	D	J	39.89	D	J	9.13		J	6.18		J	5.09		J
South Basin Area X	SB-06	2	4	SA	AAB-203	01-234	U		0.34	J		0.08	U		3.57			5.3			1.48			3.48			2.08			0.52	J	J	0.59	J	J	0.74	J	J
South Basin Area X	SB-06	4	6	SA	AAB-204	01-234	U		0.16	U		0.07	U		0.08	U		0.12	U		0.08	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U	UJ	0.08	U	UJ
South Basin Area X	SB-07	0	2	SA	AAB-235	01-234	U		17.12		J	0.09	U		95.25	D	J	120.16	D	J	36.12	D	J	68.94	D	J	33.71	D	J	9.7		J	7.06		J	1.71		J
South Basin Area X	SB-07	2	4	SA	AAB-236	01-234	U		2.46			0.09	U		25.46			32.91			10.25			21.3			10.75			2.48		J	2.57		J	3.97		J
South Basin Area X	SB-07	4	6	SA	AAB-237	01-234	U		0.17	U		0.07	U		0.09	U		0.13	U		0.08	U		0.09	U		0.08	U		0.08	U	UJ	0.08	U	UJ	0.08	U	UJ
South Basin Area X	SB-12	0	2	SA	AAB-199	01-230	U	UJ	31.96	D	J	0.09	U	UJ	191.66	D	J	218.93	D	J	61.38	D	J	118.14	D	J	56.98	D	J	11.46	D	J	8.17		J	8.06		J
South Basin Area X	SB-12	2	4	SA	AAB-200	01-230	U	UJ	1.33		J	0.09	U	UJ	13.29		J	17.26		J	4.47		J	9.87		J	6.01		J	1.64		J	2.2		J	3.26		J
South Basin Area X	SB-12	4	6	SA	AAB-201	01-230	U		0.16	U		0.07	U		0.08	U		0.12	U		0.08	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U	UJ	0.08	U	UJ
South Basin Area X	SB-16	0	2	SA	AAB-256	01-235	U	UJ	3.63		J	0.07	U	UJ	45.4	D	J	68.34	D	J	29.84	D	J	54.59	D	J	29.66	D	J	5.02		J	2.17		J	0.38	J	J
South Basin Area X	SB-16	2	4	SA	AAB-257	01-235	U		0.37	J		0.07	U		4.91			7.53		J	2.45			4.62			2.02			0.37	J		0.18	J	J	0.34	J	
South Basin Area X	SB-16	4	6	SA	AAB-258	01-235	U		0.19	J		0.07	U		4.13			6.19		J	2.05			3.8			1.69			0.32	J		0.22	J	J	0.45	J	
South Basin Area X	SB-20	0	2	SA	AAB-250	01-235	U		57.56	D		0.09	U		436.82	D		622.1	D	J	184.07	D		17.33			169.43	D		12.68			4.42		J	2.02		
South Basin Area X	SB-20	2	4	SA	AAB-251	01-235	U		5.6			0.1	U		44.03			31.67	D	J	6.83			15.02			16.14			1.6			1.53		J	2.24		
South Basin Area X	SB-20	4	6	SA	AAB-252	01-235	U		0.17	U		0.07	U		0.67	J		1.11		J	0.52	J		0.67	J		0.21	J		0.07	J		0.05	J	J	0.1	J	
South Basin Area X	SB-22	0	2	SA	AAB-253	01-235	U		9.21			0.08	U		114.89	D		181.56	D	J	34.88			113.96	D		59.33	D		4.76			1.76		J	1.11		
South Basin Area X	SB-22	2	4	SA	AAB-254	01-235	U		0.5	J		0.09	U		12.51			22.88		J	4.08			9.94			6.68			0.77	J		0.65	J	J	1.06		
South Basin Area X	SB-22	4	6	SA	AAB-255	01-235	U		0.17	U		0.07	U		0.28	J		0.86		J	0.28	J		0.5	J		0.27	J		0.04	J		0.03	J	J	0.06	J	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-14. Polychlorinated Biphenyls as Aroclors in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Aroclors in Sediment (ug/kg dry weight)																				
							Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	01-234	10.08	U		10.08	U		10.08	U		10.08	U		10.08	U		10.08	U		93.29		
India Basin Area I	IB-56	2	4	SA	AAB-206	01-234	10.75	U		10.75	U		10.75	U		10.75	U		10.75	U		10.75	U		10.75	U	
India Basin Area I	IB-56	4	6	SA	AAB-207	01-398	10.89	U		10.89	U		10.89	U		10.89	U		10.89	U		10.89	U		10.89	U	
India Basin Area I	IB-59	0	2	SA	AAB-247	01-234	12.73	U		12.73	U		12.73	U		12.73	U		12.73	U		12.73	U		12.73	U	
India Basin Area I	IB-59	2	4	SA	AAB-248	01-234	12.46	U		12.46	U		12.46	U		12.46	U		12.46	U		12.46	U		12.46	U	
India Basin Area I	IB-59	4	6	SA	AAB-249	01-234	11.27	U		11.27	U		11.27	U		11.27	U		11.27	U		11.27	U		106.78		
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-234	7.28	U		7.28	U		7.28	U		7.28	U		7.28	U		7.28	U		7.28	U	
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-234	7.48	U		7.48	U		7.48	U		7.48	U		7.48	U		7.48	U		7.48	U	
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-229	9.7	U		9.7	U		9.7	U		9.7	U		9.7	U		9.7	U		182.24		
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-229	9.9	U	UJ	9.9	U	UJ	9.9	U	UJ	9.9	U	UJ	9.9	U	UJ	9.9	U	UJ	338.02		J
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-398	10.09	U		10.09	U		10.09	U		10.09	U		10.09	U		10.09	U		10.09	U	
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-229	10.22	U		10.22	U		10.22	U		10.22	U		10.22	U		10.22	U		10.22	U	
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-229	10.26	U		10.26	U		10.26	U		10.26	U		10.26	U		10.26	U		10.26	U	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-230	10.69	U		10.69	U		10.69	U		10.69	U		10.69	U		10.69	U		10.69	U	
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-229	9.6	U		9.6	U		9.6	U		9.6	U		9.6	U		9.6	U		34.05		J
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-229	10.2	U		10.2	U		10.2	U		10.2	U		10.2	U		10.2	U		10.2	U	
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-229	9.71	U		9.71	U		9.71	U		9.71	U		9.71	U		9.71	U		9.71	U	
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-230	10.55	U		10.55	U		10.55	U		10.55	U		10.55	U		10.55	U		10.55	U	
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-230	10.94	U		10.94	U		10.94	U		10.94	U		10.94	U		10.94	U		10.94	U	
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-230	11.75	U		11.75	U		11.75	U		11.75	U		11.75	U		11.75	U		11.75	U	
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-230	9.19	U		9.19	U		9.19	U		9.19	U		9.19	U		9.19	U		9.19	U	
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-230	8.83	U		8.83	U		8.83	U		8.83	U		8.83	U		8.83	U		8.83	U	
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-230	9.37	U	UJ	9.37	U	UJ	9.37	U	UJ	9.37	U	UJ	9.37	U	UJ	9.37	U	UJ	9.37	U	UJ
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-234	7.5	U		7.5	U		7.5	U		7.5	U		7.5	U		7.5	U		7.5	U	
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-234	7.24	U		7.24	U		7.24	U		7.24	U		7.24	U		7.24	U		7.24	U	
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-234	7.35	U	UJ	7.35	U	UJ	7.35	U	UJ	7.35	U	UJ	7.35	U	UJ	7.35	U	UJ	7.35	U	UJ
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-235	6.71	U		6.71	U		6.71	U		6.71	U		6.71	U		6.71	U		6.71	U	
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-235	7.08	U		7.08	U		7.08	U		7.08	U		7.08	U		7.08	U		7.08	U	
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-235	6.96	U		6.96	U		6.96	U		6.96	U		6.96	U		6.96	U		6.96	U	
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-234	9.41	U		9.41	U		9.41	U		9.41	U		9.41	U		9.41	U		9.41	U	
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-234	9.06	U		9.06	U		9.06	U		9.06	U		9.06	U		9.06	U		9.06	U	
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-234	9.41	U		9.41	U		9.41	U		9.41	U		9.41	U		9.41	U		9.41	U	
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-229	11.18	U		11.18	U		11.18	U		11.18	U		11.18	U		11.18	U		96.46		
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-229	11.53	U		11.53	U		11.53	U		11.53	U		11.53	U		11.53	U		11.53	U	
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-229	10.7	U		10.7	U		10.7	U		10.7	U		10.7	U		10.7	U		10.7	U	
South Basin Area X	SB-01	0	2	SA	AAB-259	01-235	9.68	U	UJ	9.68	U	UJ	9.68	U	UJ	9.68	U	UJ	9.68	U	UJ	9.68	U	UJ	4,607.04	D	J
South Basin Area X	SB-01	2	4	SA	AAB-260	01-235	11.61	U		11.61	U		11.61	U		11.61	U		11.61	U		11.61	U		501.74	D	J
South Basin Area X	SB-01	4	6	SA	AAB-261	01-235	9.61	U		9.61	U		9.61	U		9.61	U		9.61	U		9.61	U		9.61	U	
South Basin Area X	SB-03	0	2	SA	AAB-208	01-235	11.74	U		11.74	U		11.74	U		11.74	U		11.74	U		11.74	U		1,352.32	D	
South Basin Area X	SB-03	2	4	SA	AAB-209	01-235	10.93	U		10.93	U		10.93	U		10.93	U		10.93	U		10.93	U		49.3		
South Basin Area X	SB-03	4	6	SA	AAB-210	01-235	9.48	U		9.48	U		9.48	U		9.48	U		9.48	U		9.48	U		9.48	U	
South Basin Area X	SB-06	0	2	SA	AAB-202	01-234	12.23	U	UJ	12.23	U	UJ	12.23	U	UJ	12.23	U	UJ	12.23	U	UJ	12.23	U	UJ	1,314.73		J
South Basin Area X	SB-06	2	4	SA	AAB-203	01-234	11.12	U		11.12	U		11.12	U		11.12	U		11.12	U		11.12	U		11.12	U	
South Basin Area X	SB-06	4	6	SA	AAB-204	01-234	9.53	U		9.53	U		9.53	U		9.53	U		9.53	U		9.53	U		9.53	U	
South Basin Area X	SB-07	0	2	SA	AAB-235	01-234	12.26	U		12.26	U		12.26	U		12.26	U		12.26	U		12.26	U		1,277.92		
South Basin Area X	SB-07	2	4	SA	AAB-236	01-234	12.05	U		12.05	U		12.05	U		12.05	U		12.05	U		12.05	U		249.15		
South Basin Area X	SB-07	4	6	SA	AAB-237	01-234	9.82	U		9.82	U		9.82	U		9.82	U		9.82	U		9.82	U		9.82	U	
South Basin Area X	SB-12	0	2	SA	AAB-199	01-230	12.03	U	UJ	12.03	U	UJ	12.03	U	UJ	12.03	U	UJ	12.03	U	UJ	12.03	U	UJ	1,955.51		J
South Basin Area X	SB-12	2	4	SA	AAB-200	01-230	12.62	U	UJ	12.62	U	UJ	12.62	U	UJ	12.62	U	UJ	12.62	U	UJ	12.62	U	UJ	12.62	U	UJ
South Basin Area X	SB-12	4	6	SA	AAB-201	01-230	9.55	U		9.55	U		9.55	U		9.55	U		9.55	U		9.55	U		9.55	U	
South Basin Area X	SB-16	0	2	SA	AAB-256	01-235	9.54	U	UJ	9.54	U	UJ	9.54	U	UJ	9.54	U	UJ	9.54	U	UJ	9.54	U	UJ	568.14	D	J
South Basin Area X	SB-16	2	4	SA	AAB-257	01-235	9.02	U		9.02	U		9.02	U		9.02	U		9.02	U		9.02	U		49.39		
South Basin Area X	SB-16	4	6	SA	AAB-258	01-235	10.19	U		10.19	U		10.19	U		10.19	U		10.19	U		10.19	U		41.52		
South Basin Area X	SB-20	0	2	SA	AAB-250	01-235	12.1	U		12.1	U		12.1	U		12.1	U		12.1	U		12.1	U		4,152.62	D	
South Basin Area X	SB-20	2	4	SA	AAB-251	01-235	13.7	U		13.7	U		13.7	U		13.7	U		13.7	U		576.08			13.7	U	
South Basin Area X	SB-20	4	6	SA	AAB-252	01-235	9.89	U		9.89	U		9.89	U		9.89	U		9.89	U		9.89	U		9.89	U	
South Basin Area X	SB-22	0	2	SA	AAB-253	01-235	11.54	U		11.54	U		11.54	U		11.54	U		11.54	U		11.54	U		1,249.96	D	
South Basin Area X	SB-22	2	4	SA	AAB-254	01-235	12.84	U		12.84	U		12.84	U		12.84	U		12.84	U		12.84	U		127.52		
South Basin Area X	SB-22	4	6	SA	AAB-255	01-235	10.23	U		10.23	U		10.23	U		10.23	U		10.23	U		10.23	U		10.23	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-15. Chlorinated Pesticides in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Chlorinated Pesticides in Sediment (ug/kg dry weight)

							2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	01-234	0.1	U		0.12	U		0.11	U		2.32			0.43	J		0.16	J	J	0.31	J		0.09	U		0.09	U		0.08	U		0.38	J		0.07	U	
India Basin Area I	IB-56	2	4	SA	AAB-206	01-234	0.1	U		0.13	U		0.12	U		1.29			0.09	U		0.09	U	UJ	0.07	U		0.09	U		0.1	U		0.08	U		0.07	U		0.08	U	
India Basin Area I	IB-56	4	6	SA	AAB-207	01-398	0.1	U		0.13	U		0.12	U		0.1	U		0.09	U		0.09	U	UJ	0.07	U		0.09	U		0.1	U		0.09	U		0.08	U		0.08	U	
India Basin Area I	IB-59	0	2	SA	AAB-247	01-234	0.12	U		0.15	U		0.14	U		0.96	J		0.89	J		0.1	U	UJ	0.08	U		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
India Basin Area I	IB-59	2	4	SA	AAB-248	01-234	0.12	U		0.15	U		0.14	U		1.64			1.74			0.1	U	UJ	0.08	U		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
India Basin Area I	IB-59	4	6	SA	AAB-249	01-234	0.11	U		0.13	U		0.13	U		2.07			0.55	J		0.09	U	UJ	0.48	J		0.1	U		0.1	U		0.09	U		0.4	J		0.08	U	
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-234	0.07	U		0.09	U		0.08	U		0.79			0.7			0.06	U	UJ	0.05	U		0.06	U		0.06	U		0.06	U		0.05	U		0.05	U	
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-234	0.07	U		0.09	U		0.08	U		0.76			0.52	J		0.06	U	UJ	0.05	U		0.06	U		0.07	U		0.06	U		0.05	U		0.05	U	
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-229	0.09	U		0.12	U		0.11	U		5.05			2.87			0.97		J	0.12	J		0.08	U		0.09	U		0.08	U		3.31			0.07	U	
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-229	0.09	U	UJ	0.12	U	UJ	0.11	U	UJ	3.39		J	2.19		J	0.08	U	UJ	0.06	U	UJ	0.09	U	UJ	0.09	U	UJ	0.08	U	UJ	0.07	U	UJ	0.07	U	UJ
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-398	0.1	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-229	0.1	U		0.12	U		0.11	U		0.09	U		0.2	J		0.08	U	UJ	0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-229	0.1	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-230	0.1	U		0.13	U		0.12	U		0.09	U		0.09	U		0.09	U	UJ	0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-229	0.09	U		0.11	U		0.11	U		2.12		J	0.88		J	0.08	U	UJ	0.15	J	J	0.08	U		0.08	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-229	0.1	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-229	0.09	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.06	U		0.08	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-230	0.1	U		0.13	U		0.12	U		0.81	J		0.83	J		0.09	U		0.06	J		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-230	0.1	U		0.13	U		0.12	U		0.1	U		0.09	U		0.09	U	UJ	0.07	U		0.09	U		0.1	U		0.09	U		0.08	U		0.08	U	
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-230	0.11	U		0.14	U		0.13	U		0.1	U		0.09	U		0.1	U	UJ	0.08	U		0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-230	0.09	U		0.11	U		0.1	U		0.79			0.57	J		0.08	U	UJ	0.06	U		0.08	U		0.08	U		0.07	U		0.06	U		0.07	U	
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-230	0.08	U		0.11	U		0.1	U		1.03			0.14	J		0.22	J	J	0.06	U		0.08	U		0.08	U		0.07	U		0.06	U		0.06	U	
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-230	0.09	U	UJ	0.11	U	UJ	0.1	U	UJ	1.29		J	0.42	J	J	0.08	U	UJ	0.06	U	UJ	0.08	U	UJ	0.08	U	UJ	0.07	U	UJ	0.06	U	UJ	0.07	U	UJ
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-234	0.07	U		0.09	U		0.08	U		0.07	U		0.19	J		0.06	U	UJ	0.05	U		0.06	U		0.07	U		0.06	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-234	0.07	U		0.09	U		0.08	U		0.06	U		0.06	U		0.06	U	UJ	0.05	U		0.06	U		0.06	U		0.06	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-234	0.07	U	UJ	0.09	U	UJ	0.08	U	UJ	0.06	U	UJ	0.06	U	UJ	0.06	U	UJ	0.05	U	UJ	0.06	U	UJ	0.06	U	UJ	0.06	U	UJ	0.05	U	UJ	0.05	U	UJ
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-235	0.06	U		0.08	U		0.07	U	UJ	0.06	U		0.05	U		0.06	U		0.04	U		0.06	U		0.06	U		0.05	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-235	0.07	U		0.08	U		0.08	U	UJ	0.06	U		0.06	U		0.06	U		0.05	U		0.06	U		0.06	U		0.06	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-235	0.07	U		0.08	U		0.08	U	UJ	0.06	U		0.06	U		0.06	U		0.05	U		0.06	U		0.06	U		0.05	U		0.05	U		0.05	U	
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-234	0.09	U		0.11	U		0.11	U		0.08	U		0.08	U		0.08	U	UJ	0.06	U		0.08	U		0.08	U		0.07	U		0.07	U		0.07	U	
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-234	0.09	U		0.11	U		0.1	U		0.08	U		0.07	U		0.07	U	UJ	0.06	U		0.08	U		0.08	U		0.07	U		0.06	U		0.07	U	
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-234	0.09	U		0.11	U		0.11	U		0.08	U		0.08	U		0.08	U	UJ	0.06	U		0.08	U		0.08	U		0.07	U		0.07	U		0.07	U	
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-229	0.11	U		0.13	U		0.12	U		1.18			0.9	J		0.12	J	J	0.12	J		0.1	U		0.1	U		0.09	U		0.09	J		0.08	U	
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-229	0.11	U		0.14	U		0.13	U		0.77	J		0.09	U		0.99		J	0.07	U		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-229	0.1	U		0.13	U		0.12	U		0.09	U		0.09	U		0.09	U	UJ	0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
South Basin Area X	SB-01	0	2	SA	AAB-259	01-235	0.09	U	UJ	0.12	U	UJ	0.11	U	UJ	65.35	D	J	146.28	D	J	135.33	D	J	24.15	D	J	128.49	D	J	0.09	U	UJ	0.08	U	UJ	40.35	D	J	0.07	U	UJ
South Basin Area X	SB-01	2	4	SA	AAB-260	01-235	0.11	U		0.14	U		0.13	U	UJ	10.97		J	37.05	D	J	0.54	J	J	0.08	U		0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
South Basin Area X	SB-01	4	6	SA	AAB-261	01-235	0.09	U		0.11	U		0.11	U	UJ	0.08	U		0.18	J		0.08	U		0.03	J		0.08	U		0.08	U		0.08	U		0.08	J		0.07	U	
South Basin Area X	SB-03	0	2	SA	AAB-208	01-235	0.11	U		0.14	U		0.13	U	UJ	12.8			27.34			1.03			3.81			4.16			0.1	U		0.09	U		12.25			0.09	U	
South Basin Area X	SB-03	2	4	SA	AAB-209	01-235	0.1	U		0.13	U		0.12	U	UJ	0.88			0.98			0.09	U		0.07	U		0.09	U		0.1	U		0.09	U		0.08	U		0.08	U	
South Basin Area X	SB-03	4	6	SA	AAB-210	01-235	0.09	U		0.11	U		0.11	U	UJ	0.08	U		0.04	J		0.08	U		0.06	U		0.08	U		0.08	U		0.07	U		0.07	U		0.07	U	
South Basin Area X	SB-06	0	2	SA	AAB-202	01-234	0.12	U	UJ	0.15	U	UJ	0.14	U	UJ	6.31		J	32.15	D	J	0.41	J	J	0.85	J	J	2.3		J	0.11	U	UJ	0.1	U	UJ	2.37		J	0.09	U	UJ
South Basin Area X	SB-06	2	4	SA	AAB-203	01-234	0.11	U		0.13	U		0.12	U		0.57	J		3.06			0.09	U	UJ	0.07	U		0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
South Basin Area X	SB-06	4	6	SA	AAB-204	01-234	0.09	U		0.11	U		0.11	U		0.08	U		0.08	U		0.08	U	UJ	0.06	U		0.08	U		0.08	U		0.07	U		0.07	U		0.07	U	
South Basin Area X	SB-07	0	2	SA	AAB-235	01-234	0.12	U		0.15	U		0.14	U		7.35			32.83	D		0.73	J	J	0.75	J		0.11	U		0.11	U		0.1	U		1.73			0.09	U	
South Basin Area X	SB-07	2	4	SA	AAB-236	01-234	0.11	U		0.14	U		0.13	U		1.96			32.8			0.74	J	J	0.08	U		0.1	U		0.11	U		0.09	U		0.08	U		0.09	U	
South Basin Area X	SB-07	4	6	SA	AAB-237	01-234	0.09	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.06	U		0.08	U		0.09	U		0.08	U		0.07	U		0.07	U	
South Basin Area X	SB-12	0	2	SA	AAB-199	01-230	0.11	U	UJ	0.14	U	UJ	0.13	U	UJ	16.28		J	83.2	D	J	1.74		J	2.3		J	15.75		J	0.11	U	UJ	0.09	U	UJ	6.12		J	0.09	U	UJ
South Basin Area X	SB-12	2	4	SA	AAB-200	01-230	0.12	U	UJ	0.15	U	UJ	0.14	U	UJ	1.35		J	53.14	D	J	0.1	U	UJ	0.08	U	UJ	0.11	U	UJ	0.11	U	UJ	0.1	U	UJ	0.09	U	UJ	0.09	U	UJ
South Basin Area X	SB-12	4	6	SA	AAB-201	01-230	0.09	U		0.11	U		0.11	U		0.08	U		0.08	U		0.08	U	UJ	0.06	U		0.08	U		0.08	U		0.07	U		0.07	U		0.07	U	
South Basin Area X	SB-16	0	2	SA	AAB-256	01-235	0.09	U	UJ	0.11	U	UJ	0.11	U	UJ	2.28		J	0.58	J	J	0.4	J	J	0.35	J	J	0.08	U	UJ	0.08	U	UJ	0.07	U	UJ	1.		J	0.07	U	UJ
South Basin Area X	SB-16	2	4	SA	AAB-257	01-235	0.09	U		0.11	U		0.1	U	UJ	0.08	U		0.07	U		0.07	U		0.06	U		0.08	U		0.08	U		0.07	U		0.06	U		0.07	U	
South Basin Area X	SB-16	4	6	SA	AAB-258	01-235	0.1	U		0.12	U		0.11	U	UJ	0.09	U		0.08	U		0.08	U		0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
South Basin Area X	SB-20	0	2	SA	AAB-250	01-235	0.11	U		0.14	U		0.14	U	UJ	26.34			5.4			3.06			3.49			1.49			0.11	U		0.09	U		9.64			0.09	U	
South Basin Area X	SB-20	2	4	SA	AAB-251	01-235	0.13	U		0.16	U		0.15	U	UJ	10.02			10.55			0.11	U		0.09	U		0.12	U		0.12	U		0.11	U		0.09	U		0.1	U	
South Basin Area X	SB-20	4	6	SA	AAB-252	01-235	0.09	U		0.12	U		0.11	U	UJ	0.09	U		0.14	J		0.08	U		0.06	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
South Basin Area X	SB-22	0	2	SA	AAB-253	01-235	0.11	U		0.14	U		0.13	U	UJ	5.67			16.68			0.1	U		0.92	J		4.94			0.1	U		0.09	U		3.14			0.08	U	
South Basin Area X	SB-22	2	4	SA	AAB-254	01-235	0.12	U		0.15	U		0.14	U	UJ	0.11	U		0.42	J		0.11	U		0.08	U		0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
South Basin Area X	SB-22	4	6	SA	AAB-255	01-235	0.1	U		0.12	U		0.11	U	UJ	0.09	U		0.08	U		0.08	U		0.07	U		0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-16. Polycyclic Aromatic Hydrocarbons in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Polycyclic Aromatic Hydrocarbons in Sediment (ug/kg dry weight)																				
							2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	01-234	14.29			17.04			27.13			98.64			20.38			36.52			266.23		
India Basin Area I	IB-56	2	4	SA	AAB-206	01-234	14.17			12.22			42.22			135.08			24.54			47.97			330.71		
India Basin Area I	IB-56	4	6	SA	AAB-207	01-235	8.39			3.02			7.15			26.83			7.20			18.71			39.04		
India Basin Area I	IB-59	0	2	SA	AAB-247	01-234	5.62			5.15			8.59			32.94			7.18			13.47			76.50		
India Basin Area I	IB-59	2	4	SA	AAB-248	01-234	6.66			6.85			6.83			29.47			7.82			13.94			77.85		
India Basin Area I	IB-59	4	6	SA	AAB-249	01-234	12.15			14.67			21.38			66.10			15.86			32.51			198.82		
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-234	5.85			13.83			4.69			41.41			17.48			9.87			162.59		
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-234	5.58			9.36			4.86			71.40			9.37			10.45			90.91		
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-229	29.29			55.45			16.61			101.69		J	45.17			40.33			486.28		
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-229	23.62			110.12			35.70			157.90		J	81.01			91.68			538.86		
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-229	26.61			49.24			35.38			170.24		J	48.86			86.32			480.86		
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-229	3.66			5.57			4.78			26.97		J	8.88			5.73			62.49		
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-229	1.64			0.19	J	UJ	0.06	J	U	0.63	J	UJ	2.34			1.87		U	3.77		
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-230	2.12			0.35	J		0.10	J		1.15			3.43			2.07		U	6.01		
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-229	16.19			49.72			25.48			77.04		J	30.03			38.87			294.90		
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-229	2.79			0.30	J	U	0.08	J	U	1.22		J	3.24			2.67		U	7.26		
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-229	2.37			0.23	J	U	0.07	J	U	0.74	J	UJ	2.37			2.14		U	6.06		
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-230	8.52			13.56			22.22			67.35			16.66			24.51			200.15		
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-230	2.31			0.17	J		0.08	J		0.77	J		2.18			2.22		U	5.75		
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-230	2.09			0.16	J		0.06	J		0.53	J		1.75			2.22		U	4.89		
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-230	25.79			54.95			69.03			275.98			77.35			49.47			947.15		
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-230	33.20		J	63.80		J	157.67		J	591.85		J	131.61		J	93.80		J	1539.35		J
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-230	29.91		J	80.47		J	164.75		J	584.92		J	130.59		J	94.55		J	1651.31		J
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-234	6.07			5.48			36.96			119.59			41.37			15.05			469.71		
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-234	16.54			9.00			28.88			134.21			25.19			46.60			300.48		
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-234	71.55	D		100.94	D		753.20	D		4511.95	D		1082.23	D		141.19	D		11409.11	D	
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-235	2.23			6.44			3.69			19.34			5.12			4.14			55.83		
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-235	29.31			21.34			130.73			462.67			184.58			45.83			1319.25		
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-235	8.82		J	3.29		J	22.88		J	92.54		J	24.08		J	13.23		J	283.05		J
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-234	2.23			0.63	J		2.27			9.37			3.25			3.45			31.61		
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-234	1.95			0.15	J		0.16	J		1.08			1.47			1.84		U	7.19		
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-234	10.42			6.68			21.31			61.08			13.86			47.27			187.78		
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-229	6.75			6.19			8.68			29.08		J	7.98			16.84			106.26		
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-229	22.00			21.06			58.08			147.66		J	32.92			129.58			519.26		
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-229	4.93			0.34	J	U	0.63	J	U	1.72		J	1.92			5.81			10.58		
South Basin Area X	SB-01	0	2	SA	AAB-259	01-235	111.38			11.57			28.28			138.57			22.05			83.81			160.32		
South Basin Area X	SB-01	2	4	SA	AAB-260	01-235	29.70			14.44			27.47			80.60			19.94			70.66			150.00		
South Basin Area X	SB-01	4	6	SA	AAB-261	01-235	4.87			0.21	J		0.12	J		1.04			2.15			2.86		U	8.80		
South Basin Area X	SB-03	0	2	SA	AAB-208	01-235	39.92			7.91			24.35			44.81			12.05			52.43			109.37		
South Basin Area X	SB-03	2	4	SA	AAB-209	01-235	8.66			3.42			13.81			19.80			6.17			26.92			64.81		
South Basin Area X	SB-03	4	6	SA	AAB-210	01-235	3.16			0.22	J		0.04	U		0.74	J		1.79			2.57		U	7.36		
South Basin Area X	SB-06	0	2	SA	AAB-202	01-234	30.14			10.51			24.90			52.26			14.25			69.05			122.68		
South Basin Area X	SB-06	2	4	SA	AAB-203	01-234	5.31			2.16			6.44			11.00			3.90			18.17			35.99		
South Basin Area X	SB-06	4	6	SA	AAB-204	01-234	2.47			0.16	J		0.06	J		0.62	J		1.47			1.80		U	6.05		
South Basin Area X	SB-07	0	2	SA	AAB-235	01-234	28.26			7.58			20.86			57.05			14.58			55.88			100.18		
South Basin Area X	SB-07	2	4	SA	AAB-236	01-234	16.69			11.16			22.47			49.89			11.50			56.28			108.90		
South Basin Area X	SB-07	4	6	SA	AAB-237	01-234	2.90			0.26	J		0.28	J		0.93	J		1.66			2.53		U	7.52		
South Basin Area X	SB-12	0	2	SA	AAB-199	01-230	42.39			7.18			15.18			48.54			14.69			113.78			103.92		
South Basin Area X	SB-12	2	4	SA	AAB-200	01-230	13.92			14.35			14.03			45.12			15.60			92.74			97.50		
South Basin Area X	SB-12	4	6	SA	AAB-201	01-230	2.74			0.39	J	J	0.20	J	J	0.94	J	J	1.78			2.50			8.36		
South Basin Area X	SB-16	0	2	SA	AAB-256	01-235	5.38			1.25			2.85			7.94			3.20			12.97			23.67		
South Basin Area X	SB-16	2	4	SA	AAB-257	01-235	2.71			0.69	J		2.55			4.42			2.00			6.70			15.71		
South Basin Area X	SB-16	4	6	SA	AAB-258	01-235	4.77			1.57			4.11			7.78			3.73			12.01			28.97		
South Basin Area X	SB-20	0	2	SA	AAB-250	01-235	57.20			13.79			28.53			91.55			25.24			145.34			169.99		
South Basin Area X	SB-20	2	4	SA	AAB-251	01-235	36.34			30.89			21.23			91.91			40.03			281.90			230.44		
South Basin Area X	SB-20	4	6	SA	AAB-252	01-235	3.75			0.83	J		2.33			4.72			2.73			7.46			20.38		
South Basin Area X	SB-22	0	2	SA	AAB-253	01-235	22.73			5.94			22.00			35.92			9.82			62.71			84.62		
South Basin Area X	SB-22	2	4	SA	AAB-254	01-235	8.07			6.24			10.90			24.45			8.94			33.65			60.73		
South Basin Area X	SB-22	4	6	SA	AAB-255	01-235	8.19			5.05			21.43			33.04			8.44			44.88			114.20		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-16. Polycyclic Aromatic Hydrocarbons in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Polycyclic Aromatic Hydrocarbons in Sediment (ug/kg dry weight)																													
							Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	01-234	306.09			520.09			323.64			427.01			343.52			363.40			56.39			613.06			422.54			827.74		
India Basin Area I	IB-56	2	4	SA	AAB-206	01-234	452.86			799.76			478.82			649.45			476.05			501.67			81.80			805.18			643.57			1120.97		
India Basin Area I	IB-56	4	6	SA	AAB-207	01-235	120.74			147.61			91.41			94.62			110.67			118.83			19.35		J	170.67			98.89			224.94		
India Basin Area I	IB-59	0	2	SA	AAB-247	01-234	98.92			220.52			170.94			185.77			154.44			132.23			24.19			193.90			173.12			298.80		
India Basin Area I	IB-59	2	4	SA	AAB-248	01-234	87.33			194.29			149.52			168.55			134.69			110.50			19.54			179.98			163.86			270.40		
India Basin Area I	IB-59	4	6	SA	AAB-249	01-234	208.58			462.80			328.61			389.18			329.22			266.25			49.89			429.24			383.99			647.86		
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-234	162.76			207.45			165.16			143.40			173.22			175.70			30.19			309.92			153.47			368.91		
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-234	108.46			177.99			153.52			133.23			148.43			192.31			26.11			170.86			133.73			285.68		
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-229	372.99			456.29			360.71			353.75			327.96			452.53			61.46			755.43			348.67			1078.67		
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-229	500.06			707.11			520.23			635.95			468.24			603.75			83.95			1165.43			607.65			1576.66		
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-229	437.04			730.59			431.48			667.67			436.03			519.14			72.83			1006.19			626.89			1408.98		
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-229	48.08			55.97			34.33			37.60			39.94			56.58			6.43			103.90			35.30			129.07		
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-229	0.52	J	U	0.41	J	U	1.42		UJ	1.28		U	0.45	J	U	1.79		U	0.20	J	U	2.24			0.54	J	U	2.56		U
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-230	1.27			1.45			2.84			4.22			1.10			3.39			0.47	J	J	4.04			1.52			4.26		
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-229	389.71			653.80			528.71			516.13			496.91			465.71			96.99			631.13			513.64			1004.24		
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-229	1.02	J	U	1.24		U	2.71			3.35			1.00	J	U	3.02			0.37	J	U	3.34			1.25			4.14		
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-229	0.66	J	U	0.60	J	U	2.05			1.50		U	0.60	J	U	2.31			0.30	J	U	2.39			0.68	J	U	2.64		U
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-230	195.39			296.80			174.05			235.37			178.07			208.59			28.90		J	416.62			219.73			536.26		
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-230	0.63	J		0.72	J		1.90			2.10			0.61	J		2.28			0.28	J	J	2.16			0.82	J		2.84		
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-230	0.48	J		0.47	J		1.54			1.11	J		0.31	J		1.80			0.18	J	J	1.71			0.49	J		1.98		
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-230	628.80			786.88			426.54			553.98			461.40			652.31			83.91		J	1197.40			533.45			1565.19		
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-230	948.86		J	1274.34		J	695.53		J	937.05		J	764.38		J	1025.79		J	136.74		J	2116.30		J	913.20		J	2690.21		J
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-230	1147.02		J	1623.52		J	884.74		J	1242.76		J	954.78		J	1194.13		J	166.09		J	2604.24		J	1212.64		J	3292.09		J
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-234	238.32			279.95			131.20			172.58			176.21			236.47			26.66			447.74			168.66			624.24		
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-234	425.75			494.69			260.52			295.12			332.58			418.64			51.50			742.37			296.97			909.06		
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-234	3634.00	D		4200.82	D		1934.46	D		2432.83	D		2581.21	D		3740.61	D		398.56	D		9735.36	D		2377.28	D		11748.58	D	
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-235	36.95			56.79			31.90			43.77			36.28			40.35			5.04		J	86.70			43.36			110.35		
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-235	639.77			676.47			316.10			327.78			417.68			723.53			82.57		J	1012.61			375.48			1345.14		
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-235	185.04		J	199.61		J	98.55		J	120.01		J	126.22		J	203.78		J	21.08		J	353.52		J	118.18		J	455.35		J
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-234	22.15			37.60			21.14			34.68			21.97			26.20			3.69			44.90			27.47			64.01		
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-234	1.51			1.89			2.85			2.88			1.32			3.30			0.43	J		3.45			1.46			4.55		
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-234	312.90			758.27			457.19			703.49			441.85			382.23			76.01			582.58			668.15			881.52		
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-229	124.31			240.48			147.26			230.00			150.80			142.86			19.72			262.83			204.50			352.97		
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-229	727.42			1748.77			1066.70			1796.39			958.53			900.09			172.20			1529.94			1686.48			2224.25		
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-229	8.20			19.39			12.84			19.35			10.73			12.15			1.91			15.61			15.95			24.31		
South Basin Area X	SB-01	0	2	SA	AAB-259	01-235	211.10			422.68			275.39			368.09			267.63			243.48			56.84		J	371.89			330.47			872.73		
South Basin Area X	SB-01	2	4	SA	AAB-260	01-235	230.87			551.62			350.64			554.91			324.19			275.74			64.12		J	450.78			514.81			875.69		
South Basin Area X	SB-01	4	6	SA	AAB-261	01-235	1.23			1.82			2.85			7.34			1.12			3.02			0.41	J	J	2.49			1.76			4.77		
South Basin Area X	SB-03	0	2	SA	AAB-208	01-235	135.56			398.80			281.13			416.92			239.68			166.44			53.44		J	248.11			379.11			396.20		
South Basin Area X	SB-03	2	4	SA	AAB-209	01-235	104.20			287.93			176.50			285.73			153.97			121.35			28.75		J	179.33			266.06			279.13		
South Basin Area X	SB-03	4	6	SA	AAB-210	01-235	0.80	J		1.41			2.58			8.19			0.94	J		2.69			0.37	J	J	1.92			1.44			3.13		
South Basin Area X	SB-06	0	2	SA	AAB-202	01-234	217.93			461.52			312.85			410.27			283.11			239.19			56.83			290.52			387.79			575.10		
South Basin Area X	SB-06	2	4	SA	AAB-203	01-234	48.33			169.14			111.36			192.77			99.35			62.19			15.36			93.99			169.16			225.98		
South Basin Area X	SB-06	4	6	SA	AAB-204	01-234	0.81	J		0.86	J	U	2.27			2.29			0.76	J		2.46			0.27	J		1.76			0.92	J		2.63		
South Basin Area X	SB-07	0	2	SA	AAB-235	01-234	204.47			393.21			291.25			372.24			261.49			228.56			51.83			288.02			356.49			594.30		
South Basin Area X	SB-07	2	4	SA	AAB-236	01-234	211.33			500.40			314.62			483.13			307.22			255.52			51.84			405.55			460.29			737.19		
South Basin Area X	SB-07	4	6	SA	AAB-237	01-234	2.02			4.03			4.06			8.17			2.32			3.84			0.49	J		4.49			3.97			6.88		
South Basin Area X	SB-12	0	2	SA	AAB-199	01-230	213.45			368.50			262.04			329.33			245.73			249.99			47.82		J	290.53			304.78			657.32		
South Basin Area X	SB-12	2	4	SA	AAB-200	01-230	173.28			374.53			268.18			398.62			218.37			236.49			37.10		J	370.84			359.55			592.76		
South Basin Area X	SB-12	4	6	SA	AAB-201	01-230	1.52		J	1.94		J	2.91			3.07		J	1.51		J	3.23			0.38	J	J	3.65		J	1.52		J	5.59		J
South Basin Area X	SB-16	0	2	SA	AAB-256	01-235	43.94			67.82			56.41			62.99			56.24			56.17			10.92		J	63.50			57.09			73.83		
South Basin Area X	SB-16	2	4	SA	AAB-257	01-235	18.05			56.46			34.41			62.93			33.41			23.01			4.37		J	41.45			52.08			74.05		
South Basin Area X	SB-16	4	6	SA	AAB-258	01-235	29.93			96.30			61.99			113.73			55.85			37.49			8.61		J	70.08			93.96			114.69		
South Basin Area X	SB-20	0	2	SA	AAB-250	01-235	278.18			528.52			385.06			497.70			370.22			361.55			78.81		J	499.60			443.23			885.11		
South Basin Area X	SB-20	2	4	SA	AAB-251	01-235	209.40			409.43			310.27			444.61			254.00			347.61			51.98		J	504.59			393.72			728.50		
South Basin Area X	SB-20	4	6	SA	AAB-252	01-235	20.84			55.54			35.11			62.73			31.11			26.70			5.28		J	52.00			50.05			80.19		
South Basin Area X	SB-22	0	2	SA	AAB-253	01-235	221.55			491.50			308.32			468.93			294.93			243.23			57.30		J	301.95			408.99			782.16		
South Basin Area X	SB-22	2	4	SA	AAB-254	01-235	85.74			228.22			154.39			263.73			132.44			109.87			20.81		J	213.81			229.74			393.83		
South Basin Area X	SB-22	4	6	SA	AAB-255	01-235	189.21			609.92			362.02			671.63			317.32			231.49			49.77		J	466.22			592.83			707.07		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-17. Diesel Range Organics Total Petroleum Hydrocarbons in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ ID	Lab_Batch	Diesel Range Organics TPH (C10-C25) (mg/kg dry weight) Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	E1E250272	17		
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	E1E250272	19		
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	E1E250272	25		
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	E1E250272	36		
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	E1E250272	16		
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	E1E250272	8	U	
India Basin Area I	IB-56	0	2	SA	AAB-205	E1E250272	54		J
India Basin Area I	IB-56	2	4	SA	AAB-206	E1E250272	55		J
India Basin Area I	IB-56	4	6	SA	AAB-207	E1E250272	20	J	J
India Basin Area I	IB-59	0	2	SA	AAB-247	E1E250272	35		
India Basin Area I	IB-59	2	4	SA	AAB-248	E1E250272	35		
India Basin Area I	IB-59	4	6	SA	AAB-249	E1E250272	52		J
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	E1E250272	15	J	
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	E1E250272	15	J	
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	E1E250272	37		
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	E1E240218	14	U	UJ
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	E1E240218	31		J
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	E1E240218	12	U	UJ
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	E1E250272	96		
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	E1E250272	210		
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	E1E240218	120		J
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	E1E240218	120		J
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	E1E240218	59		J
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	E1E240218	36		J
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	E1E240218	14	J	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	E1E240218	22		
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	E1E240218	67		J
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	E1E240218	12	U	UJ
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	E1E240218	16	J	J
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	E1E240218	29		
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	E1E240218	28		
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	E1E240218	23		
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	E1E240218	39		
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	E1E240218	54		
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	E1E240218	67		
South Basin Area X	SB-01	0	2	SA	AAB-259	E1E250272	870		
South Basin Area X	SB-01	2	4	SA	AAB-260	E1E250272	260		
South Basin Area X	SB-01	4	6	SA	AAB-261	E1E250272	12	U	
South Basin Area X	SB-03	0	2	SA	AAB-208	E1E250272	200		
South Basin Area X	SB-03	2	4	SA	AAB-209	E1E250272	43		
South Basin Area X	SB-03	4	6	SA	AAB-210	E1E250272	12	U	
South Basin Area X	SB-06	0	2	SA	AAB-202	E1E250272	240		
South Basin Area X	SB-06	2	4	SA	AAB-203	E1E250272	88		
South Basin Area X	SB-06	4	6	SA	AAB-204	E1E250272	16	J	
South Basin Area X	SB-07	0	2	SA	AAB-235	E1E250272	530		J
South Basin Area X	SB-07	2	4	SA	AAB-236	E1E250272	170		
South Basin Area X	SB-07	4	6	SA	AAB-237	E1E250272	15	J	
South Basin Area X	SB-12	0	2	SA	AAB-199	E1E240218	1000		
South Basin Area X	SB-12	2	4	SA	AAB-200	E1E240218	20	J	
South Basin Area X	SB-12	4	6	SA	AAB-201	E1E240218	360		
South Basin Area X	SB-16	0	2	SA	AAB-256	E1E250272	12	J	
South Basin Area X	SB-16	2	4	SA	AAB-257	E1E250272	12	U	
South Basin Area X	SB-16	4	6	SA	AAB-258	E1E250272	13	U	
South Basin Area X	SB-20	0	2	SA	AAB-250	E1E250272	890		J
South Basin Area X	SB-20	2	4	SA	AAB-251	E1E250272	1600		
South Basin Area X	SB-20	4	6	SA	AAB-252	E1E250272	12	U	
South Basin Area X	SB-22	0	2	SA	AAB-253	E1E250272	200		
South Basin Area X	SB-22	2	4	SA	AAB-254	E1E250272	320		
South Basin Area X	SB-22	4	6	SA	AAB-255	E1E250272	13	U	

J Estimated value.

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-18. Butyltins in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Butyltins in Sediment (ug/kg dry weight)											
							Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	SA	AAB-205	01-236	0.95	U		5.05			1.28	U		2.25	U	
India Basin Area I	IB-56	2	4	SA	AAB-206	01-236	0.97	U		1.83	U		1.30	U		2.29	U	
India Basin Area I	IB-56	4	6	SA	AAB-207	01-237	1.05	U		1.98	U		1.41	U		2.48	U	
India Basin Area I	IB-59	0	2	SA	AAB-247	01-236	1.15	U		2.17	U		1.55	U		2.72	U	
India Basin Area I	IB-59	2	4	SA	AAB-248	01-236	1.15	U		3.33			1.55	U		2.73	U	
India Basin Area I	IB-59	4	6	SA	AAB-249	01-236	1.05	U		1.98	U		1.41	U		2.48	U	
Point Avisadero Area III	PA-40	0	2	SA	AAB-244	01-236	4.56			163.68	D		850.42	D		8.73		
Point Avisadero Area III	PA-40	2	4	SA	AAB-245	01-236	8.36			136.15	D		1008.42	D		10.98		
Point Avisadero Area III	PA-41	0	2	SA	AAB-196	01-226	0.94	U	UJ	169.20	D		1024.11	D		17.33		
Point Avisadero Area III	PA-41	2	4	SA	AAB-197	01-226	0.98	U	UJ	1.85	U		1.31	U		2.31	U	
Point Avisadero Area III	PA-41	4	6	SA	AAB-198	01-226	0.99	U	UJ	1.87	U		1.33	U		2.34	U	
Point Avisadero Area III	PA-44	0	2	SA	AAB-226	01-226	0.95	U	UJ	19.65			67.12			2.25	U	
Point Avisadero Area III	PA-44	2	4	SA	AAB-227	01-226	0.97	U	UJ	1.83	U		1.30	U		2.29	U	
Point Avisadero Area III	PA-44	4	6	SA	AAB-228	01-227	0.99	U	UJ	1.87	U		1.33	U		2.35	U	
Point Avisadero Area III	PA-47	0	2	SA	AAB-223	01-226	0.89	U	UJ	1.69	U		138.41	D		2.11	U	
Point Avisadero Area III	PA-47	2	4	SA	AAB-224	01-226	0.95	U	UJ	1.79	U		1.28	U		2.25	U	
Point Avisadero Area III	PA-47	4	6	SA	AAB-225	01-226	0.91	U	UJ	1.73	U		1.23	U		2.16	U	
Point Avisadero Area III	PA-49	0	2	SA	AAB-232	01-227	0.99	U	UJ	4.23			5.17			2.35	U	
Point Avisadero Area III	PA-49	2	4	SA	AAB-233	01-227	1.07	U	UJ	2.03	U		1.45	U		2.54	U	
Point Avisadero Area III	PA-49	4	6	SA	AAB-234	01-227	1.10	U	UJ	2.08	U		1.48	U		2.60	U	
Point Avisadero Area III	PA-52	0	2	SA	AAB-229	01-227	0.86	U	UJ	5.22			12.43			2.04	U	
Point Avisadero Area III	PA-52	2	4	SA	AAB-230	01-227	0.84	U	UJ	6.46			20.14			1.99	U	
Point Avisadero Area III	PA-52	4	6	SA	AAB-231	01-227	0.89	U	UJ	7.32			33.14			2.10	U	
Eastern Wetland Area VIII	EW-31	0	2	SA	AAB-238	01-236	0.67	U		1.27	U		0.90	U		1.59	U	
Eastern Wetland Area VIII	EW-31	2	4	SA	AAB-239	01-236	0.66	U		1.24	U		0.88	U		1.56	U	
Eastern Wetland Area VIII	EW-31	4	6	SA	AAB-240	01-236	0.66	U		1.26	U		0.90	U		1.57	U	
Eastern Wetland Area VIII	EW-36	0	2	SA	AAB-262	01-237	0.61	U		1.16	U		0.82	U		1.45	U	
Eastern Wetland Area VIII	EW-36	2	4	SA	AAB-263	01-237	0.65	U		1.24	U		0.88	U		1.55	U	
Eastern Wetland Area VIII	EW-36	4	6	SA	AAB-264	01-237	0.62	U		1.18	U		0.84	U		1.47	U	
Oil Reclamation Area IX	OR-24	0	2	SA	AAB-241	01-236	0.88	U		1.66	U		1.19	U		2.08	U	
Oil Reclamation Area IX	OR-24	2	4	SA	AAB-242	01-236	0.86	U		1.62	U		1.15	U		2.03	U	
Oil Reclamation Area IX	OR-24	4	6	SA	AAB-243	01-236	0.88	U		1.67	U		1.19	U		2.09	U	
Oil Reclamation Area IX	OR-28	0	2	SA	AAB-220	01-226	1.05	U	UJ	6.21			6.68			2.49	U	
Oil Reclamation Area IX	OR-28	2	4	SA	AAB-221	01-226	1.06	U	UJ	2.00	U		1.42	U		2.50	U	
Oil Reclamation Area IX	OR-28	4	6	SA	AAB-222	01-226	1.01	U	UJ	1.90	U		1.36	U		2.38	U	
South Basin Area X	SB-01	0	2	SA	AAB-259	01-237	0.92	U		1.74	U		11.85			2.18	U	
South Basin Area X	SB-01	2	4	SA	AAB-260	01-237	1.07	U		2.02	U		1.44	U		2.53	U	
South Basin Area X	SB-01	4	6	SA	AAB-261	01-237	0.90	U		1.71	U		1.22	U		2.14	U	
South Basin Area X	SB-03	0	2	SA	AAB-208	01-237	1.09	U		12.56			1.47	U		2.59	U	
South Basin Area X	SB-03	2	4	SA	AAB-209	01-237	1.01	U		1.91	U		1.36	U		2.40	U	
South Basin Area X	SB-03	4	6	SA	AAB-210	01-237	0.90	U		1.70	U		1.21	U		2.13	U	
South Basin Area X	SB-06	0	2	SA	AAB-202	01-236	1.13	U		2.13	U		1.52	U		2.67	U	
South Basin Area X	SB-06	2	4	SA	AAB-203	01-236	1.01	U		1.91	U		1.36	U		2.39	U	
South Basin Area X	SB-06	4	6	SA	AAB-204	01-236	0.90	U		1.71	U		1.78			2.14	U	
South Basin Area X	SB-07	0	2	SA	AAB-235	01-236	1.14	U		8.93			1.53	U		2.70	U	

Table B-18. Butyltins in Sediment Core Samples, Hunters Point Shipyard Parcel F Validation Study

							Butyltins in Sediment (ug/kg dry weight)											
							Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-07	2	4	SA	AAB-236	01-236	1.14	U		2.15	U		1.53	U		2.70	U	
South Basin Area X	SB-07	4	6	SA	AAB-237	01-236	0.92	U		1.74	U		1.24	U		2.18	U	
South Basin Area X	SB-12	0	2	SA	AAB-199	01-227	1.17	U	UJ	15.50			12.47			2.76	U	
South Basin Area X	SB-12	2	4	SA	AAB-200	01-227	1.19	U	UJ	2.25	U		1.61	U		2.82	U	
South Basin Area X	SB-12	4	6	SA	AAB-201	01-227	0.90	U	UJ	1.70	U		1.21	U		2.13	U	
South Basin Area X	SB-16	0	2	SA	AAB-256	01-237	0.89	U		3.00			3.53			2.11	U	
South Basin Area X	SB-16	2	4	SA	AAB-257	01-237	0.84	U		1.59	U		1.13	U		1.99	U	
South Basin Area X	SB-16	4	6	SA	AAB-258	01-237	0.96	U		1.82	U		1.29	U		2.28	U	
South Basin Area X	SB-20	0	2	SA	AAB-250	01-237	1.12	U		16.63			19.46			2.66	U	
South Basin Area X	SB-20	2	4	SA	AAB-251	01-237	1.29	U		2.43	U		1.73	U		3.05	U	
South Basin Area X	SB-20	4	6	SA	AAB-252	01-237	0.93	U		1.75	U		1.25	U		2.19	U	
South Basin Area X	SB-22	0	2	SA	AAB-253	01-237	1.10	U		6.85			6.02			2.60	U	
South Basin Area X	SB-22	2	4	SA	AAB-254	01-237	1.18	U		2.23	U		1.59	U		2.79	U	
South Basin Area X	SB-22	4	6	SA	AAB-255	01-237	0.98	U		1.85	U		1.32	U		2.32	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-19. Quality Control Data for Grain Size in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Samp_ Type	Lab_ Batch	Percent Gravel	Percent Sand	Percent Silt	Percent Clay
Field duplicates (relative percent difference)												
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	SA	82956	8.4	6.5	43.4	41.7
India Basin Area I	IB-59	0	5	cm	SA	AAB-163	DU	82956	8.5	8.6	41.7	41.2
RPD									***1***	***28***	***4***	***1***
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	SA	82956	0	3.5	61.8	34.7
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-155	DU	82956	0	1.7	58.4	39.9
RPD									***NA***	***69***	***6***	***14***
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	SA	83164	0	85.6	6.2	8.2
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-106	DU	83164	0	88	3.9	8.1
RPD									***NA***	***3***	***46***	***1***
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	SA	83164	2.7	42.7	16	38.6
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-123	DU	83164	0	50.3	25	24.7
RPD									***200***	***16***	***44***	***44***
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	SA	83115	0	2.8	50	47.2
South Basin Area X	SB-12	0	5	cm	SA	AAB-140	DU	83115	0	10.1	36.2	53.7
RPD									***NA***	***113***	***32***	***13***
Analytical duplicates (relative percent difference)												
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	SA	83124	0	3.4	59.1	37.5
India Basin Area I	IB-56	2	4	ft	SA	AAB-206	QADU	83124	0	1.8	50.9	47.3
RPD									***NA***	***62***	***15***	***23***
Point Avisadero Area III	PA-47	0	2	ft	SA	AAB-223	SA	83115	6.2	24.3	30.8	38.7
Point Avisadero Area III	PA-47	0	2	ft	SA	AAB-223	QADU	83115	1.3	25.8	33.9	39
RPD									***131***	***6***	***10***	***1***
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	SA	82956	0	30.7	39.7	29.6
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	QADU	82956	0	31.4	37	31.6
RPD									***NA***	***2***	***7***	***7***
Eastern Wetland Area VIII	EW-36	0	5	cm	SA	AAB-105	SA	83164	0	82.4	5.1	12.5
Eastern Wetland Area VIII	EW-36	0	5	cm	SA	AAB-105	QADU	83164	0	82.9	4.5	12.6
RPD									***NA***	***1***	***13***	***1***
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	SA	83164	0	35.7	32.6	31.7
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	QADU	83164	0	37.3	29.3	33.4
RPD									***NA***	***4***	***11***	***5***
South Basin Area X	SB-14	0	5	cm	SA	AAB-138	SA	83115	0	2.6	46.5	50.9
South Basin Area X	SB-14	0	5	cm	SA	AAB-138	QADU	83115	0	2.6	49.4	48
RPD									***NA***	***0***	***6***	***6***
South Basin Area X	SB-06	2	4	ft	SA	AAB-203	SA	83124	0	2.5	38.8	58.7
South Basin Area X	SB-06	2	4	ft	SA	AAB-203	QADU	83124	0	2.8	35.4	61.8
RPD									***NA***	***11***	***9***	***5***
Paradise Cove	PC-63	0	5	cm	SA	AAB-162	SA	82956	0	1.7	59.5	38.8
Paradise Cove	PC-63	0	5	cm	SA	AAB-162	QADU	82956	0	1.7	59.3	39
RPD									***NA***	***0***	***0***	***1***

Table B-20. Quality Control Data for Total Organic Carbon in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Procedural Blank (mg/kg dry weight)										
					PB	STL-SA-G1E180000433B	G1E110302	76.8	U	
					PB	STL-SA-G1E180000433B-X	G1E150196	76.8	U	
					PB	STL-SA-G1E220000229B	G1E150196	76.8	U	
					PB	STL-SA-G1E240000279B	G1E240181	76.8	U	
					PB	STL-SA-G1E240000282B	G1E240181	76.8	U	
					PB	STL-SA-G1E240000459B	G1E300233	76.8	U	
					PB	STL-SA-G1E280000096B	G1E250223	76.8	U	
					PB	STL-SA-G1E280000097B	G1E250223	76.8	U	
					PB	STL-SA-G1E300000417B	G1E150196	76.8	U	
					PB	STL-SA-G1F040000330B	G1E300233	76.8	U	
Laboratory Control Samples (percent recoveries)										
					LCS	STL-SA-G1E180000433C	G1E110302	118		
					LCS	STL-SA-G1E180000433C-X	G1E150196	118		
					LCS	STL-SA-G1E220000229C	G1E150196	131	N	
					LCS	STL-SA-G1E240000279C	G1E240181	87		
					LCS	STL-SA-G1E240000282C	G1E240181	83		
					LCS	STL-SA-G1E240000459C	G1E300233	97		
					LCS	STL-SA-G1E280000096C	G1E250223	82		
					LCS	STL-SA-G1E280000097C	G1E250223	95		
					LCS	STL-SA-G1E300000417C	G1E150196	94		
					LCS	STL-SA-G1F040000330C	G1E300233	106		
Field duplicates (relative percent difference)										
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	G1E150196	14100		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	G1E150196	14500		J
RPD								***3***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	G1E150196	8770		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	G1E150196	10300		
RPD								***16***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	G1E300233	8940		J
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	G1E300233	6190		J
RPD								***36***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	G1E300233	24600		J
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	G1E300233	13800		J
RPD								***56***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	G1E240181	16800		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	G1E240181	15600		
RPD								***7***		
Analytical duplicates (relative percent difference)										
Point Avisadero Area III	PA-40	0	5	cm	SA	AAB-132	G1E150196	11300		J
Point Avisadero Area III	PA-40	0	5	cm	QADU	AAB-131	G1E150196	10600		
RPD								***6***		
Point Avisadero Area III	PA-47	4	6	ft	SA	AAB-225	G1E240181	12500		
Point Avisadero Area III	PA-47	4	6	ft	QADU	AAB-225	G1E240181	12100		
RPD								***3***		
Eastern Wetland Area VIII	EW-36	0	5	cm	SA	AAB-105	G1E300233	6340		J
Eastern Wetland Area VIII	EW-36	0	5	cm	QADU	AAB-105	G1E300233	9340		
RPD								***38***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	G1E300233	13500		J
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	G1E300233	11900		
RPD								***13***		

Table B-20. Quality Control Data for Total Organic Carbon in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
South Basin Area X	SB-07	0	2	ft	SA	AAB-235	G1E250223	19300		
South Basin Area X	SB-07	0	2	ft	QADU	AAB-235	G1E250223	19800		
RPD								***3***		
South Basin Area X	SB-14	0	5	cm	SA	AAB-138	G1E240181	15200		
South Basin Area X	SB-14	0	5	cm	QADU	AAB-138	G1E240181	15300		
RPD								***1***		
South Basin Area X	SB-20	0	2	ft	SA	AAB-250	G1E250223	21300		
South Basin Area X	SB-20	0	2	ft	QADU	AAB-250	G1E250223	20600		
RPD								***3***		
Red Rock	RR-65	0	5	cm	SA	AAB-165	G1E110302	3720		
Red Rock	RR-65	0	5	cm	QADU	AAB-165	G1E110302	3890		
RPD								***4***		
Matrix Spike/Matrix Spike duplicates (percent recoveries)										
Point Avisadero Area III	PA-47	4	6	ft	MS	AAB-225	G1E240181	94		
Point Avisadero Area III	PA-47	4	6	ft	MSD	AAB-225	G1E240181	99		
RPD								***5***		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	G1E250223	92		
South Basin Area X	SB-07	0	2	ft	MSD	AAB-235	G1E250223	85		
RPD								***8***		
South Basin Area X	SB-14	0	5	ft	MS	AAB-138	G1E240181	101		
South Basin Area X	SB-14	0	5	ft	MSD	AAB-138	G1E240181	103		
RPD								***2***		
South Basin Area X	SB-20	0	2	ft	MS	AAB-250	G1E250223	99		
South Basin Area X	SB-20	0	2	ft	MSD	AAB-250	G1E250223	103		
RPD								***4***		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.

Table B-21. Quality Control Data for Metals in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Ag			Al			As			Ba			Cd			Co			Cr		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)																												
					PB	BSL-BLANK 1	SDG 1	0.066	U		2.39	U		0.068	U		0.018	U		0.0175	U		0.0527	U		0.653		
					PB	BSL-BLANK 2	SDG 1	0.066	U		2.39	U		0.068	U		0.018	U		0.0175	U		0.0527	U		0.51	U	
					PB	BSL-BLANK 3	SDG 2	0.066	U		2.39	U		0.068	U		0.0191	J		0.0175	U		0.0527	U		0.732	J	
					PB	BSL-BLANK 4	SDG 2	0.066	U		2.39	U		0.068	U		0.018	U		0.0175	U		0.0527	U		0.51	U	
					PB	BSL-BLANK 5	SDG 3	0.066	U		2.39	U		0.068	U		0.018	U		0.0175	U		0.0527	U		0.51	U	
					PB	BSL-BLANK 6	SDG 3	0.066	U		2.39	U		0.068	U		0.0193	J		0.0175	U		0.0527	U		0.51	U	
					PB	BSL-BLANK 7	SDG 4	0.066	U		2.39	U		0.068	U		0.0217	J		0.0175	U		0.0527	U		0.62	J	
					PB	BSL-BLANK 8	SDG 5	0.066	U		2.39	U		0.068	U		0.03	J		0.0175	U		0.0527	U		0.51	U	
Laboratory Control Samples (percent recoveries)																												
					LCS	BSL-BLANK SPIKE 1	SDG 1	108			107			105			107			109			107			102		
					LCS	BSL-BLANK SPIKE 2	SDG 1	123			110			118			113			118			117			102		
					LCS	BSL-BLANK SPIKE 3	SDG 2	76			100			97			101			101			100			96		
					LCS	BSL-BLANK SPIKE 4	SDG 2	103			100			106			105			100			104			99		
					LCS	BSL-BLANK SPIKE 5	SDG 3	107			104			102			97			102			100			102		
					LCS	BSL-BLANK SPIKE 6	SDG 3	107			103			100			100			99			101			102		
					LCS	BSL-BLANK SPIKE 7	SDG 4	65	N		103			30	N		96			95			95			100		
					LCS	BSL-BLANK SPIKE 8	SDG 5	98			102			98			100			100			97			99		
Standard Reference Material (percent difference)																												
					SRM	MESS-2-SDG 1	SDG 1	25	*		2			13						22			10			7		
					SRM	MESS-2-SDG 2	SDG 2	8			13			9						28	*		12			13		
					SRM	MESS-2-SDG 3	SDG 3	9			10			9						8			14			8		
					SRM	MESS-2-SDG 4	SDG 4	5			6			4						2			2			5		
					SRM	MESS-2-SDG 5	SDG 5	23	*		5			11						7			0			8		
					SRM	PACS-2-SDG 1	SDG 1	45	*		12			22						32	*		10			11		
					SRM	PACS-2-SDG 2	SDG 2	31			20			12						7			7			15		
					SRM	PACS-2-SDG 3	SDG 3	28	*		17			13						9			8			14		
					SRM	PACS-2-SDG 4	SDG 4	12			9			3						4			1			6		
					SRM	PACS-2-SDG 5	SDG 5	8			9			6						4			3			12		
Field duplicates (relative percent difference)																												
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	SDG 2	0.321			66400			11.4			438			0.24	J	J	21.4			271		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	SDG 2	0.327			62600			11.3			404			0.28	J	J	20.5			224		
RPD								***2***			***6***			***1***			***8***			***15***			***4***			***19***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	SDG 3	0.316		J	68400			10.7			438			0.244	J		17.7			165		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	SDG 2	0.276			67500			10.5			447			0.23	J	J	17			159		
RPD								***14***			***1***			***2***			***2***			***6***			***4***			***4***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	SDG 3	0.0732	J	J	43500			6.12			372			0.264	J		12.8			225		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	SDG 3	0.0839	J	J	47500			6.27			386			0.154	J		12.7			491		
RPD								***14***			***9***			***2***			***4***			***53***			***1***			***74***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	SDG 4	0.229		J	52000			8.9		J	293			0.297	J		17.5			414		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	SDG 4	0.207		J	54400			9.18		J	302			0.301	J		18.8			505		
RPD								***10***			***5***			***3***			***3***			***1***			***7***			***20***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	SDG 2	0.615			71100			12.5			483			0.522	J	J	17.5			212		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	SDG 2	0.572			70800			12.1			477			0.441	J	J	18.1			205		
RPD								***7***			***0***			***3***			***1***			***17***			***3***			***3***		

Table B-21. Quality Control Data for Metals in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Ag Result	Ag Lab Qual	Ag Final Qual	Al Result	Al Lab Qual	Al Final Qual	As Result	As Lab Qual	As Final Qual	Ba Result	Ba Lab Qual	Ba Final Qual	Cd Result	Cd Lab Qual	Cd Final Qual	Co Result	Co Lab Qual	Co Final Qual	Cr Result	Cr Lab Qual	Cr Final Qual
Analytical duplicates (relative percent difference)																												
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	SDG 3	0.211		J	66100			11			428			0.204	J		16.8			170		
Point Avisadero Area III	PA-52	0	5	cm	QADU	AAB-084-LE	SDG 3	0.214			65100			11.1			419			0.213	J		17.1			161		
RPD								***1***			***2***			***1***			***2***			***4***			***2***			***5***		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	SDG 2	0.276			67500			10.5			447			0.23	J	J	17			159		
Point Avisadero Area III	PA-39	0	5	cm	QADU	AAB-155-LE	SDG 2	0.236			66800			10.9			446			0.241	J		17.5			180		
RPD								***16***			***1***			***4***			***0***			***5***			***3***			***12***		
South Basin Area X	SB-01	0	2	ft	SA	AAB-259	SDG 2	0.892			63100			13			675			4.69		J	18.1			336		
South Basin Area X	SB-01	0	2	ft	QADU	AAB-259	SDG 2	0.857			63900			12.3			806			19.6			18.3			358		
RPD								***4***			***1***			***6***			***18***			***123***			***1***			***6***		
South Basin Area X	SB-03	0	5	cm	SA	AAB-122	SDG 5	0.425		J	73200			9.33			445			0.371			15.3			171		
South Basin Area X	SB-03	0	5	cm	QADU	AAB-122-E	SDG 5	0.427			74300			9.64			459			0.366			15.5			175		
RPD								***0***			***1***			***3***			***3***			***1***			***1***			***2***		
South Basin Area X	SB-06	4	6	ft	SA	AAB-204	SDG 1	0.127	J	J	73000			14.9			445			0.397	J	J	16.8			161		
South Basin Area X	SB-06	4	6	ft	QADU	AAB-204	SDG 1	0.138			69900			16.5			421			0.456	J		18.8			154		
RPD								***8***			***4***			***10***			***6***			***14***			***11***			***4***		
South Basin Area X	SB-20	0	5	cm	SA	AAB-109	SDG 4	0.634		J	68600			11.3		J	469			0.682			17.6			225		
South Basin Area X	SB-20	0	5	cm	QADU	AAB-109-E	SDG 4	0.654			71500			11.7			493			0.617			17.			255.		
RPD								***3***			***4***			***3***			***5***			***10***			***3***			***13***		
South Basin Area X	SB-20	4	6	ft	SA	AAB-252	SDG 3	0.15		J	69200			17.3			407			0.484	J		17.6			168		
South Basin Area X	SB-20	4	6	ft	QADU	AAB-252	SDG 3	0.162			71700			17			422			0.468	J		16.8			170		
RPD								***8***			***4***			***2***			***4***			***3***			***5***			***1***		
Alcatraz Environs	AL-64	0	5	cm	SA	AAB-098	SDG 1	0.066	U	UJ	44300			6.69			501			0.841		J	10.3			103		
Alcatraz Environs	AL-64	0	5	cm	QADU	AAB-098-E	SDG 1	0.066	U		46500			7.14			485			0.68			10.3			84.1		
RPD								***NA***			***5***			***7***			***3***			***21***			***0***			***20***		
Matrix Spikes (percent recoveries)																												
					MS	BSL-1658-138 MS	SDG 1	107			108			117			92			101			119			70		
					MS	BSL-1658-155 MS	SDG 3	100			93			112			94			98			97			94		
					MS	BSL-1658-163 MS	SDG 2	105			96			105			104			98			100			104		
					MS	BSL-1658-40 MS	SDG 3	104			30	N		103			72			97			101			91		
					MS	BSL-1658-50 MS	SDG 2	95			131	N		111			103			98			98			97		
					MS	BSL-1658-85 MS	SDG 1	98			94			102			75			105			96			126		
					MS	BSL-1658-138 MS	SDG 1	107			108			117			92			101			119			70		
					MS	BSL-1658-155 MS	SDG 3	100			93			112			94			98			97			94		
					MS	BSL-1658-163 MS	SDG 2	105			96			105			104			98			100			104		
					MS	BSL-1658-227 MS	SDG 4	114			84			101			98			96			95			91		
					MS	BSL-1658-239 MS	SDG 5	96			114			94			97			96			92			95		
					MS	BSL-1658-40 MS	SDG 3	104			30	N		103			72			97			101			91		
					MS	BSL-1658-50 MS	SDG 2	95			131	N		111			103			98			98			97		
					MS	BSL-1658-85 MS	SDG 1	98			94			102			75			105			96			126		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
* Replicate precision not within control limits.
J Estimated value.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-21. Quality Control Data for Metals in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cu			Fe			Hg			Mn			Mo			Ni			Pb		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)																												
					PB	BSL-BLANK 1	SDG 1	0.24	U		4.59	J		0.00208	U		0.074	U		0.0391	U		0.0386	U		0.198	U	
					PB	BSL-BLANK 2	SDG 1	0.24	U		0.564	U		0.00208	U		0.074	U		0.0391	U		0.0386	U		0.198	U	
					PB	BSL-BLANK 3	SDG 2	0.24	U		0.564	U		0.00208	U		0.074	U		0.0391	U		0.0386	U		0.198	U	
					PB	BSL-BLANK 4	SDG 2	0.24	U		3.87	J		0.00208	U		0.0869			0.0391	U		0.0386	U		0.198	U	
					PB	BSL-BLANK 5	SDG 3	0.24	U		0.622	J		0.0037	J		0.074	U		0.0391	U		0.208	J		0.198	U	
					PB	BSL-BLANK 6	SDG 3	0.24	U		2.09	J		0.00208	U		0.074	U		0.0391	U		1.01			0.198	U	
					PB	BSL-BLANK 7	SDG 4	0.24	U		1.04	J		0.00208	U		0.074	U		0.0391	U		0.239	J		0.198	U	
					PB	BSL-BLANK 8	SDG 5	0.24	U		1.29	J		0.0084			0.074	U		0.0391	U		0.0386	U		0.198	U	
Laboratory Control Samples (percent recoveries)																												
					LCS	BSL-BLANK SPIKE 1	SDG 1	101			108			97			104			104			106			101		
					LCS	BSL-BLANK SPIKE 2	SDG 1	103			108			78			107			111			110			88		
					LCS	BSL-BLANK SPIKE 3	SDG 2	95			100			93			99			80			94			104		
					LCS	BSL-BLANK SPIKE 4	SDG 2	98			102			98			101			100			99			103		
					LCS	BSL-BLANK SPIKE 5	SDG 3	99			105			83			98			97			98			98		
					LCS	BSL-BLANK SPIKE 6	SDG 3	99			106			82			100			94			99			96		
					LCS	BSL-BLANK SPIKE 7	SDG 4	98			105			95			98			12	N		98			83		
					LCS	BSL-BLANK SPIKE 8	SDG 5	98			103			94			99			93			98			101		
Standard Reference Material (percent difference)																												
					SRM	MESS-2-SDG 1	SDG 1	17			3			3			10			9			14			6		
					SRM	MESS-2-SDG 2	SDG 2	9			14			12			17			2			5			2		
					SRM	MESS-2-SDG 3	SDG 3	11			7			12			20			5			4			1		
					SRM	MESS-2-SDG 4	SDG 4	11			4			6			10			3			4			3		
					SRM	MESS-2-SDG 5	SDG 5	11			5			11			11			5			3			1		
					SRM	PACS-2-SDG 1	SDG 1	137	*		7			6			11			9			17			5		
					SRM	PACS-2-SDG 2	SDG 2	16			10			1			13			9			13			10		
					SRM	PACS-2-SDG 3	SDG 3	13			3			4			15			3			5			12		
					SRM	PACS-2-SDG 4	SDG 4	7			2			0			8			1			2			8		
					SRM	PACS-2-SDG 5	SDG 5	7			3			2			9			1			6			8		
Field duplicates (relative percent difference)																												
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	SDG 2	117	J		43700			0.318			450			0.925			232	J		28.2	J	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	SDG 2	54.5	J		42500			0.327			446			0.999			231	J		29.7	J	
RPD								***73***			***3***			***3***			***1***			***8***			***0***			***5***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	SDG 3	57.7			39900			1		J	423			1.01			95.4			27.1		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	SDG 2	105	J		39000			0.959			448			0.875			91.8	J		27.2	J	
RPD								***58***			***2***			***4***			***6***			***14***			***4***			***0***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	SDG 3	20.8			27200			0.142		J	579			0.494			59.6			18.5		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	SDG 3	32.5			33900			0.148		J	589			0.578			74.9			21.3		
RPD								***44***			***22***			***4***			***2***			***16***			***23***			***14***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	SDG 4	55.1			41200			0.303		J	567			1.08		J	94.9			32.9		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	SDG 4	52.5			43900			0.287		J	586			1.08		J	103			32.9		
RPD								***5***			***6***			***5***			***3***			***0***			***8***			***0***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	SDG 2	95.5	J		45000			0.62			440			1.09			107	J		90.8	J	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	SDG 2	91.7	J		44900			0.623			435			1.26			105	J		89.4	J	
RPD								***4***			***0***			***0***			***1***			***14***			***2***			***2***		

Table B-21. Quality Control Data for Metals in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Cu Result	Cu Lab Qual	Cu Final Qual	Fe Result	Fe Lab Qual	Fe Final Qual	Hg Result	Hg Lab Qual	Hg Final Qual	Mn Result	Mn Lab Qual	Mn Final Qual	Mo Result	Mo Lab Qual	Mo Final Qual	Ni Result	Ni Lab Qual	Ni Final Qual	Pb Result	Pb Lab Qual	Pb Final Qual
Analytical duplicates (relative percent difference)																												
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	SDG 3	34.1			39000			0.407		J	501			0.611			85.1			18.2		
Point Avisadero Area III	PA-52	0	5	cm	QADU	AAB-084-LE	SDG 3	32.7			38200			0.214			470			0.723			86.6			18.9		
RPD								***4***			***2***			***62***			***6***			***17***			***2***			***4***		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	SDG 2	105		J	39000			0.959			448			0.875			91.8		J	27.2		J
Point Avisadero Area III	PA-39	0	5	cm	QADU	AAB-155-LE	SDG 2	65.			39900			0.942			456			0.863			129			30.9		
RPD								***47***			***2***			***2***			***2***			***1***			***34***			***13***		
South Basin Area X	SB-01	0	2	ft	SA	AAB-259	SDG 2	129		J	38900			1.11			420			2.4			96.2		J	408		J
South Basin Area X	SB-01	0	2	ft	QADU	AAB-259	SDG 2	126			40100			1.18			430			2.42			99			663		
RPD								***2***			***3***			***6***			***2***			***1***			***3***			***48***		
South Basin Area X	SB-03	0	5	cm	SA	AAB-122	SDG 5	74.4			45800			0.466		J	404			1.27			104			69.3		
South Basin Area X	SB-03	0	5	cm	QADU	AAB-122-E	SDG 5	74.8			47100			0.429			414			1.3			104			68.9		
RPD								***1***			***3***			***8***			***2***			***2***			***0***			***1***		
South Basin Area X	SB-06	4	6	ft	SA	AAB-204	SDG 1	30.7		J	50100			0.0749		J	495			2.98			93.5			10.5		J
South Basin Area X	SB-06	4	6	ft	QADU	AAB-204	SDG 1	29.2			47600			0.0734			475			3.5			89.1			11.6		
RPD								***5***			***5***			***2***			***4***			***16***			***5***			***10***		
South Basin Area X	SB-20	0	5	cm	SA	AAB-109	SDG 4	133			44600			1.06		J	444			1.14		J	118			106		
South Basin Area X	SB-20	0	5	cm	QADU	AAB-109-E	SDG 4	132			46600			0.752			458			1.05			123			114		
RPD								***1***			***4***			***34***			***3***			***8***			***4***			***7***		
South Basin Area X	SB-20	4	6	ft	SA	AAB-252	SDG 3	31			49700			0.127		J	444			3.4			83.7			14.8		
South Basin Area X	SB-20	4	6	ft	QADU	AAB-252	SDG 3	32			51500			0.125			459			3.4			87.4			14.7		
RPD								***3***			***4***			***2***			***3***			***0***			***4***			***1***		
Alcatraz Environs	AL-64	0	5	cm	SA	AAB-098	SDG 1	16.5		J	20600			0.0252		J	390			0.293			39.8			12.3		J
Alcatraz Environs	AL-64	0	5	cm	QADU	AAB-098-E	SDG 1	6.45			20900			0.0177			357			0.238		J	45.1			12.8		
RPD								***88***			***1***			***35***			***9***			***21***			***12***			***4***		
Matrix Spikes (percent recoveries)																												
					MS	BSL-1658-138 MS	SDG 1	95			124			99			217	N		108			98			107		
					MS	BSL-1658-155 MS	SDG 3	94			95			104			92			101			93			96		
					MS	BSL-1658-163 MS	SDG 2	96			94			98			88			103			92			95		
					MS	BSL-1658-40 MS	SDG 3	92			56	N		98			64	N		97			88			94		
					MS	BSL-1658-50 MS	SDG 2	46	N		106			97			82			104			93			93		
					MS	BSL-1658-85 MS	SDG 1	162	N		154	N		115			117			108			107			163	N	
					MS	BSL-1658-138 MS	SDG 1	95			124			99			217	N		108			98			107		
					MS	BSL-1658-155 MS	SDG 3	94			95			104			92			101			93			96		
					MS	BSL-1658-163 MS	SDG 2	96			94			98			88			103			92			95		
					MS	BSL-1658-227 MS	SDG 4	95			96			110			91			98			90			97		
					MS	BSL-1658-239 MS	SDG 5	103			100			95			90			94			97			98		
					MS	BSL-1658-40 MS	SDG 3	92			56	N		98			64	N		97			88			94		
					MS	BSL-1658-50 MS	SDG 2	46	N		106			97			82			104			93			93		
					MS	BSL-1658-85 MS	SDG 1	162	N		154	N		115			117			108			107			163	N	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
* Replicate precision not within control limits.
J Estimated value.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-21. Quality Control Data for Metals in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Sb			Se			V			Zn		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)																			
					PB	BSL-BLANK 1	SDG 1	0.0297	U		0.126	U		0.345	U		0.164		
					PB	BSL-BLANK 2	SDG 1	0.0297	U		0.126	U		0.345	U		0.107	U	
					PB	BSL-BLANK 3	SDG 2	0.0297	U		0.126	U		0.345	U		0.725		
					PB	BSL-BLANK 4	SDG 2	0.0297	U		0.126	U		0.345	U		1.53		
					PB	BSL-BLANK 5	SDG 3	0.0297	U		0.126	U		0.345	U		0.347	J	
					PB	BSL-BLANK 6	SDG 3	0.0297	U		0.126	U		0.345	U		0.528	J	
					PB	BSL-BLANK 7	SDG 4	0.0297	U		0.126	U		0.345	U		0.298	J	
					PB	BSL-BLANK 8	SDG 5	0.0297	U		0.126	U		0.345	U		0.178	J	
Laboratory Control Samples (percent recoveries)																			
					LCS	BSL-BLANK SPIKE 1	SDG 1	103			109			99			98		
					LCS	BSL-BLANK SPIKE 2	SDG 1	116			108			89			98		
					LCS	BSL-BLANK SPIKE 3	SDG 2	101			100			100			95		
					LCS	BSL-BLANK SPIKE 4	SDG 2	102			106			100			97		
					LCS	BSL-BLANK SPIKE 5	SDG 3	100			96			99			97		
					LCS	BSL-BLANK SPIKE 6	SDG 3	98			99			103			98		
					LCS	BSL-BLANK SPIKE 7	SDG 4	21	N		87			100			98		
					LCS	BSL-BLANK SPIKE 8	SDG 5	102			101			90			97		
Standard Reference Material (percent difference)																			
					SRM	MESS-2-SDG 1	SDG 1	17			20			5			32		
					SRM	MESS-2-SDG 2	SDG 2	23			22			9			31		
					SRM	MESS-2-SDG 3	SDG 3	17			31			2			33		
					SRM	MESS-2-SDG 4	SDG 4	0			2			1			17		
					SRM	MESS-2-SDG 5	SDG 5	9			3			10			17		
					SRM	PACS-2-SDG 1	SDG 1	22			17			14			89	*	
					SRM	PACS-2-SDG 2	SDG 2	16			18			9			13		
					SRM	PACS-2-SDG 3	SDG 3	13			27			12			11		
					SRM	PACS-2-SDG 4	SDG 4	3			7			2			6		
					SRM	PACS-2-SDG 5	SDG 5	7			11			2			7		
Field duplicates (relative percent difference)																			
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	SDG 2	1.24			0.43	J		141			136		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	SDG 2	1.07			0.268	J		138			130		
RPD								***15***			***46***			***2***			***5***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	SDG 3	1.09			0.337	J		134			112		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	SDG 2	0.964			0.333	J		133			114		
RPD								***12***			***1***			***1***			***2***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	SDG 3	3.64			0.126	U		83			79.5		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	SDG 3	7.8			0.126	U		84			125		
RPD								***73***			***NA***			***2***			***44***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	SDG 4	2.25		J	0.233	J		139			114		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	SDG 4	1.35		J	0.311	J		149			113		
RPD								***50***			***29***			***7***			***1***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	SDG 2	2.69			0.418	J		146			199		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	SDG 2	2.68			0.427	J		155			189		
RPD								***0***			***2***			***6***			***5***		

Table B-21. Quality Control Data for Metals in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Sb			Se			V			Zn		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical duplicates (relative percent difference)																			
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	SDG 3	0.722			0.288	J		124			94.3		
Point Avisadero Area III	PA-52	0	5	cm	QADU	AAB-084-LE	SDG 3	0.565			0.289	J		129			90.9		
RPD								***24***			***0***			***4***			***4***		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	SDG 2	0.964			0.333	J		133			114		
Point Avisadero Area III	PA-39	0	5	cm	QADU	AAB-155-LE	SDG 2	1.09			0.307	J		132			114		
RPD								***12***			***8***			***1***			***0***		
South Basin Area X	SB-01	0	2	ft	SA	AAB-259	SDG 2	4.28			1.15	J		144			481		
South Basin Area X	SB-01	0	2	ft	QADU	AAB-259	SDG 2	4.35			1.04	J		141			478		
RPD								***2***			***10***			***2***			***1***		
South Basin Area X	SB-03	0	5	cm	SA	AAB-122	SDG 5	1.5			0.41	J		131			164		
South Basin Area X	SB-03	0	5	cm	QADU	AAB-122-E	SDG 5	1.46			0.421	J		135			167		
RPD								***3***			***3***			***3***			***2***		
South Basin Area X	SB-06	4	6	ft	SA	AAB-204	SDG 1	0.435			0.42	J		132			81.8		J
South Basin Area X	SB-06	4	6	ft	QADU	AAB-204	SDG 1	0.479			0.635	J		149			80		
RPD								***10***			***41***			***12***			***2***		
South Basin Area X	SB-20	0	5	cm	SA	AAB-109	SDG 4	4.29		J	0.457	J		139			215		
South Basin Area X	SB-20	0	5	cm	QADU	AAB-109-E	SDG 4	6.66			0.328	J		136			277		
RPD								***43***			***33***			***2***			***25***		
South Basin Area X	SB-20	4	6	ft	SA	AAB-252	SDG 3	0.531			0.516	J		141			85.7		
South Basin Area X	SB-20	4	6	ft	QADU	AAB-252	SDG 3	0.519			0.538	J		139			88		
RPD								***2***			***4***			***1***			***3***		
Alcatraz Environs	AL-64	0	5	cm	SA	AAB-098	SDG 1	0.361			0.126	U		62.7			42.5		J
Alcatraz Environs	AL-64	0	5	cm	QADU	AAB-098-E	SDG 1	0.302			0.126	U		50.8			35.8		
RPD								***18***			***NA***			***21***			***17***		
Matrix Spikes (percent recoveries)																			
					MS	BSL-1658-138 MS	SDG 1	100			107			121			92		
					MS	BSL-1658-155 MS	SDG 3	100			98			106			92		
					MS	BSL-1658-163 MS	SDG 2	107			105			97			91		
					MS	BSL-1658-40 MS	SDG 3	99			97			105			87		
					MS	BSL-1658-50 MS	SDG 2	102			107			119			113		
					MS	BSL-1658-85 MS	SDG 1	98			105			105			139	N	
					MS	BSL-1658-138 MS	SDG 1	100			107			121			92		
					MS	BSL-1658-155 MS	SDG 3	100			98			106			92		
					MS	BSL-1658-163 MS	SDG 2	107			105			97			91		
					MS	BSL-1658-227 MS	SDG 4	99			86			97			94		
					MS	BSL-1658-239 MS	SDG 5	97			108			101			93		
					MS	BSL-1658-40 MS	SDG 3	99			97			105			87		
					MS	BSL-1658-50 MS	SDG 2	102			107			119			113		
					MS	BSL-1658-85 MS	SDG 1	98			105			105			139	N	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
* Replicate precision not within control limits.
J Estimated value.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)	
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Procedural Blanks (ug/kg dry weight)																																	
					PB	BDO-YX13PB	01-212	0.16	U		0.08	U		0.11	U		0.1	U		0.11	U		0.12	U		0.17	U		0.1	U		0.09	U	
					PB	BDO-YX17PB	01-213	0.17	U		0.08	U		0.12	U		0.1	U		0.11	U		0.12	U		0.17	U		0.11	U		0.09	U	
					PB	BDO-YX74PB	01-229	0.16	U		0.08	U		0.11	U		0.1	U		0.11	U		0.12	U		0.17	U		0.1	U		0.09	U	
					PB	BDO-YX74PB	01-229	0.16	U		0.08	U		0.11	U		0.1	U		0.11	U		0.12	U		0.17	U		0.1	U		0.09	U	
					PB	BDO-YX78PB	01-230	0.14	U		0.06	U		0.09	U		0.08	U		0.09	U		0.1	U		0.14	U		0.08	U		0.07	U	
					PB	BDO-YX95PB	01-234	0.14	U		0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.15	U		0.09	U		0.08	U	
					PB	BDO-YX99PB	01-235	0.14	U		0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.15	U		0.09	U		0.08	U	
					PB	BDO-YY13PB	01-239	0.13	U		0.06	U		0.09	U		0.08	U		0.08	U		0.09	U		0.13	U		0.08	U		0.07	U	
					PB	BDO-YY17PB	01-240	0.17	U		0.08	U		0.12	U		0.11	U		0.11	U		0.13	U		0.18	U		0.11	U		0.1	U	
					PB1	BDO-ZB42PB	01-333	0.16	U		0.08	U		0.11	U		0.1	U		0.11	U		0.12	U		0.17	U		0.1	U		0.09	U	
					PB1	BDO-ZE34PB	01-398	0.14	U		0.06	U		0.09	U		0.08	U		0.09	U		0.1	U		0.14	U		0.08	U		0.07	U	
Laboratory Control Samples (percent recoveries)																																	
					LCS	BDO-YX14LCS	01-212	67.61			61.13			67.72			69.67			72.35			65.79			72.51			68.69			78.51		
					LCS	BDO-YX18LCS	01-213	68.91			52.25			70.64			70.4			69.1			74.16			64.03			72.04			74.32		
					LCS	BDO-YX75LCS	01-229	70.99			54.82			74.29			76.88			73.99			80.62			69.5			79.17			78.53		
					LCS	BDO-YX79LCS	01-230	66.04			64.17			70.58			70.86			73.69			63.92			75.86			70.47			79.17		
					LCS	BDO-YX96LCS	01-234	70.12			64.75			72.8			70.15			74.53			67.29			62.58			73.29			72.54		
					LCS	BDO-YY01LCS	01-235	80.43			59.8			78.84			81.27			80.15			83.69			71.35			85.32			83.46		
					LCS	BDO-YY14LCS	01-239	73.95			69.39			81.71			76.67			83.73			70.99			79.91			77.03			83.62		
					LCS	BDO-YY18LCS	01-240	63.55			46.99			67.09			67.26			67.73			67.01			70.64			69.85			67.84		
					LCS1	BDO-ZB43LCS	01-333	60.8			45.16			65.49			69.01			68.76			72.55			65.85			78.68			79.26		
					LCS1	BDO-ZE35LCS	01-398	67.65			48.13			75.24			72.67			69.84			76.47			71.98			77.18			81.93		
Standard Reference Material (percent difference)																																	
					SRM	NIST 1944-01-212	01-212	50.03	N		36.98	N		0			3.44			1.84			26.85			NA			13.78			0		
					SRM	NIST 1944-01-213	01-213	94.2	N		34.9			13.3			36.2	N		25.5			0			NA			1.1			10		
					SRM	NIST 1944-01-229	01-229	52.02	N		5.34			0			14.67			2.32			13.81			NA			11.82			0.84		
					SRM	NIST 1944-01-230	01-230	89.37	N		59.37	N		4.35			0			0			12.32			NA			6.15			0		
					SRM	NIST 1944-01-234	01-234	53.06	N		1.19			NA			2.26			3.27			16.66			NA			16.07			2.77		
					SRM	NIST 1944-01-235	01-235	45.11	N		18.48			0			15.64			12.36			15.38			NA			0			1.88		
					SRM	NIST 1944-01-239	01-239	54.27	N		0			0			3.88			0.68			11.07			NA			17.54			6.67		
					SRM	NIST 1944-01-240	01-240	47.98	N		8.92			5.87			0			2.37			21.56			NA			22.77			13.54		
					SRM1	NIST 1944-01-333	01-333	34.78			19.76			6.05			16.79			0			3.48			NA			6.5			0		
					SRM1	NIST 1944-01-398	01-398	61.01			24.39			12.06			23.66			0.85			0			NA			0			1.28		
Field duplicates (relative percent difference)																																	
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	0.19	U	UJ	0.14	J	J	0.3	J		0.32	J		0.62	J		0.19	J		0.19	U		1.53			0.7	J
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	0.19	U	UJ	0.15	J		0.51	J		0.87	J	J	1.01	J		0.14	U		0.19	U		2.04			0.76	J
RPD								***NA***			***7***			***52***			***92***			***48***			***NA***			***NA***			***29***			***8***	
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	0.84	J	J	1.4		J	1.77			2.03			3.47			1.25			0.17	U		10.38			1.74	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	0.18	U	UJ	0.08	U	UJ	0.26	J		0.34	J		1.42			0.13	U		0.18	U		7.62			0.1	U
RPD								***NA***			***NA***			***149***			***143***			***84***			***NA***			***NA***			***31***			***NA***	
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.13	J		0.08	U		0.11	U		0.51	J		0.11	J
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.15	J		0.07	U		0.1	U		0.46	J		0.23	J
RPD								***NA***			***NA***			***NA***			***NA***			***14***			***NA***			***NA***			***10***			***71***	
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	0.13	U	UJ	0.08	J		0.11	J		0.3	J		0.73			0.1	U		0.13	U		3.58			0.63	J
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	0.12	U	UJ	0.06	U		0.08	U		0.24	J		0.77			0.09	U		0.12	U		3.35			0.62	J
RPD								***NA***			***NA***			***NA***			***22***			***5***			***NA***			***NA***			***7***			***2***	
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	0.67	J	J	0.35	J		1.01			3.4			6.57			2.58			0.19	U		27.54	D		5.3	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	0.75	J	J	0.29	J		0.98	J		3.4			6.5			2.38			0.19	U		24.43	D		5.46	
RPD								***11***			***19***			***3***			***0***			***1***			***8***			***NA***			***12***			***3***	

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Cl2(8) Result	Cl2(8) Lab Qual	Cl2(8) Final Qual	Cl3(18) Result	Cl3(18) Lab Qual	Cl3(18) Final Qual	Cl3(28) Result	Cl3(28) Lab Qual	Cl3(28) Final Qual	Cl4(44) Result	Cl4(44) Lab Qual	Cl4(44) Final Qual	Cl4(52) Result	Cl4(52) Lab Qual	Cl4(52) Final Qual	Cl4(66) Result	Cl4(66) Lab Qual	Cl4(66) Final Qual	Cl4(77) Result	Cl4(77) Lab Qual	Cl4(77) Final Qual	Cl5(101) Result	Cl5(101) Lab Qual	Cl5(101) Final Qual	Cl5(105) Result	Cl5(105) Lab Qual
Analytical duplicates (relative percent difference)																																	
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	0.41	J	J	0.47	J	J	0.66	J		1.03		J	1.66		J	0.2	J	J	0.15	U		4.93			0.9	
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	0.43	J		0.28	J		0.61	J		1.74			2.56			0.39	J		0.15	U		6.06			1.43	
RPD								***5***			***51***			***8***			***51***			***43***			***64***			***NA***			***21***			***45***	
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.23	J		0.08	U
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	0.22	U		0.1	U		0.15	U		0.13	U		0.14	U		0.16	U		0.22	U		0.17	J		0.12	U
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***30***			***NA***	
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	0.15	U	UJ	0.07	U		0.1	U		0.09	U		0.1	U		0.11	U		0.15	U		0.09	U		0.08	U
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	0.15	U		0.07	U		0.11	U		0.1	U		0.1	U		0.11	U		0.16	U		0.1	U		0.08	U
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***	
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	0.17	U	UJ	0.06	J		0.12	J		0.24	J	J	0.52	J		0.13	U		0.18	U		1.11			0.25	J
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	0.17	U		0.06	J		0.17	J		0.26	J		0.48	J		0.13	U		0.18	U		1.07			0.26	J
RPD								***NA***			***0***			***34***			***8***			***8***			***NA***			***NA***			***4***			***4***	
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	0.1	U	UJ	0.05	U		0.07	U		0.06	U		0.07	U		0.07	U		0.1	U		0.06	U		0.06	U
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	0.1	U		0.05	U		0.07	U		0.06	U		0.09	J		0.07	U		0.1	U		0.06	U		0.05	U
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***	
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	1.29		J	0.58	J		1.35		J	4.74			6.34		J	0.13	U		0.18	U		23.62		J	4.31	
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	0.93	J		0.49	J		0.98			3.77			4.52			0.12	U		0.17	U		36.65	D		4.2	
RPD								***32***			***17***			***32***			***23***			***34***			***NA***			***NA***			***43***			***3***	
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	0.14	U	UJ	0.07	U	UJ	0.1	U		0.09	U		0.09	U		0.1	U		0.14	U		0.09	U		0.08	U
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	0.14	U		0.07	U		0.1	U		0.09	U		0.09	U		0.1	U		0.14	U		0.09	U		0.08	U
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***	
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	0.2	U	UJ	0.1	U		0.14	U		1.46		J	2.79		J	1.04	J		0.2	U		14.54		J	2.24	
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	0.2	U		0.09	U		0.14	U		1.05	J		1.94			0.82	J		0.2	U		8.84			1.65	
RPD								***NA***			***NA***			***NA***			***33***			***36***			***24***			***NA***			***49***			***30***	
Matrix Spike (percent recoveries)																																	
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	105.18			76.65			101.93			106.97			113.57			92.9			73.56			116.42			90.58	
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	88.45			44.58			93.81			87.72			109.44			86.62			76.23			92.69			89.22	
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	126.2	N		91.43			108.07			105.92			109.23			41.13			76.65			86.12			72.45	
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	108.69			72.74			106.44			56.18			0.59	N		58.44			67.5			0	N		37.63	N
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	67.44			64.98			74.87			71.17			75.13			69.55			70.17			64.7			72.13	
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	86.71			63.01			76.39			90.4			154.77	N		80.1			75.82			213.71	N		206.19	N
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	76.08			58.5			86.83			88.79			93.95			96.52			74.41			140.15	N		83.95	
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	70.02			59.08			80.23			32.86	N		75.12			74.93			54.84			73.68			83.95	
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	128.25	N		114.02			104.16			93.78			91.88			85.61			99.2			92.96			87.56	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual
Procedural Blanks (ug/kg dry weight)								
					PB	BDO-YX13PB	01-212	
					PB	BDO-YX17PB	01-213	
					PB	BDO-YX74PB	01-229	
					PB	BDO-YX74PB	01-229	
					PB	BDO-YX78PB	01-230	
					PB	BDO-YX95PB	01-234	
					PB	BDO-YX99PB	01-235	
					PB	BDO-YY13PB	01-239	
					PB	BDO-YY17PB	01-240	
					PB1	BDO-ZB42PB	01-333	
					PB1	BDO-ZE34PB	01-398	
Laboratory Control Samples (percent recoveries)								
					LCS	BDO-YX14LCS	01-212	
					LCS	BDO-YX18LCS	01-213	
					LCS	BDO-YX75LCS	01-229	
					LCS	BDO-YX79LCS	01-230	
					LCS	BDO-YX96LCS	01-234	
					LCS	BDO-YY01LCS	01-235	
					LCS	BDO-YY14LCS	01-239	
					LCS	BDO-YY18LCS	01-240	
					LCS1	BDO-ZB43LCS	01-333	
					LCS1	BDO-ZE35LCS	01-398	
Standard Reference Material (percent difference)								
					SRM	NIST 1944-01-212	01-212	
					SRM	NIST 1944-01-213	01-213	
					SRM	NIST 1944-01-229	01-229	
					SRM	NIST 1944-01-230	01-230	
					SRM	NIST 1944-01-234	01-234	
					SRM	NIST 1944-01-235	01-235	
					SRM	NIST 1944-01-239	01-239	
					SRM	NIST 1944-01-240	01-240	
					SRM1	NIST 1944-01-333	01-333	
					SRM1	NIST 1944-01-398	01-398	
Field duplicates (relative percent difference)								
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	
RPD								
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	
RPD								
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	
RPD								
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	
RPD								
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	
RPD								

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual
Analytical duplicates (relative percent difference)								
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	J
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	
RPD								
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	
RPD								
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	
RPD								
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	
RPD								
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	
RPD								
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	
RPD								
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	
RPD								
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	
RPD								
Matrix Spike (percent recoveries)								
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl5(110)			Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180	
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Procedural Blanks (ug/kg dry weight)																																	
					PB	BDO-YX13PB	01-212	0.11	U		0.12	U		0.14	U		0.19	U		0.08	U		0.1	U		0.14	U		0.1	U		0.1	U
					PB	BDO-YX17PB	01-213	0.12	U		0.12	U		0.15	U		0.2	U		0.08	U		0.1	U		0.15	U		0.1	U		0.11	U
					PB	BDO-YX74PB	01-229	0.11	U		0.12	U		0.14	U		0.19	U		0.08	U		0.1	U		0.14	U		0.1	U		0.1	U
					PB	BDO-YX74PB	01-229	0.11	U		0.12	U		0.14	U		0.19	U		0.08	U		0.1	U		0.14	U		0.1	U		0.1	U
					PB	BDO-YX78PB	01-230	0.09	U		0.1	U		0.12	U		0.16	U		0.07	U		0.08	U		0.12	U		0.08	U		0.08	U
					PB	BDO-YX95PB	01-234	0.1	U		0.1	U		0.13	U		0.17	U		0.07	U		0.09	U		0.13	U		0.08	U		0.09	U
					PB	BDO-YX99PB	01-235	0.1	U		0.1	U		0.13	U		0.17	U		0.07	U		0.09	U		0.13	U		0.08	U		0.09	U
					PB	BDO-YY13PB	01-239	0.09	U		0.09	U		0.11	U		0.15	U		0.06	U		0.08	U		0.11	U		0.08	U		0.08	U
					PB	BDO-YY17PB	01-240	0.12	U		0.12	U		0.15	U		0.2	U		0.09	U		0.1	U		0.15	U		0.1	U		0.11	U
					PB1	BDO-ZB42PB	01-333	0.11	U		0.12	U		0.14	U		0.19	U		0.08	U		0.1	U		0.14	U		0.1	U		0.1	U
					PB1	BDO-ZE34PB	01-398	0.09	U		0.1	U		0.12	U		0.16	U		0.07	U		0.08	U		0.12	U		0.08	U		0.08	U
Laboratory Control Samples (percent recoveries)																																	
					LCS	BDO-YX14LCS	01-212	95.87			82.92			73.39			79.7			88.5			80.22			82.99			81.33			77.62	
					LCS	BDO-YX18LCS	01-213	78.76			69.16			71.98			74.61			77.65			71.58			70.32			79.11			74.93	
					LCS	BDO-YX75LCS	01-229	80.46			71.94			70.63			79.83			86.			76.48			69.52			85.97			81.16	
					LCS	BDO-YX79LCS	01-230	102.86			76.81			91.56			82.39			77.6			81.3			83.67			80.37			78.08	
					LCS	BDO-YX96LCS	01-234	90.4			74.52			80.92			78.51			78.56			76.65			84.35			79.63			77.06	
					LCS	BDO-YY01LCS	01-235	89.33			77.68			92.66			87.01			83.02			81.94			77.57			91.43			87.53	
					LCS	BDO-YY14LCS	01-239	105.71			88.09			87.01			90.9			89.09			89.59			102.19			85.92			88.76	
					LCS	BDO-YY18LCS	01-240	74.4			67.86			70.95			68.32			70.24			71.14			71.78			76.78			72.34	
					LCS1	BDO-ZB43LCS	01-333	90.43			78.52			73.19			79.46			88.45			80.69			81.75			82.01			80.89	
					LCS1	BDO-ZE35LCS	01-398	89.2			82.78			82.32			81.11			77.37			82.06			83.14			81.03			85.53	
Standard Reference Material (percent difference)																																	
					SRM	NIST 1944-01-212	01-212	34.14			1.1			NA			16.12			NA			1.45			7.89			18.09			0	
					SRM	NIST 1944-01-213	01-213	47.3	N		0.5			NA			24.7			NA			0.7			28.9			0.9			5.2	
					SRM	NIST 1944-01-229	01-229	29.27			0			NA			15.37			NA			8.75			24.13			10.45			0	
					SRM	NIST 1944-01-230	01-230	33.16			0			NA			5.47			NA			2.09			17.49			10.5			0.52	
					SRM	NIST 1944-01-234	01-234	44.55	N		NA			NA			NA			NA			1.61			19.84			NA			3.94	
					SRM	NIST 1944-01-235	01-235	53.16	N		0			NA			18.82			NA			0			48.62	N		12.59			9	
					SRM	NIST 1944-01-239	01-239	60.32	N		0			NA			8.08			NA			4.64			26.85			24.8			7.24	
					SRM	NIST 1944-01-240	01-240	8.32			8.4			NA			12.05			NA			28.04			0			54.85	N		20.97	
					SRM1	NIST 1944-01-333	01-333	11.27			0.83			NA			24.95			NA			8.94			4.37			0			7.55	
					SRM1	NIST 1944-01-398	01-398	20.35			0			NA			1.87			NA			10.25			3.63			0			8.71	
Field duplicates (relative percent difference)																																	
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	2.38		J	1.18			0.17	U		0.34	J		0.09	U		5.25			8.43			3.15			6.37	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	1.53		J	0.88	J		0.17	U		0.41	J		0.09	U		3.38			6.01			3.02			6.46	
RPD								***43***			***29***			***NA***			***19***			***NA***			***43***			***34***			***4***			***1***	
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	7.58		J	5.12			0.15	U		2.11			0.08	U		32.19			43.61			17.56			33.92	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	4.59		J	2.43			0.16	U		1.33			0.09	U		22.69			33.96			12.53			25.09	
RPD								***49***			***71***			***NA***			***45***			***NA***			***35***			***25***			***33***			***30***	
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	0.6		J	0.31	J		0.09	U		0.22	J		0.05	U		1.77			2.58			0.81			1.65	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	0.36	J	J	0.39	J		0.09	U		0.33	J		0.05	U		2.66			3.85			2.08			3.09	
RPD								***50***			***23***			***NA***			***40***			***NA***			***40***			***40***			***88***			***61***	
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	2.32			2.02			0.12	U		0.83			0.07	U		11.11			19.17			6.71		J	13.42	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	2.75		J	1.98			0.11	U		0.91			0.06	U		11.01			15.83			5.55			11.16	
RPD								***17***			***2***			***NA***			***9***			***NA***			***1***			***19***			***19***			***18***	
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	21.13	D		19.	D		0.16	U		7.26			0.09	U		54.83			74.79	D		29.31	D		51.21	D
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	19.45	D		17.82	D		0.16	U		6.92			0.09	U		51.79	D		67.34	D		28.43	D		49.81	D
RPD								***8***			***6***			***NA***			***5***			***NA***			***6***			***10***			***3***			***3***	

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Cl5(110) Result	Cl5(110) Lab Qual	Cl5(110) Final Qual	Cl5(118) Result	Cl5(118) Lab Qual	Cl5(118) Final Qual	Cl5(126) Result	Cl5(126) Lab Qual	Cl5(126) Final Qual	Cl6(128) Result	Cl6(128) Lab Qual	Cl6(128) Final Qual	Cl6(129) Result	Cl6(129) Lab Qual	Cl6(129) Final Qual	Cl6(138) Result	Cl6(138) Lab Qual	Cl6(138) Final Qual	Cl6(153) Result	Cl6(153) Lab Qual	Cl6(153) Final Qual	Cl7(170) Result	Cl7(170) Lab Qual	Cl7(170) Final Qual	Cl7(180 Result	Cl7(180 Lab Qual
Analytical duplicates (relative percent difference)																																	
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	3.58		J	2.23		J	0.13	U		0.45	J		0.07	U		7.82			11.69			3.33			8.14	
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	5.12			3.64			0.13	U		0.81	J		0.07	U		9.14			12.75			3.41			8.31	
RPD								***35***			***48***			***NA***			***57***			***NA***			***16***			***9***			***2***			***2***	
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	0.1	U		0.11	U		0.13	U		0.17	U		0.07	U		0.62	J		0.88			0.18	J	J	0.53	J
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	0.14	J		0.15	U		0.19	U		0.25	U		0.11	U		0.8	J		0.76	J		0.25	J		0.62	J
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***25***			***15***			***33***			***16***	
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	0.1	U		0.11	U		0.13	U		0.17	U		0.07	U		0.09	U		0.13	U		0.09	U		0.09	U
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	0.11	U		0.11	U		0.14	U		0.18	U		0.08	U		0.09	U		0.14	U		0.08	J		0.1	U
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***	
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	0.79	J	J	0.59	J		0.15	U		0.2	U		0.09	U		1.47			2.35			1.35			1.9	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	0.8	J		0.57	J		0.15	U		0.2	U		0.09	U		1.19			2.06			1.2			1.67	
RPD								***1***			***3***			***NA***			***NA***			***NA***			***21***			***13***			***12***			***13***	
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	0.07	U	UJ	0.07	U		0.09	U		0.12	U		0.05	U		0.06	U		0.09	U	UJ	0.06	U		0.19	J
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	0.07	U		0.07	U		0.09	U		0.12	U		0.05	U		0.06	U		0.09	U		0.09	J		0.12	J
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***45***	
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	19.1			17.15		J	0.15	U		4.67			0.09	U		43.2	D	J	72.27	D	J	15.07		J	36.76	D
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	24.46			23.49			0.15	U		4.96			0.09	U		62.12	D		227.96	D		16.72			42.22	D
RPD								***25***			***31***			***NA***			***6***			***NA***			***36***			***104***			***10***			***14***	
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	0.1	U	UJ	0.1	U		0.12	U		0.16	U		0.07	U		0.08	U		0.12	U		0.08	U		0.09	U
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	0.1	U		0.1	U		0.12	U		0.16	U		0.07	U		0.08	U		0.12	U		0.08	U		0.09	U
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***	
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	10.46		J	8.25		J	0.18	U		3.3		J	0.1	U		35.83		J	47.81		J	17.1		J	33.98	
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	7.52			5.93			0.18	U		2.38			0.1	U		25.78			34.98			12.2			24.68	
RPD								***33***			***33***			***NA***			***32***			***NA***			***33***			***31***			***33***			***32***	
Matrix Spike (percent recoveries)																																	
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	87.04			90.92			101.9			96.42			86.67			80.03			92.12			93.43			95.28	
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	89.81			77.15			91.99			112.73			91.79			81.05			95.97			82.36			85.33	
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	81.68			69.66			139.21	N		63.26			75.55			60.79			68.91			69.62			54.17	
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	0	N		0	N		116.76			41.63			74.01			0	N		0	N		50.23			47.32	
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	80.56			75.41			99.11			78.88			71.41			64.48			75.93			75.5			65.35	
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	760.41	N		698.36	N		118.89			156.71	N		171.23	N		1,090.65	N		1,189.18	N		545.22	N		952.17	N
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	123.85	N		123.67	N		94.04			100.58			75.94			190.6	N		279.34	N		140.63	N		204.79	N
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	107.83			81.45			87.05			75.07			82.63			135.47	N		372.81	N		39.58	N		78.34	
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	109.83			94.74			92.46			94.24			89.89			84.16			91.74			95.85			89.87	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual
Procedural Blanks (ug/kg dry weight)								
					PB	BDO-YX13PB	01-212	
					PB	BDO-YX17PB	01-213	
					PB	BDO-YX74PB	01-229	
					PB	BDO-YX74PB	01-229	
					PB	BDO-YX78PB	01-230	
					PB	BDO-YX95PB	01-234	
					PB	BDO-YX99PB	01-235	
					PB	BDO-YY13PB	01-239	
					PB	BDO-YY17PB	01-240	
					PB1	BDO-ZB42PB	01-333	
					PB1	BDO-ZE34PB	01-398	
Laboratory Control Samples (percent recoveries)								
					LCS	BDO-YX14LCS	01-212	
					LCS	BDO-YX18LCS	01-213	
					LCS	BDO-YX75LCS	01-229	
					LCS	BDO-YX79LCS	01-230	
					LCS	BDO-YX96LCS	01-234	
					LCS	BDO-YY01LCS	01-235	
					LCS	BDO-YY14LCS	01-239	
					LCS	BDO-YY18LCS	01-240	
					LCS1	BDO-ZB43LCS	01-333	
					LCS1	BDO-ZE35LCS	01-398	
Standard Reference Material (percent difference)								
					SRM	NIST 1944-01-212	01-212	
					SRM	NIST 1944-01-213	01-213	
					SRM	NIST 1944-01-229	01-229	
					SRM	NIST 1944-01-230	01-230	
					SRM	NIST 1944-01-234	01-234	
					SRM	NIST 1944-01-235	01-235	
					SRM	NIST 1944-01-239	01-239	
					SRM	NIST 1944-01-240	01-240	
					SRM1	NIST 1944-01-333	01-333	
					SRM1	NIST 1944-01-398	01-398	
Field duplicates (relative percent difference)								
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	
RPD								
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	
RPD								
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	
RPD								
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	
RPD								
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	
RPD								

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Final Qual
Analytical duplicates (relative percent difference)								
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	
RPD								
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	
RPD								
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	
RPD								
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	
RPD								
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	J
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	
RPD								
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	
RPD								
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	
RPD								
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	
RPD								
Matrix Spike (percent recoveries)								
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg dry weight)																			
					PB	BDO-YX13PB	01-212	0.09	U		0.09	U		0.09	U		0.09	U	
					PB	BDO-YX17PB	01-213	0.1	U		0.09	U		0.09	U		0.1	U	
					PB	BDO-YX74PB	01-229	0.09	U		0.09	U		0.09	U		0.09	U	
					PB	BDO-YX74PB	01-229	0.09	U		0.09	U		0.09	U		0.09	U	
					PB	BDO-YX78PB	01-230	0.08	U		0.07	U		0.07	U		0.08	U	
					PB	BDO-YX95PB	01-234	0.08	U		0.08	U		0.08	U		0.08	U	
					PB	BDO-YX99PB	01-235	0.08	U		0.08	U		0.08	U		0.08	U	
					PB	BDO-YY13PB	01-239	0.07	U		0.07	U		0.07	U		0.07	U	
					PB	BDO-YY17PB	01-240	0.1	U		0.09	U		0.09	U		0.1	U	
					PB1	BDO-ZB42PB	01-333	0.09	U		0.09	U		0.09	U		0.09	U	
					PB1	BDO-ZE34PB	01-398	0.08	U		0.07	U		0.07	U		0.08	U	
Laboratory Control Samples (percent recoveries)																			
					LCS	BDO-YX14LCS	01-212	80.94			83.88			84.76			92.23		
					LCS	BDO-YX18LCS	01-213	70.18			78.33			75.55			78.73		
					LCS	BDO-YX75LCS	01-229	74.89			86.25			79.91			85.01		
					LCS	BDO-YX79LCS	01-230	84.41			85.62			88.74			95.42		
					LCS	BDO-YX96LCS	01-234	80.3			85.23			87.47			95.43		
					LCS	BDO-YY01LCS	01-235	82.57			92.27			83.52			91.99		
					LCS	BDO-YY14LCS	01-239	94.73			95.17			97.06			106.59		
					LCS	BDO-YY18LCS	01-240	71.83			74.24			68.66			79.01		
					LCS1	BDO-ZB43LCS	01-333	80.62			80.52			74.24			81.4		
					LCS1	BDO-ZE35LCS	01-398	85.82			83.06			84.03			85.46		
Standard Reference Material (percent difference)																			
					SRM	NIST 1944-01-212	01-212	3.46			344.7	N		292.64	N		105.84	N	
					SRM	NIST 1944-01-213	01-213	21			82.7	N		31			32.5		
					SRM	NIST 1944-01-229	01-229	22.51			56.26	N		36.49	N		18.16		
					SRM	NIST 1944-01-230	01-230	1.07			292.76	N		116.06	N		74.95	N	
					SRM	NIST 1944-01-234	01-234	2.39			331.67	N		121.18	N		169.52	N	
					SRM	NIST 1944-01-235	01-235	19.05			29.88			48.37	N		28.61		
					SRM	NIST 1944-01-239	01-239	16.71			431.58	N		128.2	N		77.06	N	
					SRM	NIST 1944-01-240	01-240	3.61			7.32			46.92	N		33.67		
					SRM1	NIST 1944-01-333	01-333	4.64			120.49			12.28			2.59		
					SRM1	NIST 1944-01-398	01-398	4.69			148.94			18.99			44.75		
Field duplicates (relative percent difference)																			
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	4.17			0.71	J	J	0.97	J	J	1.71		J
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	3.72			0.72	J	J	0.45	J		0.11	U	
RPD								***11***			***1***			***73***			***NA***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	16.89			3.12		J	1.62		J	0.61	J	J
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	12.56			2.46		J	1.1		J	0.72	J	J
RPD								***29***			***24***			***38***			***17***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	1.06			0.18	J	J	0.18	J	J	0.16	J	J
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	1.53			0.46	J	J	0.31	J	J	0.18	J	J
RPD								***36***			***88***			***53***			***12***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	7.57			1.25			0.7	J	J	0.44	J	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	6.45			1.08		J	0.91		J	0.77		J
RPD								***16***			***15***			***26***			***55***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	29.09	D		4.11		J	1.79		J	0.65	J	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	27.3	D		4.02		J	1.66		J	0.56	J	
RPD								***6***			***2***			***8***			***15***		

Table B-22. Quality Control Data for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical duplicates (relative percent difference)																			
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	5.02			0.97		J	1		J	1.13		J
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	4.94			0.82	J		0.73	J		0.72	J	
RPD								***2***			***17***			***31***			***44***		
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	0.23	J		0.08	U	UJ	0.08	U		0.08	U	UJ
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	0.28	J		0.12	U		0.12	U		0.12	U	
RPD								***20***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	0.09	U		0.08	U	UJ	0.08	U	UJ	0.09	U	
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	0.09	U		0.08	U		0.08	U		0.09	U	
RPD								***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	1.01			0.17	J	J	0.09	U		0.1	U	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	0.98			0.15	J		0.09	U		0.1	U	
RPD								***3***			***13***			***NA***			***NA***		
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	0.04	J		0.06	U		0.05	U	UJ	0.06	U	
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	0.05	J		0.05	U		0.01	J		0.06	U	
RPD								***22***			***NA***			***NA***			***NA***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	23.84		J	2.39			1.17		J	0.46	J	
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	72.51	D		3.19			1.95			0.58	J	
RPD								***101***			***29***			***50***			***23***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	0.08	U		0.08	U	UJ	0.07	U	UJ	0.08	U	UJ
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	0.08	U		0.08	U		0.07	U		0.08	U	
RPD								***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	19.34		J	3.33		J	1.91		J	1.44		J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	14.04			2.44			1.23			1.22		
RPD								***32***			***31***			***43***			***17***		
Matrix Spike (percent recoveries)																			
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	95.19			93.2			80.98			91.64		
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	93.28			80.77			68.39			78.79		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	75.26			82.07			80.26			91.23		
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	58.71			70.33			57.09			70.36		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	70.47			75.42			72.32			46.25		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	515.42	N		129.99	N		149.09	N		196.52	N	
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	148.06	N		73.65			57.16			63.73		
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	117.99			75.69			63.17			63.57		
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	94.87			93.75			96.21			105.38		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-23. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recoveries (percent)					
								Cl3(34)			Cl5(112)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	0	5	cm	SA	AAB-158	01-212	86.53			90.42		
India Basin Area I	IB-55	0	5	cm	SA	AAB-160	01-212	69.72			70.04		
India Basin Area I	IB-56	0	5	cm	SA	AAB-159	01-212	87.02			81.19		
India Basin Area I	IB-57	0	5	cm	SA	AAB-129	01-212	76.62			77.56		
India Basin Area I	IB-58	0	5	cm	SA	AAB-130	01-212	80.71			70.48		
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	79.94			86.19		
Point Avisadero Area III	PA-38	0	5	cm	SA	AAB-133	01-213	59.26			63.2		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	75.13			71.29		
Point Avisadero Area III	PA-40	0	5	cm	SA	AAB-132	01-213	81.61			68.23		
Point Avisadero Area III	PA-41	0	5	cm	SA	AAB-092	01-213	109.48			68.25		
Point Avisadero Area III	PA-42	0	5	cm	SA	AAB-086	01-212	95.06			57.16		
Point Avisadero Area III	PA-43	0	5	cm	SA	AAB-087	01-333	86.75			72.2		
Point Avisadero Area III	PA-44	0	5	cm	SA	AAB-091	01-213	139.35	N		63.12		
Point Avisadero Area III	PA-45	0	5	cm	SA	AAB-126	01-212	81.38			62.84		
Point Avisadero Area III	PA-46	0	5	cm	SA	AAB-127	01-212	74.26			60.78		
Point Avisadero Area III	PA-47	0	5	cm	SA	AAB-089	01-212	128.02	N		57.04		
Point Avisadero Area III	PA-48	0	5	cm	SA	AAB-088	01-212	110.28			80.05		
Point Avisadero Area III	PA-49	0	5	cm	SA	AAB-083	01-212	92.26			70.94		
Point Avisadero Area III	PA-50	0	5	cm	SA	AAB-094	01-213	94.79			73.69		
Point Avisadero Area III	PA-51	0	5	cm	SA	AAB-085	01-212	86.64			67.77		
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	01-212	109.07			69.28		
Point Avisadero Area III	PA-53	0	5	cm	SA	AAB-090	01-213	100.34			66.08		
Point Avisadero Area III	PA-70	0	5	cm	SA	AAB-137	01-213	82.25			67.26		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	79.43			71.58		
Point Avisadero Area III	PA-72	0	5	cm	SA	AAB-135	01-213	55.79			48.41		
Eastern Wetland Area VIII	EW-30	0	5	cm	SA	AAB-107	01-333	87.78			75.4		
Eastern Wetland Area VIII	EW-31	0	5	cm	SA	AAB-104	01-230	85.31			82.59		
Eastern Wetland Area VIII	EW-32	0	5	cm	SA	AAB-095	01-229	81.68			71.15		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	73.99			78.89		
Eastern Wetland Area VIII	EW-34	0	5	cm	SA	AAB-108	01-239	77.26			88.91		
Eastern Wetland Area VIII	EW-35	0	5	cm	SA	AAB-097	01-229	66.58			55.57		
Eastern Wetland Area VIII	EW-36	0	5	cm	SA	AAB-105	01-239	79.97			83.15		
Eastern Wetland Area VIII	EW-37	0	5	cm	SA	AAB-142	01-229	77.2			62.72		
Oil Reclamation Area IX	OR-24	0	5	cm	SA	AAB-125	01-240	67.9			37.46	N	
Oil Reclamation Area IX	OR-25	0	5	cm	SA	AAB-103	01-230	71.14			69.97		
Oil Reclamation Area IX	OR-26	0	5	cm	SA	AAB-116	01-240	76.4			61.34		
Oil Reclamation Area IX	OR-27	0	5	cm	SA	AAB-117	01-240	73.33			60.9		
Oil Reclamation Area IX	OR-28	0	5	cm	SA	AAB-096	01-229	72.03			61.24		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	76.87			61.71		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	86.91			75.54		
South Basin Area X	SB-02	0	5	cm	SA	AAB-143	01-240	81.36			79.76		
South Basin Area X	SB-03	0	5	cm	SA	AAB-122	01-240	54.55			43.11		
South Basin Area X	SB-04	0	5	cm	SA	AAB-121	01-240	80.75			66.59		
South Basin Area X	SB-05	0	5	cm	SA	AAB-141	01-229	73.43			61		
South Basin Area X	SB-06	0	5	cm	SA	AAB-120	01-240	66.5			60.43		
South Basin Area X	SB-07	0	5	cm	SA	AAB-119	01-240	98.11			73.35		
South Basin Area X	SB-08	0	5	cm	SA	AAB-115	01-240	75.3			55.97		
South Basin Area X	SB-09	0	5	cm	SA	AAB-145	01-230	88.17			58.61		
South Basin Area X	SB-10	0	5	cm	SA	AAB-144	01-230	96.23			57.28		
South Basin Area X	SB-11	0	5	cm	SA	AAB-139	01-229	74.68			47.42		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	70.8			49.22		
South Basin Area X	SB-13	0	5	cm	SA	AAB-113	01-239	77.54			55.68		
South Basin Area X	SB-14	0	5	cm	SA	AAB-138	01-229	73.22			59.2		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	86.85			68.43		
South Basin Area X	SB-16	0	5	cm	SA	AAB-112	01-239	68.12				N	
South Basin Area X	SB-17	0	5	cm	SA	AAB-146	01-230	81.91			52.33		
South Basin Area X	SB-18	0	5	cm	SA	AAB-100	01-230	78.78			79.99		
South Basin Area X	SB-19	0	5	cm	SA	AAB-101	01-230	62.91			58.63		
South Basin Area X	SB-20	0	5	cm	SA	AAB-109	01-239	71.55			51.77		
South Basin Area X	SB-21	0	5	cm	SA	AAB-102	01-230	43.96			25.79	N	
South Basin Area X	SB-22	0	5	cm	SA	AAB-111	01-239	57.63			14.51	N	
South Basin Area X	SB-23	0	5	cm	SA	AAB-099	01-230	29.17	N			N	

Table B-23. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl3(34)			Cl5(112)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Alameda Buoy	AB-67	0	5	cm	SA	AAB-157	01-212	86.31			80.3		
Alcatraz Environs	AL-64	0	5	cm	SA	AAB-098	01-230	94.07			99.37		
Bay Farm Borrow Pit	BF-66	0	5	cm	SA	AAB-156	01-212	73.76			74.75		
Paradise Cove	PC-63	0	5	cm	SA	AAB-162	01-213	23.97	N		22.72	N	
Paradise Cove	PC-63	0	5	cm	SA	AAB-162	01-333	71.67		J	72.67		J
Red Rock	RR-65	0	5	cm	SA	AAB-165	01-212	74.43			75.12		
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	87.07			51.7		
India Basin Area I	IB-56	2	4	ft	SA	AAB-206	01-234	88.9			53.05		
India Basin Area I	IB-56	4	6	ft	SA	AAB-207	01-398	59.71			58.99		
India Basin Area I	IB-59	0	2	ft	SA	AAB-247	01-234	54.9			57.94		
India Basin Area I	IB-59	2	4	ft	SA	AAB-248	01-234	58.15			61.88		
India Basin Area I	IB-59	4	6	ft	SA	AAB-249	01-234	68.58			47.04		
Point Avisadero Area III	PA-40	0	2	ft	SA	AAB-244	01-234	83.66			60.4		
Point Avisadero Area III	PA-40	2	4	ft	SA	AAB-245	01-234	85.61			55.06		
Point Avisadero Area III	PA-41	0	2	ft	SA	AAB-196	01-229	75.91			48.7		
Point Avisadero Area III	PA-41	2	4	ft	SA	AAB-197	01-229	73.94			20.83	N	
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	62.52			65.9		
Point Avisadero Area III	PA-44	0	2	ft	SA	AAB-226	01-229	90.48			67.17		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	78.47			69.88		
Point Avisadero Area III	PA-44	4	6	ft	SA	AAB-228	01-230	84.23			82.25		
Point Avisadero Area III	PA-47	0	2	ft	SA	AAB-223	01-229	173.77	N		116.15		
Point Avisadero Area III	PA-47	2	4	ft	SA	AAB-224	01-229	73.51			64.99		
Point Avisadero Area III	PA-47	4	6	ft	SA	AAB-225	01-229	72.87			62.78		
Point Avisadero Area III	PA-49	0	2	ft	SA	AAB-232	01-230	87.01			74.82		
Point Avisadero Area III	PA-49	2	4	ft	SA	AAB-233	01-230	58.19			59.27		
Point Avisadero Area III	PA-49	4	6	ft	SA	AAB-234	01-230	51.66			53.45		
Point Avisadero Area III	PA-52	0	2	ft	SA	AAB-229	01-230	115.41			73.55		
Point Avisadero Area III	PA-52	2	4	ft	SA	AAB-230	01-230	119.42			40.38		
Point Avisadero Area III	PA-52	4	6	ft	SA	AAB-231	01-230	112.82			32.75	N	
Eastern Wetland Area VIII	EW-31	0	2	ft	SA	AAB-238	01-234	82.42			60.26		
Eastern Wetland Area VIII	EW-31	2	4	ft	SA	AAB-239	01-234	90.4			65.33		
Eastern Wetland Area VIII	EW-31	4	6	ft	SA	AAB-240	01-234	162.57	N		27.03	N	
Eastern Wetland Area VIII	EW-36	0	2	ft	SA	AAB-262	01-235	76.74			84.9		
Eastern Wetland Area VIII	EW-36	2	4	ft	SA	AAB-263	01-235	144.87	N		75.17		
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	112.59			72.33		
Oil Reclamation Area IX	OR-24	0	2	ft	SA	AAB-241	01-234	58.03			61.58		
Oil Reclamation Area IX	OR-24	2	4	ft	SA	AAB-242	01-234	55.41			65.82		
Oil Reclamation Area IX	OR-24	4	6	ft	SA	AAB-243	01-234	83.6			64.13		
Oil Reclamation Area IX	OR-28	0	2	ft	SA	AAB-220	01-229	64.94			51.97		
Oil Reclamation Area IX	OR-28	2	4	ft	SA	AAB-221	01-229	103.1			67.81		
Oil Reclamation Area IX	OR-28	4	6	ft	SA	AAB-222	01-229	65.04			58.45		
South Basin Area X	SB-01	0	2	ft	SA	AAB-259	01-235	36.96	N		113.7		
South Basin Area X	SB-01	2	4	ft	SA	AAB-260	01-235	75.94			134.44	N	
South Basin Area X	SB-01	4	6	ft	SA	AAB-261	01-235	75.48			73.02		
South Basin Area X	SB-03	0	2	ft	SA	AAB-208	01-235	77.33			100		
South Basin Area X	SB-03	2	4	ft	SA	AAB-209	01-235	94.34			66.35		
South Basin Area X	SB-03	4	6	ft	SA	AAB-210	01-235	74.26			75.49		
South Basin Area X	SB-06	0	2	ft	SA	AAB-202	01-234	87.44			30.85	N	
South Basin Area X	SB-06	2	4	ft	SA	AAB-203	01-234	86.47			52.44		
South Basin Area X	SB-06	4	6	ft	SA	AAB-204	01-234	63.98			70.5		
South Basin Area X	SB-07	0	2	ft	SA	AAB-235	01-234	74.67			54.45		
South Basin Area X	SB-07	2	4	ft	SA	AAB-236	01-234	75.35			55.31		
South Basin Area X	SB-07	4	6	ft	SA	AAB-237	01-234	64			73.23		
South Basin Area X	SB-12	0	2	ft	SA	AAB-199	01-230	84.15			15.74	N	
South Basin Area X	SB-12	2	4	ft	SA	AAB-200	01-230	71.36			26.67	N	
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	74.66			78.58		
South Basin Area X	SB-16	0	2	ft	SA	AAB-256	01-235	66.18			36.4	N	
South Basin Area X	SB-16	2	4	ft	SA	AAB-257	01-235	75.68			73.75		
South Basin Area X	SB-16	4	6	ft	SA	AAB-258	01-235	90.18			83.62		
South Basin Area X	SB-20	0	2	ft	SA	AAB-250	01-235	57.91			86.81		
South Basin Area X	SB-20	2	4	ft	SA	AAB-251	01-235	82.64			116.73		
South Basin Area X	SB-20	4	6	ft	SA	AAB-252	01-235	78.76			71.78		
South Basin Area X	SB-22	0	2	ft	SA	AAB-253	01-235	75.52			62.93		
South Basin Area X	SB-22	2	4	ft	SA	AAB-254	01-235	64.93			65.87		
South Basin Area X	SB-22	4	6	ft	SA	AAB-255	01-235	89.4			71.21		

Table B-23. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl3(34)			Cl5(112)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg dry weight)													
					PB	BDO-YX13PB	01-212	63.27			71.17		
					PB	BDO-YX17PB	01-213	66.05			68.66		
					PB	BDO-YX74PB	01-229	59.14			55.36		
					PB	BDO-YX78PB	01-230	72.42			81.28		
					PB	BDO-YX95PB	01-234	75			83.16		
					PB	BDO-YX99PB	01-235	76.46			78.21		
					PB	BDO-YY13PB	01-239	64.13			72.2		
					PB	BDO-YY17PB	01-240	71.21			72.37		
					PB1	BDO-ZB42PB	01-333	63.65			74.06		
					PB1	BDO-ZE34PB	01-398	52.71			68.57		
Laboratory Control Samples (percent recoveries)													
					LCS	BDO-YX14LCS	01-212	66.98			80.86		
					LCS	BDO-YX18LCS	01-213	79.23			67.55		
					LCS	BDO-YX75LCS	01-229	85.32			72.5		
					LCS	BDO-YX79LCS	01-230	76.31			82.38		
					LCS	BDO-YX96LCS	01-234	73.86			78.64		
					LCS	BDO-YY01LCS	01-235	85.09			77.1		
					LCS	BDO-YY14LCS	01-239	83.72			94.26		
					LCS	BDO-YY18LCS	01-240	71.2			67.84		
					LCS1	BDO-ZB43LCS	01-333	68.66			71.68		
					LCS1	BDO-ZE35LCS	01-398	68.7			77.59		
Standard Reference Material (percent difference)													
					SRM	NIST 1944-01-212	01-212	117.36			68.06		
					SRM	NIST 1944-01-213	01-213	109			78.87		
					SRM	NIST 1944-01-229	01-229	111.84			70.27		
					SRM	NIST 1944-01-230	01-230	102.25			64.1		
					SRM	NIST 1944-01-234	01-234	127.55	N		68.48		
					SRM	NIST 1944-01-235	01-235	133.57	N		92.66		
					SRM	NIST 1944-01-239	01-239	136.91	N		72.12		
					SRM	NIST 1944-01-240	01-240	109.1			74.76		
					SRM1	NIST 1944-01-333	01-333	88.72			72.13		
					SRM1	NIST 1944-01-398	01-398	80.5			72.45		
Field duplicates (relative percent difference)													
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	79.94			86.19		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	92.25			58.22		
RPD								***14***			***39***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	75.13			71.29		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	92.06			86.38		
RPD								***20***			***19***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	73.99			78.89		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	64.91			77.83		
RPD								***13***			***1***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	76.87			61.71		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	68.71			74.15		
RPD								***11***			***18***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	70.8			49.22		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	74.58			44.77		
RPD								***5***			***9***		

Table B-23. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Cl3(34)			Cl5(112)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spike (percent recoveries)													
India Basin Area I	IB-56	4	6	ft	AAB-207	01-235	MS	105.58			79.12		
Point Avisadero Area III	PA-43	0	5	cm	AAB-087	01-333	MS1	98.39			76.4		
Point Avisadero Area III	PA-52	0	5	cm	AAB-084	01-212	MS	107.13			70.19		
Point Avisadero Area III	PA-53	0	5	cm	AAB-090	01-213	MS	111.14			69.54		
Eastern Wetland Area VIII	EW-36	0	5	cm	AAB-105	01-239	MS	72.77			69.09		
South Basin Area X	SB-07	0	2	ft	AAB-235	01-234	MS	83.99			68.94		
South Basin Area X	SB-08	0	5	cm	AAB-115	01-240	MS	99.97			77.01		
South Basin Area X	SB-14	0	5	cm	AAB-138	01-229	MS	88.96			50.08		
Alcatraz Environs	AL-64	0	5	cm	AAB-098	01-230	MS	95.36			80.81		

N Value is not within control limits.
J Estimated value.

Table B-24. Quality Control Data for Polychlorinated Biphenyls as Aroclors in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ug/kg dry weight)																												
					PB	BDO-YX13PB	01-212	11.11	U		11.11	U		11.11	U		11.11	U		11.11	U		11.11	U		11.11	U	
					PB	BDO-YX17PB	01-213	11.62	U		11.62	U		11.62	U		11.62	U		11.62	U		11.62	U		11.62	U	
					PB	BDO-YX74PB	01-229	11.11	U		11.11	U		11.11	U		11.11	U		11.11	U		11.11	U		11.11	U	
					PB	BDO-YX78PB	01-230	9.26	U		9.26	U		9.26	U		9.26	U		9.26	U		9.26	U		9.26	U	
					PB	BDO-YX95PB	01-234	9.81	U		9.81	U		9.81	U		9.81	U		9.81	U		9.81	U		9.81	U	
					PB	BDO-YX99PB	01-235	9.81	U		9.81	U		9.81	U		9.81	U		9.81	U		9.81	U		9.81	U	
					PB	BDO-YY13PB	01-239	8.77	U		8.77	U		8.77	U		8.77	U		8.77	U		8.77	U		8.77	U	
					PB	BDO-YY17PB	01-240	11.91	U		11.91	U		11.91	U		11.91	U		11.91	U		11.91	U		11.91	U	
					PB1	BDO-ZB42PB	01-333	11.11	U		11.11	U		11.11	U		11.11	U		11.11	U		11.11	U		11.11	U	
					PB1	BDO-ZE34PB	01-398	9.26	U		9.26	U		9.26	U		9.26	U		9.26	U		9.26	U		9.26	U	
Field duplicates (relative percent difference)																												
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	12.83	U		12.83	U		12.83	U		12.83	U		12.83	U		12.83	U		12.83	U	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	12.9	U		12.9	U		12.9	U		12.9	U		12.9	U		12.9	U		64.8		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	11.33	U		11.33	U		11.33	U		11.33	U		11.33	U		11.33	U		355.96		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	12.11	U		12.11	U		12.11	U		12.11	U		12.11	U		12.11	U		259.93		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***31***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	7.02	U		7.02	U		7.02	U		7.02	U		7.02	U		7.02	U		7.02	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	9.06	U		9.06	U		9.06	U		9.06	U		9.06	U		9.06	U		130.5		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	8.23	U		8.23	U		8.23	U		8.23	U		8.23	U		8.23	U		122.22		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***7***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	12.5	U		12.5	U		12.5	U		12.5	U		12.5	U		12.5	U		541.01		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	12.52	U		12.52	U		12.52	U		12.52	U		12.52	U		12.52	U		502.55		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***7***		
Analytical duplicates (relative percent difference)																												
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	10.08	U		10.08	U		10.08	U		10.08	U		10.08	U		10.08	U		93.29		
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	10.2	U		10.2	U		10.2	U		10.2	U		10.2	U		10.2	U		100.36		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***7***		
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	10.09	U		10.09	U		10.09	U		10.09	U		10.09	U		10.09	U		10.09	U	
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	14.79	U		14.79	U		14.79	U		14.79	U		14.79	U		14.79	U		14.79	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	10.26	U		10.26	U		10.26	U		10.26	U		10.26	U		10.26	U		10.26	U	
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	10.58	U		10.58	U		10.58	U		10.58	U		10.58	U		10.58	U		10.58	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	11.89	U		11.89	U		11.89	U		11.89	U		11.89	U		11.89	U		11.89	U	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	11.78	U		11.78	U		11.78	U		11.78	U		11.78	U		11.78	U		11.78	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		

Table B-24. Quality Control Data for Polychlorinated Biphenyls as Aroclors in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	6.96	U		6.96	U		6.96	U		6.96	U		6.96	U		6.96	U		6.96	U	
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	6.82	U		6.82	U		6.82	U		6.82	U		6.82	U		6.82	U		6.82	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	11.87	U		11.87	U		11.87	U		11.87	U		11.87	U		11.87	U		472.14	D	J
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	11.7	U		11.7	U		11.7	U		11.7	U		11.7	U		11.7	U		958.26	D	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***68***		
South Basin Area X	SB-04	0	5	cm	SA	AAB-121	01-240	12.66	U		12.66	U		12.66	U		12.66	U		12.66	U		12.66	U		250.06		
South Basin Area X	SB-04	0	5	cm	QADU1	AAB-121	01-333	13.15	U		13.15	U		13.15	U		13.15	U		13.15	U		13.15	U		185.47		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***30***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	9.55	U		9.55	U		9.55	U		9.55	U		9.55	U		9.55	U		9.55	U	
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	9.61	U		9.61	U		9.61	U		9.61	U		9.61	U		9.61	U		9.61	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	13.72	U		13.72	U		13.72	U		13.72	U		13.72	U		13.72	U		364.73		J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	13.64	U		13.64	U		13.64	U		13.64	U		13.64	U		13.64	U		267.18		
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***31***		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table B-25. Quality Control Data for Chlorinated Pesticides in Sediment, Hunters Point Shipyard Parcel F Validation Study

								2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg dry weight)																												
					PB	BDO-YX13PB	01-212	0.11	U		0.13	U		0.12	U		0.1	U		0.09	U		0.09	U		0.07	U	
					PB	BDO-YX17PB	01-213	0.11	U		0.14	U		0.13	U		0.1	U		0.09	U		0.1	U		0.08	U	
					PB	BDO-YX74PB	01-229	0.11	U		0.13	U		0.12	U		0.1	U		0.09	U		0.09	U		0.07	U	
					PB	BDO-YX78PB	01-230	0.09	U		0.11	U		0.1	U		0.08	U		0.07	U		0.08	U		0.06	U	
					PB	BDO-YX95PB	01-234	0.09	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U		0.06	U	
					PB	BDO-YX99PB	01-235	0.09	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U		0.06	U	
					PB	BDO-YY13PB	01-239	0.08	U		0.1	U		0.1	U		0.08	U		0.07	U		0.07	U		0.06	U	
					PB	BDO-YY17PB	01-240	0.11	U		0.14	U		0.13	U		0.1	U		0.1	U		0.1	U		0.08	U	
					PB1	BDO-ZB42PB	01-333	0.11	U		0.13	U		0.12	U		0.1	U		0.09	U		0.09	U		0.07	U	
					PB1	BDO-ZE34PB	01-398	0.09	U		0.11	U		0.1	U		0.08	U		0.07	U		0.08	U		0.06	U	
Laboratory Control Samples (percent recoveries)																												
					LCS	BDO-YX14LCS	01-212	80.27			70.74			40.11			76.87			79.17			80.28			66.08		
					LCS	BDO-YX18LCS	01-213	70.44			59.29			32.19	N		72.46			72.29			81.05			71.3		
					LCS	BDO-YX75LCS	01-229	76.12			79.4			46.75			78.61			78.61			84.96			78.24		
					LCS	BDO-YX79LCS	01-230	98.99			67.16			46.47			76.8			79.7			84.23			65.64		
					LCS	BDO-YX96LCS	01-234	84.05			71.69			55.61			74.64			72.23			81.04			67.51		
					LCS	BDO-YY01LCS	01-235	75.44			77.4			30.69	N		73.08			81.28			79.39			76.85		
					LCS	BDO-YY14LCS	01-239	83.96			70.93			56.53			77.54			83.25			80			66.81		
					LCS	BDO-YY18LCS	01-240	76.3			74.42			71.49			81.4			63.58			77.4			70.15		
					LCS1	BDO-ZB43LCS	01-333	84.48			85.45			62.7			84.76			74.66			97.36			75.92		
					LCS1	BDO-ZE35LCS	01-398	80.45			90.24			66.04			86.88			79.94			98.01			79.14		
Standard Reference Material (percent difference)																												
					SRM	NIST 1944-01-212	01-212	NA			NA			NA			NA			NA			27.86			5.36		
					SRM	NIST 1944-01-213	01-213	NA			NA			NA			NA			NA			31.45			21.97		
					SRM	NIST 1944-01-229	01-229	NA			NA			NA			NA			NA			36.54	N		5.2		
					SRM	NIST 1944-01-230	01-230	NA			NA			NA			NA			NA			31.11			NA		
					SRM	NIST 1944-01-234	01-234	NA			NA			NA			NA			NA			42.77	N		4.17		
					SRM	NIST 1944-01-235	01-235	NA			NA			NA			NA			NA			16.63			1.62		
					SRM	NIST 1944-01-239	01-239	NA			NA			NA			NA			NA			40.66	N		13.53		
					SRM	NIST 1944-01-240	01-240	NA			NA			NA			NA			NA			22.49			0		
					SRM1	NIST 1944-01-333	01-333	NA			NA			NA			NA			NA			23.05			9.04		
					SRM1	NIST 1944-01-398	01-398	NA			NA			NA			NA			NA			45.34			22.35		
Field duplicates (relative percent difference)																												
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	0.12	U		0.15	U		0.14	U		1.44			1.84			0.43	J		0.26	J	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	0.12	U		0.15	U		0.14	U	UJ	2.12			1.9			1.1			0.73	J	
RPD								***NA***			***NA***			***NA***			***38***			***3***			***88***			***95***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	0.11	U		0.13	U		0.13	U		1.41			1.21			0.51	J		0.07	U	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	0.12	U		0.14	U		0.14	U		1.58			1.17			0.42	J		0.08	U	
RPD								***NA***			***NA***			***NA***			***11***			***3***			***19***			***NA***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	0.07	U		0.08	U		0.08	U		0.27	J		0.31	J		0.06	U	UJ	0.05	U	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	0.07	U		0.08	U		0.08	U		0.21	J		0.17	J		0.06	U	UJ	0.05	U	
RPD								***NA***			***NA***			***NA***			***25***			***58***			***NA***			***NA***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	0.09	U		0.11	U		0.1	U		0.91			0.79			0.17	J		0.16	J	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	0.08	U		0.1	U		0.09	U		0.64	J		0.81			3.5		J	0.1	J	
RPD								***NA***			***NA***			***NA***			***35***			***3***			***181***			***46***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	0.12	U		0.15	U		0.14	U		4.39			7.65			1.06		J	1.33		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	0.12	U		0.15	U		0.14	U		4.28			7.46			1.02		J	1.22		
RPD								***NA***			***NA***			***NA***			***3***			***3***			***4***			***9***		

Table B-25. Quality Control Data for Chlorinated Pesticides in Sediment, Hunters Point Shipyard Parcel F Validation Study

								2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical duplicates (relative percent difference)																												
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	0.1	U		0.12	U		0.11	U		2.32			0.43	J		0.16	J	J	0.31	J	
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	0.1	U		0.12	U		0.11	U		2.3			0.45	J		0.41	J		0.35	J	
RPD								***NA***			***NA***			***NA***			***1***			***5***			***88***			***12***		
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	0.1	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U	
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	0.14	U		0.18	U		0.17	U		0.13	U		0.12	U		0.12	U		0.1	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	0.1	U		0.12	U		0.11	U		0.09	U		0.08	U		0.08	U	UJ	0.07	U	
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	0.1	U		0.13	U		0.12	U		0.09	U		0.09	U		0.09	U		0.07	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	0.11	U		0.14	U		0.13	U	UJ	0.93	J		0.96			0.14	J		0.11	J	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	0.11	U		0.14	U		0.13	U		1.18			1.25			0.23	J		0.13	J	
RPD								***NA***			***NA***			***NA***			***24***			***26***			***49***			***17***		
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	0.07	U		0.08	U		0.08	U	UJ	0.06	U		0.06	U		0.06	U		0.05	U	
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	0.06	U		0.08	U		0.08	U		0.06	U		0.05	U		0.06	U		0.04	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	0.11	U		0.14	U		0.13	U		6.89			9.12			1.16			3.56		J
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	0.11	U		0.14	U		0.13	U		7.79			10.01			0.9	J		2.57		
RPD								***NA***			***NA***			***NA***			***12***			***9***			***25***			***32***		
South Basin Area X	SB-04	0	5	cm	SA	AAB-121	01-240	0.12	U		0.15	U		0.14	U		2.87			3.56			0.48	J		0.97	J	
South Basin Area X	SB-04	0	5	cm	QADU1	AAB-121	01-333	0.12	U		0.16	U		0.15	U		2.04			2.76			0.45	J		0.66	J	
RPD								***NA***			***NA***			***NA***			***100***			***25***			***6***			***38***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	0.09	U		0.11	U		0.11	U		0.08	U		0.08	U		0.08	U	UJ	0.06	U	
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	0.09	U		0.11	U		0.11	U		0.08	U		0.08	U		0.08	U		0.06	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	0.13	U		0.16	U		0.15	U		2.06			3.25		J	0.39	J	J	0.54	J	J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	0.13	U		0.16	U		0.15	U		1.62			1.94			0.22	J		0.38	J	
RPD								***NA***			***NA***			***NA***			***24***			***50***			***56***			***35***		
Matrix Spike (percent recoveries)																												
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	114.73			102.75			34.18	N		81.13			91.68			101.81			94.02		
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	100.48			105.15			57.76			86.72			86.72			112.84			95.48		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	122.84	N		85.02			60.05			62.99			74.2			101.89			86.34		
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	136.77	N		91.42			42.52			69.13			84.32			84.08			102.94		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	73.87			68.66			42.18			72.15			62.55			73.75			61.8		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	138.68	N		78.65			93.86			112.12			500.01	N		123.32	N		62.19		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	138.87	N		97			108.82			92.56			106.13			95.28			93.44		
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	118.75			80			64.29			57.23			68.76			55.62			15.52	N	
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	98.07			81.88			53.36			88.4			84.47			89.28			85.59		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-25. Quality Control Data for Chlorinated Pesticides in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg dry weight)																						
					PB	BDO-YX13PB	01-212	0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
					PB	BDO-YX17PB	01-213	0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
					PB	BDO-YX74PB	01-229	0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
					PB	BDO-YX78PB	01-230	0.08	U		0.08	U		0.07	U		0.06	U		0.07	U	
					PB	BDO-YX95PB	01-234	0.08	U		0.09	U		0.08	U		0.07	U		0.07	U	
					PB	BDO-YX99PB	01-235	0.08	U		0.09	U		0.08	U		0.07	U		0.07	U	
					PB	BDO-YY13PB	01-239	0.08	U		0.08	U		0.07	U		0.06	U		0.06	U	
					PB	BDO-YY17PB	01-240	0.1	U		0.11	U		0.09	U		0.08	U		0.09	U	
					PB1	BDO-ZB42PB	01-333	0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
					PB1	BDO-ZE34PB	01-398	0.08	U		0.08	U		0.07	U		0.06	U		0.07	U	
Laboratory Control Samples (percent recoveries)																						
					LCS	BDO-YX14LCS	01-212	85.05			66.95			79.87			58.56			69.87		
					LCS	BDO-YX18LCS	01-213	66.8			57.15			66.84			48.52			68.62		
					LCS	BDO-YX75LCS	01-229	69.16			53.07			72.25			51.56			56.21		
					LCS	BDO-YX79LCS	01-230	86.67			72.46			81.13			59			64.14		
					LCS	BDO-YX96LCS	01-234	82.2			67.21			71.97			59.91			73.95		
					LCS	BDO-YY01LCS	01-235	66.28			63.23			68.41			48.85			67.99		
					LCS	BDO-YY14LCS	01-239	93.75			73.86			86.99			56.81			74.18		
					LCS	BDO-YY18LCS	01-240	74.82			57.21			76.74			43.75			69.65		
					LCS1	BDO-ZB43LCS	01-333	82.9			75.39			80.29			57.55			53.72		
					LCS1	BDO-ZE35LCS	01-398	85.54			84.34			87.74			59.5			85.57		
Standard Reference Material (percent difference)																						
					SRM	NIST 1944-01-212	01-212	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-213	01-213	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-229	01-229	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-230	01-230	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-234	01-234	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-235	01-235	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-239	01-239	NA			NA			NA			NA			NA		
					SRM	NIST 1944-01-240	01-240	NA			NA			NA			NA			NA		
					SRM1	NIST 1944-01-333	01-333	NA			NA			NA			NA			NA		
					SRM1	NIST 1944-01-398	01-398	NA			NA			NA			NA			NA		
Field duplicates (relative percent difference)																						
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	0.11	U		0.11	U		0.1	U		0.14	J		0.09	U	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	0.11	U		0.11	U		0.1	U		0.09	U		0.09	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	0.1	U		0.11	U		0.09	U		0.08	U		0.09	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	0.06	U		0.06	U		0.06	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	0.06	U		0.06	U		0.05	U		0.05	U		0.05	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	0.08	U		0.08	U		0.07	U		0.08	J		0.07	U	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	0.07	U		0.07	U		0.06	U		0.06	U		0.06	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	2.11			0.11	U		0.1	U		1.84			0.09	U	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	2.02			0.11	U		0.1	U		1.84			0.09	U	
RPD								***4***			***NA***			***NA***			***0***			***NA***		

Table B-25. Quality Control Data for Chlorinated Pesticides in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical duplicates (relative percent difference)																						
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	0.09	U		0.09	U		0.08	U		0.38	J		0.07	U	
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	0.09	U		0.09	U		0.08	U		0.38	J		0.07	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-398	0.09	U		0.09	U		0.08	U		0.07	U		0.07	U	
Point Avisadero Area III	PA-41	4	6	ft	QADU1	AAB-198	01-398	0.13	U		0.13	U		0.12	U		0.1	U		0.11	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	0.09	U		0.09	U		0.08	U		0.07	U		0.08	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	0.1	U		0.11	U		0.09	U		0.08	U		0.09	U	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	0.1	U		0.1	U		0.09	U		0.08	U		0.09	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	0.06	U		0.06	U		0.05	U		0.05	U		0.05	U	
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	0.06	U		0.06	U		0.05	U		0.05	U		0.05	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	4.21			0.1	U		0.09	U		6.29		J	0.09	U	
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	6.19			0.1	U		0.09	U		4.7			0.09	U	
RPD								***38***			***NA***			***NA***			***29***			***NA***		
South Basin Area X	SB-04	0	5	cm	SA	AAB-121	01-240	0.83	J		0.11	U		0.1	U		0.98	J		0.09	U	
South Basin Area X	SB-04	0	5	cm	QADU1	AAB-121	01-333	0.57	J		0.12	U		0.1	U		0.83	J		0.1	U	
RPD								***37***			***NA***			***NA***			***17***			***NA***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	0.08	U		0.08	U		0.07	U		0.07	U		0.07	U	
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	0.08	U		0.08	U		0.08	U		0.07	U		0.07	U	
RPD								***NA***			***NA***			***NA***			***NA***			***NA***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	0.75	J		0.12	U		0.11	U		0.75	J	J	0.1	U	
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	0.12	U		0.12	U		0.11	U		0.54	J		0.1	U	
RPD								***NA***			***NA***			***NA***			***33***			***NA***		
Matrix Spike (percent recoveries)																						
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	66.73			70.38			80.35			55.88			87.43		
Point Avisadero Area III	PA-43	0	5	cm	MS1	AAB-087	01-333	93.77			76.4			96.18			66.94			107.94		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	82.85			67.27			89.69			51.56			113.12		
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	74.36			72.42			90.88			58.97			104.09		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	74.44			61.13			69.87			49.36			67.59		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	101.65			99.43			132.41	N		92.16			77.4		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	99.46			112.96			107.97			62.42			103.31		
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	61.84			82.33			77.89			0	N		45.89		
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	94.06			92.02			80.44			74.26			109.64		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ug/kg dry weight)																									
					PB	BDO-YX13PB	01-212	0.18	J		0.03	U		0.05	U		0.05	U		0.05	U		1.26		
					PB	BDO-YX17PBX	01-213	0.13	J		0.05	U		0.04	U		0.03	U		0.04	U		0.79	J	
					PB	BDO-YX74PB	01-229	0.08	J		0.2	J		0.14	J		0.21	J		0.21	J		0.73	J	
					PB	BDO-YX78PB	01-230	0.09	J		0.03	U		0.04	U		0.04	U		0.04	U		0.48	J	
					PB	BDO-YX95PB	01-234	0.10	J		0.03	U		0.05	U		0.04	U		0.04	U		0.59	J	
					PB	BDO-YX99PB	01-235	0.13	J		0.03	U		0.05	U		0.04	U		0.04	U		0.61	J	
					PB	BDO-YY13PBX	01-239	0.25	J		0.02	U		0.04	U		0.03	J		0.04	U		1.38		
					PB	BDO-YY17PB	01-240	0.39	J		0.03	U		0.06	U		0.05	U		0.05	U		1.67	B	
					PB	BDO-ZB42PB	01-333	0.12	J		0.03	U		0.05	U		0.05	U		0.05	U		0.54	J	
Laboratory Control Sample (percent recoveries)																									
					LCS	BDO-YX14LCS	01-212	57.96			57.91			64.58			62.48			58.1			59.08		
					LCS	BDO-YX18LCSX	01-213	49.75			51.53			57.65			58.53			52.74			47.69		
					LCS	BDO-YX75LCS	01-229	55.39			57.64			64.95			65.7			59.55			54.79		
					LCS	BDO-YX79LCS	01-230	57.05			58.11			61.82			64.79			59.56			58.33		
					LCS	BDO-YX96LCS	01-234	54.17			55.07			63.09			63.26			56.77			53.86		
					LCS	BDO-YY01LCS	01-235	65.64			66.02			75.74			72.18			65.25			65.08		
					LCS	BDO-YY14LCSX	01-239	60.62			59.37			68.11			69.01			60.60			59.74		
					LCS	BDO-YY18LCS	01-240	55.08			54.89			60.58			55.02			54.19			54.62	B	
					LCS	BDO-ZB43LCS	01-333	56.2			56.36			59.25			62.61			55.79			55.33		
Standard Reference Material (percent difference)																									
					SRM	NIST 1944-01-212	01-212	NA			NA			NA			32.85			NA			23.03		
					SRM	NIST 1944-01-213	01-213	NA			NA			NA			19.42			NA			10.17		
					SRM	NIST 1944-01-234	01-234	NA			NA			NA			23.51			NA			21.94		
					SRM	NIST 1944-01-235	01-235	NA			NA			NA			24.40			NA			14.40		
					SRM	NIST 1944-01-239	01-239	NA			NA			NA			32.19			NA			17.66		
					SRM	NIST 1944-01-240	01-240	NA			NA			NA			28.87			NA			15.29	B	
					SRM	NIST 1944-01-333	01-333	NA			NA			NA			23.03			NA			16.67		
					SRM	NIST_1944-01-229	01-229	NA			NA			NA			43.03	N		NA			23.08		
					SRM	NIST_1944-01-230	01-230	NA			NA			NA			34.98			NA			22.33		

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Field duplicates (relative percent difference)																									
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	12.98	B		11.82			13.18			228.23			32.71			19.27	B	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	9.06	B		136.27			21.98			324.7			155.88			13.26	B	
RPD								***36***			***168***			***50***			***35***			***131***			***37***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	7.09	B		10.41			9.94			64.13			15.39			14.56	B	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	9.05	B		14.98			11.51			119.74			21.56			18.02	B	
RPD								***24***			***36***			***15***			***60***			***33***			***21***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	1.59			1.63			1.09			4.87			1.55			3.51		U
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	1.30			0.60	J		0.68	J		2.51			1.12			2.87		U
RPD								***20***			***92***			***46***			***64***			***32***			***20***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	5.23			2.13			4.71			11.38			3.27			10.37	B	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	5.38			2.46			3.57			15.81			4.03			9.55		
RPD								***3***			***14***			***28***			***33***			***21***			***8***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	16.32			4.68			8.99			27.04		J	8.07			26.33		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	17.48			5.13			9.79			30.63		J	10.44			27.01		
RPD								***7***			***9***			***9***			***12***			***26***			***3***		
Analytical duplicates (relative percent difference)																									
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	8.82		J	3.29		J	22.88		J	92.54		J	24.08		J	13.23		J
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	1.51			5.59			6.16			45.79			5.60			6.16		
RPD								***142***			***52***			***115***			***68***			***124***			***73***		
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	14.29			17.04			27.13			98.64			20.38			36.52		
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	14.37			14.12			27.78			85.74			21.38			31.32		
RPD								***1***			***19***			***2***			***14***			***5***			***15***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	1.64			0.19	J	UJ	0.06	J	U	0.63	J	UJ	2.34			1.87		U
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	1.96			0.29	J		0.06	J		0.8	J		2.93			2.15		
RPD								***18***			***42***			***0***			***24***			***22***			***14***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	6.05	B		7.78			9.77			72.91			14.06			11.85	B	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	7.03	B		9.22			10.54			79.95			17.36			13.67	B	
RPD								***15***			***17***			***8***			***9***			***21***			***14***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	26.85			6.4		J	11.41			37.13			10.07			28.15	B	
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	27.82			9.4			11.47			41.03			12.61			29.	B	
RPD								***4***			***38***			***1***			***10***			***22***			***3***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	2.74			0.39	J	J	0.20	J	J	0.94	J	J	1.78			2.50		
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	2.58			0.17	J		0.08	J		0.64	J		1.47			2.39		
RPD								***6***			***79***			***86***			***38***			***19***			***4***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	16.49		J	8.91		J	7.30		J	34.80		J	10.26		J	27.59		J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	9.16			3.14			4.92			15.42			5.45			16.52		
RPD								***57***			***96***			***39***			***77***			***61***			***50***		

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spikes (percent recoveries)																									
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	62.10			65.97			75.45			79.43			70.88			57.62		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	50.43			56.51			63.79			65.90			59.82			44.36		
Point Avisadero Area III	PA-43	0	5	cm	MS	AAB-087	01-333	48.53			56.59			58.25			72.06			62.47			45.94		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	47.79			68.28			79.17			145.83	N		58.24			50.19		
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	44.11			50.47			35.55	N		0	N		49.90			36.35	N	
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	52.44			57.86			62.91			66.70			52.42			49.58		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	54.31			58.74			64.97			77.51			64.87			52.82	B	
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	49.65			57.05			61.66			70.7			63.43			43.61		
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	1,101.07	N		66.83			76.45			79.51			80.47			455.78	N	

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
B Analyte found in both sample and associated blank. The "B" will be reported on the result associated with the field samples, not the blank.

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Phenanthrene Result	Phenanthrene Lab Qual	Phenanthrene Final Qual	Benzo(a)anthracene Result	Benzo(a)anthracene Lab Qual	Benzo(a)anthracene Final Qual	Benzo(a)pyrene Result	Benzo(a)pyrene Lab Qual	Benzo(a)pyrene Final Qual	Benzo(b)fluoranthene Result	Benzo(b)fluoranthene Lab Qual	Benzo(b)fluoranthene Final Qual	Benzo(ghi)perylene Result	Benzo(ghi)perylene Lab Qual	Benzo(ghi)perylene Final Qual	Benzo(k)fluoranthene Result	Benzo(k)fluoranthene Lab Qual	Benzo(k)fluoranthene Final Qual
Procedural Blank (ug/kg dry weight)																									
					PB	BDO-YX13PB	01-212	0.28	J		0.02	J		0.04	U		0.04	U		0.18	J		0.03	U	
					PB	BDO-YX17PBX	01-213	0.21	J		0.06	U		0.06	U		0.04	U		0.21	J		0.04	U	
					PB	BDO-YX74PB	01-229	0.49	J		0.29	J		0.36	J		0.35	J		0.33	J		0.47	J	
					PB	BDO-YX78PB	01-230	0.12	J		0.04	J		0.04	U		0.03	U		0.17	J		0.02	U	
					PB	BDO-YX95PB	01-234	0.14	J		0.14	J		0.19	J		0.03	U		0.14	J		0.02	U	
					PB	BDO-YX99PB	01-235	0.05	U		0.03	U		0.04	U		0.03	U		0.02	U		0.02	U	
					PB	BDO-YY13PBX	01-239	0.43	J		0.07	J		0.03	U		0.14	J		0.37	J		0.11	J	
					PB	BDO-YY17PB	01-240	0.46	J		0.04	U		0.05	U		0.04	U		0.03	U		0.03	U	
					PB	BDO-ZB42PB	01-333	0.13	J		0.07	J		0.04	U		0.04	U		0.35	J		0.03	U	
Laboratory Control Sample (percent recoveries)																									
					LCS	BDO-YX14LCS	01-212	62.6			62.25			59.67			64.51			56.53			70.03		
					LCS	BDO-YX18LCSX	01-213	57.33			67.02			62.52			66.06			65.64			68.82		
					LCS	BDO-YX75LCS	01-229	64.82			70.01			64.63			65.22			65.71			74.28		
					LCS	BDO-YX79LCS	01-230	65.22			65.29			62.33			63.54			63.83			68.87		
					LCS	BDO-YX96LCS	01-234	61.03			60.92			56.35			55.87			48.21			64.19		
					LCS	BDO-YY01LCS	01-235	67.76			67.48			64.67			65.09			70.86			68.99		
					LCS	BDO-YY14LCSX	01-239	66.29			68.33			66.69			64.10			69.58			73.86		
					LCS	BDO-YY18LCS	01-240	54.92			48.55			47.88			40.94			45.27			58.04		
					LCS	BDO-ZB43LCS	01-333	59.64			74.57			74.05			76.11			70.39			77.31		
Standard Reference Material (percent difference)																									
					SRM	NIST 1944-01-212	01-212	8.52			12.55			15.41			2.24			3.81			7.22		
					SRM	NIST 1944-01-213	01-213	NA			NA			0.41			NA			0.85			NA		
					SRM	NIST 1944-01-234	01-234	6.92			12.68			20.88			9.84			10.40			10.53		
					SRM	NIST 1944-01-235	01-235	0.14			8.80			15.25			3.32			NA			4.72		
					SRM	NIST 1944-01-239	01-239	17.88			14.21			16.27			13.99			2.00			4.94		
					SRM	NIST 1944-01-240	01-240	17.93			17.64			20.66			15.34			6.20			10.94		
					SRM	NIST 1944-01-333	01-333	3.21			14.22			17.81			1.67			15.12			7.80		
					SRM	NIST_1944-01-229	01-229	8.19			19.04			26.25			16.46			13.87			11.59		
					SRM	NIST_1944-01-230	01-230	12.46			7.48			15.89			2.86			6.4			7.85		

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Phenanthrene			Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Field duplicates (relative percent difference)																									
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	167.24	B		236.43	B		299.1			264.6			220.87	B		255.37		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	1,259.6	B		691.96			556.29			493.45			279.56	B		486.7		
RPD								***153***			***98***			***60***			***60***			***23***			***62***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	149.84	B		172.56	B		239.35			174.34			197.56	B		171.53		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	248.19	B		386.21	B		477.3			398.78			380.18	B		395.18		
RPD								***49***			***76***			***66***			***78***			***63***			***79***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	18.63			12.77			21.60			13.63			21.05			15.62		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	8.42			7.32			14.73			8.85			14.59			12.09		
RPD								***75***			***54***			***38***			***43***			***36***			***25***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	40.37			51.30			109.24			68.26			113.11			72.97		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	41.27			47.40			95.33			59.93			97.21			68.39		
RPD								***2***			***8***			***14***			***13***			***15***			***6***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	93.34			132.45			240.1			173.8			240.61			182.81		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	118.44			145.79			246.53			179.9			234.25			186.76		
RPD								***24***			***10***			***3***			***3***			***3***			***2***		
Analytical duplicates (relative percent difference)																									
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	283.05		J	185.04		J	199.61		J	98.55		J	120.01		J	126.22		J
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	79.98			62.34			81.39			41.47			59.25			49.97		
RPD								***112***			***99***			***84***			***82***			***68***			***87***		
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	266.23			306.09			520.09			323.64			427.01			343.52		
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	236.28			240.24			407.53			264.92			343.59			263.70		
RPD								***12***			***24***			***24***			***20***			***22***			***26***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	3.77			0.52	J	U	0.41	J	U	1.42		UJ	1.28		U	0.45	J	U
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	4.84			0.68	J		0.51	J		2.06			1.63			0.56	J	
RPD								***25***			***27***			***22***			***37***			***24***			***22***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	101.5	B		137.76			188.85			139.25			150.92	B		137.16		
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	116.24	B		162.68			221.21			159.76			178.37	B		161.54		
RPD								***14***			***17***			***16***			***14***			***17***			***16***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	120.79			133.89			267.61			176.63			282.9			192.18		
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	131.03			132.09			253.88			172.92			279.45			189.44		
RPD								***8***			***1***			***5***			***2***			***1***			***1***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	8.36			1.52		J	1.94		J	2.91			3.07		J	1.51		J
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	6.48			0.84	J		1.2			2.43			1.97			0.81	J	
RPD								***25***			***58***			***47***			***18***			***44***			***60***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	101.82		J	118.35		J	217.88		J	147.91		J	225.64		J	155.68		J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	58.52			68.63			148.47			108.13			162.87			104.14		
RPD								***54***			***53***			***38***			***31***			***32***			***40***		

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Phenanthrene			Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spikes (percent recoveries)																									
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	76.63			93.77			91.96			80.13			88.66			88.19		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	65.04			74.09			82.88			73.71			90.77			76.94		
Point Avisadero Area III	PA-43	0	5	cm	MS	AAB-087	01-333	51.84			64.32			62.34			73.23			67.79			78.04		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	86.89			114.75			179.11	N		113.95			188.79	N		135.77	N	
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	0	N		27.20	N		16.43	N		50.13			58.27			51.09		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	68.12			88.66			103.72			84.34			102.17			97.76		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	84.26			101.91			116.32			99.06			127.85	N		110.02		
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	75.91			101.36			106.57			98.13			115.26			106.75		
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	237.29	N		66.28			49.99			58.41			62.69			53.96		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
B Analyte found in both sample and associated blank. The "B" will be reported on the result associated with the field samples, not the blank.

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Chrysene Result	Chrysene Lab Qual	Chrysene Final Qual	Dibenz(ah)anthracene Result	Dibenz(ah)anthracene Lab Qual	Dibenz(ah)anthracene Final Qual	Fluoranthene Result	Fluoranthene Lab Qual	Fluoranthene Final Qual	Indeno(123-cd)pyrene Result	Indeno(123-cd)pyrene Lab Qual	Indeno(123-cd)pyrene Final Qual	Pyrene Result	Pyrene Lab Qual	Pyrene Final Qual
Procedural Blank (ug/kg dry weight)																						
					PB	BDO-YX13PB	01-212	0.08	J		0.04	U		0.05	U		0.02	U		0.09	J	
					PB	BDO-YX17PBX	01-213	0.03	U		0.09	U		0.06	J		0.08	U		0.11	J	
					PB	BDO-YX74PB	01-229	0.45	J		0.14	J		0.43	J		0.22	J		0.65	J	
					PB	BDO-YX78PB	01-230	0.06	J		0.03	U		0.08	J		0.02	U		0.14	J	
					PB	BDO-YX95PB	01-234	0.06	J		0.03	U		0.08	J		0.02	U		0.17	J	
					PB	BDO-YX99PB	01-235	0.02	U		0.03	U		0.04	U		0.02	U		0.14	J	
					PB	BDO-YY13PBX	01-239	0.13	J		0.03	U		0.21	J		0.16	J		0.51	J	
					PB	BDO-YY17PB	01-240	0.03	U		0.04	U		0.13	J		0.02	U		0.22	J	
					PB	BDO-ZB42PB	01-333	0.1	J		0.04	U		0.05	U		0.15	J		0.41	J	
Laboratory Control Sample (percent recoveries)																						
					LCS	BDO-YX14LCS	01-212	74.39			49.05			70.43			49.6			69.09		
					LCS	BDO-YX18LCSX	01-213	70.36			63.17			67.56			69.56			66.78		
					LCS	BDO-YX75LCS	01-229	77.9			56.77			75.85			59.83			73.53		
					LCS	BDO-YX79LCS	01-230	74.84			59.58			73.04			60.51			70.84		
					LCS	BDO-YX96LCS	01-234	68.16			46.98			68.33			48.62			66.19		
					LCS	BDO-YY01LCS	01-235	70.78			66.97			73.15			73.31			72.25		
					LCS	BDO-YY14LCSX	01-239	74.54			67.10			75.30			62.14			73.54		
					LCS	BDO-YY18LCS	01-240	59.26			40.07			60.28			36.02	N		57.75		
					LCS	BDO-ZB43LCS	01-333	75.47			69.69			73.43			75.23			72.13		
Standard Reference Material (percent difference)																						
					SRM	NIST 1944-01-212	01-212	8.18			50.94	N		0.44			NA			3.79		
					SRM	NIST 1944-01-213	01-213	NA			74.02	N		0.26			8.43			0.15		
					SRM	NIST 1944-01-234	01-234	7.24			34.50			NA			4.04			NA		
					SRM	NIST 1944-01-235	01-235	4.67			61.61	N		2.27			3.37			3.49		
					SRM	NIST 1944-01-239	01-239	9.89			30.16			4.52			NA			6.84		
					SRM	NIST 1944-01-240	01-240	10.81			14.97			7.09			6.91			9.15		
					SRM	NIST 1944-01-333	01-333	10.25			28.16			1.39			11.70			3.41		
					SRM	NIST_1944-01-229	01-229	13.85			26.36			9.20			11.16			7.88		
					SRM	NIST_1944-01-230	01-230	3.85			39.75	N		2.42			2.27			3.57		

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Field duplicates (relative percent difference)																						
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	375.15	B		42.79		J	418.93			223.81			436.74	B	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	844.45			65.26		J	2,102.1			306.92			1,695.57	B	
RPD								***77***			***42***			***134***			***31***			***118***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	212.72	B		28.16		J	378.75			188.25			446.23	B	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	513.35	B		69.22		J	713.14			380.53			751.8	B	
RPD								***83***			***84***			***61***			***68***			***51***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	17.27			1.64			38.10			17.23			46.44		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	10.94			0.94			19.09			10.15			23.91		
RPD								***45***			***54***			***66***			***52***			***64***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	70.65			8.82			131.97			89.90		J	170.57		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	64.22			7.56			115.53			83.14			145.96		
RPD								***10***			***15***			***13***			***8***			***16***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	174.53			29.93			253.5			219.89			320.01		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	190.81			31.21			254.35			217.24			342.56		
RPD								***9***			***4***			***0***			***1***			***7***		
Analytical duplicates (relative percent difference)																						
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	203.78		J	21.08		J	353.52		J	118.18		J	455.35		J
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	74.93			6.61			138.08			51.66			169.41		
RPD								***92***			***104***			***88***			***78***			***92***		
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	363.40			56.39			613.06			422.54			827.74		
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	277.17			47.87			486.09			332.88			656.83		
RPD								***27***			***16***			***23***			***24***			***23***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	1.79		U	0.20	J	U	2.24			0.54	J	U	2.56		U
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	2.39			0.27	J		2.9			0.59	J		3.05		
RPD								***29***			***30***			***26***			***9***			***17***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	190.64			19.32		J	302.83			146.47			334.4	B	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	225.65			22.31			354.21			163.5			387.45	B	
RPD								***17***			***14***			***16***			***11***			***15***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	189.91			31.68			268			227.78		J	365.89		
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	178.31			33.43			264.29			228.18			344.35		
RPD								***6***			***5***			***1***			***0***			***6***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	3.23			0.38	J	J	3.65		J	1.52		J	5.59		J
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	2.7			0.27	J		2.2			0.98			3.52		
RPD								***18***			***34***			***50***			***43***			***45***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	170.4488		J	24.74357		J	243.49227		J	192.04198		J	316.29137		J
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	100.54			16.09			161.21			133.65			213.12		
RPD								***52***			***42***			***41***			***36***			***39***		

Table B-26. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spikes (percent recoveries)																						
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	92.02			74.68			117.83			91.30			119.59		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	76.60			71.33			84.56			80.93			86.45		
Point Avisadero Area III	PA-43	0	5	cm	MS	AAB-087	01-333	62.87			73.39			42.16			73.35			35.91	N	
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	78.40			80.47			395.71	N		195.32	N		344.96	N	
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	3.05	N		78.41			0	N		58.61			0	N	
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	87.30			64.79			95.39			92.22			118.83		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	110.54			82.42			116.86			109.42			123.08	N	
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	102.41			80.29			122.42	N		103.64			118.13		
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	50.13			66.84			43.46			63.48			69.73		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
B Analyte found in both sample and associated blank. The "B" will be reported on the result associated with the field samples, not the blank.

Table B-27. Surrogate Recoveries for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recoveries (percent)								
								Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	0	5	cm	SA	AAB-158	01-212	84.12			43.25			69.56		
India Basin Area I	IB-55	0	5	cm	SA	AAB-160	01-212	73.08			42.59			62.19		
India Basin Area I	IB-56	0	5	cm	SA	AAB-159	01-212	80.87			42.7			67.32		
India Basin Area I	IB-57	0	5	cm	SA	AAB-129	01-212	79.17			42.37			65.16		
India Basin Area I	IB-58	0	5	cm	SA	AAB-130	01-212	72.61			40.5			60.88		
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	82.62			47.89			71.04		
Point Avisadero Area III	PA-38	0	5	cm	SA	AAB-133	01-213	79.62			38.96	N		66.02		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	71.41			37.21	N		60.12		
Point Avisadero Area III	PA-40	0	5	cm	SA	AAB-132	01-213	76.66			38.38	N		63.84		
Point Avisadero Area III	PA-41	0	5	cm	SA	AAB-092	01-213	94.2			47.84			77.3		
Point Avisadero Area III	PA-42	0	5	cm	SA	AAB-086	01-212	72.99			46.86			60.55		
Point Avisadero Area III	PA-43	0	5	cm	SA	AAB-087	01-333	81.91			36.48	N		70.28		
Point Avisadero Area III	PA-44	0	5	cm	SA	AAB-091	01-213	83.56			52.1			69.68		
Point Avisadero Area III	PA-45	0	5	cm	SA	AAB-126	01-212	82.02			47.94			69.4		
Point Avisadero Area III	PA-46	0	5	cm	SA	AAB-127	01-212	78.9			43.97			66.91		
Point Avisadero Area III	PA-47	0	5	cm	SA	AAB-089	01-212	79.47			41.96			67.14		
Point Avisadero Area III	PA-48	0	5	cm	SA	AAB-088	01-212	89.19			47.03			75.06		
Point Avisadero Area III	PA-49	0	5	cm	SA	AAB-083	01-212	83.02			38.82	N		67.95		
Point Avisadero Area III	PA-50	0	5	cm	SA	AAB-094	01-213	87.42			46.79			69.87		
Point Avisadero Area III	PA-51	0	5	cm	SA	AAB-085	01-212	74.97			40.41			62.98		
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	01-212	80.18			41.39			66.81		
Point Avisadero Area III	PA-53	0	5	cm	SA	AAB-090	01-213	79.44			35.56	N		65.54		
Point Avisadero Area III	PA-70	0	5	cm	SA	AAB-137	01-213	81.13			43.7			66.33		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	81.31			41.94			65.86		
Point Avisadero Area III	PA-72	0	5	cm	SA	AAB-135	01-213	54.07			25.84	N		43.85		
Eastern Wetland Area VIII	EW-30	0	5	cm	SA	AAB-107	01-333	86.38			45.21			69.57		
Eastern Wetland Area VIII	EW-31	0	5	cm	SA	AAB-104	01-230	84.11			59.59			71.51		
Eastern Wetland Area VIII	EW-32	0	5	cm	SA	AAB-095	01-229	84.72			50.04			69.81		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	71.85			52.20			65.37		
Eastern Wetland Area VIII	EW-34	0	5	cm	SA	AAB-108	01-239	80.16			55.29			70.97		
Eastern Wetland Area VIII	EW-35	0	5	cm	SA	AAB-097	01-229	66.88			34.77	N		54.66		
Eastern Wetland Area VIII	EW-36	0	5	cm	SA	AAB-105	01-239	74.07			54.32			64.76		
Eastern Wetland Area VIII	EW-37	0	5	cm	SA	AAB-142	01-229	76.73			37.57	N		62.62		
Oil Reclamation Area IX	OR-24	0	5	cm	SA	AAB-125	01-240	56.06			32.78	N		48.32		
Oil Reclamation Area IX	OR-25	0	5	cm	SA	AAB-103	01-230	71.85			44.49			63.58		
Oil Reclamation Area IX	OR-26	0	5	cm	SA	AAB-116	01-240	70.87			45.31			61.61		
Oil Reclamation Area IX	OR-27	0	5	cm	SA	AAB-117	01-240	71.01			34.89	N		60.36		
Oil Reclamation Area IX	OR-28	0	5	cm	SA	AAB-096	01-229	79.58			45.31			63.67		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	69.88			50.92			62.56		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	85.06			52.43			73.91		
South Basin Area X	SB-02	0	5	cm	SA	AAB-143	01-240	85.81			58.68			73.95		
South Basin Area X	SB-03	0	5	cm	SA	AAB-122	01-240	48.72			31.67	N		42.45		
South Basin Area X	SB-04	0	5	cm	SA	AAB-121	01-240	76.27			38.39	N		66.16		
South Basin Area X	SB-05	0	5	cm	SA	AAB-141	01-229	77.54			43.03			65.34		
South Basin Area X	SB-06	0	5	cm	SA	AAB-120	01-240	65.24			37.3	N		56.11		
South Basin Area X	SB-07	0	5	cm	SA	AAB-119	01-240	88.22			55.52			78.72		
South Basin Area X	SB-08	0	5	cm	SA	AAB-115	01-240	67.42			38.07	N		58.67		
South Basin Area X	SB-09	0	5	cm	SA	AAB-145	01-230	77.2			58.05			61.36		
South Basin Area X	SB-10	0	5	cm	SA	AAB-144	01-230	81.13			60.77			61.81		
South Basin Area X	SB-11	0	5	cm	SA	AAB-139	01-229	80.19			49.01			67.82		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	77.02			43.95			64.79		
South Basin Area X	SB-13	0	5	cm	SA	AAB-113	01-239	76.27			53.93			67.56		
South Basin Area X	SB-14	0	5	cm	SA	AAB-138	01-229	74.17			48.16			63.13		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	84.64			58.25			74.54		
South Basin Area X	SB-16	0	5	cm	SA	AAB-112	01-239	82.95			55.86			73.09		
South Basin Area X	SB-17	0	5	cm	SA	AAB-146	01-230	81.82			50.09			72.45		
South Basin Area X	SB-18	0	5	cm	SA	AAB-100	01-230	78.74			55.49			60.08		
South Basin Area X	SB-19	0	5	cm	SA	AAB-101	01-230	76.82			54.01			70.42		
South Basin Area X	SB-20	0	5	cm	SA	AAB-109	01-239	85.50			55.09			72.63		
South Basin Area X	SB-21	0	5	cm	SA	AAB-102	01-230	80.00			52.51			60.19		
South Basin Area X	SB-22	0	5	cm	SA	AAB-111	01-239	72.57			51.58			63.93		
Alameda Buoy	AB-67	0	5	cm	SA	AAB-157	01-212	86.09			44.23			72.3		
Alcatraz Environs	AL-64	0	5	cm	SA	AAB-098	01-230	90.07			49.25			74.36		
Bay Farm Borrow Pit	BF-66	0	5	cm	SA	AAB-156	01-212	77.5			40.75			63.24		
Paradise Cove	PC-63	0	5	cm	SA	AAB-162	01-333	79.69			38.84	N		65.98		
Red Rock	RR-65	0	5	cm	SA	AAB-165	01-212	77.63			48.7			63.61		

Table B-27. Surrogate Recoveries for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recoveries (percent)								
								Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	76.29			55.39			66.65		
India Basin Area I	IB-56	2	4	ft	SA	AAB-206	01-234	71.88			46.53			61.04		
India Basin Area I	IB-56	4	6	ft	SA	AAB-207	01-235	72.80			54.46			65.73		
India Basin Area I	IB-59	0	2	ft	SA	AAB-247	01-234	57.28			34.69	N		47.35		
India Basin Area I	IB-59	2	4	ft	SA	AAB-248	01-234	58.52			36.48	N		49.86		
India Basin Area I	IB-59	4	6	ft	SA	AAB-249	01-234	62.61			45.53			54.79		
Point Avisadero Area III	PA-40	0	2	ft	SA	AAB-244	01-234	60.67			45.31			52.94		
Point Avisadero Area III	PA-40	2	4	ft	SA	AAB-245	01-234	51.76			37.66	N		46.06		
Point Avisadero Area III	PA-41	0	2	ft	SA	AAB-196	01-229	63.88			41.80			49.24		
Point Avisadero Area III	PA-41	2	4	ft	SA	AAB-197	01-229	63.53			43.70			49.70		
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-229	66.17			47.05			51.60		
Point Avisadero Area III	PA-44	0	2	ft	SA	AAB-226	01-229	82.89			56.13			70.74		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	80.80			55.19			68.98		
Point Avisadero Area III	PA-44	4	6	ft	SA	AAB-228	01-230	81.18			48.01			70.12		
Point Avisadero Area III	PA-47	0	2	ft	SA	AAB-223	01-229	146.72	N		106.24			113.68		
Point Avisadero Area III	PA-47	2	4	ft	SA	AAB-224	01-229	73.99			51.86			64.09		
Point Avisadero Area III	PA-47	4	6	ft	SA	AAB-225	01-229	72.59			52.09			63.23		
Point Avisadero Area III	PA-49	0	2	ft	SA	AAB-232	01-230	79.00			40.33			69.84		
Point Avisadero Area III	PA-49	2	4	ft	SA	AAB-233	01-230	55.41			36.28	N		48.09		
Point Avisadero Area III	PA-49	4	6	ft	SA	AAB-234	01-230	50.37			34.01	N		44.91		
Point Avisadero Area III	PA-52	0	2	ft	SA	AAB-229	01-230	83.27			52.04			74.61		
Point Avisadero Area III	PA-52	2	4	ft	SA	AAB-230	01-230	75.98			45.58			66.54		
Point Avisadero Area III	PA-52	4	6	ft	SA	AAB-231	01-230	75.61			45.76			66.17		
Eastern Wetland Area VIII	EW-31	0	2	ft	SA	AAB-238	01-234	69.16			41.27			58.34		
Eastern Wetland Area VIII	EW-31	2	4	ft	SA	AAB-239	01-234	76.97			50.25			62.42		
Eastern Wetland Area VIII	EW-31	4	6	ft	SA	AAB-240	01-234	3.96	N		3.32	N		2.88	N	
Eastern Wetland Area VIII	EW-36	0	2	ft	SA	AAB-262	01-235	86.78			60.53			74.87		
Eastern Wetland Area VIII	EW-36	2	4	ft	SA	AAB-263	01-235	82.92			61.73			72.18		
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	71.52			57.18			61.94		
Oil Reclamation Area IX	OR-24	0	2	ft	SA	AAB-241	01-234	61.63			43.82			49.99		
Oil Reclamation Area IX	OR-24	2	4	ft	SA	AAB-242	01-234	64.09			46.95			52.46		
Oil Reclamation Area IX	OR-24	4	6	ft	SA	AAB-243	01-234	78.05			52.63			64.77		
Oil Reclamation Area IX	OR-28	0	2	ft	SA	AAB-220	01-229	65.32			34.91	N		53.64		
Oil Reclamation Area IX	OR-28	2	4	ft	SA	AAB-221	01-229	71.81			48.85			64.40		
Oil Reclamation Area IX	OR-28	4	6	ft	SA	AAB-222	01-229	67.13			41.95			57.09		
South Basin Area X	SB-01	0	2	ft	SA	AAB-259	01-235	63.85			56.27			58.97		
South Basin Area X	SB-01	2	4	ft	SA	AAB-260	01-235	75.67			59.41			67.06		
South Basin Area X	SB-01	4	6	ft	SA	AAB-261	01-235	70.20			57.10			61.61		
South Basin Area X	SB-03	0	2	ft	SA	AAB-208	01-235	75.49			62.41			68.29		
South Basin Area X	SB-03	2	4	ft	SA	AAB-209	01-235	74.16			58.76			67.40		
South Basin Area X	SB-03	4	6	ft	SA	AAB-210	01-235	67.59			57.85			59.29		
South Basin Area X	SB-06	0	2	ft	SA	AAB-202	01-234	78.98			58.30			59.45		
South Basin Area X	SB-06	2	4	ft	SA	AAB-203	01-234	80.59			56.80			62.42		
South Basin Area X	SB-06	4	6	ft	SA	AAB-204	01-234	68.00			50.06			57.16		
South Basin Area X	SB-07	0	2	ft	SA	AAB-235	01-234	62.70			45.98			57.27		
South Basin Area X	SB-07	2	4	ft	SA	AAB-236	01-234	63.18			44.33			48.08		
South Basin Area X	SB-07	4	6	ft	SA	AAB-237	01-234	68.65			49.91			57.56		
South Basin Area X	SB-12	0	2	ft	SA	AAB-199	01-230	60.84			42.94			54.26		
South Basin Area X	SB-12	2	4	ft	SA	AAB-200	01-230	64.49			40.61			50.39		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	76.01			46.60			65.79		
South Basin Area X	SB-16	0	2	ft	SA	AAB-256	01-235	72.05			53.75			64.48		
South Basin Area X	SB-16	2	4	ft	SA	AAB-257	01-235	72.44			57.48			63.56		
South Basin Area X	SB-16	4	6	ft	SA	AAB-258	01-235	77.78			61.62			70.37		
South Basin Area X	SB-20	0	2	ft	SA	AAB-250	01-235	74.50			65.49			64.70		
South Basin Area X	SB-20	2	4	ft	SA	AAB-251	01-235	79.79			64.88			68.01		
South Basin Area X	SB-20	4	6	ft	SA	AAB-252	01-235	76.17			58.29			67.74		
South Basin Area X	SB-22	0	2	ft	SA	AAB-253	01-235	76.29			65.50			68.99		
South Basin Area X	SB-22	2	4	ft	SA	AAB-254	01-235	56.53			49.44			51.69		
South Basin Area X	SB-22	4	6	ft	SA	AAB-255	01-235	68.82			57.71			61.53		

Table B-27. Surrogate Recoveries for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recoveries (percent)								
								Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg dry weight)																
					PB	BDO-YX13PB	01-212	71.24			55.38			56.83		
					PB	BDO-YX17PBX	01-213	71.54			49.71			53.56		
					PB	BDO-YX74PB	01-229	56.45			45.11			48.37		
					PB	BDO-YX78PB	01-230	75.46			67.68			65.24		
					PB	BDO-YX95PB	01-234	72.96			64.64			63.82		
					PB	BDO-YX99PB	01-235	70.80			65.52			60.54		
					PB	BDO-YY13PBX	01-239	60.88			52.30			54.23		
					PB	BDO-YY17PB	01-240	59.01			62.14			57.48		
					PB	BDO-ZB42PB	01-333	84.68			62.69			62.31		
Laboratory Control Samples (percent recoveries)																
					LCS	BDO-YX14LCS	01-212	78.65			63.04			62.76		
					LCS	BDO-YX18LCSX	01-213	71.04			50.64			54.77		
					LCS	BDO-YX75LCS	01-229	84.4			59.55			66.07		
					LCS	BDO-YX79LCS	01-230	79.33			61.62			62.43		
					LCS	BDO-YX96LCS	01-234	75.13			59.13			62.17		
					LCS	BDO-YY01LCS	01-235	74.90			68.64			66.37		
					LCS	BDO-YY14LCSX	01-239	79.40			63.03			65.62		
					LCS	BDO-YY18LCS	01-240	63.82			57.86			55.82		
					LCS	BDO-ZB43LCS	01-333	80.64			58.37			58.04		
Standard Reference Material (percent difference)																
					SRM	NIST 1944-01-212	01-212	76.63			49.11			66.49		
					SRM	NIST 1944-01-213	01-213	80.47			47.2			70.64		
					SRM	NIST 1944-01-234	01-234	75.24			54.94			58.39		
					SRM	NIST 1944-01-235	01-235	83.56			69.27			75.37		
					SRM	NIST 1944-01-239	01-239	92.72			58.88			81.28		
					SRM	NIST 1944-01-240	01-240	69.92			45.24			60.96		
					SRM	NIST 1944-01-333	01-333	69.55			39.11	N		62.13		
					SRM	NIST_1944-01-229	01-229	81.62			49.95			69.43		
					SRM	NIST_1944-01-230	01-230	66.37			48.45			60.03		
Field duplicates (relative percent difference)																
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-212	82.62			47.89			71.04		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-213	70.57			38.36	N		58.89		
RPD								***16***			***22***			***19***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-212	71.41			37.21	N		60.12		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-212	89.69			45.95			73.75		
RPD								***23***			***21***			***20***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-239	71.85			52.20			65.37		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-239	69.33			48.09			60.44		
RPD								***4***			***8***			***8***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-240	69.88			50.92			62.56		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-239	75.28			53.24			64.81		
RPD								***7***			***4***			***4***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-229	77.02			43.95			64.79		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-229	75.35			39.29	N		63.73		
RPD								***2***			***11***			***2***		
Analytical duplicates (relative percent difference)																
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-234	76.29			55.39			66.65		
India Basin Area I	IB-56	0	2	ft	QADU	AAB-205	01-234	61.27			51.59			55.51		
RPD								***22***			***7***			***18***		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-229	80.80			55.19			68.98		
Point Avisadero Area III	PA-44	2	4	ft	QADU	AAB-227	01-229	80.97			55.74			68.84		
RPD								***0***			***1***			***0***		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-213	81.31			41.94			65.86		
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-213	81.08			42.03			65.35		
RPD								***0***			***0***			***1***		

Table B-27. Surrogate Recoveries for Polycyclic Aromatic Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recoveries (percent)								
								Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ ID	Depth_ Top (ft)	Depth_ Bottom (ft)	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-235	71.52			57.18			61.94		
Eastern Wetland Area VIII	EW-36	4	6	ft	QADU	AAB-264	01-235	73.00			56.42			62.74		
RPD								***2***			***1***			***1***		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-240	85.06			52.43			73.91		
South Basin Area X	SB-01	0	5	cm	QADU	AAB-148	01-240	77.21			48.27			66.96		
RPD								***10***			***8***			***10***		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-230	76.01			46.60			65.79		
South Basin Area X	SB-12	4	6	ft	QADU	AAB-201	01-230	75.63			45.85			63.77		
RPD								***1***			***2***			***3***		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-239	84.64			58.25			74.54		
South Basin Area X	SB-15	0	5	cm	QADU	AAB-114	01-239	81.36			52.51			71.33		
RPD								***4***			***10***			***4***		
Matrix Spikes (percent recoveries)																
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-235	80.60			59.18			71.11		
Point Avisadero Area III	PA-43	0	5	cm	MS	AAB-087	01-333	85.29			35.61	N		70.8		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	01-212	73.96			41.74			64.74		
Point Avisadero Area III	PA-53	0	5	cm	MS	AAB-090	01-213	83.86			35.43	N		68.33		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-239	75.00			47.27			63.28		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-234	74.48			51.26			67.03		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-240	104.2			59.98			84.13		
South Basin Area X	SB-14	0	5	cm	MS	AAB-138	01-229	90.04			43.37			71.74		
South Basin Area X	SB-21	0	5	cm	MS	AAB-102	01-313	165.14			130.72			134.66		
Alcatraz Environs	AL-64	0	5	cm	MS	AAB-098	01-230	78.79			48.05			70.77		

N Value is not within control limits.

Table B-28. Quality Control Data for Total Petroleum Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)										
					PB	STL-LA-E1E110000381B	E1E100247	6	U	
					PB	STL-LA-E1E160000340B	E1E150256	6	U	
					PB	STL-LA-E1E160000341B	E1E150256	6	U	
					PB	STL-LA-E1E310000353B	E1E300180	6	U	
					PB	STL-LA-E1E310000355B	E1E300180	6	U	
					PB	STL-LA-E1E290000451B	E1E250272	6	U	
					PB	STL-LA-E1E290000454B	E1E250272	6	U	
Laboratory Control Samples (percent recovery)										
					LCS	STL-LA-E1E110000381C	E1E100247	83		
					LCS	STL-LA-E1E160000340C	E1E150256	77		
					LCS	STL-LA-E1E160000341C	E1E150256	76		
					LCS	STL-LA-E1E310000353C	E1E300180	83		
					LCS	STL-LA-E1E310000355C	E1E300180	82		
					LCS	STL-LA-E1E290000451C	E1E250272	99		
					LCS	STL-LA-E1E290000454C	E1E250272	85		
Field duplicates (mg/kg dry weight)										
Eastern Wetland Area VIII	EW-33				SA	AAB-124	E1E300180	9	U	
Eastern Wetland Area VIII	EW-33				DU	AAB-106	E1E300180	9	U	
RPD								***NA***		
India Basin Area I	IB-59				SA	AAB-161	E1E150256	54		
India Basin Area I	IB-59				DU	AAB-163	E1E150256	71		
RPD								***27***		
Oil Reclamation Area IX	OR-29				SA	AAB-118	E1E300180	12	U	
Oil Reclamation Area IX	OR-29				DU	AAB-123	E1E300180	12	U	
RPD								**NA**		
Point Avisadero Area III	PA-39				SA	AAB-128	E1E150256	49		
Point Avisadero Area III	PA-39				DU	AAB-155	E1E150256	39		
RPD								***23***		
South Basin Area X	SB-12				SA	AAB-154	E1E240218	69		J
South Basin Area X	SB-12				DU	AAB-140	E1E240218	70		J
RPD								***1***		
Matrix Spike/Matrix Spike duplicates (percent recoveries)										
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084-C	E1E150256	66		
Point Avisadero Area III	PA-52	0	5	cm	MSD	AAB-084-C	E1E150256	75		
RPD								***13***		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105-C	E1E300180	76		
Eastern Wetland Area VIII	EW-36	0	5	cm	MSD	AAB-105-C	E1E300180	71		
RPD								***7***		
South Basin Area X	SB-02	0	5	cm	MS	AAB-143-C	E1E300180	69		
South Basin Area X	SB-02	0	5	cm	MSD	AAB-143-C	E1E300180	79		
RPD								***14***		
Paradise Cove	PC-63	0	5	cm	MS	AAB-162-C	E1E150256	66		
Paradise Cove	PC-63	0	5	cm	MSD	AAB-162-C	E1E150256	67		
RPD								***2***		

Table B-28. Quality Control Data for Total Petroleum Hydrocarbons in Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-31	2	4	ft	MS	AAB-239-C	E1E250272	86		
Eastern Wetland Area VIII	EW-31	2	4	ft	MSD	AAB-239-C	E1E250272	96		
RPD								***11***		
South Basin Area X	SB-20	0	2	ft	MS	AAB-250-C	E1E250272	46	N	
South Basin Area X	SB-20	0	2	ft	MSD	AAB-250-C	E1E250272	110		
RPD								***82***		

N Spiked sample recovery is not within control limits.
J Estimated value.
U The value was less than the IDL or the analyte was not detected.

Table B-29. Surrogate Recovery of Benzo(a)pyrene in Total Petroleum Hydrocarbon Analysis of Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	0	5	cm		AAB-158	E1E150256	89		
India Basin Area I	IB-55	0	5	cm		AAB-160	E1E150256	92		
India Basin Area I	IB-56	0	5	cm		AAB-159	E1E150256	88		
India Basin Area I	IB-57	0	5	cm		AAB-129	E1E150256	95		
India Basin Area I	IB-58	0	5	cm		AAB-130	E1E150256	92		
India Basin Area I	IB-59	0	5	cm		AAB-161	E1E150256	81		
India Basin Area I	IB-59	0	5	cm		AAB-163	E1E150256	96		
Point Avisadero Area III	PA-38	0	5	cm		AAB-133	E1E150256	77		
Point Avisadero Area III	PA-39	0	5	cm		AAB-128	E1E150256	86		
Point Avisadero Area III	PA-39	0	5	cm		AAB-155	E1E150256	88		
Point Avisadero Area III	PA-40	0	5	cm		AAB-132	E1E150256	90		
Point Avisadero Area III	PA-41	0	5	cm		AAB-092	E1E150256	97		
Point Avisadero Area III	PA-42	0	5	cm		AAB-086	E1E150256	97		
Point Avisadero Area III	PA-43	0	5	cm		AAB-087	E1E150256	91		
Point Avisadero Area III	PA-44	0	5	cm		AAB-091	E1E150256	91		
Point Avisadero Area III	PA-45	0	5	cm		AAB-126	E1E100247	95		
Point Avisadero Area III	PA-46	0	5	cm		AAB-127	E1E150256	91		
Point Avisadero Area III	PA-47	0	5	cm		AAB-089	E1E150256	114		
Point Avisadero Area III	PA-48	0	5	cm		AAB-088	E1E150256	90		
Point Avisadero Area III	PA-49	0	5	cm		AAB-083	E1E100247	91		
Point Avisadero Area III	PA-50	0	5	cm		AAB-094	E1E150256	78		
Point Avisadero Area III	PA-51	0	5	cm		AAB-085	E1E150256	97		
Point Avisadero Area III	PA-52	0	5	cm		AAB-084	E1E150256	97		
Point Avisadero Area III	PA-53	0	5	cm		AAB-090	E1E150256	82		
Point Avisadero Area III	PA-70	0	5	cm		AAB-137	E1E150256	88		
Point Avisadero Area III	PA-71	0	5	cm		AAB-136	E1E150256	82		
Point Avisadero Area III	PA-72	0	5	cm		AAB-135	E1E150256	85		
Eastern Wetland Area VIII	EW-30	0	5	cm		AAB-107	E1E300180	75		
Eastern Wetland Area VIII	EW-31	0	5	cm		AAB-104	E1E240218	73		
Eastern Wetland Area VIII	EW-32	0	5	cm		AAB-095	E1E240218	79		
Eastern Wetland Area VIII	EW-33	0	5	cm		AAB-106	E1E300180	77		
Eastern Wetland Area VIII	EW-33	0	5	cm		AAB-124	E1E300180	86		
Eastern Wetland Area VIII	EW-34	0	5	cm		AAB-108	E1E300180	90		
Eastern Wetland Area VIII	EW-35	0	5	cm		AAB-097	E1E240218	89		
Eastern Wetland Area VIII	EW-36	0	5	cm		AAB-105	E1E300180	81		
Eastern Wetland Area VIII	EW-37	0	5	cm		AAB-142	E1E240218	89		
Oil Reclamation Area IX	OR-24	0	5	cm		AAB-125	E1E300180	79		
Oil Reclamation Area IX	OR-25	0	5	cm		AAB-103	E1E240218	71		
Oil Reclamation Area IX	OR-26	0	5	cm		AAB-116	E1E300180	76		
Oil Reclamation Area IX	OR-27	0	5	cm		AAB-117	E1E300180	80		
Oil Reclamation Area IX	OR-28	0	5	cm		AAB-096	E1E240218	100		
Oil Reclamation Area IX	OR-29	0	5	cm		AAB-118	E1E300180	74		
Oil Reclamation Area IX	OR-29	0	5	cm		AAB-123	E1E300180	77		
South Basin Area X	SB-01	0	5	cm		AAB-148	E1E300180	90		
South Basin Area X	SB-02	0	5	cm		AAB-143	E1E300180	81		
South Basin Area X	SB-03	0	5	cm		AAB-122	E1E300180	86		
South Basin Area X	SB-04	0	5	cm		AAB-121	E1E300180	69		
South Basin Area X	SB-05	0	5	cm		AAB-141	E1E240218	81		
South Basin Area X	SB-06	0	5	cm		AAB-120	E1E300180	80		
South Basin Area X	SB-07	0	5	cm		AAB-119	E1E300180	77		
South Basin Area X	SB-08	0	5	cm		AAB-115	E1E300180	78		
South Basin Area X	SB-09	0	5	cm		AAB-145	E1E240218	85		
South Basin Area X	SB-10	0	5	cm		AAB-144	E1E240218	81		
South Basin Area X	SB-11	0	5	cm		AAB-139	E1E240218	87		
South Basin Area X	SB-12	0	5	cm		AAB-140	E1E240218	82		
South Basin Area X	SB-12	0	5	cm		AAB-154	E1E240218	84		
South Basin Area X	SB-13	0	5	cm		AAB-113	E1E300180	74		
South Basin Area X	SB-14	0	5	cm		AAB-138	E1E240218	79		
South Basin Area X	SB-15	0	5	cm		AAB-114	E1E300180	71		
South Basin Area X	SB-16	0	5	cm		AAB-112	E1E300180	72		
South Basin Area X	SB-17	0	5	cm		AAB-146	E1E240218	79		
South Basin Area X	SB-18	0	5	cm		AAB-100	E1E240218	89		
South Basin Area X	SB-19	0	5	cm		AAB-101	E1E240218	80		
South Basin Area X	SB-20	0	5	cm		AAB-109	E1E300180	83		
South Basin Area X	SB-21	0	5	cm		AAB-102	E1E240218	89		
South Basin Area X	SB-22	0	5	cm		AAB-111	E1E300180	82		
South Basin Area X	SB-23	0	5	cm		AAB-099	E1E240218	85		

Table B-29. Surrogate Recovery of Benzo(a)pyrene in Total Petroleum Hydrocarbon Analysis of Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Alameda Buoy	AB-67	0	5	cm		AAB-157	E1E150256	92		
Alcatraz Environs	AL-64	0	5	cm		AAB-098	E1E240218	83		
Bay Farm	BF-66	0	5	cm		AAB-156	E1E150256	82		
Paradise Cove	PC-63	0	5	cm		AAB-162	E1E150256	63		
Red Rock	RR-65	0	5	cm		AAB-165	E1E100247	79		
India Basin Area I	IB-56	0	2	ft		AAB-205	E1E250272	80		
India Basin Area I	IB-56	2	4	ft		AAB-206	E1E250272	71		
India Basin Area I	IB-56	4	6	ft		AAB-207	E1E250272	80		
India Basin Area I	IB-59	0	2	ft		AAB-247	E1E250272	74		
India Basin Area I	IB-59	2	4	ft		AAB-248	E1E250272	74		
India Basin Area I	IB-59	4	6	ft		AAB-249	E1E250272	88		
Point Avisadero Area III	PA-40	0	2	ft		AAB-244	E1E250272	84		
Point Avisadero Area III	PA-40	2	4	ft		AAB-245	E1E250272	84		
Point Avisadero Area III	PA-41	0	2	ft		AAB-196	E1E240218	82		
Point Avisadero Area III	PA-41	2	4	ft		AAB-197	E1E240218	92		
Point Avisadero Area III	PA-41	4	6	ft		AAB-198	E1E240218	96		
Point Avisadero Area III	PA-44	0	2	ft		AAB-226	E1E240218	78		
Point Avisadero Area III	PA-44	2	4	ft		AAB-227	E1E240218	81		
Point Avisadero Area III	PA-44	4	6	ft		AAB-228	E1E240218	81		
Point Avisadero Area III	PA-47	0	2	ft		AAB-223	E1E240218	93		
Point Avisadero Area III	PA-47	2	4	ft		AAB-224	E1E240218	83		
Point Avisadero Area III	PA-47	4	6	ft		AAB-225	E1E240218	74		
Point Avisadero Area III	PA-49	0	2	ft		AAB-232	E1E240218	71		
Point Avisadero Area III	PA-49	2	4	ft		AAB-233	E1E240218	76		
Point Avisadero Area III	PA-49	4	6	ft		AAB-234	E1E240218	80		
Point Avisadero Area III	PA-52	0	2	ft		AAB-229	E1E240218	69		
Point Avisadero Area III	PA-52	2	4	ft		AAB-230	E1E240218	74		
Point Avisadero Area III	PA-52	4	6	ft		AAB-231	E1E240218	99		
Eastern Wetland Area VIII	EW-31	0	2	ft		AAB-238	E1E250272	76		
Eastern Wetland Area VIII	EW-31	2	4	ft		AAB-239	E1E250272	94		
Eastern Wetland Area VIII	EW-31	4	6	ft		AAB-240	E1E250272	93		
Eastern Wetland Area VIII	EW-36	0	2	ft		AAB-262	E1E250272	91		
Eastern Wetland Area VIII	EW-36	2	4	ft		AAB-263	E1E250272	80		
Eastern Wetland Area VIII	EW-36	4	6	ft		AAB-264	E1E250272	73		
Oil Reclamation Area IX	OR-24	0	2	ft		AAB-241	E1E250272	87		
Oil Reclamation Area IX	OR-24	2	4	ft		AAB-242	E1E250272	70		
Oil Reclamation Area IX	OR-24	4	6	ft		AAB-243	E1E250272	78		
Oil Reclamation Area IX	OR-28	0	2	ft		AAB-220	E1E240218	66		
Oil Reclamation Area IX	OR-28	2	4	ft		AAB-221	E1E240218	83		
Oil Reclamation Area IX	OR-28	4	6	ft		AAB-222	E1E240218	80		
South Basin Area X	SB-01	0	2	ft		AAB-259	E1E250272	118		
South Basin Area X	SB-01	2	4	ft		AAB-260	E1E250272	97		
South Basin Area X	SB-01	4	6	ft		AAB-261	E1E250272	64		
South Basin Area X	SB-03	0	2	ft		AAB-208	E1E250272	97		
South Basin Area X	SB-03	2	4	ft		AAB-209	E1E250272	74		
South Basin Area X	SB-03	4	6	ft		AAB-210	E1E250272	85		
South Basin Area X	SB-06	0	2	ft		AAB-202	E1E250272	76		
South Basin Area X	SB-06	2	4	ft		AAB-203	E1E250272	83		
South Basin Area X	SB-06	4	6	ft		AAB-204	E1E250272	69		
South Basin Area X	SB-07	0	2	ft		AAB-235	E1E250272	98		
South Basin Area X	SB-07	2	4	ft		AAB-236	E1E250272	81		
South Basin Area X	SB-07	4	6	ft		AAB-237	E1E250272	81		
South Basin Area X	SB-12	0	2	ft		AAB-199	E1E240218	93		
South Basin Area X	SB-12	2	4	ft		AAB-200	E1E240218	87		
South Basin Area X	SB-12	4	6	ft		AAB-201	E1E240218	85		
South Basin Area X	SB-16	0	2	ft		AAB-256	E1E250272	76		
South Basin Area X	SB-16	2	4	ft		AAB-257	E1E250272	74		
South Basin Area X	SB-16	4	6	ft		AAB-258	E1E250272	72		
South Basin Area X	SB-20	0	2	ft		AAB-250	E1E250272	99		
South Basin Area X	SB-20	2	4	ft		AAB-251	E1E250272	112		
South Basin Area X	SB-20	4	6	ft		AAB-252	E1E250272	82		
South Basin Area X	SB-22	0	2	ft		AAB-253	E1E250272	91		
South Basin Area X	SB-22	2	4	ft		AAB-254	E1E250272	91		
South Basin Area X	SB-22	4	6	ft		AAB-255	E1E250272	74		

Table B-29. Surrogate Recovery of Benzo(a)pyrene in Total Petroleum Hydrocarbon Analysis of Sediment, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Procedural Blank (percent recoveries)										
					PB	STL-LA-E1E110000381B	E1E100247	86		
					PB	STL-LA-E1E160000340B	E1E150256	83		
					PB	STL-LA-E1E160000341B	E1E150256	69		
					PB	STL-LA-E1E290000451B	E1E250272	91		
					PB	STL-LA-E1E290000454B	E1E250272	90		
					PB	STL-LA-E1E310000353B	E1E300180	89		
					PB	STL-LA-E1E310000355B	E1E300180	84		
Laboratory Control Sample (percent recoveries)										
					LCS	STL-LA-E1E110000381C	E1E100247	86		
					LCS	STL-LA-E1E160000340C	E1E150256	86		
					LCS	STL-LA-E1E160000341C	E1E150256	82		
					LCS	STL-LA-E1E290000451C	E1E250272	91		
					LCS	STL-LA-E1E290000454C	E1E250272	91		
					LCS	STL-LA-E1E310000353C	E1E300180	85		
					LCS	STL-LA-E1E310000355C	E1E300180	84		
Matrix Spikes (percent recoveries)										
Eastern Wetland Area VIII	EW-31	2	4	ft	MS	AAB-239-C	E1E250272	86		
Eastern Wetland Area VIII	EW-31	2	4	ft	MSD	AAB-239-C	E1E250272	89		
RPD								***3***		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	E1E300180	78		
Eastern Wetland Area VIII	EW-36	0	5	cm	MSD	AAB-105	E1E300180	74		
RPD								***5***		
Paradise Cove	PC-63	0	5	cm	MS	AAB-162	E1E150256	64		
Paradise Cove	PC-63	0	5	cm	MSD	AAB-162	E1E150256	74		
RPD								***14***		
Point Avisadero Area III	PA-52	0	5	cm	MS	AAB-084	E1E150256	85		
Point Avisadero Area III	PA-52	0	5	cm	MSD	AAB-084	E1E150256	96		
RPD								***12***		
South Basin Area X	SB-02	0	5	cm	MS	AAB-143	E1E300180	78		
South Basin Area X	SB-02	0	5	cm	MSD	AAB-143	E1E300180	90		
RPD								***14***		
South Basin Area X	SB-20	0	2	ft	MS	AAB-250-C	E1E250272	94		
South Basin Area X	SB-20	0	2	ft	MSD	AAB-250-C	E1E250272	101		
RPD								***7***		

Table B-30. Quality Control Data for Butyltins in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg dry weight)																			
					PB	BDO-YX21PB	01-214	1.03	U		1.95	U		1.39	U		2.45	U	
					PB	BDO-YX25PB	01-215	1.19	U		2.25	U		1.61	U		2.82	U	
					PB	BDO-YX62PB	01-226	1.03	U		1.95	U		1.39	U		2.45	U	
					PB	BDO-YX66PB	01-227	0.86	U		1.63	U		1.16	U		2.04	U	
					PB	BDO-YY04PB	01-236	0.86	U		1.63	U		1.16	U		2.04	U	
					PB	BDO-YY08PB	01-237	0.91	U		1.72	U		1.23	U		2.16	U	
					PB	BDO-YY21PB	01-241	0.82	U		1.54	U		1.10	U		1.93	U	
					PB	BDO-YY25PB	01-242	1.03	U		1.95	U		1.39	U		2.45	U	
Laboratory Control Samples (percent recoveries)																			
					LCS	BDO-YX22LCS	01-214	47.44			109.08			105.58			91.49		
					LCS	BDO-YX26LCS	01-215	25.52			99.35			102.89			86.17		
					LCS	BDO-YX63LCS	01-226	10.45			100.97			97.95			44.31		
					LCS	BDO-YX67LCS	01-227	6.19			99.41			104.56			65.46		
					LCS	BDO-YY05LCS	01-236	21.27			82.79			101.55			74.10		
					LCS	BDO-YY09LCS	01-237	15.95			104.10			105.22			71.25		
					LCS	BDO-YY22LCS	01-241	21.43			85.58			98.10			70.27		
					LCS	BDO-YY26LCS	01-242	12.02			93.16			105.42			63.67		
Field duplicates (relative percent difference)																			
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-214	1.16	U		10.86			17.73			2.76	U	
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-215	1.17	U	UJ	12.74			15.87			2.78	U	
RPD								***NA***			***16***			***11***			***NA***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-214	1.00	U		33.55			131.21			2.38	U	
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-214	1.07	U		47.99			105.76			2.53	U	
RPD								***NA***			***35***			***21***			***NA***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-241	0.66	U	UJ	1.25	U		0.89	U		1.56	U	
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-241	0.66	U	UJ	1.25	U		0.89	U		1.57	U	
RPD								***NA***			***NA***			***NA***			***NA***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-242	0.80	U	UJ	2.69			3.30			1.90	U	
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-241	0.77	U	UJ	3.48			6.21			1.83	U	
RPD								***NA***			***26***			***61***			***NA***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-226	1.16	U	UJ	17.06			15.35			2.75	U	
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-226	1.12	U	UJ	17.58			16.06			2.66	U	
RPD								***NA***			***3***			***4***			***NA***		

Table B-30. Quality Control Data for Butyltins in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ ID	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical duplicates (relative percent difference)																			
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-215	1.07	U	UJ	2.02	U		14.70		J	2.53	U	
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-215	1.08	U		2.05	U		8.45			2.56	U	
RPD								***NA***			***NA***			***54***			***NA***		
Matrix Spike/Matrix Spike duplicates (percent recoveries)																			
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-237	0			97.91			92.29			70.46		
India Basin Area I	IB-56	4	6	ft	MSD	AAB-207	01-237	0			96.85			97.29			77.93		
RPD								***NA***			***1***			***5***			***10***		
India Basin Area I	IB-59	0	5	cm	MS	AAB-163	01-215	16.78			85.25			81.10			83.05		
India Basin Area I	IB-59	0	5	cm	MSD	AAB-163	01-215	19.89			97.17			100.36			86.51		
RPD								***17***			***13***			***21***			***4***		
Point Avisadero Area III	PA-49	0	5	cm	MS	AAB-083	01-214	41.64			128.04	N		131.80	N		117.49		
Point Avisadero Area III	PA-49	0	5	cm	MSD	AAB-083	01-214	28.19			116.40			113.81			100.74		
RPD								***39***			***10***			***15***			***15***		
Eastern Wetland Area VIII	EW-32	0	5	cm	MS	AAB-095	01-226	12.38			97.09			117.88			89.53		
Eastern Wetland Area VIII	EW-32	0	5	cm	MSD	AAB-095	01-226	10.35			91.93			92.74			85.10		
RPD								***18***			***5***			***24***			***5***		
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-241	7.72			89.29			97.63			75.05		
Eastern Wetland Area VIII	EW-36	0	5	cm	MSD	AAB-105	01-241	8.16			106.49			119.04			82.75		
RPD								***5***			***18***			***20***			***10***		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-236	0			74.89			83.39			70.30		
South Basin Area X	SB-07	0	2	ft	MSD	AAB-235	01-236	0			89.31			99.34			78.34		
RPD								***NA***			***18***			***17***			***11***		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-242	6.55			57.35			59.12			64.52		
South Basin Area X	SB-08	0	5	cm	MSD	AAB-115	01-242	6.86			63.92			68.47			69.89		
RPD								***5***			***11***			***15***			***8***		
South Basin Area X	SB-23	0	5	cm	MS	AAB-099	01-227	0			79.28			0	N		71.30		
South Basin Area X	SB-23	0	5	cm	MSD	AAB-099	01-227	10.91			71.55			0	N		91.40		
RPD								***200***			***10***			***NA***			***25***		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table B-31. Surrogate Recoveries for Butyltins in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recovery (percent)		
								TPET (SIS)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
India Basin Area I	IB-54	0	5	cm	SA	AAB-158	01-214	73.85		
India Basin Area I	IB-55	0	5	cm	SA	AAB-160	01-214	83.15		
India Basin Area I	IB-56	0	5	cm	SA	AAB-159	01-214	79.63		
India Basin Area I	IB-57	0	5	cm	SA	AAB-129	01-214	81.88		
India Basin Area I	IB-58	0	5	cm	SA	AAB-130	01-214	80.05		
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-214	63.67		
Point Avisadero Area III	PA-38	0	5	cm	SA	AAB-133	01-215	70.53		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-214	80.66		
Point Avisadero Area III	PA-40	0	5	cm	SA	AAB-132	01-215	75.80		
Point Avisadero Area III	PA-41	0	5	cm	SA	AAB-092	01-215	87.60		
Point Avisadero Area III	PA-42	0	5	cm	SA	AAB-086	01-214	68.85		
Point Avisadero Area III	PA-43	0	5	cm	SA	AAB-087	01-214	84.36		
Point Avisadero Area III	PA-44	0	5	cm	SA	AAB-091	01-215	71.79		
Point Avisadero Area III	PA-45	0	5	cm	SA	AAB-126	01-214	87.36		
Point Avisadero Area III	PA-46	0	5	cm	SA	AAB-127	01-214	84.90		
Point Avisadero Area III	PA-47	0	5	cm	SA	AAB-089	01-214	90.89		
Point Avisadero Area III	PA-48	0	5	cm	SA	AAB-088	01-214	83.03		
Point Avisadero Area III	PA-49	0	5	cm	SA	AAB-083	01-214	87.01		
Point Avisadero Area III	PA-50	0	5	cm	SA	AAB-094	01-215	78.98		
Point Avisadero Area III	PA-51	0	5	cm	SA	AAB-085	01-214	48.05		
Point Avisadero Area III	PA-52	0	5	cm	SA	AAB-084	01-214	89.42		
Point Avisadero Area III	PA-53	0	5	cm	SA	AAB-090	01-215	74.03		
Point Avisadero Area III	PA-70	0	5	cm	SA	AAB-137	01-215	72.23		
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-215	70.33		
Point Avisadero Area III	PA-72	0	5	cm	SA	AAB-135	01-215	67.17		
Eastern Wetland Area VIII	EW-30	0	5	cm	SA	AAB-107	01-241	59.16		
Eastern Wetland Area VIII	EW-31	0	5	cm	SA	AAB-104	01-227	62.55		
Eastern Wetland Area VIII	EW-32	0	5	cm	SA	AAB-095	01-226	64.56		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-241	78.31		
Eastern Wetland Area VIII	EW-34	0	5	cm	SA	AAB-108	01-241	82.60		
Eastern Wetland Area VIII	EW-35	0	5	cm	SA	AAB-097	01-226	48.76		
Eastern Wetland Area VIII	EW-36	0	5	cm	SA	AAB-105	01-241	80.32		
Eastern Wetland Area VIII	EW-37	0	5	cm	SA	AAB-142	01-226	60.92		
Oil Reclamation Area IX	OR-24	0	5	cm	SA	AAB-125	01-242	87.23		
Oil Reclamation Area IX	OR-25	0	5	cm	SA	AAB-103	01-227	51.52		
Oil Reclamation Area IX	OR-26	0	5	cm	SA	AAB-116	01-242	78.52		
Oil Reclamation Area IX	OR-27	0	5	cm	SA	AAB-117	01-242	80.13		
Oil Reclamation Area IX	OR-28	0	5	cm	SA	AAB-096	01-226	58.48		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-242	84.25		
South Basin Area X	SB-01	0	5	cm	SA	AAB-148	01-242	82.83		
South Basin Area X	SB-02	0	5	cm	SA	AAB-143	01-242	68.81		
South Basin Area X	SB-03	0	5	cm	SA	AAB-122	01-242	75.24		
South Basin Area X	SB-04	0	5	cm	SA	AAB-121	01-242	65.11		
South Basin Area X	SB-05	0	5	cm	SA	AAB-141	01-226	63.74		
South Basin Area X	SB-06	0	5	cm	SA	AAB-120	01-242	77.57		
South Basin Area X	SB-07	0	5	cm	SA	AAB-119	01-242	88.53		
South Basin Area X	SB-08	0	5	cm	SA	AAB-115	01-242	73.67		
South Basin Area X	SB-09	0	5	cm	SA	AAB-145	01-236	64.10		
South Basin Area X	SB-10	0	5	cm	SA	AAB-144	01-227	63.55		
South Basin Area X	SB-11	0	5	cm	SA	AAB-139	01-226	69.11		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-226	61.88		
South Basin Area X	SB-13	0	5	cm	SA	AAB-113	01-241	58.89		
South Basin Area X	SB-14	0	5	cm	SA	AAB-138	01-226	62.70		
South Basin Area X	SB-15	0	5	cm	SA	AAB-114	01-241	77.48		
South Basin Area X	SB-16	0	5	cm	SA	AAB-112	01-241	85.01		
South Basin Area X	SB-17	0	5	cm	SA	AAB-146	01-227	60.63		
South Basin Area X	SB-18	0	5	cm	SA	AAB-100	01-227	59.85		
South Basin Area X	SB-19	0	5	cm	SA	AAB-101	01-227	62.87		
South Basin Area X	SB-20	0	5	cm	SA	AAB-109	01-241	75.20		
South Basin Area X	SB-21	0	5	cm	SA	AAB-102	01-227	62.69		
South Basin Area X	SB-22	0	5	cm	SA	AAB-111	01-241	74.01		
South Basin Area X	SB-23	0	5	cm	SA	AAB-099	01-227	64.08		

Table B-31. Surrogate Recoveries for Butyltins in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recovery (percent)		
								TPET (SIS)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Alameda Buoy	AB-67	0	5	cm	SA	AAB-157	01-214	86.31		
Alcatraz Environs	AL-64	0	5	cm	SA	AAB-098	01-227	56.75		
Bay Farm Borrow Pit	BF-66	0	5	cm	SA	AAB-156	01-214	82.59		
Paradise Cove	PC-63	0	5	cm	SA	AAB-162	01-215	66.56		
Red Rock	RR-65	0	5	cm	SA	AAB-165	01-214	72.71		
India Basin Area I	IB-56	0	2	ft	SA	AAB-205	01-236	71.02		
India Basin Area I	IB-56	2	4	ft	SA	AAB-206	01-236	58.20		
India Basin Area I	IB-56	4	6	ft	SA	AAB-207	01-237	71.80		
India Basin Area I	IB-59	0	2	ft	SA	AAB-247	01-236	42.13		
India Basin Area I	IB-59	2	4	ft	SA	AAB-248	01-236	67.35		
India Basin Area I	IB-59	4	6	ft	SA	AAB-249	01-236	57.47		
Point Avisadero Area III	PA-40	0	2	ft	SA	AAB-244	01-236	81.03		
Point Avisadero Area III	PA-40	2	4	ft	SA	AAB-245	01-236	94.97		
Point Avisadero Area III	PA-41	0	2	ft	SA	AAB-196	01-226	97.73		
Point Avisadero Area III	PA-41	2	4	ft	SA	AAB-197	01-226	46.71		
Point Avisadero Area III	PA-41	4	6	ft	SA	AAB-198	01-226	67.22		
Point Avisadero Area III	PA-44	0	2	ft	SA	AAB-226	01-226	57.51		
Point Avisadero Area III	PA-44	2	4	ft	SA	AAB-227	01-226	67.32		
Point Avisadero Area III	PA-44	4	6	ft	SA	AAB-228	01-227	59.44		
Point Avisadero Area III	PA-47	0	2	ft	SA	AAB-223	01-226	41.56		
Point Avisadero Area III	PA-47	2	4	ft	SA	AAB-224	01-226	59.04		
Point Avisadero Area III	PA-47	4	6	ft	SA	AAB-225	01-226	55.11		
Point Avisadero Area III	PA-49	0	2	ft	SA	AAB-232	01-227	56.36		
Point Avisadero Area III	PA-49	2	4	ft	SA	AAB-233	01-227	40.01		
Point Avisadero Area III	PA-49	4	6	ft	SA	AAB-234	01-227	58.53		
Point Avisadero Area III	PA-52	0	2	ft	SA	AAB-229	01-227	44.54		
Point Avisadero Area III	PA-52	2	4	ft	SA	AAB-230	01-227	65.63		
Point Avisadero Area III	PA-52	4	6	ft	SA	AAB-231	01-227	50.64		
Eastern Wetland Area VIII	EW-31	0	2	ft	SA	AAB-238	01-236	52.59		
Eastern Wetland Area VIII	EW-31	2	4	ft	SA	AAB-239	01-236	60.57		
Eastern Wetland Area VIII	EW-31	4	6	ft	SA	AAB-240	01-236	60.95		
Eastern Wetland Area VIII	EW-36	0	2	ft	SA	AAB-262	01-237	66.66		
Eastern Wetland Area VIII	EW-36	2	4	ft	SA	AAB-263	01-237	66.06		
Eastern Wetland Area VIII	EW-36	4	6	ft	SA	AAB-264	01-237	58.94		
Oil Reclamation Area IX	OR-24	0	2	ft	SA	AAB-241	01-236	65.73		
Oil Reclamation Area IX	OR-24	2	4	ft	SA	AAB-242	01-236	59.82		
Oil Reclamation Area IX	OR-24	4	6	ft	SA	AAB-243	01-236	59.38		
Oil Reclamation Area IX	OR-28	0	2	ft	SA	AAB-220	01-226	41.45		
Oil Reclamation Area IX	OR-28	2	4	ft	SA	AAB-221	01-226	55.50		
Oil Reclamation Area IX	OR-28	4	6	ft	SA	AAB-222	01-226	59.07		
South Basin Area X	SB-01	0	2	ft	SA	AAB-259	01-237	40.62		
South Basin Area X	SB-01	2	4	ft	SA	AAB-260	01-237	52.29		
South Basin Area X	SB-01	4	6	ft	SA	AAB-261	01-237	61.31		
South Basin Area X	SB-03	0	2	ft	SA	AAB-208	01-237	55.98		
South Basin Area X	SB-03	2	4	ft	SA	AAB-209	01-237	79.69		
South Basin Area X	SB-03	4	6	ft	SA	AAB-210	01-237	70.92		
South Basin Area X	SB-06	0	2	ft	SA	AAB-202	01-236	60.68		
South Basin Area X	SB-06	2	4	ft	SA	AAB-203	01-236	63.67		
South Basin Area X	SB-06	4	6	ft	SA	AAB-204	01-236	69.39		
South Basin Area X	SB-07	0	2	ft	SA	AAB-235	01-236	34.35		
South Basin Area X	SB-07	2	4	ft	SA	AAB-236	01-236	55.11		
South Basin Area X	SB-07	4	6	ft	SA	AAB-237	01-236	60.15		
South Basin Area X	SB-12	0	2	ft	SA	AAB-199	01-227	43.75		
South Basin Area X	SB-12	2	4	ft	SA	AAB-200	01-227	49.79		
South Basin Area X	SB-12	4	6	ft	SA	AAB-201	01-227	54.99		
South Basin Area X	SB-16	0	2	ft	SA	AAB-256	01-237	73.64		
South Basin Area X	SB-16	2	4	ft	SA	AAB-257	01-237	67.95		
South Basin Area X	SB-16	4	6	ft	SA	AAB-258	01-237	46.47		
South Basin Area X	SB-20	0	2	ft	SA	AAB-250	01-237	46.60		
South Basin Area X	SB-20	2	4	ft	SA	AAB-251	01-237	51.11		
South Basin Area X	SB-20	4	6	ft	SA	AAB-252	01-237	54.72		
South Basin Area X	SB-22	0	2	ft	SA	AAB-253	01-237	64.38		
South Basin Area X	SB-22	2	4	ft	SA	AAB-254	01-237	63.06		
South Basin Area X	SB-22	4	6	ft	SA	AAB-255	01-237	62.82		

Table B-31. Surrogate Recoveries for Butyltins in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recovery (percent)		
								TPET (SIS)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Procedural Blanks (percent recoveries)										
					PB	BDO-YX21PB	01-214	74.21		
					PB	BDO-YX25PB	01-215	59.47		
					PB	BDO-YX62PB	01-226	48.35		
					PB	BDO-YX66PB	01-227	58.52		
					PB	BDO-YY04PB	01-236	58.52		
					PB	BDO-YY04PB	01-236	69.20		
					PB	BDO-YY08PB	01-237	61.36		
					PB	BDO-YY21PB	01-241	55.29		
Laboratory Control Samples (percent recoveries)										
					LCS	BDO-YX22LCS	01-214	81.03		
					LCS	BDO-YX26LCS	01-215	72.55		
					LCS	BDO-YX63LCS	01-226	53.37		
					LCS	BDO-YX67LCS	01-227	60.56		
					LCS	BDO-YY05LCS	01-236	58.83		
					LCS	BDO-YY09LCS	01-237	66.64		
					LCS	BDO-YY22LCS	01-241	82.04		
					LCS	BDO-YY26LCS	01-242	68.51		
Field duplicates (relative percent difference)										
India Basin Area I	IB-59	0	5	cm	SA	AAB-161	01-214	63.67		
India Basin Area I	IB-59	0	5	cm	DU	AAB-163	01-215	84.74		
RPD								***28***		
Point Avisadero Area III	PA-39	0	5	cm	SA	AAB-128	01-214	80.66		
Point Avisadero Area III	PA-39	0	5	cm	DU	AAB-155	01-214	69.45		
RPD								***15***		
Eastern Wetland Area VIII	EW-33	0	5	cm	SA	AAB-124	01-241	78.31		
Eastern Wetland Area VIII	EW-33	0	5	cm	DU	AAB-106	01-241	73.40		
RPD								***6***		
Oil Reclamation Area IX	OR-29	0	5	cm	SA	AAB-118	01-242	84.25		
Oil Reclamation Area IX	OR-29	0	5	cm	DU	AAB-123	01-241	82.85		
RPD								***2***		
South Basin Area X	SB-12	0	5	cm	SA	AAB-154	01-226	61.88		
South Basin Area X	SB-12	0	5	cm	DU	AAB-140	01-226	65.38		
RPD								***6***		
Analytical duplicates (relative percent difference)										
Point Avisadero Area III	PA-71	0	5	cm	SA	AAB-136	01-215	70.33		
Point Avisadero Area III	PA-71	0	5	cm	QADU	AAB-136	01-215	60.49		
RPD								***15***		
Matrix Spike/Matrix Spike Duplicates (percent recoveries)										
India Basin Area I	IB-56	4	6	ft	MS	AAB-207	01-237	64.73		
India Basin Area I	IB-56	4	6	ft	MSD	AAB-207	01-237	71.02		
RPD								***9***		
India Basin Area I	IB-59	0	5	cm	MS	AAB-163	01-215	88.25		
India Basin Area I	IB-59	0	5	cm	MSD	AAB-163	01-215	86.36		
RPD								***2***		
Point Avisadero Area III	PA-49	0	5	cm	MS	AAB-083	01-214	61.71		
Point Avisadero Area III	PA-49	0	5	cm	MSD	AAB-083	01-214	76.92		
RPD								***22***		
Eastern Wetland Area VIII	EW-32	0	5	cm	MS	AAB-095	01-226	49.89		
Eastern Wetland Area VIII	EW-32	0	5	cm	MSD	AAB-095	01-226	59.51		
RPD								***18***		

Table B-31. Surrogate Recoveries for Butyltins in Sediment, Hunters Point Shipyard Parcel F Validation Study

								Surrogate Recovery (percent)		
								TPET (SIS)		
Area_Name	Station_ ID	Depth_ Top	Depth_ Bottom	Depth_ Unit	Field_ QC_ Code	Client_ Samp_ID	Lab_ Batch	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-36	0	5	cm	MS	AAB-105	01-241	70.92		
Eastern Wetland Area VIII	EW-36	0	5	cm	MSD	AAB-105	01-241	64.09		
RPD								***10***		
South Basin Area X	SB-07	0	2	ft	MS	AAB-235	01-236	80.92		
South Basin Area X	SB-07	0	2	ft	MSD	AAB-235	01-236	77.91		
RPD								***4***		
South Basin Area X	SB-08	0	5	cm	MS	AAB-115	01-242	89.87		
South Basin Area X	SB-08	0	5	cm	MSD	AAB-115	01-242	80.24		
RPD								***11***		
South Basin Area X	SB-23	0	5	cm	MS	AAB-099	01-227	48.19		
South Basin Area X	SB-23	0	5	cm	MSD	AAB-099	01-227	65.22		
RPD								***30***		

Table B-32. Metals in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Sample ID No.	Client_Samp_ID	Samp_Type	*ICP-MS* Ag	*ICP-AES* Al	*ICP-MS* As	*ICP-MS* Ba	*ICP-MS* Cd	*ICP-MS* Cr
Equipment Blanks (µg/L)										
Indian Basin Area I	Area I EB	1658-1 r1	AAB-001	SA	0.0213 U	12.4	0.154	7.21	0.0104 U	0.178
Point Avisadero Area III	Area III EB	1658-2 r1	AAB-002	SA	0.0213 U	9.54 U	0.162	7.41	0.0104 U	0.162
Eastern Wetland Area VIII	Area VIII EB	1658-36	AAB-003	SA	0.0213 U	14.0	0.180	7.46	0.0281	0.191
Oil Reclamation Area IX	Area IX EB	1658-38	AAB-005	SA	0.0213 U	18.1	0.252	7.42	0.0188	0.173
South Basin Area X	Area X EB	1658-37	AAB-004	SA	0.0213 U	25.3	0.283	7.35	0.0479	0.216
Procedural Blanks (µg/L)										
		Blank 1		PB	0.0213 U	9.54 U	0.03 U	0.0289 U	0.0104 U	0.0414
		Blank 2		PB	0.0213 U	--	0.03 U	0.0289 U	0.0104 U	0.0423
		Blank 3		PB	--	--	--	--	--	--
Blank Spikes (percent recovery)										
		Blank Spike			90%	103%	99%	108%	100%	104%
		Blank Spike			91%	--	98%	113%	104%	111%
Matrix Spikes (percent recovery)										
				MS	85%	--	111%	113%	107%	106%
				MS	88%	--	111%	107%	105%	109%
				MS	--	104%	--	--	--	--
				MS	--	--	--	--	--	--
Standard Reference Material (percent difference)										
		1643d Direct		SRM	2%	30% *	3%	3%	6%	4%
		1643d Direct		SRM	3%	--	4%	0%	6%	2%
		1643d Direct		SRM	8%	--	5%	1%	1%	3%
		1643d TRM		SRM	6%	--	6%	1%	3%	2%
		1643d TRM		SRM	8%	--	9%	1%	4%	5%
		1641d		SRM	--	--	--	--	--	--
Analytical Replicates (relative percent difference)										
Indian Basin Area I	Area I EB	1658-1 r1	AAB-001-E	SA	0.0213 U	12.4	0.154	7.21	0.0104 U	0.178
Indian Basin Area I	Area I EB	1658-1 r2	AAB-001-E	SA	0.0213 U	16.4	0.150	7.08	0.0104 U	0.203
RPD					**0%**	**28%**	**3%**	**2%**	**0%**	**13%**
Point Avisadero Area III	Area III EB	1658-2 r1	AAB-002-E	SA	0.0213 U	9.54 U	0.162	7.41	0.0104 U	0.162
Point Avisadero Area III	Area III EB	1658-2 r2	AAB-002-E	SA	--	--	--	--	--	--
RPD					--	--	--	--	--	--

U The value was less than the IDL or the analyte was not detected.
N Outside accuracy DQO (±25%)
* Outside presision DQO (SRM = ±20%; Dup = <30%)
-- No analysis

Table B-32. Metals in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Sample ID No.	Client_Samp_ID	Samp_Type	*ICP-MS* Cu	*ICP-MS* Co	*ICP-AES* Fe	*CVAF* Hg	*ICP-MS* Mn	*ICP-MS* Mo
Equipment Blanks (µg/L)										
Indian Basin Area I	Area I EB	1658-1 r1	AAB-001	SA	0.235	0.0603	4.09	0.000452	0.108	0.0147
Point Avisadero Area III	Area III EB	1658-2 r1	AAB-002	SA	0.125	0.0584	2.25 U	0.000481	0.583	0.0188 U
Eastern Wetland Area VIII	Area VIII EB	1658-36	AAB-003	SA	0.140	0.0692	2.25 U	0.000401	0.0896	0.0188 U
Oil Reclamation Area IX	Area IX EB	1658-38	AAB-005	SA	0.354	0.0603	10.3	0.00105	0.638	0.0201
South Basin Area X	Area X EB	1658-37	AAB-004	SA	0.192	0.0659	10.6	0.00176	0.643	0.0316
Procedural Blanks (µg/L)										
		Blank 1		PB	0.022 U	0.00346 U	2.25 U	0.000168 U	0.0118 U	0.0188 U
		Blank 2		PB	0.022 U	0.00346 U	--	0.000168 U	0.0118 U	0.025
		Blank 3		PB	--	--	--	0.000168 U	--	--
Blank Spikes (percent recovery)										
		Blank Spike			106%	109%	106%	104%	111%	108%
		Blank Spike			107%	108%	--	108%	109%	110%
Matrix Spikes (percent recovery)										
				MS	102%	108%	--	--	106%	112%
				MS	102%	108%	--	--	106%	113%
				MS	--	--	110%	--	--	--
				MS	--	--	--	105%	--	--
Standard Reference Material (percent difference)										
		1643d Direct		SRM	0%	6%	10%	--	5%	9%
		1643d Direct		SRM	0%	5%	--	--	2%	4%
		1643d Direct		SRM	4%	0%	--	--	2%	4%
		1643d TRM		SRM	2%	4%	--	--	3%	7%
		1643d TRM		SRM	1%	4%	--	--	3%	7%
		1641d		SRM	--	--	--	4%	--	--
Analytical Replicates (relative percent difference)										
Indian Basin Area I	Area I EB	1658-1 r1	AAB-001-E	SA	0.235	0.0603	4.09	0.000452	0.108	0.0147
Indian Basin Area I	Area I EB	1658-1 r2	AAB-001-E	SA	0.246	0.0688	3.03	--	0.104	0.0131
RPD					**5%**	**13%**	**30% ***	--	**4%**	**12%**
Point Avisadero Area III	Area III EB	1658-2 r1	AAB-002-E	SA	0.125	0.0584	2.25 U	0.000481	0.583	0.0188 U
Point Avisadero Area III	Area III EB	1658-2 r2	AAB-002-E	SA	--	--	--	0.000411	--	--
RPD					--	--	--	**16%**	--	--

U The value was less than the IDL or the analyte was not detected.
N Outside accuracy DQO (±25%)
* Outside presision DQO (SRM = ±20%; Dup = <30%)
-- No analysis

Table B-32. Metals in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Sample ID No.	Client_Samp_ID	Samp_Type	*ICP-MS* Ni	*ICP-MS* Pb	*ICP-MS* Sb	*ICP-MS* Se	*ICP-MS* V	*ICP-MS* Zn
Equipment Blanks (µg/L)										
Indian Basin Area I	Area I EB	1658-1 r1	AAB-001	SA	1.80	0.0381	0.0308	0.569 U	0.0322	7.65
Point Avisadero Area III	Area III EB	1658-2 r1	AAB-002	SA	1.83	0.313	0.0357	0.569 U	0.0377	7.40
Eastern Wetland Area VIII	Area VIII EB	1658-36	AAB-003	SA	1.86	0.0464	0.0403	0.569 U	0.0338	7.52
Oil Reclamation Area IX	Area IX EB	1658-38	AAB-005	SA	1.89	0.0902	0.0392	0.569 U	0.0485	7.71
South Basin Area X	Area X EB	1658-37	AAB-004	SA	1.87	0.234	0.0357	0.569 U	0.0623	10.3
Procedural Blanks (µg/L)										
		Blank 1		PB	0.0369 U	0.0164 U	0.0127 U	0.569 U	0.0129 U	0.0223 U
		Blank 2		PB	0.0369 U	0.0164 U	0.0127 U	0.569 U	0.0129 U	0.0223 U
		Blank 3		PB	--	--	--	--	--	--
Blank Spikes (percent recovery)										
		Blank Spike			107%	105%	102%	92%	108%	92%
		Blank Spike			106%	112%	106%	99%	110%	93%
Matrix Spikes (percent recovery)										
				MS	105%	108%	111%	116%	111%	103%
				MS	104%	105%	109%	119%	110%	109%
				MS	--	--	--	--	--	--
				MS	--	--	--	--	--	--
Standard Reference Material (percent difference)										
		1643d Direct		SRM	4%	7%	6%	13%	5%	7%
		1643d Direct		SRM	3%	3%	4%	12%	2%	2%
		1643d Direct		SRM	2%	0%	5%	10%	2%	1%
		1643d TRM		SRM	2%	2%	1%	1%	4%	7%
		1643d TRM		SRM	1%	4%	1%	8%	3%	8%
		1641d		SRM	--	--	--	--	--	--
Analytical Replicates (relative percent difference)										
Indian Basin Area I	Area I EB	1658-1 r1	AAB-001-E	SA	1.80	0.0381	0.0308	0.569 U	0.0322	7.65
Indian Basin Area I	Area I EB	1658-1 r2	AAB-001-E	SA	2.00	0.0384	0.0259	0.569 U	0.0408	7.69
RPD					**11%**	**1%**	**17%**	**0%**	**24%**	**1%**
Point Avisadero Area III	Area III EB	1658-2 r1	AAB-002-E	SA	1.83	0.313	0.0357	0.569 U	0.0377	7.40
Point Avisadero Area III	Area III EB	1658-2 r2	AAB-002-E	SA	--	--	--	--	--	--
RPD					--	--	--	--	--	--

U The value was less than the IDL or the analyte was not detected.
N Outside accuracy DQO (±25%)
* Outside presision DQO (SRM = ±20%; Dup = <30%)
-- No analysis

Table B-33. Polychlorinated Biphenyls as Congeners in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)																		
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	19.2	U		1.66	U		2.08	U		1.74	U		1.72	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	9.6	U		0.83	U		1.04	U		0.87	U		0.86	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	13.15	U		1.14	U		1.42	U		1.2	U		1.18	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	9.6	U		0.83	U		1.04	U		0.87	U		0.86	U
South Basin Area X	Area X EB	AAB-004	01-223	SA	12.15	U		1.05	U		1.31	U		1.1	U		1.09	U
Matrix Spikes (percent recoveries)																		
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	91.31			79.65			88.24			86.61			89.32	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	102.03			97.8			97.86			96.63			97.06	
South Basin Area X	Area X EB	AAB-004	01-223	MS	94.34			80.82			89.93			90			92.07	

U The value was less than the IDL or the analyte was not detected.
N The value is not within control limits.

Table B-33. Polychlorinated Biphenyls as Congeners in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)																			
Indian Basin Area I	Area I EB	AAB-001	01-205	SA		1.79	U		2.54	U		1.37	U		0.69	U		1.15	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA		0.89	U		1.27	U		0.69	U		0.35	U		0.58	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA		1.23	U		1.74	U		0.94	U		0.47	U		0.79	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA		0.89	U		1.27	U		0.69	U		0.35	U		0.58	U
South Basin Area X	Area X EB	AAB-004	01-223	SA		1.13	U		1.61	U		0.87	U		0.44	U		0.73	U
Matrix Spikes (percent recoveries)																			
Indian Basin Area I	Area I EB	AAB-001	01-205	MS		82.93			87.28			85.78			91.85			115.53	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS		88.6			97.34			88.15			96.8			123.44	N
South Basin Area X	Area X EB	AAB-004	01-223	MS		86.39			89.35			89.38			95.47			111.44	

U The value was less than the IDL or the analyte was not detected.
N The value is not within control limits.

Table B-33. Polychlorinated Biphenyls as Congeners in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)																			
Indian Basin Area I	Area I EB	AAB-001	01-205	SA		1.04	U		1.47	U		1.68	U		1.38	U		1.59	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA		0.52	U		0.74	U		0.84	U		0.69	U		0.8	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA		0.71	U		1.01	U		1.15	U		0.94	U		1.09	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA		0.52	U		0.74	U		0.84	U		0.69	U		0.8	U
South Basin Area X	Area X EB	AAB-004	01-223	SA		0.66	U		0.93	U		1.06	U		0.87	U		1.01	U
Matrix Spikes (percent recoveries)																			
Indian Basin Area I	Area I EB	AAB-001	01-205	MS		95.48			101.7			88.66			97.47			100.48	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS		99.49			88.05			85.83			108.93			146.07	N
South Basin Area X	Area X EB	AAB-004	01-223	MS		95.93			97.66			90.84			99.47			98.47	

U The value was less than the IDL or the analyte was not detected.
N The value is not within control limits.

Table B-33. Polychlorinated Biphenyls as Congeners in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Cl6(153)			Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)																			
Indian Basin Area I	Area I EB	AAB-001	01-205	SA		1.28	U		1.22	U		1.15	U		1.03	U		1.3	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA		0.64	U		0.61	U		0.58	U		0.52	U		0.65	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA		0.88	U		0.83	U		0.79	U		0.71	U		0.89	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA		0.64	U		0.61	U		0.58	U		0.52	U		0.65	U
South Basin Area X	Area X EB	AAB-004	01-223	SA		0.81	U		0.77	U		0.73	U		0.65	U		0.82	U
Matrix Spikes (percent recoveries)																			
Indian Basin Area I	Area I EB	AAB-001	01-205	MS		100.72			98.7			92.35			101.67			97.38	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS		99.5			100.85			89			99.91			96.88	
South Basin Area X	Area X EB	AAB-004	01-223	MS		99.22			103.46			95.95			101.32			100.37	

U The value was less than the IDL or the analyte was not detected.
N The value is not within control limits.

Table B-33. Polychlorinated Biphenyls as Congeners in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Cl9(206)			Cl10(209)		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)											
Indian Basin Area I	Area I EB	AAB-001	01-205	SA		1.46	U		1.52	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA		0.73	U		0.76	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA		1	U		1.04	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA		0.73	U		0.76	U	
South Basin Area X	Area X EB	AAB-004	01-223	SA		0.92	U		0.96	U	
Matrix Spikes (percent recoveries)											
Indian Basin Area I	Area I EB	AAB-001	01-205	MS		94.63			103.12		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS		96.61			104.82		
South Basin Area X	Area X EB	AAB-004	01-223	MS		101.92			110.1		

U The value was less than the IDL or the analyte was not detected.
N The value is not within control limits.

Table B-34. Surrogate Recoveries of Polychlorinated Biphenyls as Congeners in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Surrogate Recoveries (percent)					
					Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	88.25			96.54		
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	85.1			92.4		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	84.44			84.06		
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	76.02			86.27		
South Basin Area X	Area X EB	AAB-004	01-223	SA	75.97			78.6		
Matrix Spikes (percent recoveries)										
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	86.85			97.07		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	95.7			103.14		
South Basin Area X	Area X EB	AAB-004	01-223	MS	87.08			91.91		

Table B-35. Polychlorinated Biphenyls as Aroclors in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 12	
Area_Name	Station_ID	Client_ Samp_ID	Lab_Batch	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)															
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	200	U		200	U		200	U		200	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	100	U		100	U		100	U		100	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	137	U		137	U		137	U		137	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	100	U		100	U		100	U		100	U
South Basin Area X	Area X EB	AAB-004	01-223	SA	127	U		127	U		127	U		127	U

U The value was less than the IDL or the analyte was not detected.

Table B-35. Polychlorinated Biphenyls as Aroclors in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					42	Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ID	Client_ Samp_ID	Lab_Batch	Samp_ Type	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)														
Indian Basin Area I	Area I EB	AAB-001	01-205	SA		200	U		200	U		200	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA		100	U		100	U		100	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA		137	U		137	U		137	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA		100	U		100	U		100	U	
South Basin Area X	Area X EB	AAB-004	01-223	SA		127	U		127	U		127	U	

U The value was less than the IDL or the analyte was not detected.

Table B-36. Chlorinated Pesticides in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					2,4'-DDD			2,4'-DDE			2,4'-DDT		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)													
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	0.9	U		2.05	U		2.38	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	0.45	U		1.02	U		1.19	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	0.61	U		1.4	U		1.63	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	0.45	U		1.02	U		1.19	U	
South Basin Area X	Area X EB	AAB-004	01-223	SA	0.57	U		1.3	U		1.51	U	
Matrix Spikes (percent recoveries)													
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	100.04			86.1			108.12		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	107.85			95.87			117.73		
South Basin Area X	Area X EB	AAB-004	01-223	MS	101.18			86.68			111.68		

U The value was less than the IDL or the analyte was not detected.

Table B-36. Chlorinated Pesticides in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlorda	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)															
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	0.71	U		1.01	U		0.67	U		1.29	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	0.36	U		0.5	U		0.33	U		0.65	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	0.49	U		0.69	U		0.46	U		0.89	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	0.36	U		0.5	U		0.33	U		0.65	U
South Basin Area X	Area X EB	AAB-004	01-223	SA	0.45	U		0.64	U		0.42	U		0.82	U
Matrix Spikes (percent recoveries)															
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	103.01			94.33			98.02			79.76	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	107.67			103.02			102.55			85.35	
South Basin Area X	Area X EB	AAB-004	01-223	MS	95.39			94.76			98.75			84.31	

U The value was less than the IDL or the analyte was not detected.

Table B-36. Chlorinated Pesticides in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	ne Final Qual
Equipment Blanks (ng/L)					
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	
South Basin Area X	Area X EB	AAB-004	01-223	SA	
Matrix Spikes (percent recoveries)					
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	
South Basin Area X	Area X EB	AAB-004	01-223	MS	

U The value was less than the IDL or the analyte was not detected.

Table B-36. Chlorinated Pesticides in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Dieldrin			Endosulfan II			Endrin			g-Chlorda	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)															
Indian Basin Area I	Area I EB	AAB-001	01-205	SA	1.17	U		0.61	U		1.18	U		1.29	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA	0.59	U		0.31	U		0.59	U		0.65	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA	0.8	U		0.42	U		0.81	U		0.89	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA	0.59	U		0.31	U		0.59	U		0.65	U
South Basin Area X	Area X EB	AAB-004	01-223	SA	0.74	U		0.39	U		0.74	U		0.82	U
Matrix Spikes (percent recoveries)															
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	96.04			99.49			95.66			69.47	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	111.01			103.55			104.72			73.68	
South Basin Area X	Area X EB	AAB-004	01-223	MS	98.69			102.09			95.27			72.15	

U The value was less than the IDL or the analyte was not detected.

Table B-36. Chlorinated Pesticides in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					ıne		Heptachlor	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)								
Indian Basin Area I	Area I EB	AAB-001	01-205	SA		1.41	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	SA		0.7	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	SA		0.96	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	SA		0.7	U	
South Basin Area X	Area X EB	AAB-004	01-223	SA		0.89	U	
Matrix Spikes (percent recoveries)								
Indian Basin Area I	Area I EB	AAB-001	01-205	MS		90.43		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS		102.39		
South Basin Area X	Area X EB	AAB-004	01-223	MS		93.72		

U The value was less than the IDL or the analyte was not detected.

Table B-37. Polycyclic Aromatic Hydrocarbons in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)																
Indian Basin Area I	Area I EB	AAB-001	01-205	EB	81.32			1.28	U		0.99	U		0.84	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	EB	43.3			0.64	U		0.5	U		0.42	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	EB	22.88			0.88	U		0.68	U		0.57	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	EB	23.35			0.64	U		0.5	U		0.96	J	
South Basin Area X	Area X EB	AAB-004	01-223	EB	89.5			1.53	J		0.63	U		1.11	J	
Matrix Spikes (percent recoveries)																
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	75.54			78.95			76.86			87.15		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	75.4			77.84			82.3			82.21		
South Basin Area X	Area X EB	AAB-004	01-223	MS	71.79			73.91			73.62			75.1		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table B-37. Polycyclic Aromatic Hydrocarbons in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Fluorene			Naphthalene			Phenanthrene			Benzo(a)anthracene		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)																
Indian Basin Area I	Area I EB	AAB-001	01-205	EB	1.18	U		370.49			1.81	J	U	1.67	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	EB	0.59	U		236.8			2.04	J	U	0.83	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	EB	3.24	J		85.85			3.04	J	U	1.14	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	EB	0.59	U		99.92			1.63	J	U	0.83	U	
South Basin Area X	Area X EB	AAB-004	01-223	EB	2.87	J		253.43			2.37	J	U	1.05	U	
Matrix Spikes (percent recoveries)																
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	80.57			74.87			84.6			87.21		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	79.58			74.22			82.2			90.03		
South Basin Area X	Area X EB	AAB-004	01-223	MS	75.32			72.72			79.17			88.03		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table B-37. Polycyclic Aromatic Hydrocarbons in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)																
Indian Basin Area I	Area I EB	AAB-001	01-205	EB	1.56	U		1.03	U		1.36	U		1.04	U	
Point Avisadero Area III	Area III EB	AAB-002	01-205	EB	0.78	U		0.51	U		1.59	J		0.52	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	EB	1.07	U		0.71	U		0.93	U		0.71	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	EB	0.78	U		0.51	U		0.68	U		0.52	U	
South Basin Area X	Area X EB	AAB-004	01-223	EB	0.99	U		0.65	U		0.86	U		0.66	U	
Matrix Spikes (percent recoveries)																
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	85.23			86.56			86.9			89.32		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	90.82			89.5			95.75			92.41		
South Basin Area X	Area X EB	AAB-004	01-223	MS	89.02			89.2			91.99			93.67		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table B-37. Polycyclic Aromatic Hydrocarbons in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene	
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Equipment Blanks (ng/L)																		
Indian Basin Area I	Area I EB	AAB-001	01-205	EB	0.88	U		2.5	U		1.06	U		2.19	U		1.15	U
Point Avisadero Area III	Area III EB	AAB-002	01-205	EB	0.44	U		1.25	U		1.13	J		1.1	U		0.57	U
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	EB	0.56	J		1.71	U		0.72	U		1.5	U		0.79	U
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	EB	0.86	J		1.25	U		0.53	U		1.1	U		0.57	U
South Basin Area X	Area X EB	AAB-004	01-223	EB	0.47	J		1.58	U		0.67	U		1.39	U		0.73	U
Matrix Spikes (percent recoveries)																		
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	91.02			81.97			93.24			86.33			90.99	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	91.69			92.36			91.8			97.89			91.4	
South Basin Area X	Area X EB	AAB-004	01-223	MS	94.68			88.49			90.14			91.13			90.13	

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table B-37. Polycyclic Aromatic Hydrocarbons in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Final Qual
Equipment Blanks (ng/L)					
Indian Basin Area I	Area I EB	AAB-001	01-205	EB	
Point Avisadero Area III	Area III EB	AAB-002	01-205	EB	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	EB	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	EB	
South Basin Area X	Area X EB	AAB-004	01-223	EB	
Matrix Spikes (percent recoveries)					
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	
South Basin Area X	Area X EB	AAB-004	01-223	MS	

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table B-38. Surrogate Recoveries of Polycyclic Aromatic Hydrocarbons in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Surrogate Recoveries (percent)								
					Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Indian Basin Area I	Area I EB	AAB-001	01-205	EB	94.28			80.58			85.4		
Point Avisadero Area III	Area III EB	AAB-002	01-205	EB	89.75			77.67			79.61		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	EB	87.93			67.96			74.31		
Oil Reclamation Area IX	Area IX EB	AAB-005	01-223	EB	84.82			70.65			70.33		
South Basin Area X	Area X EB	AAB-004	01-223	EB	79.97			68.05			67.91		
Matrix Spikes (percent recoveries)													
Indian Basin Area I	Area I EB	AAB-001	01-205	MS	95.93			79.43			81.52		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-219	MS	95.58			78.49			79.54		
South Basin Area X	Area X EB	AAB-004	01-223	MS	94.13			75.54			72.72		

Table B-39. Butyltins in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Equipment Blanks (ng/L)																
Indian Basin Area I	Area I EB	AAB-001	01-301	SA	21.24	U		15.792	U		22.162	U		15.486	U	
Point Avisadero Area III	Area III EB	AAB-002	01-301	SA	10.62	U		7.896	U		14.8691			7.743	U	
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-301	SA	10.62	U		7.896	U		11.081	U		7.743	U	
Oil Reclamation Area IX	Area IX EB	AAB-005	01-301	SA	10.62	U		7.896	U		11.081	U		7.743	U	
South Basin Area X	Area X EB	AAB-004	01-301	SA	10.62	U		7.896	U		11.081	U		7.743	U	
Analytical Duplicates (relative percent difference)																
Indian Basin Area I	Area I EB	AAB-001	01-301	SA	21.24	U		15.792	U		22.162	U		15.486	U	
Indian Basin Area I	Area I EB	AAB-001	01-301	QADU	21.24	U		15.792	U		22.162	U		15.486	U	
RPD					***NA***			***NA***			***NA***			***NA***		

U The value was less than the IDL or the analyte was not detected.

Table B-40. Surrogate Recoveries of Butyltins in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Surrogate Recoveries (percent)		
					TBT (SIS)		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual
Indian Basin Area I	Area I EB	AAB-001	01-301	SA	84.32		
Point Avisadero Area III	Area III EB	AAB-002	01-301	SA	81.22		
Eastern Wetland Area VIII	Area VIII EB	AAB-003	01-301	SA	79.77		
Oil Reclamation Area IX	Area IX EB	AAB-005	01-301	SA	71.92		
South Basin Area X	Area X EB	AAB-004	01-301	SA	86.51		
Analytical Duplicates (relative percent difference)							
Indian Basin Area I	Area I EB	AAB-001	01-301	SA	84.32		
Indian Basin Area I	Area I EB	AAB-001	01-301	QADU	70.05		
RPD					***18***		

Table B-41. Diesel Range Organics as Total Petroleum Hydrocarbons and Surrogate Recoveries in Equipment Blank Samples and Associated Quality Control Data, Hunters Point Shipyard Parcel F Validation Study

					Diesel Range Organics TPH (C10-C25) (mg/L)			Surrogate Recoveries (percent) Benzo(a)pyrene		
Area_Name	Station_ID	Client_Samp_ID	Lab_Batch	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	Area VIII EB	AAB-003	E1E170216	SA	0.2	U		95		
Oil Reclamation Area IX	Area IX EB	AAB-005	E1E220230	SA	0.2	U		102		
South Basin Area X	Area X EB	AAB-004	E1E220230	SA	0.2	U		96		

U The value was less than the IDL or the analyte was not detected.

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Alameda Buoy	AB-67	0	5	cm		DDT, Total	2.6	1	2	0	3
Alcatraz Environs	AL-64	0	5	cm		DDT, Total	0.0	3	0	0	3
Bay Farm Borrow Pit	BF-66	0	5	cm		DDT, Total	1.7	1	2	0	3
Paradise Cove	PC-63	0	5	cm		DDT, Total	5.5	0	3	0	3
Red Rock	RR-65	0	5	cm		DDT, Total	0.7	1	2	0	3
India Basin Area I	IB-54	0	5	cm		DDT, Total	3.0	0	3	0	3
India Basin Area I	IB-55	0	5	cm		DDT, Total	3.7	0	3	0	3
India Basin Area I	IB-56	0	5	cm		DDT, Total	3.2	0	3	0	3
India Basin Area I	IB-57	0	5	cm		DDT, Total	1.6	1	2	0	3
India Basin Area I	IB-58	0	5	cm		DDT, Total	2.3	0	3	0	3
India Basin Area I	IB-59	0	5	cm		DDT, Total	3.7	0	3	0	3
India Basin Area I	IB-59	0	5	cm	FD	DDT, Total	5.1	0	3	0	3
Point Avisadero Area III	PA-38	0	5	cm		DDT, Total	3.0	0	3	0	3
Point Avisadero Area III	PA-39	0	5	cm		DDT, Total	3.1	0	3	0	3
Point Avisadero Area III	PA-39	0	5	cm	FD	DDT, Total	3.2	0	3	0	3
Point Avisadero Area III	PA-40	0	5	cm		DDT, Total	2.9	0	3	0	3
Point Avisadero Area III	PA-41	0	5	cm		DDT, Total	3.9	0	3	0	3
Point Avisadero Area III	PA-42	0	5	cm		DDT, Total	2.9	1	2	0	3
Point Avisadero Area III	PA-43	0	5	cm		DDT, Total	1.3	1	2	0	3
Point Avisadero Area III	PA-44	0	5	cm		DDT, Total	3.1	0	3	0	3
Point Avisadero Area III	PA-45	0	5	cm		DDT, Total	2.6	0	3	0	3
Point Avisadero Area III	PA-46	0	5	cm		DDT, Total	2.3	0	3	0	3
Point Avisadero Area III	PA-47	0	5	cm		DDT, Total	3.1	1	2	0	3
Point Avisadero Area III	PA-48	0	5	cm		DDT, Total	1.9	1	2	0	3
Point Avisadero Area III	PA-49	0	5	cm		DDT, Total	1.4	1	2	0	3
Point Avisadero Area III	PA-50	0	5	cm		DDT, Total	2.7	0	3	0	3
Point Avisadero Area III	PA-51	0	5	cm		DDT, Total	1.1	1	2	0	3
Point Avisadero Area III	PA-52	0	5	cm		DDT, Total	1.4	1	2	0	3
Point Avisadero Area III	PA-53	0	5	cm		DDT, Total	3.5	0	3	0	3
Point Avisadero Area III	PA-70	0	5	cm		DDT, Total	2.3	0	3	0	3
Point Avisadero Area III	PA-71	0	5	cm		DDT, Total	2.0	0	3	0	3
Point Avisadero Area III	PA-72	0	5	cm		DDT, Total	1.6	1	2	0	3
Eastern Wetland Area VIII	EW-30	0	5	cm		DDT, Total	0.6	1	2	0	3
Eastern Wetland Area VIII	EW-31	0	5	cm		DDT, Total	0.2	2	1	0	3
Eastern Wetland Area VIII	EW-32	0	5	cm		DDT, Total	2.5	0	3	0	3
Eastern Wetland Area VIII	EW-33	0	5	cm		DDT, Total	0.6	1	2	0	3
Eastern Wetland Area VIII	EW-33	0	5	cm	FD	DDT, Total	0.4	1	2	0	3
Eastern Wetland Area VIII	EW-34	0	5	cm		DDT, Total	0.4	1	2	0	3
Eastern Wetland Area VIII	EW-35	0	5	cm		DDT, Total	2.2	0	3	0	3
Eastern Wetland Area VIII	EW-36	0	5	cm		DDT, Total	0.5	2	1	0	3
Eastern Wetland Area VIII	EW-37	0	5	cm		DDT, Total	2.3	0	3	0	3
Oil Reclamation Area IX	OR-24	0	5	cm		DDT, Total	4.2	0	3	0	3
Oil Reclamation Area IX	OR-25	0	5	cm		DDT, Total	2.3	1	2	0	3
Oil Reclamation Area IX	OR-26	0	5	cm		DDT, Total	4.9	0	3	0	3
Oil Reclamation Area IX	OR-27	0	5	cm		DDT, Total	3.9	0	3	0	3
Oil Reclamation Area IX	OR-28	0	5	cm		DDT, Total	2.4	0	3	0	3
Oil Reclamation Area IX	OR-29	0	5	cm		DDT, Total	1.9	0	3	0	3
Oil Reclamation Area IX	OR-29	0	5	cm	FD	DDT, Total	5.0	0	3	0	3
South Basin Area X	SB-01	0	5	cm		DDT, Total	17.2	0	3	0	3
South Basin Area X	SB-02	0	5	cm		DDT, Total	35.4	0	3	0	3
South Basin Area X	SB-03	0	5	cm		DDT, Total	4.5	0	3	0	3
South Basin Area X	SB-04	0	5	cm		DDT, Total	6.9	0	3	0	3
South Basin Area X	SB-05	0	5	cm		DDT, Total	5.5	0	3	0	3
South Basin Area X	SB-06	0	5	cm		DDT, Total	2.5	0	3	0	3
South Basin Area X	SB-07	0	5	cm		DDT, Total	9.5	0	3	0	3
South Basin Area X	SB-08	0	5	cm		DDT, Total	8.0	0	3	0	3
South Basin Area X	SB-09	0	5	cm		DDT, Total	8.4	1	2	0	3
South Basin Area X	SB-10	0	5	cm		DDT, Total	17.9	0	3	0	3
South Basin Area X	SB-11	0	5	cm		DDT, Total	17.2	0	3	0	3
South Basin Area X	SB-12	0	5	cm		DDT, Total	13.1	0	3	0	3
South Basin Area X	SB-12	0	5	cm	FD	DDT, Total	12.8	0	3	0	3
South Basin Area X	SB-13	0	5	cm		DDT, Total	38.5	0	3	0	3

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
South Basin Area X	SB-14	0	5	cm		DDT, Total	14.3	0	3	0	3
South Basin Area X	SB-15	0	5	cm		DDT, Total	5.7	0	3	0	3
South Basin Area X	SB-16	0	5	cm		DDT, Total	5.1	0	2	1	2
South Basin Area X	SB-17	0	5	cm		DDT, Total	30.3	0	3	0	3
South Basin Area X	SB-18	0	5	cm		DDT, Total	10.6	1	2	0	3
South Basin Area X	SB-19	0	5	cm		DDT, Total	3.6	1	2	0	3
South Basin Area X	SB-20	0	5	cm		DDT, Total	15.8	0	3	0	3
South Basin Area X	SB-21	0	5	cm		DDT, Total	52.8	0	3	0	3
South Basin Area X	SB-22	0	5	cm		DDT, Total	10.2	0	3	0	3
South Basin Area X	SB-23	0	5	cm		DDT, Total	5.6	1	2	0	3
Alameda Buoy	AB-67	0	5	cm		Total PAH HIGH (10)	1932.4	0	10	0	10
Alcatraz Environs	AL-64	0	5	cm		Total PAH HIGH (10)	521.8	0	10	0	10
Bay Farm Borrow Pit	BF-66	0	5	cm		Total PAH HIGH (10)	942.2	0	10	0	10
Paradise Cove	PC-63	0	5	cm		Total PAH HIGH (10)	776.9	0	10	0	10
Red Rock	RR-65	0	5	cm		Total PAH HIGH (10)	205.5	0	10	0	10
India Basin Area I	IB-54	0	5	cm		Total PAH HIGH (10)	1455.6	0	10	0	10
India Basin Area I	IB-55	0	5	cm		Total PAH HIGH (10)	1895.3	0	10	0	10
India Basin Area I	IB-56	0	5	cm		Total PAH HIGH (10)	1494.4	0	10	0	10
India Basin Area I	IB-57	0	5	cm		Total PAH HIGH (10)	1461.5	0	10	0	10
India Basin Area I	IB-58	0	5	cm		Total PAH HIGH (10)	1592.1	0	10	0	10
India Basin Area I	IB-59	0	5	cm		Total PAH HIGH (10)	2773.8	0	10	0	10
India Basin Area I	IB-59	0	5	cm	FD	Total PAH HIGH (10)	7522.3	0	10	0	10
Point Avisadero Area III	PA-38	0	5	cm		Total PAH HIGH (10)	2649.8	0	10	0	10
Point Avisadero Area III	PA-39	0	5	cm		Total PAH HIGH (10)	2209.5	0	10	0	10
Point Avisadero Area III	PA-39	0	5	cm	FD	Total PAH HIGH (10)	4465.7	0	10	0	10
Point Avisadero Area III	PA-40	0	5	cm		Total PAH HIGH (10)	1580.9	0	10	0	10
Point Avisadero Area III	PA-41	0	5	cm		Total PAH HIGH (10)	6753.6	0	10	0	10
Point Avisadero Area III	PA-42	0	5	cm		Total PAH HIGH (10)	4853.0	0	10	0	10
Point Avisadero Area III	PA-43	0	5	cm		Total PAH HIGH (10)	1712.1	0	10	0	10
Point Avisadero Area III	PA-44	0	5	cm		Total PAH HIGH (10)	3517.6	0	10	0	10
Point Avisadero Area III	PA-45	0	5	cm		Total PAH HIGH (10)	3982.2	0	10	0	10
Point Avisadero Area III	PA-46	0	5	cm		Total PAH HIGH (10)	2634.7	0	10	0	10
Point Avisadero Area III	PA-47	0	5	cm		Total PAH HIGH (10)	5082.1	0	10	0	10
Point Avisadero Area III	PA-48	0	5	cm		Total PAH HIGH (10)	3232.8	0	10	0	10
Point Avisadero Area III	PA-49	0	5	cm		Total PAH HIGH (10)	4009.0	0	10	0	10
Point Avisadero Area III	PA-50	0	5	cm		Total PAH HIGH (10)	3364.1	0	10	0	10
Point Avisadero Area III	PA-51	0	5	cm		Total PAH HIGH (10)	5365.9	0	10	0	10
Point Avisadero Area III	PA-52	0	5	cm		Total PAH HIGH (10)	6173.3	0	10	0	10
Point Avisadero Area III	PA-53	0	5	cm		Total PAH HIGH (10)	6504.9	0	10	0	10
Point Avisadero Area III	PA-70	0	5	cm		Total PAH HIGH (10)	2138.1	0	10	0	10
Point Avisadero Area III	PA-71	0	5	cm		Total PAH HIGH (10)	1747.6	0	10	0	10
Point Avisadero Area III	PA-72	0	5	cm		Total PAH HIGH (10)	1108.9	0	10	0	10
Eastern Wetland Area VIII	EW-30	0	5	cm		Total PAH HIGH (10)	1040.3	0	10	0	10
Eastern Wetland Area VIII	EW-31	0	5	cm		Total PAH HIGH (10)	544.4	0	10	0	10
Eastern Wetland Area VIII	EW-32	0	5	cm		Total PAH HIGH (10)	1444.0	0	10	0	10
Eastern Wetland Area VIII	EW-33	0	5	cm		Total PAH HIGH (10)	205.4	0	10	0	10
Eastern Wetland Area VIII	EW-33	0	5	cm	FD	Total PAH HIGH (10)	122.6	0	10	0	10
Eastern Wetland Area VIII	EW-34	0	5	cm		Total PAH HIGH (10)	225.0	0	10	0	10
Eastern Wetland Area VIII	EW-35	0	5	cm		Total PAH HIGH (10)	1232.4	0	10	0	10
Eastern Wetland Area VIII	EW-36	0	5	cm		Total PAH HIGH (10)	289.6	0	10	0	10
Eastern Wetland Area VIII	EW-37	0	5	cm		Total PAH HIGH (10)	1694.6	0	10	0	10
Oil Reclamation Area IX	OR-24	0	5	cm		Total PAH HIGH (10)	1895.1	0	10	0	10
Oil Reclamation Area IX	OR-25	0	5	cm		Total PAH HIGH (10)	1585.5	0	10	0	10
Oil Reclamation Area IX	OR-26	0	5	cm		Total PAH HIGH (10)	1068.3	0	10	0	10
Oil Reclamation Area IX	OR-27	0	5	cm		Total PAH HIGH (10)	1005.6	0	10	0	10
Oil Reclamation Area IX	OR-28	0	5	cm		Total PAH HIGH (10)	1549.5	0	10	0	10
Oil Reclamation Area IX	OR-29	0	5	cm		Total PAH HIGH (10)	886.8	0	10	0	10
Oil Reclamation Area IX	OR-29	0	5	cm	FD	Total PAH HIGH (10)	784.7	0	10	0	10
South Basin Area X	SB-01	0	5	cm		Total PAH HIGH (10)	2136.5	0	10	0	10
South Basin Area X	SB-02	0	5	cm		Total PAH HIGH (10)	2781.6	0	10	0	10
South Basin Area X	SB-03	0	5	cm		Total PAH HIGH (10)	1288.1	0	10	0	10
South Basin Area X	SB-04	0	5	cm		Total PAH HIGH (10)	1722.2	0	10	0	10

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
South Basin Area X	SB-05	0	5	cm		Total PAH HIGH (10)	1467.5	0	10	0	10
South Basin Area X	SB-06	0	5	cm		Total PAH HIGH (10)	436.9	0	10	0	10
South Basin Area X	SB-07	0	5	cm		Total PAH HIGH (10)	2053.0	0	10	0	10
South Basin Area X	SB-08	0	5	cm		Total PAH HIGH (10)	1569.0	0	10	0	10
South Basin Area X	SB-09	0	5	cm		Total PAH HIGH (10)	1243.5	0	10	0	10
South Basin Area X	SB-10	0	5	cm		Total PAH HIGH (10)	2403.4	0	10	0	10
South Basin Area X	SB-11	0	5	cm		Total PAH HIGH (10)	2290.3	0	10	0	10
South Basin Area X	SB-12	0	5	cm		Total PAH HIGH (10)	1967.6	0	10	0	10
South Basin Area X	SB-12	0	5	cm	FD	Total PAH HIGH (10)	2029.4	0	10	0	10
South Basin Area X	SB-13	0	5	cm		Total PAH HIGH (10)	2022.9	0	10	0	10
South Basin Area X	SB-14	0	5	cm		Total PAH HIGH (10)	1856.3	0	10	0	10
South Basin Area X	SB-15	0	5	cm		Total PAH HIGH (10)	1812.5	0	10	0	10
South Basin Area X	SB-16	0	5	cm		Total PAH HIGH (10)	3872.3	0	10	0	10
South Basin Area X	SB-17	0	5	cm		Total PAH HIGH (10)	2995.4	0	10	0	10
South Basin Area X	SB-18	0	5	cm		Total PAH HIGH (10)	3062.5	0	10	0	10
South Basin Area X	SB-19	0	5	cm		Total PAH HIGH (10)	774.5	0	10	0	10
South Basin Area X	SB-20	0	5	cm		Total PAH HIGH (10)	2692.5	0	10	0	10
South Basin Area X	SB-21	0	5	cm		Total PAH HIGH (10)	5907.4	0	10	0	10
South Basin Area X	SB-22	0	5	cm		Total PAH HIGH (10)	2696.5	0	10	0	10
South Basin Area X	SB-23	0	5	cm		Total PAH HIGH (10)	4068.1	0	10	0	10
Alameda Buoy	AB-67	0	5	cm		Total PAH LOW	243.8	0	7	0	7
Alcatraz Environs	AL-64	0	5	cm		Total PAH LOW	58.5	0	7	0	7
Bay Farm Borrow Pit	BF-66	0	5	cm		Total PAH LOW	88.8	0	7	0	7
Paradise Cove	PC-63	0	5	cm		Total PAH LOW	90.7	0	7	0	7
Red Rock	RR-65	0	5	cm		Total PAH LOW	21.3	1	6	0	7
India Basin Area I	IB-54	0	5	cm		Total PAH LOW	155.3	0	7	0	7
India Basin Area I	IB-55	0	5	cm		Total PAH LOW	240.2	0	7	0	7
India Basin Area I	IB-56	0	5	cm		Total PAH LOW	173.1	0	7	0	7
India Basin Area I	IB-57	0	5	cm		Total PAH LOW	203.1	0	7	0	7
India Basin Area I	IB-58	0	5	cm		Total PAH LOW	205.6	0	7	0	7
India Basin Area I	IB-59	0	5	cm		Total PAH LOW	485.4	0	7	0	7
India Basin Area I	IB-59	0	5	cm	FD	Total PAH LOW	1920.8	0	7	0	7
Point Avisadero Area III	PA-38	0	5	cm		Total PAH LOW	313.2	0	7	0	7
Point Avisadero Area III	PA-39	0	5	cm		Total PAH LOW	271.4	0	7	0	7
Point Avisadero Area III	PA-39	0	5	cm	FD	Total PAH LOW	443.1	0	7	0	7
Point Avisadero Area III	PA-40	0	5	cm		Total PAH LOW	217.2	0	7	0	7
Point Avisadero Area III	PA-41	0	5	cm		Total PAH LOW	1224.9	0	7	0	7
Point Avisadero Area III	PA-42	0	5	cm		Total PAH LOW	900.3	0	7	0	7
Point Avisadero Area III	PA-43	0	5	cm		Total PAH LOW	257.2	0	7	0	7
Point Avisadero Area III	PA-44	0	5	cm		Total PAH LOW	559.6	0	7	0	7
Point Avisadero Area III	PA-45	0	5	cm		Total PAH LOW	541.6	0	7	0	7
Point Avisadero Area III	PA-46	0	5	cm		Total PAH LOW	348.1	0	7	0	7
Point Avisadero Area III	PA-47	0	5	cm		Total PAH LOW	757.1	0	7	0	7
Point Avisadero Area III	PA-48	0	5	cm		Total PAH LOW	615.6	0	7	0	7
Point Avisadero Area III	PA-49	0	5	cm		Total PAH LOW	594.0	0	7	0	7
Point Avisadero Area III	PA-50	0	5	cm		Total PAH LOW	490.5	0	7	0	7
Point Avisadero Area III	PA-51	0	5	cm		Total PAH LOW	805.0	0	7	0	7
Point Avisadero Area III	PA-52	0	5	cm		Total PAH LOW	1186.9	0	7	0	7
Point Avisadero Area III	PA-53	0	5	cm		Total PAH LOW	1140.3	0	7	0	7
Point Avisadero Area III	PA-70	0	5	cm		Total PAH LOW	270.9	0	7	0	7
Point Avisadero Area III	PA-71	0	5	cm		Total PAH LOW	223.9	0	7	0	7
Point Avisadero Area III	PA-72	0	5	cm		Total PAH LOW	140.6	0	7	0	7
Eastern Wetland Area VIII	EW-30	0	5	cm		Total PAH LOW	197.1	0	7	0	7
Eastern Wetland Area VIII	EW-31	0	5	cm		Total PAH LOW	46.8	0	7	0	7
Eastern Wetland Area VIII	EW-32	0	5	cm		Total PAH LOW	177.2	0	7	0	7
Eastern Wetland Area VIII	EW-33	0	5	cm		Total PAH LOW	29.4	1	6	0	7
Eastern Wetland Area VIII	EW-33	0	5	cm	FD	Total PAH LOW	14.6	1	6	0	7
Eastern Wetland Area VIII	EW-34	0	5	cm		Total PAH LOW	39.2	0	7	0	7
Eastern Wetland Area VIII	EW-35	0	5	cm		Total PAH LOW	126.6	0	7	0	7
Eastern Wetland Area VIII	EW-36	0	5	cm		Total PAH LOW	28.7	1	6	0	7
Eastern Wetland Area VIII	EW-37	0	5	cm		Total PAH LOW	162.7	0	7	0	7
Oil Reclamation Area IX	OR-24	0	5	cm		Total PAH LOW	250.0	0	7	0	7

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Oil Reclamation Area IX	OR-25	0	5	cm		Total PAH LOW	158.0	0	7	0	7
Oil Reclamation Area IX	OR-26	0	5	cm		Total PAH LOW	131.5	0	7	0	7
Oil Reclamation Area IX	OR-27	0	5	cm		Total PAH LOW	100.6	0	7	0	7
Oil Reclamation Area IX	OR-28	0	5	cm		Total PAH LOW	135.7	0	7	0	7
Oil Reclamation Area IX	OR-29	0	5	cm		Total PAH LOW	77.5	0	7	0	7
Oil Reclamation Area IX	OR-29	0	5	cm	FD	Total PAH LOW	82.1	0	7	0	7
South Basin Area X	SB-01	0	5	cm		Total PAH LOW	240.8	0	7	0	7
South Basin Area X	SB-02	0	5	cm		Total PAH LOW	397.9	0	7	0	7
South Basin Area X	SB-03	0	5	cm		Total PAH LOW	139.0	0	7	0	7
South Basin Area X	SB-04	0	5	cm		Total PAH LOW	169.2	0	7	0	7
South Basin Area X	SB-05	0	5	cm		Total PAH LOW	136.1	0	7	0	7
South Basin Area X	SB-06	0	5	cm		Total PAH LOW	38.7	1	6	0	7
South Basin Area X	SB-07	0	5	cm		Total PAH LOW	267.2	0	7	0	7
South Basin Area X	SB-08	0	5	cm		Total PAH LOW	161.7	0	7	0	7
South Basin Area X	SB-09	0	5	cm		Total PAH LOW	144.7	0	7	0	7
South Basin Area X	SB-10	0	5	cm		Total PAH LOW	387.9	0	7	0	7
South Basin Area X	SB-11	0	5	cm		Total PAH LOW	248.4	0	7	0	7
South Basin Area X	SB-12	0	5	cm		Total PAH LOW	184.8	0	7	0	7
South Basin Area X	SB-12	0	5	cm	FD	Total PAH LOW	218.9	0	7	0	7
South Basin Area X	SB-13	0	5	cm		Total PAH LOW	202.8	0	7	0	7
South Basin Area X	SB-14	0	5	cm		Total PAH LOW	203.9	0	7	0	7
South Basin Area X	SB-15	0	5	cm		Total PAH LOW	207.2	0	7	0	7
South Basin Area X	SB-16	0	5	cm		Total PAH LOW	275.6	0	7	0	7
South Basin Area X	SB-17	0	5	cm		Total PAH LOW	271.9	0	7	0	7
South Basin Area X	SB-18	0	5	cm		Total PAH LOW	322.7	0	7	0	7
South Basin Area X	SB-19	0	5	cm		Total PAH LOW	82.0	0	7	0	7
South Basin Area X	SB-20	0	5	cm		Total PAH LOW	280.7	0	7	0	7
South Basin Area X	SB-21	0	5	cm		Total PAH LOW	1103.8	0	7	0	7
South Basin Area X	SB-22	0	5	cm		Total PAH LOW	234.5	0	7	0	7
South Basin Area X	SB-23	0	5	cm		Total PAH LOW	804.7	0	7	0	7
Alameda Buoy	AB-67	0	5	cm		Total PCBs	42.5	5	17	0	22
Alcatraz Environs	AL-64	0	5	cm		Total PCBs	0.0	22	0	0	22
Bay Farm Borrow Pit	BF-66	0	5	cm		Total PCBs	13.5	10	12	0	22
Paradise Cove	PC-63	0	5	cm		Total PCBs	6.1	13	9	0	22
Red Rock	RR-65	0	5	cm		Total PCBs	2.0	16	6	0	22
India Basin Area I	IB-54	0	5	cm		Total PCBs	17.3	6	16	0	22
India Basin Area I	IB-55	0	5	cm		Total PCBs	89.2	4	18	0	22
India Basin Area I	IB-56	0	5	cm		Total PCBs	16.7	7	15	0	22
India Basin Area I	IB-57	0	5	cm		Total PCBs	12.0	9	13	0	22
India Basin Area I	IB-58	0	5	cm		Total PCBs	15.0	6	16	0	22
India Basin Area I	IB-59	0	5	cm		Total PCBs	76.9	4	18	0	22
India Basin Area I	IB-59	0	5	cm	FD	Total PCBs	63.8	6	16	0	22
Point Avisadero Area III	PA-38	0	5	cm		Total PCBs	587.3	5	17	0	22
Point Avisadero Area III	PA-39	0	5	cm		Total PCBs	374.4	3	19	0	22
Point Avisadero Area III	PA-39	0	5	cm	FD	Total PCBs	258.2	7	15	0	22
Point Avisadero Area III	PA-40	0	5	cm		Total PCBs	29.7	6	16	0	22
Point Avisadero Area III	PA-41	0	5	cm		Total PCBs	703.5	6	16	0	22
Point Avisadero Area III	PA-42	0	5	cm		Total PCBs	1129.8	4	18	0	22
Point Avisadero Area III	PA-43	0	5	cm		Total PCBs	21.8	6	16	0	22
Point Avisadero Area III	PA-44	0	5	cm		Total PCBs	67.6	6	16	0	22
Point Avisadero Area III	PA-45	0	5	cm		Total PCBs	2463.3	3	19	0	22
Point Avisadero Area III	PA-46	0	5	cm		Total PCBs	356.8	5	17	0	22
Point Avisadero Area III	PA-47	0	5	cm		Total PCBs	111.8	4	18	0	22
Point Avisadero Area III	PA-48	0	5	cm		Total PCBs	16.4	10	12	0	22
Point Avisadero Area III	PA-49	0	5	cm		Total PCBs	10.9	9	13	0	22
Point Avisadero Area III	PA-50	0	5	cm		Total PCBs	13.2	8	14	0	22
Point Avisadero Area III	PA-51	0	5	cm		Total PCBs	13.7	9	13	0	22
Point Avisadero Area III	PA-52	0	5	cm		Total PCBs	14.7	13	9	0	22
Point Avisadero Area III	PA-53	0	5	cm		Total PCBs	91.2	6	16	0	22
Point Avisadero Area III	PA-70	0	5	cm		Total PCBs	77.4	5	17	0	22
Point Avisadero Area III	PA-71	0	5	cm		Total PCBs	23.9	8	14	0	22
Point Avisadero Area III	PA-72	0	5	cm		Total PCBs	12.0	8	14	0	22

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Eastern Wetland Area VIII	EW-30	0	5	cm		Total PCBs	13.8	10	12	0	22
Eastern Wetland Area VIII	EW-31	0	5	cm		Total PCBs	11.8	9	13	0	22
Eastern Wetland Area VIII	EW-32	0	5	cm		Total PCBs	29.0	6	16	0	22
Eastern Wetland Area VIII	EW-33	0	5	cm		Total PCBs	20.5	8	14	0	22
Eastern Wetland Area VIII	EW-33	0	5	cm	FD	Total PCBs	32.2	8	14	0	22
Eastern Wetland Area VIII	EW-34	0	5	cm		Total PCBs	19.5	8	14	0	22
Eastern Wetland Area VIII	EW-35	0	5	cm		Total PCBs	28.8	5	17	0	22
Eastern Wetland Area VIII	EW-36	0	5	cm		Total PCBs	32.5	8	14	0	22
Eastern Wetland Area VIII	EW-37	0	5	cm		Total PCBs	23.9	5	17	0	22
Oil Reclamation Area IX	OR-24	0	5	cm		Total PCBs	424.7	5	17	0	22
Oil Reclamation Area IX	OR-25	0	5	cm		Total PCBs	101.3	6	16	0	22
Oil Reclamation Area IX	OR-26	0	5	cm		Total PCBs	321.3	5	17	0	22
Oil Reclamation Area IX	OR-27	0	5	cm		Total PCBs	279.0	5	17	0	22
Oil Reclamation Area IX	OR-28	0	5	cm		Total PCBs	87.2	4	18	0	22
Oil Reclamation Area IX	OR-29	0	5	cm		Total PCBs	141.9	5	17	0	22
Oil Reclamation Area IX	OR-29	0	5	cm	FD	Total PCBs	126.8	7	15	0	22
South Basin Area X	SB-01	0	5	cm		Total PCBs	556.6	4	18	0	22
South Basin Area X	SB-02	0	5	cm		Total PCBs	937.9	4	18	0	22
South Basin Area X	SB-03	0	5	cm		Total PCBs	180.0	4	18	0	22
South Basin Area X	SB-04	0	5	cm		Total PCBs	314.2	4	18	0	22
South Basin Area X	SB-05	0	5	cm		Total PCBs	280.3	4	18	0	22
South Basin Area X	SB-06	0	5	cm		Total PCBs	112.6	5	17	0	22
South Basin Area X	SB-07	0	5	cm		Total PCBs	425.2	4	18	0	22
South Basin Area X	SB-08	0	5	cm		Total PCBs	370.3	4	18	0	22
South Basin Area X	SB-09	0	5	cm		Total PCBs	351.6	3	19	0	22
South Basin Area X	SB-10	0	5	cm		Total PCBs	723.0	3	19	0	22
South Basin Area X	SB-11	0	5	cm		Total PCBs	1112.5	3	19	0	22
South Basin Area X	SB-12	0	5	cm		Total PCBs	681.2	3	19	0	22
South Basin Area X	SB-12	0	5	cm	FD	Total PCBs	638.6	3	19	0	22
South Basin Area X	SB-13	0	5	cm		Total PCBs	739.4	3	19	0	22
South Basin Area X	SB-14	0	5	cm		Total PCBs	567.8	3	19	0	22
South Basin Area X	SB-15	0	5	cm		Total PCBs	409.6	6	16	0	22
South Basin Area X	SB-16	0	5	cm		Total PCBs	1785.8	0	19	3	19
South Basin Area X	SB-17	0	5	cm		Total PCBs	891.7	4	18	0	22
South Basin Area X	SB-18	0	5	cm		Total PCBs	830.0	3	19	0	22
South Basin Area X	SB-19	0	5	cm		Total PCBs	3074.9	5	17	0	22
South Basin Area X	SB-20	0	5	cm		Total PCBs	1564.5	3	19	0	22
South Basin Area X	SB-21	0	5	cm		Total PCBs	5185.7	4	18	0	22
South Basin Area X	SB-22	0	5	cm		Total PCBs	1816.9	3	19	0	22
South Basin Area X	SB-23	0	5	cm		Total PCBs	3707.5	4	18	0	22
Point Avisadero Area III	PA-40	0	2	ft		DDT, Total	1.5	1	2	0	3
Point Avisadero Area III	PA-40	2	4	ft		DDT, Total	1.3	1	2	0	3
Point Avisadero Area III	PA-41	0	2	ft		DDT, Total	8.9	0	3	0	3
Point Avisadero Area III	PA-41	2	4	ft		DDT, Total	5.6	1	2	0	3
Point Avisadero Area III	PA-41	4	6	ft		DDT, Total	0.0	3	0	0	3
Point Avisadero Area III	PA-44	0	2	ft		DDT, Total	0.2	2	1	0	3
Point Avisadero Area III	PA-44	2	4	ft		DDT, Total	0.0	3	0	0	3
Point Avisadero Area III	PA-44	4	6	ft		DDT, Total	0.0	3	0	0	3
Point Avisadero Area III	PA-47	0	2	ft		DDT, Total	3.0	1	2	0	3
Point Avisadero Area III	PA-47	2	4	ft		DDT, Total	0.0	3	0	0	3
Point Avisadero Area III	PA-47	4	6	ft		DDT, Total	0.0	3	0	0	3
Point Avisadero Area III	PA-52	0	2	ft		DDT, Total	1.4	1	2	0	3
Point Avisadero Area III	PA-52	2	4	ft		DDT, Total	1.4	0	3	0	3
Point Avisadero Area III	PA-52	4	6	ft		DDT, Total	1.7	1	2	0	3
Eastern Wetland Area VIII	EW-31	0	2	ft		DDT, Total	0.2	2	1	0	3
Eastern Wetland Area VIII	EW-31	2	4	ft		DDT, Total	0.0	3	0	0	3
Eastern Wetland Area VIII	EW-31	4	6	ft		DDT, Total	0.0	3	0	0	3
Oil Reclamation Area IX	OR-24	0	2	ft		DDT, Total	0.0	3	0	0	3
Oil Reclamation Area IX	OR-24	2	4	ft		DDT, Total	0.0	3	0	0	3
Oil Reclamation Area IX	OR-24	4	6	ft		DDT, Total	0.0	3	0	0	3
Oil Reclamation Area IX	OR-28	0	2	ft		DDT, Total	2.2	0	3	0	3
Oil Reclamation Area IX	OR-28	2	4	ft		DDT, Total	1.8	1	2	0	3

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Oil Reclamation Area IX	OR-28	4	6	ft		DDT, Total	0.0	3	0	0	3
South Basin Area X	SB-01	0	2	ft		DDT, Total	347.0	0	3	0	3
South Basin Area X	SB-01	2	4	ft		DDT, Total	48.6	0	3	0	3
South Basin Area X	SB-01	4	6	ft		DDT, Total	0.2	2	1	0	3
South Basin Area X	SB-03	0	2	ft		DDT, Total	41.2	0	3	0	3
South Basin Area X	SB-03	2	4	ft		DDT, Total	1.9	1	2	0	3
South Basin Area X	SB-03	4	6	ft		DDT, Total	0.0	2	1	0	3
South Basin Area X	SB-06	0	2	ft		DDT, Total	38.9	0	3	0	3
South Basin Area X	SB-06	2	4	ft		DDT, Total	3.6	1	2	0	3
South Basin Area X	SB-06	4	6	ft		DDT, Total	0.0	3	0	0	3
South Basin Area X	SB-07	0	2	ft		DDT, Total	40.9	0	3	0	3
South Basin Area X	SB-07	2	4	ft		DDT, Total	35.5	0	3	0	3
South Basin Area X	SB-07	4	6	ft		DDT, Total	0.0	3	0	0	3
South Basin Area X	SB-12	0	2	ft		DDT, Total	101.2	0	3	0	3
South Basin Area X	SB-12	2	4	ft		DDT, Total	54.5	1	2	0	3
South Basin Area X	SB-12	4	6	ft		DDT, Total	0.0	3	0	0	3
South Basin Area X	SB-16	0	2	ft		DDT, Total	3.3	0	3	0	3
South Basin Area X	SB-16	2	4	ft		DDT, Total	0.0	3	0	0	3
South Basin Area X	SB-16	4	6	ft		DDT, Total	0.0	3	0	0	3
South Basin Area X	SB-20	0	2	ft		DDT, Total	34.8	0	3	0	3
South Basin Area X	SB-20	2	4	ft		DDT, Total	20.6	1	2	0	3
South Basin Area X	SB-20	4	6	ft		DDT, Total	0.1	2	1	0	3
South Basin Area X	SB-22	0	2	ft		DDT, Total	22.4	1	2	0	3
South Basin Area X	SB-22	2	4	ft		DDT, Total	0.4	2	1	0	3
South Basin Area X	SB-22	4	6	ft		DDT, Total	0.0	3	0	0	3
Point Avisadero Area III	PA-40	0	2	ft		Total PAH HIGH	1254.9	0	6	0	6
Point Avisadero Area III	PA-40	2	4	ft		Total PAH HIGH	961.4	0	6	0	6
Point Avisadero Area III	PA-41	0	2	ft		Total PAH HIGH	3177.4	0	6	0	6
Point Avisadero Area III	PA-41	2	4	ft		Total PAH HIGH	4637.0	0	6	0	6
Point Avisadero Area III	PA-41	4	6	ft		Total PAH HIGH	4174.8	0	6	0	6
Point Avisadero Area III	PA-44	0	2	ft		Total PAH HIGH	400.0	0	6	0	6
Point Avisadero Area III	PA-44	2	4	ft		Total PAH HIGH	2.2	5	1	0	6
Point Avisadero Area III	PA-44	4	6	ft		Total PAH HIGH	14.9	0	6	0	6
Point Avisadero Area III	PA-47	0	2	ft		Total PAH HIGH	3241.6	0	6	0	6
Point Avisadero Area III	PA-47	2	4	ft		Total PAH HIGH	10.5	3	3	0	6
Point Avisadero Area III	PA-47	4	6	ft		Total PAH HIGH	4.7	4	2	0	6
Point Avisadero Area III	PA-52	0	2	ft		Total PAH HIGH	4914.5	0	6	0	6
Point Avisadero Area III	PA-52	2	4	ft		Total PAH HIGH	8192.2	0	6	0	6
Point Avisadero Area III	PA-52	4	6	ft		Total PAH HIGH	10027.1	0	6	0	6
Eastern Wetland Area VIII	EW-31	0	2	ft		Total PAH HIGH	1853.4	0	6	0	6
Eastern Wetland Area VIII	EW-31	2	4	ft		Total PAH HIGH	3042.0	0	6	0	6
Eastern Wetland Area VIII	EW-31	4	6	ft		Total PAH HIGH	33457.9	0	6	0	6
Oil Reclamation Area IX	OR-24	0	2	ft		Total PAH HIGH	198.5	0	6	0	6
Oil Reclamation Area IX	OR-24	2	4	ft		Total PAH HIGH	15.1	0	6	0	6
Oil Reclamation Area IX	OR-24	4	6	ft		Total PAH HIGH	2993.5	0	6	0	6
Oil Reclamation Area IX	OR-28	0	2	ft		Total PAH HIGH	1143.2	0	6	0	6
Oil Reclamation Area IX	OR-28	2	4	ft		Total PAH HIGH	7302.7	0	6	0	6
Oil Reclamation Area IX	OR-28	4	6	ft		Total PAH HIGH	81.6	0	6	0	6
South Basin Area X	SB-01	0	2	ft		Total PAH HIGH	2178.7	0	6	0	6
South Basin Area X	SB-01	2	4	ft		Total PAH HIGH	2448.8	0	6	0	6
South Basin Area X	SB-01	4	6	ft		Total PAH HIGH	13.7	0	6	0	6
South Basin Area X	SB-03	0	2	ft		Total PAH HIGH	1398.6	0	6	0	6
South Basin Area X	SB-03	2	4	ft		Total PAH HIGH	1000.7	0	6	0	6
South Basin Area X	SB-03	4	6	ft		Total PAH HIGH	10.3	0	6	0	6
South Basin Area X	SB-06	0	2	ft		Total PAH HIGH	1841.1	0	6	0	6
South Basin Area X	SB-06	2	4	ft		Total PAH HIGH	615.0	0	6	0	6
South Basin Area X	SB-06	4	6	ft		Total PAH HIGH	7.9	1	5	0	6
South Basin Area X	SB-07	0	2	ft		Total PAH HIGH	1760.4	0	6	0	6
South Basin Area X	SB-07	2	4	ft		Total PAH HIGH	2161.8	0	6	0	6
South Basin Area X	SB-07	4	6	ft		Total PAH HIGH	21.7	0	6	0	6
South Basin Area X	SB-12	0	2	ft		Total PAH HIGH	1827.6	0	6	0	6
South Basin Area X	SB-12	2	4	ft		Total PAH HIGH	1785.0	0	6	0	6

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
South Basin Area X	SB-12	4	6	ft		Total PAH HIGH	16.3	0	6	0	6
South Basin Area X	SB-16	0	2	ft		Total PAH HIGH	316.2	0	6	0	6
South Basin Area X	SB-16	2	4	ft		Total PAH HIGH	217.4	0	6	0	6
South Basin Area X	SB-16	4	6	ft		Total PAH HIGH	357.1	0	6	0	6
South Basin Area X	SB-20	0	2	ft		Total PAH HIGH	2631.8	0	6	0	6
South Basin Area X	SB-20	2	4	ft		Total PAH HIGH	2251.5	0	6	0	6
South Basin Area X	SB-20	4	6	ft		Total PAH HIGH	240.5	0	6	0	6
South Basin Area X	SB-22	0	2	ft		Total PAH HIGH	2097.7	0	6	0	6
South Basin Area X	SB-22	2	4	ft		Total PAH HIGH	1052.3	0	6	0	6
South Basin Area X	SB-22	4	6	ft		Total PAH HIGH	2253.7	0	6	0	6
Point Avisadero Area III	PA-40	0	2	ft		Total PAH LOW	255.7	0	7	0	7
Point Avisadero Area III	PA-40	2	4	ft		Total PAH LOW	201.9	0	7	0	7
Point Avisadero Area III	PA-41	0	2	ft		Total PAH LOW	774.8	0	7	0	7
Point Avisadero Area III	PA-41	2	4	ft		Total PAH LOW	1038.9	0	7	0	7
Point Avisadero Area III	PA-41	4	6	ft		Total PAH LOW	897.5	0	7	0	7
Point Avisadero Area III	PA-44	0	2	ft		Total PAH LOW	118.1	0	7	0	7
Point Avisadero Area III	PA-44	2	4	ft		Total PAH LOW	7.8	4	3	0	7
Point Avisadero Area III	PA-44	4	6	ft		Total PAH LOW	13.2	1	6	0	7
Point Avisadero Area III	PA-47	0	2	ft		Total PAH LOW	532.2	0	7	0	7
Point Avisadero Area III	PA-47	2	4	ft		Total PAH LOW	14.5	3	4	0	7
Point Avisadero Area III	PA-47	4	6	ft		Total PAH LOW	10.8	4	3	0	7
Point Avisadero Area III	PA-52	0	2	ft		Total PAH LOW	1499.7	0	7	0	7
Point Avisadero Area III	PA-52	2	4	ft		Total PAH LOW	2611.3	0	7	0	7
Point Avisadero Area III	PA-52	4	6	ft		Total PAH LOW	2736.5	0	7	0	7
Eastern Wetland Area VIII	EW-31	0	2	ft		Total PAH LOW	694.2	0	7	0	7
Eastern Wetland Area VIII	EW-31	2	4	ft		Total PAH LOW	560.9	0	7	0	7
Eastern Wetland Area VIII	EW-31	4	6	ft		Total PAH LOW	18070.2	0	7	0	7
Oil Reclamation Area IX	OR-24	0	2	ft		Total PAH LOW	52.8	0	7	0	7
Oil Reclamation Area IX	OR-24	2	4	ft		Total PAH LOW	12.0	1	6	0	7
Oil Reclamation Area IX	OR-24	4	6	ft		Total PAH LOW	348.4	0	7	0	7
Oil Reclamation Area IX	OR-28	0	2	ft		Total PAH LOW	181.8	0	7	0	7
Oil Reclamation Area IX	OR-28	2	4	ft		Total PAH LOW	930.6	0	7	0	7
Oil Reclamation Area IX	OR-28	4	6	ft		Total PAH LOW	25.0	2	5	0	7
South Basin Area X	SB-01	0	2	ft		Total PAH LOW	556.0	0	7	0	7
South Basin Area X	SB-01	2	4	ft		Total PAH LOW	392.8	0	7	0	7
South Basin Area X	SB-01	4	6	ft		Total PAH LOW	17.2	1	6	0	7
South Basin Area X	SB-03	0	2	ft		Total PAH LOW	290.8	0	7	0	7
South Basin Area X	SB-03	2	4	ft		Total PAH LOW	143.6	0	7	0	7
South Basin Area X	SB-03	4	6	ft		Total PAH LOW	13.3	2	5	0	7
South Basin Area X	SB-06	0	2	ft		Total PAH LOW	323.8	0	7	0	7
South Basin Area X	SB-06	2	4	ft		Total PAH LOW	83.0	0	7	0	7
South Basin Area X	SB-06	4	6	ft		Total PAH LOW	10.8	1	6	0	7
South Basin Area X	SB-07	0	2	ft		Total PAH LOW	284.4	0	7	0	7
South Basin Area X	SB-07	2	4	ft		Total PAH LOW	276.9	0	7	0	7
South Basin Area X	SB-07	4	6	ft		Total PAH LOW	13.6	1	6	0	7
South Basin Area X	SB-12	0	2	ft		Total PAH LOW	345.7	0	7	0	7
South Basin Area X	SB-12	2	4	ft		Total PAH LOW	293.3	0	7	0	7
South Basin Area X	SB-12	4	6	ft		Total PAH LOW	16.9	0	7	0	7
South Basin Area X	SB-16	0	2	ft		Total PAH LOW	57.3	0	7	0	7
South Basin Area X	SB-16	2	4	ft		Total PAH LOW	34.8	0	7	0	7
South Basin Area X	SB-16	4	6	ft		Total PAH LOW	62.9	0	7	0	7
South Basin Area X	SB-20	0	2	ft		Total PAH LOW	531.6	0	7	0	7
South Basin Area X	SB-20	2	4	ft		Total PAH LOW	732.7	0	7	0	7
South Basin Area X	SB-20	4	6	ft		Total PAH LOW	42.2	0	7	0	7
South Basin Area X	SB-22	0	2	ft		Total PAH LOW	243.7	0	7	0	7
South Basin Area X	SB-22	2	4	ft		Total PAH LOW	153.0	0	7	0	7
South Basin Area X	SB-22	4	6	ft		Total PAH LOW	235.2	0	7	0	7
Point Avisadero Area III	PA-40	0	2	ft		Total PCBs	101.0	3	19	0	22
Point Avisadero Area III	PA-40	2	4	ft		Total PCBs	121.6	3	19	0	22
Point Avisadero Area III	PA-41	0	2	ft		Total PCBs	314.3	5	17	0	22
Point Avisadero Area III	PA-41	2	4	ft		Total PCBs	213.0	6	16	0	22
Point Avisadero Area III	PA-41	4	6	ft		Total PCBs	5.3	16	6	0	22

Table B-42. Calculated Total Concentrations of DDT, PCBs, and PAHs in Sediment Grab and Core Samples

Area	Station	Top Depth	Bottom Depth	Depth Unit	Field QC Code	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Point Avisadero Area III	PA-44	0	2	ft		Total PCBs	10.5	12	10	0	22
Point Avisadero Area III	PA-44	2	4	ft		Total PCBs	0.0	22	0	0	22
Point Avisadero Area III	PA-44	4	6	ft		Total PCBs	1.1	21	1	0	22
Point Avisadero Area III	PA-47	0	2	ft		Total PCBs	49.8	5	17	0	22
Point Avisadero Area III	PA-47	2	4	ft		Total PCBs	0.1	21	1	0	22
Point Avisadero Area III	PA-47	4	6	ft		Total PCBs	0.0	22	0	0	22
Point Avisadero Area III	PA-52	0	2	ft		Total PCBs	8.3	14	8	0	22
Point Avisadero Area III	PA-52	2	4	ft		Total PCBs	29.0	9	13	0	22
Point Avisadero Area III	PA-52	4	6	ft		Total PCBs	30.9	9	13	0	22
Eastern Wetland Area VIII	EW-31	0	2	ft		Total PCBs	26.2	10	12	0	22
Eastern Wetland Area VIII	EW-31	2	4	ft		Total PCBs	0.8	20	2	0	22
Eastern Wetland Area VIII	EW-31	4	6	ft		Total PCBs	0.0	22	0	0	22
Oil Reclamation Area IX	OR-24	0	2	ft		Total PCBs	5.4	15	7	0	22
Oil Reclamation Area IX	OR-24	2	4	ft		Total PCBs	0.0	22	0	0	22
Oil Reclamation Area IX	OR-24	4	6	ft		Total PCBs	24.8	11	11	0	22
Oil Reclamation Area IX	OR-28	0	2	ft		Total PCBs	105.8	5	17	0	22
Oil Reclamation Area IX	OR-28	2	4	ft		Total PCBs	17.8	10	12	0	22
Oil Reclamation Area IX	OR-28	4	6	ft		Total PCBs	0.0	22	0	0	22
South Basin Area X	SB-01	0	2	ft		Total PCBs	6193.6	3	19	0	22
South Basin Area X	SB-01	2	4	ft		Total PCBs	780.4	3	19	0	22
South Basin Area X	SB-01	4	6	ft		Total PCBs	7.8	9	13	0	22
South Basin Area X	SB-03	0	2	ft		Total PCBs	1706.4	3	19	0	22
South Basin Area X	SB-03	2	4	ft		Total PCBs	58.7	6	16	0	22
South Basin Area X	SB-03	4	6	ft		Total PCBs	1.9	15	7	0	22
South Basin Area X	SB-06	0	2	ft		Total PCBs	1278.1	3	19	0	22
South Basin Area X	SB-06	2	4	ft		Total PCBs	51.8	6	16	0	22
South Basin Area X	SB-06	4	6	ft		Total PCBs	0.0	22	0	0	22
South Basin Area X	SB-07	0	2	ft		Total PCBs	1262.4	4	18	0	22
South Basin Area X	SB-07	2	4	ft		Total PCBs	332.3	4	18	0	22
South Basin Area X	SB-07	4	6	ft		Total PCBs	0.0	22	0	0	22
South Basin Area X	SB-12	0	2	ft		Total PCBs	2577.1	3	19	0	22
South Basin Area X	SB-12	2	4	ft		Total PCBs	204.1	4	18	0	22
South Basin Area X	SB-12	4	6	ft		Total PCBs	0.0	22	0	0	22
South Basin Area X	SB-16	0	2	ft		Total PCBs	743.9	4	18	0	22
South Basin Area X	SB-16	2	4	ft		Total PCBs	52.9	9	13	0	22
South Basin Area X	SB-16	4	6	ft		Total PCBs	43.6	10	12	0	22
South Basin Area X	SB-20	0	2	ft		Total PCBs	4876.9	3	19	0	22
South Basin Area X	SB-20	2	4	ft		Total PCBs	537.0	5	17	0	22
South Basin Area X	SB-20	4	6	ft		Total PCBs	8.2	11	11	0	22
South Basin Area X	SB-22	0	2	ft		Total PCBs	1331.5	4	18	0	22
South Basin Area X	SB-22	2	4	ft		Total PCBs	144.3	7	15	0	22
South Basin Area X	SB-22	4	6	ft		Total PCBs	6.1	11	11	0	22

APPENDIX C

Tissue Chemistry Data

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Table C-1. Metals in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Metals in *M. nasuta* Tissues (mg/kg dry weight)

						Ag			Al			As			Ba			Cd			Co			Cr			Cu			Fe			Hg		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.206	J	UJ	1510		J	19.1			16.4			0.269	J		2.22			26.2		J	11			2670			0.128		
AB-67	41569-211	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.15	J	UJ	1110		J	17.2			11.3			0.166	J		1.81			22.1		J	13.1			1840			0.115		
AB-67	41569-28	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.245	J	UJ	1970		J	23.1			20.4			0.364	J	J	3.3			13.9		J	14			2710		J	0.326		
AB-67	41569-35	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.209	J	UJ	1810		J	18.9			22.8			0.418	J		2.85			29.9		J	13.1			2900			0.107		
AB-67	41569-53	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.22	J	UJ	1820		J	22.6			17.1			0.296	J		2.69			14.1		J	12.6			2690			0.162		
AL-64	41569-204	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.148	J	J	993			15.7			15.3			1.01	J		2.38			14		J	10.9			1620			0.115		U
AL-64	41569-205	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.259	J	J	952			16.6			14.7			1.05	J		2.46			7.29		J	12.1			1360			0.14		U
AL-64	41569-51	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.157	J	J	1040			24.1			11.9			1.17	J		3.19			8.54		J	11.7			1570			0.176		U
AL-64	41569-59	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.135	J	UJ	634		J	20.1			8.75			0.803	J		2.62			4.16	J	J	13.9			959			0.114		
AL-64	41569-66	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.129	J	J	312			21.5			5.08			0.74	J		2.92			5.07	J	J	11.1			780			0.129		U
BF-66	41569-120	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.17	J	UJ	1460		J	17.9			13			0.193	J	J	1.65			7.82		J	12.7			1900		J	0.109		
BF-66	41569-127	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.239	J	UJ	1920		J	20.7			14.9			0.276	J	J	2.01			7.71		J	11.4			1960		J	0.132		
BF-66	41569-191	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.265	J	UJ	1860		J	18.3			15.4			0.223	J	J	2.02			9.08		J	15			2100		J	0.123		
BF-66	41569-210	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.137	J	UJ	1690		J	20			12.2			0.217	J	J	2.13			7.86		J	12.3			2110		J	0.137		
BF-66	41569-44	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.175	J	UJ	1640		J	20.3			12.7			0.21	J	J	1.96			8.87		J	11.4			2070		J	0.152		
EW-30	41569-125	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.267	J	UJ	715		J	27.3			6.78			0.533	J	J	2.61			10.8		J	27.3			1250		J	0.169		
EW-31	41569-48	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.113	J	J	810			21.7			8.56			0.239	J		1.74			9.34		J	10.5			1410			0.148		U
EW-32	41569-65	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.249	J	J	1190			19.1			12			0.217	J		2.05			8.1		J	12.4			1850			0.132		U
EW-33	41569-152	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.297	J	UJ	1750		J	26			17.8			1.34	J	J	1.89			13.4		J	20.7			2240		J	0.161		
EW-34	41569-23	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.124	J	J	1010			25.6			11.5			0.291	J		2.35			14.1		J	10.8			2060			0.194		U
EW-35	41569-135	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.142	J	UJ	1230		J	19.8			11.4			0.255	J	J	1.9			15.2		J	12.8			1930		J	0.101		
EW-36	41569-61	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.328	J	J	1780			20.8			14.3			0.291	J		2.21			20.5		J	25			2270			0.164		U
EW-36	41569-89	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	0.216	J	J	3100		J	18.2		J	29.6		J	0.179	J		2.08			15.6		J	19.4			3610		J	0.146		J
EW-37	41569-92	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.21	J	UJ	1430		J	20.6			12.4			0.215	J	J	2.05			12.7		J	12.2			2020		J	0.0955		
IB-54	41569-106	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.194	J	J	925			18.1			9.49			0.229	J		1.62			4.9	J	J	13.8			1330			0.121		U
IB-55	41569-10	BIOACCUM	lab test tissue dep	M. nasuta	SA	1.69		J	777			22.3			9.38			0.237	J		1.74			7.77		J	11.2			1470			0.159		U
IB-56	41569-164	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.208	J	UJ	1870		J	21.1			17.4			0.351	J	J	2.41			8.03		J	14.6			1910		J	0.117		
IB-56	41569-198	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	0.153	J	J	3270		J	18.6		J	32.4		J	0.225	J		2.59			9.95		J	14			3350		J	0.146		J
IB-57	41569-189	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.227	J	UJ	2100		J	20.3			22			0.215	J	J	2.22			11.2		J	14.8			2420		J	0.116		
IB-58	41569-63	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.124	J	J	1020			21.6			10.9			0.266	J		2.16			7.73		J	10.5			1700			0.15		U
IB-59	41569-175	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.221	J	UJ	2080		J	19.1			14.7			0.209	J	J	1.87			9.36		J	14			2130		J	0.135		
OR-24	41569-202	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.199	J	UJ	3190		J	22.1			25.8			0.998	J	J	2.98			24.9		J	24			4040		J	0.159		
OR-25	41569-142	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.265	J	UJ	1950		J	19.5			15.6			0.25	J	J	1.72			8.39		J	14.3			2050		J	0.111		
OR-26	41569-162	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.198	J	UJ	1780		J	22.7			20.6			1.89	J	J	2.77			24.2		J	21.5			3080		J	0.111		
OR-26	41569-30	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	0.131	J	J	3770		J	21		J	34.7		J	0.219	J		2.65		J	16.6		J	18.3			5120		J	0.186		J
OR-27	41569-151	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.226	J	J	1640			18.7			13.9			0.209	J		2.24			19		J	18.5			2500			0.141		U
OR-28	41569-33	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.236	J	UJ	1080		J	19.4			8.4			0.647	J	J	1.49			5.46	J	J	14.9			1410		J	0.103		
OR-29	41569-150	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.25	J	UJ	1650		J	24.8			12.6			0.212	J	J	1.89			33.6		J	13.5			3190		J	0.141		
PA-38	41569-60	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.144	J	J	1330			22.6			17.2			0.42	J		2.72			9.56		J	22			1890			0.145		U
PA-39	41569-75	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.145	J	UJ	1380		J	22.8			12.1			0.211	J		2.06			5.02	J	J	14.3			1790			1.44		
PA-40	41569-110	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.224	J	UJ	1730		J	20.2			17.6			0.247	J		2.37			6.87	J	J	16.2			2320			0.146		
PA-41	41569-158	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.128	J	UJ	2030		J	20.8			21.2			0.268	J		2.09			11.4		J	35.7			2570			0.265		
PA-42	41569-187	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.209	J	UJ	2010		J	19.1			20.3			0.276	J		2.45			11.6		J	89			3640			0.175		
PA-43	41569-161	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.117	J	UJ	1500		J	19.7			14.1			0.243	J		2.37			12.5		J	10.6			2760			0.105		
PA-44	41569-70	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.163	J	UJ	2220		J	21.8			28.1			0.316	J	J	2.6			32.2		J	63.3			3260		J	4.04		
PA-45	41569-85	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.192	J	UJ	1460		J	19.6			14.7			0.229	J	J	2.42			19.2		J	51.7			2280		J	0.852		
PA-46	41569-163	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.131	J	J	1280			20.6			11.8			0.252	J		2.47			22.4		J	48.3			3120			0.143		U
PA-46	41569-46	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	0.133	J	J	2690		J	19.4		J	22		J	0.287	J		2.32			18.5		J	29.3			3120		J	0.167		J
PA-47	41569-132	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.145	J	UJ	2080		J	18.1			21.2			0.33	J	J	2.51			25.9		J	191			3520		J	0.794		
PA-48	41569-131	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.168	J	UJ	1150		J	23			11.4			0.292	J		2.19			13.4		J	17.2			1880			0.119		
PA-49	41569-182	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.211	J	UJ	1830		J	20.2			19.2			0.331	J	J	2.55			20.5		J	18.9			2990		J	0.115		
PA-50	41569-143	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.253	J	J	1440			20.2			13.6			0.274	J		2.72			28		J	13.9			2730			0.112		U
PA-51	41569-99	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.159	J	UJ	1420		J	21.7			14.7			0.266	J		2.5			8.61		J	12.2			2020			0.102		
PA-52	41569-107	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.238	J	UJ	2530		J	18.2			27.5			0.257	J	J	2.73			20.7		J	17.3			2790		J	0.119		
PA-53	41569-192	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.176	J	UJ	1550		J	15.5			12.7			0.196	J		1.65			6.78	J	J	12			1860			0.0959		
PC-63	41569-111	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.136	J	J	826			19.6			9.44			0.264	J		2.44			6.71	J	J	13.7			1220			0.11		U
PC-63	41569-179	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.242	J	J	1580			18.8			16.8			0.329	J		3.53			9.44		J	13.3			1930			0.141		U
PC-63	41569-38	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.117	J	J	1100			21.8			15.2			0.259	J		3.03			7.31		J	9.84			1390			0.181		U
PC-63	41569-52	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.172	J	J	950			20.6			8.96			0.223	J		2.3			5.19	J	J	12.1			1190			0.108		U
PC-63	41569-76	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.174	J	J	1360			19.6			13.5			0.279	J		2.87			6.91	J	J	14			1570			0.172		U

Table C-1. Metals in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Metals in *M. nasuta* Tissues (mg/kg dry weight)																													
						Ag			Al			As			Ba			Cd			Co			Cr			Cu			Fe			Hg		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
RR-65	41569-153	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.234	J	UJ	2090		J	19.6			19.9			0.351	J	J	3.77			14.3		J	18.8			2810		J	0.13		
RR-65	41569-165	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.185	J	UJ	1430		J	17.6			17.5			0.262	J	J	3.28			13.1		J	14.5			1980		J	0.102		
RR-65	41569-185	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.21	J	UJ	1730		J	20.1			19.7			0.279	J	J	3.69			17.3		J	13.9			2780		J	0.104		
RR-65	41569-78	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.257	J	UJ	2780		J	31.2			32.7			2.15	J	J	4.61			28.8		J	16.1			3700		J	0.12		
RR-65	41569-82	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.131	J	UJ	1110		J	21.6			11.6			0.289	J	J	3.22			7.2		J	12			1740		J	0.128		
SB-01	41569-39	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.242	J	UJ	1350		J	20.9			14			0.224	J		1.92			9.33		J	16.7			1970			0.122		
SB-02	41569-115	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.252	J	UJ	1210		J	21.4			10			0.22	J	J	1.6			8.11		J	14.6			1530		J	0.119		
SB-03	41569-98	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.165	J	UJ	1540		J	17.6			15.6			0.182	J	J	1.78			9.43		J	15.4			2040		J	0.118		
SB-04	41569-101	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.247	J	UJ	1790		J	19.6			14.6			0.183	J	J	1.79			8.89		J	14			1990		J	0.129		
SB-05	41569-114	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.301	J	UJ	1920		J	16.2			16.2			0.147	J	J	1.67			7.94		J	17.4			2010		J	0.115		
SB-06	41569-26	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.222	J	UJ	1430		J	22.5			13.7			0.336	J		2.18			6.45	J	J	14.1			1960			0.153		
SB-07	41569-173	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.238	J	J	1150			17.5			11			0.224	J		1.91			7.3		J	16.3			1650			0.133		U
SB-08	41569-155	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.329	J	UJ	2480		J	19.4			18.6			0.255	J	J	2.04			10.2		J	16.4			2420		J	0.121		
SB-09	41569-95	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.307	J	UJ	1490		J	15.3			22.5			0.244	J		1.83			14.8		J	17.9			2670			0.0914		
SB-10	41569-168	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.28	J	UJ	2640		J	17.6			34.7			0.276	J	J	2.28			20.2		J	25.1			3610		J	0.167		
SB-11	41569-5	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.22	J	J	1730			22.2			18.6			0.279	J		2.22			12.3		J	19.1			2340			0.169		U
SB-12	41569-157	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.114	J	UJ	1460		J	16.7			12.1			0.263	J	J	1.85			7.48		J	14.5			1660		J	0.11		
SB-13	41569-102	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.256	J	UJ	2000		J	22.3			19.5			0.37	J	J	2.78			12.1		J	21			2550		J	0.153		
SB-14	41569-77	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.214	J	J	1760			20.9			15.1			0.394	J		2.64			11.9		J	18.8			2190			0.16		U
SB-15	41569-200	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.197	J	UJ	1460		J	18.5			11.2			0.165	J		1.45			5.06	J	J	13.6			1640			0.14		
SB-16	41569-116	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.228	J	UJ	1330		J	20.4			19.3			0.326	J	J	2.4			15.5		J	21.1			2150		J	0.143		
SB-17	41569-41	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.174	J	UJ	941		J	18.4			9.94			0.233	J	J	1.59			8.62		J	15.2			1350		J	0.11		
SB-18	41569-141	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.222	J	UJ	1720		J	22.2			21.6			0.324	J	J	2.09			13.6		J	23.7			2410		J	0.18		
SB-19	41569-203	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.052	U	UJ	223		J	14.2			3.31			0.252	J		1.04			3.26	J	J	31.4			762			0.185		
SB-20	41569-147	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.224	J	J	1060			19			10.7			0.211	J		1.71			6.7	J	J	23			1510			0.161		U
SB-21	41569-11	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.116	J	UJ	1140		J	18.8			15.3			0.176	J		1.54			14.4		J	21.9			2180			0.156		
SB-21	41569-171	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	0.262	J	J	2700		J	23		J	47.5		J	0.307	J		2.58			18.4		J	54.8			3720		J	0.378		J
SB-22	41569-90	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.31	J	UJ	1380		J	21.1			14.4			0.525	J	J	2.07			13.3		J	22			1960		J	0.143		
SB-23	41569-100	BIOACCUM	lab test tissue dep	M. nasuta	SA	0.22	J	UJ	888		J	17.2			8.65			0.221	J		1.39			6.11	J	J	22.5			1500			0.175		
NA	41569-MAC-213	BIOACCUM	background tissue	M. nasuta	SA	0.254	J	J	312			20			5.96			0.278	J		1.58			3.15	J	J	12			795			0.107		U
NA	41569-MAC-214	BIOACCUM	background tissue	M. nasuta	SA	0.317	J	J	413			15.3			7.05			0.269	J		1.29			3.25	J	J	12.2			650			0.0895		U
NA	41569-MAC-215	BIOACCUM	background tissue	M. nasuta	SA	0.242	J	J	572			19.5			6.9			0.334	J		1.47			3.79	J	J	13			793			0.215		U

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-1. Metals in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Metals in *M. nasuta* Tissues (mg/kg dry weight)																							
						Mn			Mo			Ni			Pb			Sb			Se			V			Zn		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	BIOACCUM	lab test tissue dep	M. nasuta	SA	44.8			2.29			6.72			3.08		J	0.134	J		3.68	J	J	9.68			95.5		
AB-67	41569-211	BIOACCUM	lab test tissue dep	M. nasuta	SA	30			2.38			5.58			2.34		J	0.113	J		3.05	J	J	6.65			84.2		
AB-67	41569-28	BIOACCUM	lab test tissue dep	M. nasuta	SA	40.5			2.86			10.1		J	4.25		J	0.217			2.79	J	J	9.65			126		
AB-67	41569-35	BIOACCUM	lab test tissue dep	M. nasuta	SA	49.3			2.72			7.49			3.23		J	0.138	J		3	J	J	11.4			125		
AB-67	41569-53	BIOACCUM	lab test tissue dep	M. nasuta	SA	46.2			2.71			9.15			3.91		J	0.193			3.95	J	J	9.51			114		
AL-64	41569-204	BIOACCUM	lab test tissue dep	M. nasuta	SA	45			2.47			5.26	J		2.53		J	0.104	J		5.33	J		6.62			86.8		
AL-64	41569-205	BIOACCUM	lab test tissue dep	M. nasuta	SA	46.6			2.81			4.91	J		2.61		J	0.119	J		4.2	J		5.46			78.8		
AL-64	41569-51	BIOACCUM	lab test tissue dep	M. nasuta	SA	56.6			2.58			6.65			3.54		J	0.157	J		4.79	J		6.88			78.1		
AL-64	41569-59	BIOACCUM	lab test tissue dep	M. nasuta	SA	39.6			3.12			4.95	J		2.04		J	0.144	J		3.78	J	J	4.2			105		
AL-64	41569-66	BIOACCUM	lab test tissue dep	M. nasuta	SA	27			3.39			4.73	J		1.69		J	0.179	J		5.34	J		3.67			106		
BF-66	41569-120	BIOACCUM	lab test tissue dep	M. nasuta	SA	28.6			2.19			5.75		J	2		J	0.0804	J	U	4.12	J	J	6.19			74		
BF-66	41569-127	BIOACCUM	lab test tissue dep	M. nasuta	SA	25.4			2.34			7.07		J	2.55		J	0.111	J		5.09	J	J	6.39			84.8		
BF-66	41569-191	BIOACCUM	lab test tissue dep	M. nasuta	SA	23.2			2.38			8.4		J	3.06		J	0.156	J		4.76	J	J	7			78.4		
BF-66	41569-210	BIOACCUM	lab test tissue dep	M. nasuta	SA	27.8			2.46			6.52		J	2.3		J	0.126	J		5.33	J	J	7.27			111		
BF-66	41569-44	BIOACCUM	lab test tissue dep	M. nasuta	SA	27.7			2.49			6.67		J	2.12		J	0.117	J		4.03	J	J	6.53			84.7		
EW-30	41569-125	BIOACCUM	lab test tissue dep	M. nasuta	SA	26.7			4.25			8.72		J	4.88		J	0.244			5.13	J	J	5.74			143		
EW-31	41569-48	BIOACCUM	lab test tissue dep	M. nasuta	SA	19.4			2.82			5.36	J		2.15		J	0.12	J		5	J		5.42			85.6		
EW-32	41569-65	BIOACCUM	lab test tissue dep	M. nasuta	SA	23.6			2.58			6.28			2.53		J	0.128	J		4.24	J		6.86			92.1		
EW-33	41569-152	BIOACCUM	lab test tissue dep	M. nasuta	SA	26.8			3.33			7.87		J	4.55		J	0.288			4.48	J	J	7.85			98.4		
EW-34	41569-23	BIOACCUM	lab test tissue dep	M. nasuta	SA	31.4			2.96			6.79			3.02		J	0.226			4.29	J		7.43			114		
EW-35	41569-135	BIOACCUM	lab test tissue dep	M. nasuta	SA	29.7			2.27			5.65		J	1.94		J	0.1	J		5.12	J	J	6.88			124		
EW-36	41569-61	BIOACCUM	lab test tissue dep	M. nasuta	SA	31.2			3.24			8.51			4.56		J	0.19			4.9	J		8.44			108		
EW-36	41569-89	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	46.3			2.62			9.53		J	5.14			0.269		U	2.17	J	J	10.6			76.4		J
EW-37	41569-92	BIOACCUM	lab test tissue dep	M. nasuta	SA	29.8			2.19			6.28		J	1.89		J	0.103	J		4.92	J	J	7.05			102		
IB-54	41569-106	BIOACCUM	lab test tissue dep	M. nasuta	SA	14.3			2.3			5.14	J		2		J	0.0974	J		3.08	J		4.64			86.4		
IB-55	41569-10	BIOACCUM	lab test tissue dep	M. nasuta	SA	18.4			2.77			7.47			3.17		J	0.147	J		5.19	J		5.31			80.2		
IB-56	41569-164	BIOACCUM	lab test tissue dep	M. nasuta	SA	21.1			2.93			7.52		J	2.39		J	0.123	J		5.15	J	J	6.94			108		
IB-56	41569-198	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	32.8			2.14			10		J	3.22			0.137	J	U	2.88	J	J	9.65			99.4		J
IB-57	41569-189	BIOACCUM	lab test tissue dep	M. nasuta	SA	31.8			2.66			16.9		J	2.64		J	0.166	J		2.85	J	J	8.48			84.5		
IB-58	41569-63	BIOACCUM	lab test tissue dep	M. nasuta	SA	21.5			2.65			6.06			1.79		J	0.115	J		4.65	J		6.06			119		
IB-59	41569-175	BIOACCUM	lab test tissue dep	M. nasuta	SA	25.7			2.63			6.95		J	2.32		J	0.118	J		4.76	J	J	7.15			81.8		
OR-24	41569-202	BIOACCUM	lab test tissue dep	M. nasuta	SA	49.2			2.55			13.5		J	7.82		J	0.314			4.63	J	J	13.3			112		
OR-25	41569-142	BIOACCUM	lab test tissue dep	M. nasuta	SA	18.8			3.1			7		J	3.65		J	0.147	J		5.32	J	J	6.86			97.1		
OR-26	41569-162	BIOACCUM	lab test tissue dep	M. nasuta	SA	48.8			2.4			10.6		J	5.55		J	0.264			5.47	J	J	10.6			122		
OR-26	41569-30	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	53.7			2.24			13		J	7.05			0.297		U	2.55	J	J	11.1		J	79.7		J
OR-27	41569-151	BIOACCUM	lab test tissue dep	M. nasuta	SA	27.1			3.19			9.08			4.5		J	0.174	J		4.22	J		8.62			83.9		
OR-28	41569-33	BIOACCUM	lab test tissue dep	M. nasuta	SA	14.5			2.59			5.29	J	J	2.42		J	0.153	J		4.5	J	J	4.18			96.3		
OR-29	41569-150	BIOACCUM	lab test tissue dep	M. nasuta	SA	48			2.38			7		J	3.15		J	0.14	J		4.3	J	J	10.3			89.3		
PA-38	41569-60	BIOACCUM	lab test tissue dep	M. nasuta	SA	24.6			2.62			8.66			2.67		J	0.124	J		5.34	J		7.86			93.6		
PA-39	41569-75	BIOACCUM	lab test tissue dep	M. nasuta	SA	21			2.43			7.37			2.23		J	0.149	J		3.52	J	J	5.32			125		
PA-40	41569-110	BIOACCUM	lab test tissue dep	M. nasuta	SA	24.5			2.82			7.57			2.59		J	0.137	J		2.87	J	J	6.94			98.4		
PA-41	41569-158	BIOACCUM	lab test tissue dep	M. nasuta	SA	29.1			2.77			8.18			3.3		J	0.16	J		3.63	J	J	7.61			91		
PA-42	41569-187	BIOACCUM	lab test tissue dep	M. nasuta	SA	45.3			2.62			9.69			3.96		J	0.218			3.35	J	J	9.2			69.6		
PA-43	41569-161	BIOACCUM	lab test tissue dep	M. nasuta	SA	48.3			2.38			6.47			1.81		J	0.103	J		3.95	J	J	7.67			101		
PA-44	41569-70	BIOACCUM	lab test tissue dep	M. nasuta	SA	52.8			2.18			7.57		J	3.05		J	0.144	J		4.72	J	J	10.4			129		
PA-45	41569-85	BIOACCUM	lab test tissue dep	M. nasuta	SA	38.9			2.42			9.16		J	2.81		J	0.135	J		3.25	J	J	8.07			110		
PA-46	41569-163	BIOACCUM	lab test tissue dep	M. nasuta	SA	45			2.66			8.76			3.62		J	0.149	J		4.53	J		10.2			89		
PA-46	41569-46	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	53.4			2.6			9.27		J	3.6			0.141	J	U	2.43	J	J	8.42			129		J
PA-47	41569-132	BIOACCUM	lab test tissue dep	M. nasuta	SA	43.6			2.24			13.4		J	5.51		J	0.166	J		5.37	J	J	9.49			108		
PA-48	41569-131	BIOACCUM	lab test tissue dep	M. nasuta	SA	27.3			2.67			6.02			1.87		J	0.0977	J		3.19	J	J	5.79			94.8		
PA-49	41569-182	BIOACCUM	lab test tissue dep	M. nasuta	SA	52.6			2.84			8.22		J	3.03		J	0.169	J		3.4	J	J	10.9			98.1		
PA-50	41569-143	BIOACCUM	lab test tissue dep	M. nasuta	SA	56			3.06			8.41			2.35		J	0.13	J		5.15	J		10.4			103		
PA-51	41569-99	BIOACCUM	lab test tissue dep	M. nasuta	SA	34.5			2.57			7.24			2.08		J	0.112	J		3	J	J	6.97			113		
PA-52	41569-107	BIOACCUM	lab test tissue dep	M. nasuta	SA	53.4			2.53			10.3		J	2.57		J	0.139	J		3.67	J	J	9.83			112		
PA-53	41569-192	BIOACCUM	lab test tissue dep	M. nasuta	SA	24.1			2.16			5.59			1.88		J	0.099	J		3.18	J	J	5.85			84.8		
PC-63	41569-111	BIOACCUM	lab test tissue dep	M. nasuta	SA	33.3			2.31			5.07	J		1.31		J	0.0993	J		4.57	J		5.02			85.2		
PC-63	41569-179	BIOACCUM	lab test tissue dep	M. nasuta	SA	39.7			2.89			9.22			2.14		J	0.157	J		5.44	J		8.19			128		
PC-63	41569-38	BIOACCUM	lab test tissue dep	M. nasuta	SA	52.9			2.23			7.06			1.49		J	0.115	J		3.47	J		5.98			88.1		
PC-63	41569-52	BIOACCUM	lab test tissue dep	M. nasuta	SA	29.7			2.47			5.04	J		1.27		J	0.0858	J		5.09	J		4.63			95.2		
PC-63	41569-76	BIOACCUM	lab test tissue dep	M. nasuta	SA	38.7			2.92			6.67			1.78		J	0.16	J		4.79	J		6.15			76.5		

Table C-1. Metals in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Metals in *M. nasuta* Tissues (mg/kg dry weight)																							
						Mn			Mo			Ni			Pb			Sb			Se			V			Zn		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
RR-65	41569-153	BIOACCUM	lab test tissue dep	M. nasuta	SA	59			2.7			9.85		J	2.65		J	0.172	J		3.16	J	J	11.5			98.7		
RR-65	41569-165	BIOACCUM	lab test tissue dep	M. nasuta	SA	51.1			2.59			7.73		J	1.94		J	0.128	J		3.98	J	J	7.81			105		
RR-65	41569-185	BIOACCUM	lab test tissue dep	M. nasuta	SA	58			2.54			8.94		J	2.64		J	0.169	J		3.86	J	J	11.6			88.5		
RR-65	41569-78	BIOACCUM	lab test tissue dep	M. nasuta	SA	76.1			3.13			13		J	3.93		J	0.224			5.57	J	J	15.1			131		
RR-65	41569-82	BIOACCUM	lab test tissue dep	M. nasuta	SA	49.5			2.75			7.15		J	1.86		J	0.144	J		3.19	J	J	6.85			107		
SB-01	41569-39	BIOACCUM	lab test tissue dep	M. nasuta	SA	25			2.73			7.65			7.14		J	0.172	J		4.69	J	J	6.11			114		
SB-02	41569-115	BIOACCUM	lab test tissue dep	M. nasuta	SA	15.5			2.14			5.55		J	6.04		J	0.135	J		6.29	J	J	4.63			69.8		
SB-03	41569-98	BIOACCUM	lab test tissue dep	M. nasuta	SA	18.8			2.4			7		J	5.3		J	0.173	J		3.59	J	J	6.75			84.2		
SB-04	41569-101	BIOACCUM	lab test tissue dep	M. nasuta	SA	18			2.49			5.69		J	4.46		J	0.156	J		5.21	J	J	6.16			98.9		
SB-05	41569-114	BIOACCUM	lab test tissue dep	M. nasuta	SA	20.7			2.96			7.21		J	4.73		J	0.154	J		4.5	J	J	6.67			92.3		
SB-06	41569-26	BIOACCUM	lab test tissue dep	M. nasuta	SA	18.4			3.2			6.9			5.31		J	0.196			3.6	J	J	6.28			135		
SB-07	41569-173	BIOACCUM	lab test tissue dep	M. nasuta	SA	16.4			2.41			6.22			5.66		J	0.129	J		5.23	J		5.35			67.1		
SB-08	41569-155	BIOACCUM	lab test tissue dep	M. nasuta	SA	20.9			2.53			7.37		J	6.34		J	0.307			4.03	J	J	7.64			98		
SB-09	41569-95	BIOACCUM	lab test tissue dep	M. nasuta	SA	35.2			2.56			7.61			9.09		J	0.183			4.46	J	J	9.41			89.3		
SB-10	41569-168	BIOACCUM	lab test tissue dep	M. nasuta	SA	37.1			2.55			10.6		J	13.5		J	1.33			5.02	J	J	10.6			83.8		
SB-11	41569-5	BIOACCUM	lab test tissue dep	M. nasuta	SA	27.1			2.61			7.68			8.77		J	0.245			3.96	J		7.34			102		
SB-12	41569-157	BIOACCUM	lab test tissue dep	M. nasuta	SA	15.7			2.09			5.56		J	6.25		J	0.151	J		4.25	J	J	4.9			115		
SB-13	41569-102	BIOACCUM	lab test tissue dep	M. nasuta	SA	28.5			2.49			10.7		J	7.77		J	0.207			2.94	J	J	8.61			110		
SB-14	41569-77	BIOACCUM	lab test tissue dep	M. nasuta	SA	24.7			2.97			8.28			6.61		J	0.193			2.79	J		7.35			132		
SB-15	41569-200	BIOACCUM	lab test tissue dep	M. nasuta	SA	16.2			2.08			4.83	J		4.37		J	0.127	J		3.3	J	J	4.99			87.6		
SB-16	41569-116	BIOACCUM	lab test tissue dep	M. nasuta	SA	31.7			2.76			7.97		J	6.59		J	0.244			2.67	J	J	7.21			125		
SB-17	41569-41	BIOACCUM	lab test tissue dep	M. nasuta	SA	23.2			2.26			5.58		J	3.86		J	0.194			4.53	J	J	4.81			125		
SB-18	41569-141	BIOACCUM	lab test tissue dep	M. nasuta	SA	26.4			2.84			9.22		J	11.6		J	0.394			4.66	J	J	6.92			115		
SB-19	41569-203	BIOACCUM	lab test tissue dep	M. nasuta	SA	21.9			2.33			2.49	J		2.67		J	0.159	J		2.46	J	J	2.87	J		74.5		
SB-20	41569-147	BIOACCUM	lab test tissue dep	M. nasuta	SA	17.8			2.71			5.93			6.34		J	0.173	J		3.04	J		4.83			108		
SB-21	41569-11	BIOACCUM	lab test tissue dep	M. nasuta	SA	30.1			2.48			9.95			8.19		J	0.454			3.61	J	J	5.51			98.7		
SB-21	41569-171	BIOACCUM2	lab test tissue nondep	M. nasuta	SA	60.1			2.31			15.5		J	28.6			1.26			2.43	J	J	8.88			91.9		J
SB-22	41569-90	BIOACCUM	lab test tissue dep	M. nasuta	SA	24			2.89			7.36		J	7.56		J	0.267			3.62	J	J	5.64			81.6		
SB-23	41569-100	BIOACCUM	lab test tissue dep	M. nasuta	SA	14.7			2.39			5.41			6.66		J	0.199			5.12	J	J	4.15			73.9		
NA	41569-MAC-213	BIOACCUM	background tissue	M. nasuta	SA	10.2			2.96			3.81	J		1.38		J	0.0983	J		2.92	J		3.19	J		109		
NA	41569-MAC-214	BIOACCUM	background tissue	M. nasuta	SA	12.8			2.66			3.05	J		1.23		J	0.0802	J		2.85	J		2.67	J		102		
NA	41569-MAC-215	BIOACCUM	background tissue	M. nasuta	SA	13.1			2.41			3.33	J		1.42		J	0.172	J		2.73	J		3.24	J		127		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-2. Polychlorinated Biphenyls as Congeners in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in M. nasuta Tissues (ug/kg wet weight)																									
							Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)		
Station_ID	Client_Samp_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	41569-167	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.12	J		0.73			0.06	U		0.08	U		1.28			0.17	J	
AB-67	41569-211	41569-211	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.15	J		0.67			0.06	U		0.08	U		1.17			0.15	J	
AB-67	41569-28	41569-28	01-391	lab test tissue dep	M. nasuta	SA	0.14	U		0.07	U		0.1	U		0.12	J		0.65	J		0.1	U		0.14	U		1.4			0.21	J	
AB-67	41569-35	41569-35	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.06	J		0.51			0.06	U		0.08	U		1.07			0.17	J	
AB-67	41569-53	41569-53	01-391	lab test tissue dep	M. nasuta	SA	0.19	U		0.09	U		0.13	U		0.13	J		0.5	J		0.14	U		0.2	U		1.17			0.17	J	
AL-64	41569-204	41569-204	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.1	J		0.64	J		0.09	U		0.12	U		0.52	J		0.08	J	
AL-64	41569-205	41569-205	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	J		0.61	J		0.09	U		0.12	U		0.59	J		0.08	J	
AL-64	41569-51	41569-51	01-389	lab test tissue dep	M. nasuta	SA	0.15	U		0.07	U		0.1	U		0.18	J		0.52	J		0.11	U		0.15	U		0.39	J		0.06	J	
AL-64	41569-59	41569-59	01-389	lab test tissue dep	M. nasuta	SA	0.16	U		0.08	U		0.11	U		0.11	J		0.45	J		0.12	U		0.17	U		0.3	J		0.07	J	
AL-64	41569-66	41569-66	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	U		0.34	J		0.09	U		0.12	U		0.31	J		0.06	J	
BF-66	41569-120	41569-120	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.07	U		0.06	U		0.31	J		0.07	U		0.1	U		0.6			0.1	J	
BF-66	41569-127	41569-127	01-388	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.11	J		0.49	J		0.09	U		0.12	U		0.57	J		0.09	J	
BF-66	41569-191	41569-191	01-388	lab test tissue dep	M. nasuta	SA	0.09	U		0.04	U		0.06	U		0.08	J		0.45	J		0.07	U		0.09	U		0.68			0.1	J	
BF-66	41569-210	41569-210	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.07	U		0.06	U		0.52	J		0.07	U		0.1	U		0.83			0.13	J	
BF-66	41569-44	41569-44	01-388	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.09	U		0.08	U		0.41	J		0.09	U		0.13	U		0.61	J		0.09	J	
EW-30	41569-125	41569-125	01-390	lab test tissue dep	M. nasuta	SA	0.14	U		0.07	U		0.1	U		0.13	J		0.54	J		0.1	U		0.14	U		2.08			0.26	J	
EW-31	41569-48	41569-48	01-387	lab test tissue dep	M. nasuta	SA	0.25	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.26	J	J	0.02	U	UJ	0.07	U	UJ	0.73		J	0.03	U	UJ
EW-32	41569-65	41569-65	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.28	J	J	0.02	U	UJ	0.07	U	UJ	0.67		J	0.03	U	UJ
EW-33	41569-152	41569-152	01-390	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.15	J		0.11	J		0.82			0.07	U		0.1	U		2.05			0.3	J	
EW-34	41569-23	41569-23	01-387	lab test tissue dep	M. nasuta	SA	0.3	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	0.42	J	J	0.03	U	UJ	0.08	U	UJ	1.5		J	0.19	J	J
EW-35	41569-135	41569-135	01-388	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.06	J		0.08	U		0.58	J		0.09	U		0.13	U		1.09			0.12	J	
EW-36	41569-61	41569-61	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.08	J		0.64	J		0.08	U		0.12	U		2.86			0.31	J	
EW-36	41569-89	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	0.58		J	0.02	U	UJ	0.07	U	UJ	2.39		J	0.31	J	J
EW-37	41569-92	41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.09	U		0.04	U		0.06	U		0.03	J		0.08	J		0.07	U		0.09	U		0.2	J		0.03	J	
IB-54	41569-106	41569-106	01-388	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	U		0.35	J		0.09	U		0.12	U		0.71			0.1	J	
IB-55	41569-10	41569-10	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.5		J	0.02	U	UJ	0.07	U	UJ	0.99		J	0.21	J	J
IB-56	41569-164	41569-164	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.07	U		0.06	U		0.51	J		0.07	U		0.1	U		0.6			0.08	J	
IB-56	41569-198	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	0.24	J	J	0.02	U	UJ	0.07	U	UJ	0.3	J	J	0.04	U	UJ
IB-57	41569-189	41569-189	01-390	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.09	U		0.08	J		0.58	J		0.09	U		0.13	U		0.67	J		0.11	J	
IB-58	41569-63	41569-63	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.23	J	J	0.02	U	UJ	0.07	U	UJ	0.38	J	J	0.03	U	UJ
IB-59	41569-175	41569-175	01-389	lab test tissue dep	M. nasuta	SA	0.11	U		0.05	U		0.08	U		0.25	J		0.8			0.08	U		0.11	U		1.34			0.24	J	
OR-24	41569-202	41569-202	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.11	J		1.41	J		0.08	U		0.12	U		9.55			0.79	J	
OR-25	41569-142	41569-142	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.07	J		0.16	J		0.13	J		0.91			0.07	U		0.1	U		4.25			0.54	J	
OR-26	41569-162	41569-162	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.16	J		0.17	J		1.26			0.46	J		0.12	U		6.48			0.78		
OR-26	41569-30	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	0.94		J	0.02	U	UJ	0.07	U	UJ	5.46		J	0.68		J
OR-27	41569-151	41569-151	01-390	lab test tissue dep	M. nasuta	SA	0.11	U		0.05	U		0.14	J		0.19	J		1.23			0.08	U		0.12	U		8.04	D		0.49	J	
OR-28	41569-33	41569-33	01-389	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.13	J		0.52	J		0.09	U		0.12	U		2.51			0.34	J	
OR-29	41569-150	41569-150	01-388	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.09	U		0.14	J		1.22			0.09	U		0.13	U		6.11			0.61	J	
PA-38	41569-60	41569-60	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.07	J		0.08	J		2.99			0.06	U		0.08	U		3.76			0.04	U	
PA-39	41569-75	41569-75	01-389	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.09	U		0.08	J		0.64	J		0.09	U		0.13	U		2.74			0.07	U	
PA-40	41569-110	41569-110	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.07	J		0.43	J		0.06	U		0.08	U		0.77			0.11	J	
PA-41	41569-158	41569-158	01-389	lab test tissue dep	M. nasuta	SA	0.17	U		0.08	U		0.12	U		0.21	J		1.23			0.12	U		0.17	U		1.84			0.2	J	
PA-42	41569-187	41569-187	01-389	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.09	U		0.19	J		0.93			0.1	U		0.13	U		1.5			0.2	J	
PA-43	41569-161	41569-161	01-389	lab test tissue dep	M. nasuta	SA	0.09	U		0.04	U		0.06	U		0.1	J		0.55			0.07	U		0.09	U		0.54			0.08	J	
PA-44	41569-70	41569-70	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.07	U		0.09	J		0.61			0.07	U		0.1	U		1.23			0.19	J	
PA-45	41569-85	41569-85	01-391	lab test tissue dep	M. nasuta	SA	0.15	U		0.07	U		0.11	U		0.2	J		0.77	J		0.11	U		0.16	U		1.86			0.12	J	
PA-46	41569-163	41569-163	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	1.1		J	0.02	U	UJ	0.07	U	UJ	0.95		J	0.03	U	UJ
PA-46	41569-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	1.07		J	0.02	U	UJ	0.07	U	UJ	0.95		J	0.04	U	UJ
PA-47	41569-132	41569-132	01-389	lab test tissue dep	M. nasuta	SA	0.09	U		0.04	U		0.07	U		0.14	J		0.87			0.07	U		0.1	U		1.36			0.18	J	
PA-48	41569-131	41569-131	01-389	lab test tissue dep	M. nasuta	SA	0.11	U		0.05	U		0.08	U		0.24	J		0.38	J		0.08	U		0.12	U		0.62	J		0.06	J	
PA-49	41569-182	41569-182	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.05	U		0.08	U		0.06	J		0.51	J		0.08	U		0.12	U		0.62	J		0.08	J	
PA-50	41569-143	41569-143	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.02	U	UJ	0.02	U	UJ	0.07	U	UJ	0.25	J	J	0.03	U	UJ
PA-51	41569-99	41569-99	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.06	J		0.28	J		0.06	U		0.08	U		0.43	J		0.09	J	
PA-52	41569-107	41569-107	01-389	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.07	U		0.14	J		0.29	J		0.07	U		0.1	U		0.49	J		0.08	J	
PA-53	41569-192	41569-192	01-389	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.17	J		0.62	J		0.09	U		0.12	U		0.6	J		0.08	J	

Table C-2. Polychlorinated Biphenyls as Congeners in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in M. nasuta Tissues (ug/kg wet weight)																									
							Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)		
Station_ID	Client_Samp_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PC-63	41569-111	41569-111	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	U		0.22	J		0.08	U		0.12	U		0.3	J		0.04	J	
PC-63	41569-179	41569-179	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	J		0.52	J		0.09	U		0.12	U		0.45	J		0.06	J	
PC-63	41569-38	41569-38	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.14	J	J	0.02	U	UJ	0.07	U	UJ	0.22	J	J	0.03	U	UJ
PC-63	41569-52	41569-52	01-387	lab test tissue dep	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	0.17	J	J	0.02	U	UJ	0.07	U	UJ	0.2	J	J	0.04	U	UJ
PC-63	41569-76	41569-76	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	U		0.22	J		0.09	U		0.12	U		0.3	J		0.06	J	
RR-65	41569-153	41569-153	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.08	J		0.34	J		0.06	U		0.08	U		0.32	J		0.05	J	
RR-65	41569-165	41569-165	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.08	J		0.48			0.06	U		0.08	U		0.43	J		0.09	J	
RR-65	41569-185	41569-185	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.06	J		0.35	J		0.06	U		0.08	U		0.38	J		0.06	J	
RR-65	41569-78	41569-78	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.07	U		0.35	J		0.08	U		0.12	U		0.37	J		0.05	J	
RR-65	41569-82	41569-82	01-391	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.07	U		0.06	J		0.27	J		0.08	U		0.11	U		0.26	J		0.07	J	
SB-01	41569-39	41569-39	01-389	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.86			0.61	J		4.35			1.84			0.13	U		16.77	D		2.25		
SB-02	41569-115	41569-115	01-388	lab test tissue dep	M. nasuta	SA	0.09	U		0.15	J		0.61			0.33	J		2.2			1.21			0.1	U		9.1			1.47		
SB-03	41569-98	41569-98	01-389	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.3	J		0.24	J		1.41			0.08	U		0.12	U		6.63			0.98		
SB-04	41569-101	41569-101	01-388	lab test tissue dep	M. nasuta	SA	0.15	U		0.07	U		0.3	J		0.15	J		1.49			0.11	U		0.15	U		6.89			1.06		
SB-05	41569-114	41569-114	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.24	J		0.15	J		1.11			0.63			0.1	U		5.12			0.77		
SB-06	41569-26	41569-26	01-391	lab test tissue dep	M. nasuta	SA	0.18	U		0.08	U		0.12	U		0.18	J		1.73			0.13	U		0.18	U		8.1			1.25		
SB-07	41569-173	41569-173	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.31	J		0.24	J		1.88			0.94			0.12	U		8.21	D		1.11		
SB-08	41569-155	41569-155	01-388	lab test tissue dep	M. nasuta	SA	0.11	U		0.05	U		0.32	J		0.23	J		2.16			0.97			0.11	U		9.98	D		1.63		
SB-09	41569-95	41569-95	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.06	U		0.46			2.9			1.5			0.08	U		13.3	D		2.36		
SB-10	41569-168	41569-168	01-388	lab test tissue dep	M. nasuta	SA	0.13	U		0.11	J		0.44	J		0.37	J		3.26			1.4			0.13	U		13.22	D		2.16		
SB-11	41569-5	41569-5	01-390	lab test tissue dep	M. nasuta	SA	0.13	U		0.06	U		0.48	J		0.39	J		4.06			1.8			0.13	U		21.47	D		2.88		
SB-12	41569-157	41569-157	01-388	lab test tissue dep	M. nasuta	SA	0.1	U		0.05	U		0.38	J		0.35	J		3.18			1.34			0.1	U		16.05	D		2.16		
SB-13	41569-102	41569-102	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.36	J		0.33	J		2.48			1.06			0.08	U		13.16	D		1.89		
SB-14	41569-77	41569-77	01-387	lab test tissue dep	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	2.4		J	0.02	U	UJ	0.07	U	UJ	13.85	D	J	1.85		J
SB-15	41569-200	41569-200	01-389	lab test tissue dep	M. nasuta	SA	0.09	U		0.04	U		0.25	J		0.27	J		1.88			0.97			0.09	U		10.65	D		1.4		
SB-16	41569-116	41569-116	01-391	lab test tissue dep	M. nasuta	SA	0.08	U		0.04	U		0.26	J		0.21	J		2.02			0.88			0.08	U		19.53	D		1.46		
SB-17	41569-41	41569-41	01-390	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.23	J		0.21	J		1.72			0.67	J		0.12	U		12.59	D		1.05		
SB-18	41569-141	41569-141	01-388	lab test tissue dep	M. nasuta	SA	0.11	U		0.18	J		0.54	J		0.46	J		4.04			1.32			0.11	U		24.77	D		2.5		
SB-19	41569-203	41569-203	01-389	lab test tissue dep	M. nasuta	SA	0.17	U		0.08	U		0.12	U		0.11	U		1.42			0.13	U		0.18	U		8.86			0.09	U	
SB-20	41569-147	41569-147	01-387	lab test tissue dep	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	2.94		J	0.02	U	UJ	0.07	U	UJ	20.08	D	J	2.12		J
SB-21	41569-11	41569-11	01-389	lab test tissue dep	M. nasuta	SA	0.12	U		0.06	U		0.08	U		0.29	J		3.65			0.87			0.12	U		34.87	D		2.4		
SB-21	41569-171	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.34	J	J	3.06		J	0.02	U	UJ	0.07	U	UJ	36.91	D	J	1.76		J
SB-22	41569-90	41569-90	01-389	lab test tissue dep	M. nasuta	SA	0.11	U		0.05	U		0.3	J		0.31	J		2.46			1.05			0.11	U		19.12	D		1.73		
SB-23	41569-100	41569-100	01-389	lab test tissue dep	M. nasuta	SA	0.09	U		0.04	U		0.27	J		0.14	J		2.88			0.59			0.09	U		36.94	D		1.21		
NA	41569-MAC-213	41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.09	J	J	0.02	U	UJ	0.07	U	UJ	0.04	J	J	0.03	U	UJ
NA	41569-MAC-214	41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.03	U	UJ	0.02	U	UJ	0.02	U	UJ	0.07	U	UJ	0.03	J	J	0.04	U	UJ
NA	41569-MAC-215	41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.26	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.1	J	J	0.02	U	UJ	0.07	U	UJ	0.04	J	J	0.03	U	UJ

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-2. Polychlorinated Biphenyls as Congeners in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in M. nasuta Tissues (ug/kg wet weight)																									
							Cl5(110)			Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)		
Station_ID	Client_Samp_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	41569-167	01-391	lab test tissue dep	M. nasuta	SA	1			0.68			0.07	U		0.25	J		0.04	U		1.58			2.1			0.26	J		0.69		
AB-67	41569-211	41569-211	01-391	lab test tissue dep	M. nasuta	SA	0.88			0.65			0.07	U		0.24	J		0.04	U		1.44			1.96			0.25	J		0.7		
AB-67	41569-28	41569-28	01-391	lab test tissue dep	M. nasuta	SA	1			0.74	J		0.12	U		0.26	J		0.07	U		1.88			2.5			0.31	J		0.89		
AB-67	41569-35	41569-35	01-391	lab test tissue dep	M. nasuta	SA	0.85			0.65			0.07	U		0.2	J		0.04	U		1.45			2			0.24	J		0.71		
AB-67	41569-53	41569-53	01-391	lab test tissue dep	M. nasuta	SA	0.83	J		0.57	J		0.17	U		0.2	J		0.1	U		1.48			2.05			0.25	J		0.71	J	
AL-64	41569-204	41569-204	01-390	lab test tissue dep	M. nasuta	SA	0.36	J		0.29	J		0.11	U		0.08	J		0.06	U		0.43	J		0.58	J		0.14	J		0.22	J	
AL-64	41569-205	41569-205	01-390	lab test tissue dep	M. nasuta	SA	0.38	J		0.29	J		0.11	U		0.09	J		0.06	U		0.41	J		0.52	J		0.16	J		0.21	J	
AL-64	41569-51	41569-51	01-389	lab test tissue dep	M. nasuta	SA	0.27	J		0.18	J		0.13	U		0.17	U		0.08	U		0.46	J		0.63	J		0.15	J		0.32	J	
AL-64	41569-59	41569-59	01-389	lab test tissue dep	M. nasuta	SA	0.25	J		0.18	J		0.15	U		0.19	U		0.08	U		0.31	J		0.35	J		0.09	J		0.18	J	
AL-64	41569-66	41569-66	01-390	lab test tissue dep	M. nasuta	SA	0.22	J		0.21	J		0.1	U		0.14	U		0.06	U		0.35	J		0.42	J		0.1	J		0.21	J	
BF-66	41569-120	41569-120	01-388	lab test tissue dep	M. nasuta	SA	0.43	J		0.4	J		0.09	U		0.08	J		0.05	U		0.85			1.11			0.17	J		0.65		
BF-66	41569-127	41569-127	01-388	lab test tissue dep	M. nasuta	SA	0.41	J		0.39	J		0.11	U		0.12	J		0.06	U		0.89			1.1			0.21	J		0.68	J	
BF-66	41569-191	41569-191	01-388	lab test tissue dep	M. nasuta	SA	0.44	J		0.4	J		0.08	U		0.16	J		0.05	U		0.75			0.95			0.15	J		0.52		
BF-66	41569-210	41569-210	01-388	lab test tissue dep	M. nasuta	SA	0.49	J		0.41	J		0.09	U		0.09	J		0.05	U		0.89			1.16			0.21	J		0.69		
BF-66	41569-44	41569-44	01-388	lab test tissue dep	M. nasuta	SA	0.41	J		0.4	J		0.11	U		0.06	J		0.06	U		0.88			1.08			0.16	J		0.65	J	
EW-30	41569-125	41569-125	01-390	lab test tissue dep	M. nasuta	SA	1.16			1.1			0.12	U		0.43	J		0.07	U		4.53			6.75			1.41			2.53		
EW-31	41569-48	41569-48	01-387	lab test tissue dep	M. nasuta	SA	0.91		J	0.45		J	0.32	U	UJ	0.25	J	J	0.03	U	UJ	2.24		J	3.39		J	0.44		J	1.23		J
EW-32	41569-65	41569-65	01-387	lab test tissue dep	M. nasuta	SA	0.97		J	0.34	J	J	0.33	U	UJ	0.24	J	J	0.03	U	UJ	2.1		J	2.99		J	0.4	J	J	1.36		J
EW-33	41569-152	41569-152	01-390	lab test tissue dep	M. nasuta	SA	1.23			1.06			0.08	U		0.4	J		0.05	U		4.28			6.47			1.21			2.62		
EW-34	41569-23	41569-23	01-387	lab test tissue dep	M. nasuta	SA	1.65		J	0.9		J	0.37	U	UJ	0.43	J	J	0.04	U	UJ	4.49		J	7.07		J	1.02		J	2.41		J
EW-35	41569-135	41569-135	01-388	lab test tissue dep	M. nasuta	SA	0.6	J		0.5	J		0.11	U		0.15	J		0.06	U		1.93			2.6			0.54	J		1.25		
EW-36	41569-61	41569-61	01-390	lab test tissue dep	M. nasuta	SA	1.61			1.5			0.1	U		0.56	J		0.06	U		6.37			9.81			2.01			3.76		
EW-36	41569-89	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	2.11		J	1.37		J	0.33	U	UJ	0.6		J	0.03	U	UJ	6.33		J	10.09		J	1.69		J	3.45		J
EW-37	41569-92	41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.13	J		0.11	J		0.08	U		0.06	J		0.05	U		0.37	J		0.54			0.15	J		0.21	J	
IB-54	41569-106	41569-106	01-388	lab test tissue dep	M. nasuta	SA	0.4	J		0.35	J		0.11	U		0.09	J		0.06	U		0.8			1.06			0.16	J		0.4	J	
IB-55	41569-10	41569-10	01-387	lab test tissue dep	M. nasuta	SA	1.3		J	0.66		J	0.32	U	UJ	0.2	J	J	0.03	U	UJ	1.57		J	2.29		J	0.36	J	J	0.88		J
IB-56	41569-164	41569-164	01-388	lab test tissue dep	M. nasuta	SA	0.38	J		0.3	J		0.09	U		0.08	J		0.05	U		0.67			0.86			0.13	J		0.47	J	
IB-56	41569-198	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	0.44	J	J	0.17	J	J	0.34	U	UJ	0.08	U	UJ	0.03	U	UJ	0.03	U	UJ	0.9		J	0.03	U	UJ	0.4	J	J
IB-57	41569-189	41569-189	01-390	lab test tissue dep	M. nasuta	SA	0.43	J		0.37	J		0.12	U		0.1	J		0.07	U		0.74			0.99			0.19	J		0.61	J	
IB-58	41569-63	41569-63	01-387	lab test tissue dep	M. nasuta	SA	0.59		J	0.25	J	J	0.32	U	UJ	0.07	U	UJ	0.03	U	UJ	0.83		J	1.29		J	0.18	J	J	0.52		J
IB-59	41569-175	41569-175	01-389	lab test tissue dep	M. nasuta	SA	0.79			0.62	J		0.1	U		0.15	J		0.06	U		1.55			2.19			0.3	J		1.1		
OR-24	41569-202	41569-202	01-390	lab test tissue dep	M. nasuta	SA	4.64			3.94			0.1	U		1.51	J		0.06	U		20.51			32.27			6.72			11.76		
OR-25	41569-142	41569-142	01-388	lab test tissue dep	M. nasuta	SA	2.68			2.26			0.09	U		0.84			0.05	U		8.83			14.45			2.37			4.65		
OR-26	41569-162	41569-162	01-390	lab test tissue dep	M. nasuta	SA	3.21			2.72			0.11	U		1.06			0.06	U		13.69			20.99			4			6.81		
OR-26	41569-30	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	5.56		J	3.23		J	0.33	U	UJ	1.44		J	0.03	U	UJ	17.42	D	J	27.6	D	J	3.65		J	10.64		J
OR-27	41569-151	41569-151	01-390	lab test tissue dep	M. nasuta	SA	3.94			3.28			0.1	U		1.18			0.06	U		15.96	D		23.75	D		4.88			9.34	D	
OR-28	41569-33	41569-33	01-389	lab test tissue dep	M. nasuta	SA	1.45			1.23			0.11	U		0.48	J		0.06	U		5.18			7.98			1.56			2.92		
OR-29	41569-150	41569-150	01-388	lab test tissue dep	M. nasuta	SA	2.88			2.55			0.11	U		1.18			0.06	U		12.35			19.79			3.7			6.71		
PA-38	41569-60	41569-60	01-390	lab test tissue dep	M. nasuta	SA	1.68			0.91			0.07	U		0.4	J		0.04	U		5.56			10.38			1.79			3.02		
PA-39	41569-75	41569-75	01-389	lab test tissue dep	M. nasuta	SA	1.24			0.68	J		0.11	U		0.34	J		0.06	U		4.28			6.42			1.14			2.24		
PA-40	41569-110	41569-110	01-391	lab test tissue dep	M. nasuta	SA	0.49			0.38	J		0.07	U		0.15	J		0.04	U		0.87			1.24			0.18	J		0.51		
PA-41	41569-158	41569-158	01-389	lab test tissue dep	M. nasuta	SA	1.07			0.65	J		0.15	U		0.16	J		0.09	U		2.04			2.88			0.44	J		1.46		
PA-42	41569-187	41569-187	01-389	lab test tissue dep	M. nasuta	SA	0.75	J		0.54	J		0.12	U		0.17	J		0.07	U		1.84			2.74			0.71	J		1.68		
PA-43	41569-161	41569-161	01-389	lab test tissue dep	M. nasuta	SA	0.4	J		0.26	J		0.08	U		0.06	J		0.05	U		0.63			0.77			0.15	J		0.28	J	
PA-44	41569-70	41569-70	01-388	lab test tissue dep	M. nasuta	SA	0.77			0.65			0.09	U		0.19	J		0.05	U		1.4			2.03			0.25	J		0.65		
PA-45	41569-85	41569-85	01-391	lab test tissue dep	M. nasuta	SA	0.85	J		0.45	J		0.13	U		0.16	J		0.08	U		2.21			3.47			0.42	J		1.14		
PA-46	41569-163	41569-163	01-387	lab test tissue dep	M. nasuta	SA	0.99		J	0.3	J	J	0.33	U	UJ	0.1	J	J	0.03	U	UJ	0.98		J	2.04		J	0.15	J	J	0.59		J
PA-46	41569-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	1.01		J	0.27	J	J	0.34	U	UJ	0.08	U	UJ	0.03	U	UJ	1.28		J	2.21		J	0.27	J	J	0.74		J
PA-47	41569-132	41569-132	01-389	lab test tissue dep	M. nasuta	SA	0.95			0.63			0.08	U		0.15	J		0.05	U		1.26			1.96			0.16	J		0.53	J	
PA-48	41569-131	41569-131	01-389	lab test tissue dep	M. nasuta	SA	0.4	J		0.27	J		0.1	U		0.13	U		0.06	U		0.73			0.96			0.13	J		0.56	J	
PA-49	41569-182	41569-182	01-390	lab test tissue dep	M. nasuta	SA	0.41	J		0.34	J		0.1	U		0.11	J		0.06	U		0.75			0.99			0.17	J		0.4	J	
PA-50	41569-143	41569-143	01-387	lab test tissue dep	M. nasuta	SA	0.64		J	0.03	U	UJ	0.32	U	UJ	0.07	U	UJ	0.03	U	UJ	0.67		J	1.02		J	0.16	J	J	0.55		J
PA-51	41569-99	41569-99	01-391	lab test tissue dep	M. nasuta	SA	0.36	J		0.29	J		0.07	U		0.16	J		0.04	U		0.65			0.9			0.14	J		0.54		
PA-52	41569-107	41569-107	01-389	lab test tissue dep	M. nasuta	SA	0.4	J		0.3	J		0.08	U		0.17	J		0.05	U		0.77			1.04			0.16	J		0.42	J	
PA-53	41569-192	41569-192	01-389	lab test tissue dep	M. nasuta	SA	0.45	J		0.33	J		0.11	U		0.15	J		0.06	U		0.75			0.95			0.14	J		0.42	J	

Table C-2. Polychlorinated Biphenyls as Congeners in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Polychlorinated Biphenyls as Congeners in M. nasuta Tissues (ug/kg wet weight)

							Cl5(110)			Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)		
Station_ID	Client_Samp_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PC-63	41569-111	41569-111	01-390	lab test tissue dep	M. nasuta	SA	0.2	J		0.17	J		0.1	U		0.06	J		0.06	U		0.4	J		0.53	J		0.13	J		0.27	J	
PC-63	41569-179	41569-179	01-390	lab test tissue dep	M. nasuta	SA	0.31	J		0.23	J		0.11	U		0.07	J		0.06	U		0.46	J		0.59	J		0.11	J		0.26	J	
PC-63	41569-38	41569-38	01-387	lab test tissue dep	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.33	U	UJ	0.07	U	UJ	0.03	U	UJ	0.57		J	0.92		J	0.14	J	J	0.33	J	J
PC-63	41569-52	41569-52	01-387	lab test tissue dep	M. nasuta	SA	0.58		J	0.2	J	J	0.33	U	UJ	0.11	J	J	0.03	U	UJ	0.62		J	1.07		J	0.18	J	J	0.48		J
PC-63	41569-76	41569-76	01-390	lab test tissue dep	M. nasuta	SA	0.2	J		0.16	J		0.11	U		0.05	J		0.06	U		0.42	J		0.55	J		0.16	J		0.25	J	
RR-65	41569-153	41569-153	01-391	lab test tissue dep	M. nasuta	SA	0.28	J		0.19	J		0.07	U		0.06	J		0.04	U		0.35	J		0.45	J		0.07	J		0.2	J	
RR-65	41569-165	41569-165	01-391	lab test tissue dep	M. nasuta	SA	0.38	J		0.25	J		0.07	U		0.07	J		0.04	U		0.44	J		0.55			0.07	J		0.24	J	
RR-65	41569-185	41569-185	01-391	lab test tissue dep	M. nasuta	SA	0.32	J		0.22	J		0.07	U		0.08	J		0.04	U		0.39	J		0.51			0.08	J		0.16	J	
RR-65	41569-78	41569-78	01-390	lab test tissue dep	M. nasuta	SA	0.27	J		0.19	J		0.1	U		0.07	J		0.06	U		0.47	J		0.58	J		0.19	J		0.28	J	
RR-65	41569-82	41569-82	01-391	lab test tissue dep	M. nasuta	SA	0.21	J		0.16	J		0.09	U		0.12	U		0.05	U		0.35	J		0.48	J		0.12	J		0.24	J	
SB-01	41569-39	41569-39	01-389	lab test tissue dep	M. nasuta	SA	9.94	D		9.49			0.11	U		1.86			0.06	U		17.49	D		26.92	D		3.66			6.21		
SB-02	41569-115	41569-115	01-388	lab test tissue dep	M. nasuta	SA	6.08			5.86			0.08	U		1.24			0.05	U		11.87			18.98			2.47			4.2		
SB-03	41569-98	41569-98	01-389	lab test tissue dep	M. nasuta	SA	4.16			4.1			0.1	U		1.12			0.06	U		11.24			18.32			2.75			5.05		
SB-04	41569-101	41569-101	01-388	lab test tissue dep	M. nasuta	SA	3.97			3.83			0.13	U		1.06			0.07	U		11.05			16.76			2.82			4.97		
SB-05	41569-114	41569-114	01-388	lab test tissue dep	M. nasuta	SA	3.32			2.91			0.09	U		0.99			0.05	U		9.66			14.67			2.53			4.54		
SB-06	41569-26	41569-26	01-391	lab test tissue dep	M. nasuta	SA	5.23			5.12			0.16	U		1.47			0.09	U		15.35			24.28			4.15			7.58		
SB-07	41569-173	41569-173	01-390	lab test tissue dep	M. nasuta	SA	5.32			4.81			0.1	U		1.27			0.06	U		12.05	D		16.83	D		2.96			4.95		
SB-08	41569-155	41569-155	01-388	lab test tissue dep	M. nasuta	SA	7.52			6.44			0.1	U		1.7			0.06	U		15.34	D		21.83	D		4.34			7.95		
SB-09	41569-95	41569-95	01-391	lab test tissue dep	M. nasuta	SA	8.49	D		8.07	D		0.07	U		2.24			0.04	U		16.47	D		20.6	D		4.35			6.69		
SB-10	41569-168	41569-168	01-388	lab test tissue dep	M. nasuta	SA	9.8	D		8.31	D		0.11	U		1.96			0.06	U		18.58	D		25.28	D		4.02			6.71		
SB-11	41569-5	41569-5	01-390	lab test tissue dep	M. nasuta	SA	14.79	D		12.44	D		0.11	U		2.92			0.06	U		29.44	D		40.15	D		6.54			11.71	D	
SB-12	41569-157	41569-157	01-388	lab test tissue dep	M. nasuta	SA	10.89			8.25			0.09	U		2.24			0.05	U		21.88	D		31.43	D		5.21			8.79		
SB-13	41569-102	41569-102	01-391	lab test tissue dep	M. nasuta	SA	8.06	D		6.74	D		0.07	U		2.26			0.04	U		22.68	D		32.59	D		7.04	D		11.08	D	
SB-14	41569-77	41569-77	01-387	lab test tissue dep	M. nasuta	SA	11.64	D	J	9.02		J	0.34	U	UJ	2.57		J	0.03	U	UJ	26.84	D	J	40.68	D	J	5.94		J	12.61	D	J
SB-15	41569-200	41569-200	01-389	lab test tissue dep	M. nasuta	SA	6.6			5.47			0.08	U		1.72			0.05	U		17.91	D		25.33	D		5.01			9.46		
SB-16	41569-116	41569-116	01-391	lab test tissue dep	M. nasuta	SA	9.51	D		7.28	D		0.07	U		2.68			0.04	U		36.45	D		55.91	D		12.79	D		20.73	D	
SB-17	41569-41	41569-41	01-390	lab test tissue dep	M. nasuta	SA	6.68			5.02			0.11	U		1.93			0.06	U		24.32	D		36.12	D		7.76			15.01	D	
SB-18	41569-141	41569-141	01-388	lab test tissue dep	M. nasuta	SA	15.01	D		11.7	D		0.1	U		2.71			0.06	U		39.55	D		60.24	D		10.7	D		18.63	D	
SB-19	41569-203	41569-203	01-389	lab test tissue dep	M. nasuta	SA	4.83			2.34			0.15	U		1.66			0.09	U		25.44	D		37.44	D		8.75			15.92		
SB-20	41569-147	41569-147	01-387	lab test tissue dep	M. nasuta	SA	15.55	D	J	10.75		J	0.33	U	UJ	3.21		J	0.03	U	UJ	39.6	D	J	64.59	D	J	8.52		J	18.18	D	J
SB-21	41569-11	41569-11	01-389	lab test tissue dep	M. nasuta	SA	15.87	D		11.15			0.11	U		4.23			0.06	U		64.29	D		100.73	D		21.84	D		35.73	D	
SB-21	41569-171	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	19.42	D	J	12.53	D	J	0.34	U	UJ	6.16		J	0.03	U	UJ	80.61	D	J	134.04	D	J	25.69	D	J	47.86	D	J
SB-22	41569-90	41569-90	01-389	lab test tissue dep	M. nasuta	SA	11.73			8.32			0.09	U		2.87			0.05	U		35.31	D		53.62	D		10.87			16.98	D	
SB-23	41569-100	41569-100	01-389	lab test tissue dep	M. nasuta	SA	14.08	D		10.38	D		0.08	U		3.99			0.05	U		64.3	D		112.2	D		20.78	D		35.26	D	
NA	41569-MAC-213	41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.33	U	UJ	0.07	U	UJ	0.03	U	UJ	0.03	U	UJ	0.61		J	0.03	U	UJ	0.34	J	J
NA	41569-MAC-214	41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.33	U	UJ	0.07	U	UJ	0.03	U	UJ	0.03	U	UJ	0.5		J	0.3	J	J	0.03	U	UJ
NA	41569-MAC-215	41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.33	U	UJ	0.07	U	UJ	0.03	U	UJ	0.03	U	UJ	0.56		J	0.03	U	UJ	0.03	U	UJ

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-2. Polychlorinated Biphenyls as Congeners in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in M. nasuta Tissues (ug/kg wet weight)											
							Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Station_ID	Client_Samp_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	41569-167	01-391	lab test tissue dep	M. nasuta	SA	0.55			0.07	J		0.06	J		0.04	J	
AB-67	41569-211	41569-211	01-391	lab test tissue dep	M. nasuta	SA	0.49			0.07	J		0.05	J		0.04	J	
AB-67	41569-28	41569-28	01-391	lab test tissue dep	M. nasuta	SA	0.67	J		0.09	J		0.08	J		0.06	J	
AB-67	41569-35	41569-35	01-391	lab test tissue dep	M. nasuta	SA	0.48			0.07	J		0.04	J		0.04	J	
AB-67	41569-53	41569-53	01-391	lab test tissue dep	M. nasuta	SA	0.46	J		0.11	U		0.1	U		0.11	U	
AL-64	41569-204	41569-204	01-390	lab test tissue dep	M. nasuta	SA	0.14	J		0.02	J		0.06	U		0.07	U	
AL-64	41569-205	41569-205	01-390	lab test tissue dep	M. nasuta	SA	0.13	J		0.07	U		0.06	U		0.07	U	
AL-64	41569-51	41569-51	01-389	lab test tissue dep	M. nasuta	SA	0.12	J		0.08	U		0.08	U		0.09	U	
AL-64	41569-59	41569-59	01-389	lab test tissue dep	M. nasuta	SA	0.07	J		0.09	U		0.09	U		0.09	U	
AL-64	41569-66	41569-66	01-390	lab test tissue dep	M. nasuta	SA	0.11	J		0.06	U		0.06	U		0.07	U	
BF-66	41569-120	41569-120	01-388	lab test tissue dep	M. nasuta	SA	0.27	J		0.05	U		0.05	U		0.06	U	
BF-66	41569-127	41569-127	01-388	lab test tissue dep	M. nasuta	SA	0.3	J		0.07	U		0.07	U		0.07	U	
BF-66	41569-191	41569-191	01-388	lab test tissue dep	M. nasuta	SA	0.23	J		0.03	J		0.02	J		0.03	J	
BF-66	41569-210	41569-210	01-388	lab test tissue dep	M. nasuta	SA	0.3	J		0.05	U		0.03	J		0.05	J	
BF-66	41569-44	41569-44	01-388	lab test tissue dep	M. nasuta	SA	0.27	J		0.07	U		0.07	U		0.07	U	
EW-30	41569-125	41569-125	01-390	lab test tissue dep	M. nasuta	SA	1.89			0.35	J		0.26	J		0.07	J	
EW-31	41569-48	41569-48	01-387	lab test tissue dep	M. nasuta	SA	0.94		J	0.1	J	J	0.04	J	J	0.03	U	UJ
EW-32	41569-65	41569-65	01-387	lab test tissue dep	M. nasuta	SA	0.86		J	0.09	J	J	0.05	J	J	0.04	J	J
EW-33	41569-152	41569-152	01-390	lab test tissue dep	M. nasuta	SA	1.83			0.2	J		0.1	J		0.04	J	
EW-34	41569-23	41569-23	01-387	lab test tissue dep	M. nasuta	SA	1.96		J	0.19	J	J	0.08	J	J	0.04	J	J
EW-35	41569-135	41569-135	01-388	lab test tissue dep	M. nasuta	SA	0.7	J		0.09	J		0.06	J		0.05	J	
EW-36	41569-61	41569-61	01-390	lab test tissue dep	M. nasuta	SA	2.33			0.31	J		0.14	J		0.05	J	
EW-36	41569-89	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	2.55		J	0.26	J	J	0.11	J	J	0.05	J	J
EW-37	41569-92	41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.15	J		0.01	J		0.05	U		0.05	U	
IB-54	41569-106	41569-106	01-388	lab test tissue dep	M. nasuta	SA	0.28	J		0.06	U		0.06	U		0.07	U	
IB-55	41569-10	41569-10	01-387	lab test tissue dep	M. nasuta	SA	0.53		J	0.06	J	J	0.03	U	UJ	0.03	U	UJ
IB-56	41569-164	41569-164	01-388	lab test tissue dep	M. nasuta	SA	0.24	J		0.04	J		0.05	U		0.06	U	
IB-56	41569-198	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	0.18	J	J	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
IB-57	41569-189	41569-189	01-390	lab test tissue dep	M. nasuta	SA	0.25	J		0.07	U		0.07	U		0.08	U	
IB-58	41569-63	41569-63	01-387	lab test tissue dep	M. nasuta	SA	0.28	J	J	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
IB-59	41569-175	41569-175	01-389	lab test tissue dep	M. nasuta	SA	0.53	J		0.06	J		0.06	J		0.04	J	
OR-24	41569-202	41569-202	01-390	lab test tissue dep	M. nasuta	SA	7			0.89	J		0.41	J		0.1	J	
OR-25	41569-142	41569-142	01-388	lab test tissue dep	M. nasuta	SA	3.06			0.34	J		0.15	J		0.06	J	
OR-26	41569-162	41569-162	01-390	lab test tissue dep	M. nasuta	SA	4.33			0.51	J		0.16	J		0.05	J	
OR-26	41569-30	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	6.99		J	0.66		J	0.24	J	J	0.12	J	J
OR-27	41569-151	41569-151	01-390	lab test tissue dep	M. nasuta	SA	5.88			0.64	J		0.21	J		0.07	J	
OR-28	41569-33	41569-33	01-389	lab test tissue dep	M. nasuta	SA	1.85			0.23	J		0.08	J		0.05	J	
OR-29	41569-150	41569-150	01-388	lab test tissue dep	M. nasuta	SA	4.43			0.54	J		0.22	J		0.13	J	
PA-38	41569-60	41569-60	01-390	lab test tissue dep	M. nasuta	SA	1.93			0.25	J		0.09	J		0.02	J	
PA-39	41569-75	41569-75	01-389	lab test tissue dep	M. nasuta	SA	1.29			0.18	J		0.06	J		0.03	J	
PA-40	41569-110	41569-110	01-391	lab test tissue dep	M. nasuta	SA	0.3	J		0.04	J		0.04	J		0.04	J	
PA-41	41569-158	41569-158	01-389	lab test tissue dep	M. nasuta	SA	0.77	J		0.11	J		0.07	J		0.04	J	
PA-42	41569-187	41569-187	01-389	lab test tissue dep	M. nasuta	SA	0.79			0.17	J		0.1	J		0.01	J	
PA-43	41569-161	41569-161	01-389	lab test tissue dep	M. nasuta	SA	0.18	J		0.05	U		0.05	U		0.05	U	
PA-44	41569-70	41569-70	01-388	lab test tissue dep	M. nasuta	SA	0.4	J		0.04	J		0.03	J		0.06	U	
PA-45	41569-85	41569-85	01-391	lab test tissue dep	M. nasuta	SA	0.67	J		0.08	J		0.04	J		0.09	U	
PA-46	41569-163	41569-163	01-387	lab test tissue dep	M. nasuta	SA	0.36	J	J	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
PA-46	41569-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	0.5		J	0.04	J	J	0.05	J	J	0.03	U	UJ
PA-47	41569-132	41569-132	01-389	lab test tissue dep	M. nasuta	SA	0.37	J		0.05	U		0.05	U		0.05	U	
PA-48	41569-131	41569-131	01-389	lab test tissue dep	M. nasuta	SA	0.22	J		0.03	J		0.05	J		0.03	J	
PA-49	41569-182	41569-182	01-390	lab test tissue dep	M. nasuta	SA	0.24	J		0.03	J		0.04	J		0.03	J	
PA-50	41569-143	41569-143	01-387	lab test tissue dep	M. nasuta	SA	0.25	J	J	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
PA-51	41569-99	41569-99	01-391	lab test tissue dep	M. nasuta	SA	0.22	J		0.03	J		0.03	J		0.05	U	
PA-52	41569-107	41569-107	01-389	lab test tissue dep	M. nasuta	SA	0.25	J		0.05	U		0.06	J		0.11	J	
PA-53	41569-192	41569-192	01-389	lab test tissue dep	M. nasuta	SA	0.25	J		0.04	J		0.05	J		0.03	J	

Table C-2. Polychlorinated Biphenyls as Congeners in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in M. nasuta Tissues (ug/kg wet weight)											
							Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Station_ID	Client_Samp_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PC-63	41569-111	41569-111	01-390	lab test tissue dep	M. nasuta	SA	0.15	J		0.06	U		0.06	U		0.07	U	
PC-63	41569-179	41569-179	01-390	lab test tissue dep	M. nasuta	SA	0.15	J		0.07	U		0.06	U		0.07	U	
PC-63	41569-38	41569-38	01-387	lab test tissue dep	M. nasuta	SA	0.11	J	J	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
PC-63	41569-52	41569-52	01-387	lab test tissue dep	M. nasuta	SA	0.19	J	J	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
PC-63	41569-76	41569-76	01-390	lab test tissue dep	M. nasuta	SA	0.14	J		0.06	U		0.06	U		0.07	U	
RR-65	41569-153	41569-153	01-391	lab test tissue dep	M. nasuta	SA	0.12	J		0.04	U		0.04	U		0.05	U	
RR-65	41569-165	41569-165	01-391	lab test tissue dep	M. nasuta	SA	0.14	J		0.04	U		0.04	U		0.05	U	
RR-65	41569-185	41569-185	01-391	lab test tissue dep	M. nasuta	SA	0.13	J		0.04	U		0.04	U		0.05	U	
RR-65	41569-78	41569-78	01-390	lab test tissue dep	M. nasuta	SA	0.15	J		0.06	U		0.06	U		0.07	U	
RR-65	41569-82	41569-82	01-391	lab test tissue dep	M. nasuta	SA	0.13	J		0.06	U		0.06	U		0.06	U	
SB-01	41569-39	41569-39	01-389	lab test tissue dep	M. nasuta	SA	4.98			0.53	J		0.23	J		0.11	J	
SB-02	41569-115	41569-115	01-388	lab test tissue dep	M. nasuta	SA	3.29			0.36	J		0.16	J		0.06	J	
SB-03	41569-98	41569-98	01-389	lab test tissue dep	M. nasuta	SA	3.76			0.39	J		0.16	J		0.06	J	
SB-04	41569-101	41569-101	01-388	lab test tissue dep	M. nasuta	SA	3.43			0.4	J		0.16	J		0.08	J	
SB-05	41569-114	41569-114	01-388	lab test tissue dep	M. nasuta	SA	3.14			0.37	J		0.13	J		0.06	J	
SB-06	41569-26	41569-26	01-391	lab test tissue dep	M. nasuta	SA	5.1			0.6	J		0.22	J		0.07	J	
SB-07	41569-173	41569-173	01-390	lab test tissue dep	M. nasuta	SA	3.88			0.41	J		0.16	J		0.06	J	
SB-08	41569-155	41569-155	01-388	lab test tissue dep	M. nasuta	SA	5.38			0.57	J		0.22	J		0.07	J	
SB-09	41569-95	41569-95	01-391	lab test tissue dep	M. nasuta	SA	4.93			0.62			0.25	J		0.11	J	
SB-10	41569-168	41569-168	01-388	lab test tissue dep	M. nasuta	SA	5.21			0.54	J		0.19	J		0.07	J	
SB-11	41569-5	41569-5	01-390	lab test tissue dep	M. nasuta	SA	7.66			0.87			0.33	J		0.1	J	
SB-12	41569-157	41569-157	01-388	lab test tissue dep	M. nasuta	SA	6.07			0.7			0.25	J		0.08	J	
SB-13	41569-102	41569-102	01-391	lab test tissue dep	M. nasuta	SA	7.51	D		0.87			0.31	J		0.1	J	
SB-14	41569-77	41569-77	01-387	lab test tissue dep	M. nasuta	SA	9.58		J	0.79		J	0.25	J	J	0.1	J	J
SB-15	41569-200	41569-200	01-389	lab test tissue dep	M. nasuta	SA	5.59			0.68			0.3	J		0.09	J	
SB-16	41569-116	41569-116	01-391	lab test tissue dep	M. nasuta	SA	13.89	D		1.46			0.46			0.11	J	
SB-17	41569-41	41569-41	01-390	lab test tissue dep	M. nasuta	SA	9.32			1.05			0.35	J		0.08	J	
SB-18	41569-141	41569-141	01-388	lab test tissue dep	M. nasuta	SA	13.94	D		1.21			0.35	J		0.09	J	
SB-19	41569-203	41569-203	01-389	lab test tissue dep	M. nasuta	SA	11.36			1.35			0.47	J		0.1	U	
SB-20	41569-147	41569-147	01-387	lab test tissue dep	M. nasuta	SA	12.85	D	J	1.21		J	0.36	J	J	0.13	J	J
SB-21	41569-11	41569-11	01-389	lab test tissue dep	M. nasuta	SA	24.4	D		2.69			0.8			0.11	J	
SB-21	41569-171	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	31.99	D	J	3.87		J	1.1		J	0.18	J	J
SB-22	41569-90	41569-90	01-389	lab test tissue dep	M. nasuta	SA	12.51	D		1.54			0.45	J		0.1	J	
SB-23	41569-100	41569-100	01-389	lab test tissue dep	M. nasuta	SA	24.47	D		2.42			0.67			0.11	J	
NA	41569-MAC-213	41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
NA	41569-MAC-214	41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ
NA	41569-MAC-215	41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ	0.03	U	UJ

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-3. Polychlorinated Biphenyls as Aroclors in *M. nasuta T*issue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polychlorinated Biphenyls as Aroclors in *M. nasuta* Tissues (ug/kg wet weight)																				
						Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	01-391	lab test tissue dep	M. nasuta	SA	5.74	U		5.74	U		5.74	U		5.74	U		5.74	U		5.74	U		5.74	U	
AB-67	41569-211	01-391	lab test tissue dep	M. nasuta	SA	5.68	U		5.68	U		5.68	U		5.68	U		5.68	U		5.68	U		5.68	U	
AB-67	41569-28	01-391	lab test tissue dep	M. nasuta	SA	9.94	U		9.94	U		9.94	U		9.94	U		9.94	U		9.94	U		9.94	U	
AB-67	41569-35	01-391	lab test tissue dep	M. nasuta	SA	5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U	
AB-67	41569-53	01-391	lab test tissue dep	M. nasuta	SA	13.74	U		13.74	U		13.74	U		13.74	U		13.74	U		13.74	U		13.74	U	
AL-64	41569-204	01-390	lab test tissue dep	M. nasuta	SA	8.5	U		8.5	U		8.5	U		8.5	U		8.5	U		8.5	U		8.5	U	
AL-64	41569-205	01-390	lab test tissue dep	M. nasuta	SA	8.56	U		8.56	U		8.56	U		8.56	U		8.56	U		8.56	U		8.56	U	
AL-64	41569-51	01-389	lab test tissue dep	M. nasuta	SA	10.66	U		10.66	U		10.66	U		10.66	U		10.66	U		10.66	U		10.66	U	
AL-64	41569-59	01-389	lab test tissue dep	M. nasuta	SA	11.6	U		11.6	U		11.6	U		11.6	U		11.6	U		11.6	U		11.6	U	
AL-64	41569-66	01-390	lab test tissue dep	M. nasuta	SA	8.34	U		8.34	U		8.34	U		8.34	U		8.34	U		8.34	U		8.34	U	
BF-66	41569-120	01-388	lab test tissue dep	M. nasuta	SA	6.89	U		6.89	U		6.89	U		6.89	U		6.89	U		6.89	U		6.89	U	
BF-66	41569-127	01-388	lab test tissue dep	M. nasuta	SA	8.65	U		8.65	U		8.65	U		8.65	U		8.65	U		8.65	U		8.65	U	
BF-66	41569-191	01-388	lab test tissue dep	M. nasuta	SA	6.37	U		6.37	U		6.37	U		6.37	U		6.37	U		6.37	U		6.37	U	
BF-66	41569-210	01-388	lab test tissue dep	M. nasuta	SA	7.06	U		7.06	U		7.06	U		7.06	U		7.06	U		7.06	U		7.06	U	
BF-66	41569-44	01-388	lab test tissue dep	M. nasuta	SA	9.02	U		9.02	U		9.02	U		9.02	U		9.02	U		9.02	U		9.02	U	
EW-30	41569-125	01-390	lab test tissue dep	M. nasuta	SA	9.76	U		9.76	U		9.76	U		9.76	U		9.76	U		9.76	U		43.98		
EW-31	41569-48	01-387	lab test tissue dep	M. nasuta	SA	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	20.26		J
EW-32	41569-65	01-387	lab test tissue dep	M. nasuta	SA	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ
EW-33	41569-152	01-390	lab test tissue dep	M. nasuta	SA	6.75	U		6.75	U		6.75	U		6.75	U		6.75	U		6.75	U		41.81		
EW-34	41569-23	01-387	lab test tissue dep	M. nasuta	SA	6.35	U	UJ	6.35	U	UJ	6.35	U	UJ	6.35	U	UJ	6.35	U	UJ	6.35	U	UJ	41.25		J
EW-35	41569-135	01-388	lab test tissue dep	M. nasuta	SA	8.84	U		8.84	U		8.84	U		8.84	U		8.84	U		8.84	U		8.84	U	
EW-36	41569-61	01-390	lab test tissue dep	M. nasuta	SA	8.28	U		8.28	U		8.28	U		8.28	U		8.28	U		8.28	U		58.49		
EW-36	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	5.73	U	UJ	5.73	U	UJ	5.73	U	UJ	5.73	U	UJ	5.73	U	UJ	5.73	U	UJ	56.74		J
EW-37	41569-92	01-388	lab test tissue dep	M. nasuta	SA	6.47	U		6.47	U		6.47	U		6.47	U		6.47	U		6.47	U		6.47	U	
IB-54	41569-106	01-388	lab test tissue dep	M. nasuta	SA	8.46	U		8.46	U		8.46	U		8.46	U		8.46	U		8.46	U		8.46	U	
IB-55	41569-10	01-387	lab test tissue dep	M. nasuta	SA	5.57	U	UJ	5.57	U	UJ	5.57	U	UJ	5.57	U	UJ	5.57	U	UJ	5.57	U	UJ	15.		J
IB-56	41569-164	01-388	lab test tissue dep	M. nasuta	SA	7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U	
IB-56	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	5.81	U	UJ	5.81	U	UJ	5.81	U	UJ	5.81	U	UJ	5.81	U	UJ	5.81	U	UJ	5.81	U	UJ
IB-57	41569-189	01-390	lab test tissue dep	M. nasuta	SA	9.23	U		9.23	U		9.23	U		9.23	U		9.23	U		9.23	U		9.23	U	
IB-58	41569-63	01-387	lab test tissue dep	M. nasuta	SA	5.52	U	UJ	5.52	U	UJ	5.52	U	UJ	5.52	U	UJ	5.52	U	UJ	5.52	U	UJ	5.52	U	UJ
IB-59	41569-175	01-389	lab test tissue dep	M. nasuta	SA	7.93	U		7.93	U		7.93	U		7.93	U		7.93	U		7.93	U		7.93	U	
OR-24	41569-202	01-390	lab test tissue dep	M. nasuta	SA	20.54	U		20.54	U		20.54	U		20.54	U		20.54	U		20.54	U		188.11		
OR-25	41569-142	01-388	lab test tissue dep	M. nasuta	SA	7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		7.07	U		77.44		
OR-26	41569-162	01-390	lab test tissue dep	M. nasuta	SA	8.52	U		8.52	U		8.52	U		8.52	U		8.52	U		8.52	U		114.95		
OR-26	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	5.68	U	UJ	5.68	U	UJ	5.68	U	UJ	5.68	U	UJ	5.68	U	UJ	5.68	U	UJ	158.27		J
OR-27	41569-151	01-390	lab test tissue dep	M. nasuta	SA	8.1	U		8.1	U		8.1	U		8.1	U		8.1	U		8.1	U		144.97		
OR-28	41569-33	01-389	lab test tissue dep	M. nasuta	SA	8.42	U		8.42	U		8.42	U		8.42	U		8.42	U		8.42	U		48.64		
OR-29	41569-150	01-388	lab test tissue dep	M. nasuta	SA	8.82	U		8.82	U		8.82	U		8.82	U		8.82	U		8.82	U		107.71		
PA-38	41569-60	01-390	lab test tissue dep	M. nasuta	SA	5.53	U		5.53	U		5.53	U		5.53	U		5.53	U		5.53	U		55.97		
PA-39	41569-75	01-389	lab test tissue dep	M. nasuta	SA	8.95	U		8.95	U		8.95	U		8.95	U		8.95	U		8.95	U		40.02		
PA-40	41569-110	01-391	lab test tissue dep	M. nasuta	SA	5.74	U		5.74	U		5.74	U		5.74	U		5.74	U		5.74	U		5.74	U	
PA-41	41569-158	01-389	lab test tissue dep	M. nasuta	SA	12.05	U		12.05	U		12.05	U		12.05	U		12.05	U		12.05	U		12.05	U	
PA-42	41569-187	01-389	lab test tissue dep	M. nasuta	SA	9.36	U		9.36	U		9.36	U		9.36	U		9.36	U		9.36	U		9.36	U	
PA-43	41569-161	01-389	lab test tissue dep	M. nasuta	SA	6.56	U		6.56	U		6.56	U		6.56	U		6.56	U		6.56	U		6.56	U	
PA-44	41569-70	01-388	lab test tissue dep	M. nasuta	SA	6.85	U		6.85	U		6.85	U		6.85	U		6.85	U		6.85	U		6.85	U	
PA-45	41569-85	01-391	lab test tissue dep	M. nasuta	SA	10.78	U		10.78	U		10.78	U		10.78	U		10.78	U		10.78	U		21.3		
PA-46	41569-163	01-387	lab test tissue dep	M. nasuta	SA	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ
PA-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ
PA-47	41569-132	01-389	lab test tissue dep	M. nasuta	SA	6.68	U		6.68	U		6.68	U		6.68	U		6.68	U		6.68	U		6.68	U	
PA-48	41569-131	01-389	lab test tissue dep	M. nasuta	SA	8.11	U		8.11	U		8.11	U		8.11	U		8.11	U		8.11	U		8.11	U	
PA-49	41569-182	01-390	lab test tissue dep	M. nasuta	SA	8.18	U		8.18	U		8.18	U		8.18	U		8.18	U		8.18	U		8.18	U	
PA-50	41569-143	01-387	lab test tissue dep	M. nasuta	SA	5.5	U	UJ	5.5	U	UJ	5.5	U	UJ	5.5	U	UJ	5.5	U	UJ	5.5	U	UJ	5.5	U	UJ
PA-51	41569-99	01-391	lab test tissue dep	M. nasuta	SA	5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U	
PA-52	41569-107	01-389	lab test tissue dep	M. nasuta	SA	6.75	U		6.75	U		6.75	U		6.75	U		6.75	U		6.75	U		6.75	U	

Table C-3. Polychlorinated Biphenyls as Aroclors in *M. nasuta T*issue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polychlorinated Biphenyls as Aroclors in *M. nasuta* Tissues (ug/kg wet weight)																				
						Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PA-53	41569-192	01-389	lab test tissue dep	M. nasuta	SA	8.42	U		8.42	U		8.42	U		8.42	U		8.42	U		8.42	U		8.42	U	
PC-63	41569-111	01-390	lab test tissue dep	M. nasuta	SA	8.21	U		8.21	U		8.21	U		8.21	U		8.21	U		8.21	U		8.21	U	
PC-63	41569-179	01-390	lab test tissue dep	M. nasuta	SA	8.56	U		8.56	U		8.56	U		8.56	U		8.56	U		8.56	U		8.56	U	
PC-63	41569-38	01-387	lab test tissue dep	M. nasuta	SA	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ
PC-63	41569-52	01-387	lab test tissue dep	M. nasuta	SA	5.75	U	UJ	5.75	U	UJ	5.75	U	UJ	5.75	U	UJ	5.75	U	UJ	5.75	U	UJ	5.75	U	UJ
PC-63	41569-76	01-390	lab test tissue dep	M. nasuta	SA	8.45	U		8.45	U		8.45	U		8.45	U		8.45	U		8.45	U		8.45	U	
RR-65	41569-153	01-391	lab test tissue dep	M. nasuta	SA	5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U	
RR-65	41569-165	01-391	lab test tissue dep	M. nasuta	SA	5.75	U		5.75	U		5.75	U		5.75	U		5.75	U		5.75	U		5.75	U	
RR-65	41569-185	01-391	lab test tissue dep	M. nasuta	SA	5.74	U		5.74	U		5.74	U		5.74	U		5.74	U		5.74	U		5.74	U	
RR-65	41569-78	01-390	lab test tissue dep	M. nasuta	SA	8.25	U		8.25	U		8.25	U		8.25	U		8.25	U		8.25	U		8.25	U	
RR-65	41569-82	01-391	lab test tissue dep	M. nasuta	SA	7.41	U		7.41	U		7.41	U		7.41	U		7.41	U		7.41	U		7.41	U	
SB-01	41569-39	01-389	lab test tissue dep	M. nasuta	SA	9.15	U		9.15	U		9.15	U		9.15	U		9.15	U		9.15	U		152.34		
SB-02	41569-115	01-388	lab test tissue dep	M. nasuta	SA	6.61	U		6.61	U		6.61	U		6.61	U		6.61	U		6.61	U		99.13		
SB-03	41569-98	01-389	lab test tissue dep	M. nasuta	SA	8.22	U		8.22	U		8.22	U		8.22	U		8.22	U		8.22	U		98.03		
SB-04	41569-101	01-388	lab test tissue dep	M. nasuta	SA	10.26	U		10.26	U		10.26	U		10.26	U		10.26	U		10.26	U		93.19		
SB-05	41569-114	01-388	lab test tissue dep	M. nasuta	SA	6.82	U		6.82	U		6.82	U		6.82	U		6.82	U		6.82	U		81.21		
SB-06	41569-26	01-391	lab test tissue dep	M. nasuta	SA	12.53	U		12.53	U		12.53	U		12.53	U		12.53	U		12.53	U		134.93		
SB-07	41569-173	01-390	lab test tissue dep	M. nasuta	SA	8.26	U		8.26	U		8.26	U		8.26	U		8.26	U		8.26	U		106.33		
SB-08	41569-155	01-388	lab test tissue dep	M. nasuta	SA	7.96	U		7.96	U		7.96	U		7.96	U		7.96	U		7.96	U		151.16		
SB-09	41569-95	01-391	lab test tissue dep	M. nasuta	SA	5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		5.73	U		148.18		
SB-10	41569-168	01-388	lab test tissue dep	M. nasuta	SA	9.04	U		9.04	U		9.04	U		9.04	U		9.04	U		9.04	U		155.16		
SB-11	41569-5	01-390	lab test tissue dep	M. nasuta	SA	8.91	U		8.91	U		8.91	U		8.91	U		8.91	U		8.91	U		228.61		
SB-12	41569-157	01-388	lab test tissue dep	M. nasuta	SA	6.81	U		6.81	U		6.81	U		6.81	U		6.81	U		6.81	U		172.16		
SB-13	41569-102	01-391	lab test tissue dep	M. nasuta	SA	5.79	U		5.79	U		5.79	U		5.79	U		5.79	U		5.79	U		196.88		
SB-14	41569-77	01-387	lab test tissue dep	M. nasuta	SA	5.79	U	UJ	5.79	U	UJ	5.79	U	UJ	5.79	U	UJ	5.79	U	UJ	5.79	U	UJ	226.41		J
SB-15	41569-200	01-389	lab test tissue dep	M. nasuta	SA	6.53	U		6.53	U		6.53	U		6.53	U		6.53	U		6.53	U		151.07		
SB-16	41569-116	01-391	lab test tissue dep	M. nasuta	SA	5.7	U		5.7	U		5.7	U		5.7	U		5.7	U		5.7	U		304.15		
SB-17	41569-41	01-390	lab test tissue dep	M. nasuta	SA	8.45	U		8.45	U		8.45	U		8.45	U		8.45	U		8.45	U		221.14		
SB-18	41569-141	01-388	lab test tissue dep	M. nasuta	SA	7.97	U		7.97	U		7.97	U		7.97	U		7.97	U		7.97	U		302.19		
SB-19	41569-203	01-389	lab test tissue dep	M. nasuta	SA	12.18	U		12.18	U		12.18	U		12.18	U		12.18	U		12.18	U		250.51		
SB-20	41569-147	01-387	lab test tissue dep	M. nasuta	SA	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	316.		J
SB-21	41569-11	01-389	lab test tissue dep	M. nasuta	SA	8.46	U		8.46	U		8.46	U		8.46	U		8.46	U		8.46	U		551.41		
SB-21	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	5.82	U	UJ	760.91	D	J
SB-22	41569-90	01-389	lab test tissue dep	M. nasuta	SA	7.58	U		7.58	U		7.58	U		7.58	U		7.58	U		7.58	U		309.5		
SB-23	41569-100	01-389	lab test tissue dep	M. nasuta	SA	6.4	U		6.4	U		6.4	U		6.4	U		6.4	U		6.4	U		545.1		
NA	41569-MAC-213	01-387	background tissue	M. nasuta	SA	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ	5.62	U	UJ
NA	41569-MAC-214	01-387	background tissue	M. nasuta	SA	5.74	U	UJ	5.74	U	UJ	5.74	U	UJ	5.74	U	UJ	5.74	U	UJ	5.74	U	UJ	5.74	U	UJ
NA	41569-MAC-215	01-387	background tissue	M. nasuta	SA	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ	5.63	U	UJ

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-4. Chlorinated Pesticides in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Chlorinated Pesticides in *M. nasuta* Tissues (ug/kg wet weight)																				
						2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.49			0.63			0.05	U		0.1	J	
AB-67	41569-211	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.42	J		0.66			0.05	U		0.08	J	
AB-67	41569-28	01-391	lab test tissue dep	M. nasuta	SA	0.09	U		0.11	U		0.11	U		0.5	J		0.83			0.08	U		0.09	J	
AB-67	41569-35	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.46	J		0.63			0.05	U		0.06	J	
AB-67	41569-53	01-391	lab test tissue dep	M. nasuta	SA	0.13	U		0.16	U		0.15	U		0.47	J		0.58	J		0.11	U		0.09	U	
AL-64	41569-204	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.28	J		0.55	J		0.07	U		0.05	J	
AL-64	41569-205	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.32	J		0.55	J		0.07	U		0.07	J	
AL-64	41569-51	01-389	lab test tissue dep	M. nasuta	SA	0.1	U		0.12	U		0.12	U		0.29	J		0.49	J		0.08	U		0.07	U	
AL-64	41569-59	01-389	lab test tissue dep	M. nasuta	SA	0.11	U		0.13	U		0.13	U		0.17	J		0.42	J		0.09	U		0.07	U	
AL-64	41569-66	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.25	J		0.49	J		0.07	U		0.05	J	
BF-66	41569-120	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.57			1.07			0.05	U		0.16	J	
BF-66	41569-127	01-388	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.54	J		1.12			0.07	U		0.15	J	
BF-66	41569-191	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.07	U		0.07	U		0.44	J		0.83			0.05	U		0.17	J	
BF-66	41569-210	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.08	U		0.58			1.09			0.06	U		0.2	J	
BF-66	41569-44	01-388	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.1	U		0.59	J		1.13			0.37	J		0.2	J	
EW-30	41569-125	01-390	lab test tissue dep	M. nasuta	SA	0.09	U		0.11	U		0.11	U		0.54	J		1.01			0.08	U		0.09	J	
EW-31	41569-48	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.44		J	0.87		J	0.02	U	UJ	0.12	J	J
EW-32	41569-65	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.62		J	1.42		J	0.02	U	UJ	0.17	J	J
EW-33	41569-152	01-390	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.47	J		1.05			0.05	U		0.14	J	
EW-34	41569-23	01-387	lab test tissue dep	M. nasuta	SA	0.03	U	UJ	0.08	U	UJ	0.03	U	UJ	0.72		J	1.45		J	0.02	U	UJ	0.17	J	J
EW-35	41569-135	01-388	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.1	U		0.53	J		1.3			0.07	U		0.22	J	
EW-36	41569-61	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.54	J		1.39			0.07	U		0.17	J	
EW-36	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	0.61		J	1.44		J	0.05	J	J	0.13	J	J
EW-37	41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.07	U		0.07	U		0.09	J		0.25	J		0.05	U		0.03	J	
IB-54	41569-106	01-388	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.58	J		1.28			0.07	U		0.2	J	
IB-55	41569-10	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.84		J	0.98		J	0.02	U	UJ	0.3	J	J
IB-56	41569-164	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.08	U		0.45	J		0.96			0.06	U		0.11	J	
IB-56	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	0.03	U	UJ	0.82		J	0.02	U	UJ	0.02	U	UJ
IB-57	41569-189	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.11	U		0.1	U		0.47	J		1.17			0.07	U		0.14	J	
IB-58	41569-63	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.59		J	1.33		J	0.02	U	UJ	0.02	U	UJ
IB-59	41569-175	01-389	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.09	U		0.83			1.45			0.06	U		0.25	J	
OR-24	41569-202	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.09	U		0.09	U		1.33	J		2.16			0.07	U		0.25	J	
OR-25	41569-142	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.08	U		0.73			2.22			0.07	J		0.25	J	
OR-26	41569-162	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		1.02			1.81			0.07	U		0.27	J	
OR-26	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.27		J	2.36		J	0.02	U	UJ	0.02	U	UJ
OR-27	41569-151	01-390	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.09	U		1.07			2.09			0.06	U		0.22	J	
OR-28	41569-33	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.53	J		1.52			0.07	U		0.14	J	
OR-29	41569-150	01-388	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.1	U		0.93			2.13			0.07	U		0.28	J	
PA-38	41569-60	01-390	lab test tissue dep	M. nasuta	SA	0.05	U		0.06	U		0.06	U		0.39	J		0.86			0.04	U		0.08	J	
PA-39	41569-75	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.1	U		0.54	J		0.96			0.07	U		0.13	J	
PA-40	41569-110	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.62			1.29			0.05	U		0.15	J	
PA-41	41569-158	01-389	lab test tissue dep	M. nasuta	SA	0.11	U		0.14	U		0.13	U		0.64	J		1.31			0.1	U		0.14	J	
PA-42	41569-187	01-389	lab test tissue dep	M. nasuta	SA	0.09	U		0.11	U		0.1	U		0.52	J		0.84			0.07	U		0.08	J	
PA-43	41569-161	01-389	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.37	J		0.72			0.05	U		0.1	J	
PA-44	41569-70	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.43	J		0.9			0.05	U		0.11	J	
PA-45	41569-85	01-391	lab test tissue dep	M. nasuta	SA	0.1	U		0.12	U		0.12	U		0.43	J		0.84	J		0.09	U		0.07	J	
PA-46	41569-163	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.34	J	J	0.84		J	0.02	U	UJ	0.1	J	J
PA-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	0.48		J	0.7		J	0.02	U	UJ	0.02	U	UJ
PA-47	41569-132	01-389	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.44	J		0.79			0.05	U		0.09	J	
PA-48	41569-131	01-389	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.09	U		0.57	J		1.08			0.06	U		0.16	J	
PA-49	41569-182	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.09	U		0.09	U		0.47	J		1.02			0.07	U		0.12	J	
PA-50	41569-143	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.63		J	1.29		J	0.26	J	J	0.02	U	UJ
PA-51	41569-99	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.49			0.97			0.05	U		0.11	J	
PA-52	41569-107	01-389	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.5	J		1.01			0.05	U		0.11	J	

Table C-4. Chlorinated Pesticides in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Chlorinated Pesticides in *M. nasuta* Tissues (ug/kg wet weight)																				
						2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PA-53	41569-192	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.54	J		1.			0.07	U		0.15	J	
PC-63	41569-111	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.09	U		0.09	U		0.38	J		0.71			0.07	U		0.1	J	
PC-63	41569-179	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.41	J		0.82			0.07	U		0.11	J	
PC-63	41569-38	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.58		J	0.93		J	0.02	U	UJ	0.13	J	J
PC-63	41569-52	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	0.75		J	1.29		J	0.02	U	UJ	0.14	J	J
PC-63	41569-76	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		0.33	J		0.66	J		0.07	U		0.08	J	
RR-65	41569-153	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.47			0.8			0.05	U		0.08	J	
RR-65	41569-165	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.65			0.99			0.05	U		0.09	J	
RR-65	41569-185	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		0.56			0.91			0.05	U		0.09	J	
RR-65	41569-78	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.09	U		0.09	U		0.53	J		0.91			0.07	U		0.11	J	
RR-65	41569-82	01-391	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.08	U		0.46	J		0.73			0.06	U		0.07	J	
SB-01	41569-39	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.11	U		0.1	U		3.94			8.47			0.07	U		2.69		
SB-02	41569-115	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		1.78			4.74			0.05	U		1.47		
SB-03	41569-98	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.09	U		0.09	U		1.11			3.34			0.07	U		0.69		
SB-04	41569-101	01-388	lab test tissue dep	M. nasuta	SA	0.09	U		0.12	U		0.11	U		1.09			2.91			0.08	U		0.58	J	
SB-05	41569-114	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		0.78			2.45			0.05	U		0.38	J	
SB-06	41569-26	01-391	lab test tissue dep	M. nasuta	SA	0.12	U		0.14	U		0.14	U		1.07			3.9			0.1	U		0.41	J	
SB-07	41569-173	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.09	U		0.09	U		0.93			3.19			0.07	U		0.56	J	
SB-08	41569-155	01-388	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.09	U		1.11			4.69			0.06	U		0.43	J	
SB-09	41569-95	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		1.66			10.67	D		0.27	J		0.42	J	
SB-10	41569-168	01-388	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.1	U		1.38			7.58			0.38	J		0.53	J	
SB-11	41569-5	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.1	U		1.59			9.01			0.13	J		0.73		
SB-12	41569-157	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		1.46			5.71			0.05	U		0.55		
SB-13	41569-102	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		1.65			5.56			0.06	J		0.52		
SB-14	41569-77	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.82		J	7.19		J	0.02	U	UJ	0.42	J	J
SB-15	41569-200	01-389	lab test tissue dep	M. nasuta	SA	0.06	U		0.08	U		0.07	U		1.42			4.12			0.17	J		0.5	J	
SB-16	41569-116	01-391	lab test tissue dep	M. nasuta	SA	0.05	U		0.07	U		0.06	U		1.85			3.72			0.05	U		0.4	J	
SB-17	41569-41	01-390	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		1.98			2.96			0.07	U		0.47	J	
SB-18	41569-141	01-388	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.09	U		2.04			8.3			0.3	J		0.63	J	
SB-19	41569-203	01-389	lab test tissue dep	M. nasuta	SA	0.11	U		0.14	U		0.13	U		0.51	J		0.47	J		0.1	U		0.09	J	
SB-20	41569-147	01-387	lab test tissue dep	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	2.13		J	7.87		J	0.02	U	UJ	0.45	J	J
SB-21	41569-11	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.1	U		0.09	U		2.			4.92			0.07	U		0.4	J	
SB-21	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	2.59		J	5.9		J	0.25	J	J	0.29	J	J
SB-22	41569-90	01-389	lab test tissue dep	M. nasuta	SA	0.07	U		0.09	U		0.08	U		1.61			4.33			0.33	J		0.47	J	
SB-23	41569-100	01-389	lab test tissue dep	M. nasuta	SA	0.06	U		0.07	U		0.07	U		2.28			3.61			0.05	U		0.28	J	
NA	41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.03	U	UJ	0.48		J	0.02	U	UJ	0.12	J	J
NA	41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	0.03	U	UJ	0.44	J	J	0.02	U	UJ	0.12	J	J
NA	41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.03	U	UJ	0.55		J	0.02	U	UJ	0.15	J	J

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-4. Chlorinated Pesticides in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Chlorinated Pesticides in M. nasuta Tissues (ug/kg wet weight)														
						Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	01-391	lab test tissue dep	M. nasuta	SA	0.12	J		0.05	U		0.04	U		0.07	J		0.04	U	
AB-67	41569-211	01-391	lab test tissue dep	M. nasuta	SA	0.09	J		0.05	U		0.04	U		0.06	J		0.04	U	
AB-67	41569-28	01-391	lab test tissue dep	M. nasuta	SA	0.13	J		0.08	U		0.08	U		0.07	J		0.07	U	
AB-67	41569-35	01-391	lab test tissue dep	M. nasuta	SA	0.11	J		0.05	U		0.04	U		0.05	J		0.04	U	
AB-67	41569-53	01-391	lab test tissue dep	M. nasuta	SA	0.11	U		0.12	U		0.1	U		0.09	U		0.1	U	
AL-64	41569-204	01-390	lab test tissue dep	M. nasuta	SA	0.07	U		0.07	U		0.06	U		0.06	U		0.06	U	
AL-64	41569-205	01-390	lab test tissue dep	M. nasuta	SA	0.07	U		0.07	U		0.06	U		0.02	J		0.06	U	
AL-64	41569-51	01-389	lab test tissue dep	M. nasuta	SA	0.08	J		0.09	U		0.08	U		0.11	J		0.08	U	
AL-64	41569-59	01-389	lab test tissue dep	M. nasuta	SA	0.1	U		0.1	U		0.09	U		0.08	U		0.08	U	
AL-64	41569-66	01-390	lab test tissue dep	M. nasuta	SA	0.07	U		0.07	U		0.06	U		0.06	U		0.06	U	
BF-66	41569-120	01-388	lab test tissue dep	M. nasuta	SA	0.24	J		0.06	U		0.05	U		0.15	J		0.05	U	
BF-66	41569-127	01-388	lab test tissue dep	M. nasuta	SA	0.25	J		0.07	U		0.07	U		0.12	J		0.06	U	
BF-66	41569-191	01-388	lab test tissue dep	M. nasuta	SA	0.2	J		0.05	U		0.05	U		0.14	J		0.05	U	
BF-66	41569-210	01-388	lab test tissue dep	M. nasuta	SA	0.23	J		0.06	U		0.05	U		0.15	J		0.05	U	
BF-66	41569-44	01-388	lab test tissue dep	M. nasuta	SA	0.25	J		0.08	U		0.07	U		0.16	J		0.06	U	
EW-30	41569-125	01-390	lab test tissue dep	M. nasuta	SA	0.13	J		0.08	U		0.07	U		0.14	J		0.07	U	
EW-31	41569-48	01-387	lab test tissue dep	M. nasuta	SA	0.32	J	J	0.04	U	UJ	0.01	U	UJ	0.11	J	J	0.02	U	UJ
EW-32	41569-65	01-387	lab test tissue dep	M. nasuta	SA	0.35	J	J	0.04	U	UJ	0.01	U	UJ	0.13	J	J	0.02	U	UJ
EW-33	41569-152	01-390	lab test tissue dep	M. nasuta	SA	0.17	J		0.06	U		0.05	U		0.15	J		0.05	U	
EW-34	41569-23	01-387	lab test tissue dep	M. nasuta	SA	0.45	J	J	0.05	U	UJ	0.02	U	UJ	0.16	J	J	0.03	U	UJ
EW-35	41569-135	01-388	lab test tissue dep	M. nasuta	SA	0.24	J		0.08	U		0.07	U		0.22	J		0.06	U	
EW-36	41569-61	01-390	lab test tissue dep	M. nasuta	SA	0.15	J		0.07	U		0.06	U		0.17	J		0.06	U	
EW-36	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	0.19	J	J	0.04	U	UJ	0.01	U	UJ	0.19	J	J	0.02	U	UJ
EW-37	41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.03	J		0.06	U		0.05	U		0.04	J		0.05	U	
IB-54	41569-106	01-388	lab test tissue dep	M. nasuta	SA	0.13	J		0.07	U		0.06	U		0.06	J		0.06	U	
IB-55	41569-10	01-387	lab test tissue dep	M. nasuta	SA	0.51		J	0.04	U	UJ	0.01	U	UJ	0.29	J	J	0.02	U	UJ
IB-56	41569-164	01-388	lab test tissue dep	M. nasuta	SA	0.19	J		0.06	U		0.05	U		0.14	J		0.05	U	
IB-56	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	0.17	J	J	0.04	U	UJ	0.01	U	UJ	0.16	J	J	0.02	U	UJ
IB-57	41569-189	01-390	lab test tissue dep	M. nasuta	SA	0.14	J		0.08	U		0.07	U		0.14	J		0.07	U	
IB-58	41569-63	01-387	lab test tissue dep	M. nasuta	SA	0.25	J	J	0.04	U	UJ	0.01	U	UJ	0.15	J	J	0.02	U	UJ
IB-59	41569-175	01-389	lab test tissue dep	M. nasuta	SA	0.16	J		0.07	U		0.06	U		0.09	J		0.06	U	
OR-24	41569-202	01-390	lab test tissue dep	M. nasuta	SA	0.22	J		0.07	U		0.06	U		0.34	J		0.06	U	
OR-25	41569-142	01-388	lab test tissue dep	M. nasuta	SA	0.23	J		0.06	U		0.05	U		0.29	J		0.05	U	
OR-26	41569-162	01-390	lab test tissue dep	M. nasuta	SA	0.2	J		0.07	U		0.06	U		0.28	J		0.06	U	
OR-26	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	0.45	J	J	0.04	U	UJ	0.01	U	UJ	0.26	J	J	0.02	U	UJ
OR-27	41569-151	01-390	lab test tissue dep	M. nasuta	SA	0.2	J		0.07	U		0.06	U		0.27	J		0.06	U	
OR-28	41569-33	01-389	lab test tissue dep	M. nasuta	SA	0.17	J		0.07	U		0.06	U		0.16	J		0.06	U	
OR-29	41569-150	01-388	lab test tissue dep	M. nasuta	SA	0.31	J		0.08	U		0.07	U		0.34	J		0.06	U	
PA-38	41569-60	01-390	lab test tissue dep	M. nasuta	SA	0.05	U		0.05	U		0.04	U		0.04	J		0.04	U	
PA-39	41569-75	01-389	lab test tissue dep	M. nasuta	SA	0.07	U		0.08	U		0.07	U		0.06	U		0.06	U	
PA-40	41569-110	01-391	lab test tissue dep	M. nasuta	SA	0.15	J		0.05	U		0.04	U		0.04	J		0.04	U	
PA-41	41569-158	01-389	lab test tissue dep	M. nasuta	SA	0.1	U		0.1	U		0.09	U		0.19	J		0.09	U	
PA-42	41569-187	01-389	lab test tissue dep	M. nasuta	SA	0.08	U		0.08	U		0.07	U		0.18	J		0.07	U	
PA-43	41569-161	01-389	lab test tissue dep	M. nasuta	SA	0.16	J		0.06	U		0.05	U		0.08	J		0.05	U	
PA-44	41569-70	01-388	lab test tissue dep	M. nasuta	SA	0.1	J		0.06	U		0.05	U		0.13	J		0.05	U	
PA-45	41569-85	01-391	lab test tissue dep	M. nasuta	SA	0.1	J		0.09	U		0.08	U		0.12	J		0.08	U	
PA-46	41569-163	01-387	lab test tissue dep	M. nasuta	SA	0.15	J	J	0.04	U	UJ	0.01	U	UJ	0.12	J	J	0.02	U	UJ
PA-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	0.2	J	J	0.04	U	UJ	0.01	U	UJ	0.12	J	J	0.02	U	UJ
PA-47	41569-132	01-389	lab test tissue dep	M. nasuta	SA	0.1	J		0.06	U		0.05	U		0.1	J		0.05	U	
PA-48	41569-131	01-389	lab test tissue dep	M. nasuta	SA	0.15	J		0.07	U		0.06	U		0.13	J		0.06	U	
PA-49	41569-182	01-390	lab test tissue dep	M. nasuta	SA	0.13	J		0.07	U		0.06	U		0.11	J		0.06	U	
PA-50	41569-143	01-387	lab test tissue dep	M. nasuta	SA	0.3	J	J	0.04	U	UJ	0.01	U	UJ	0.13	J	J	0.02	U	UJ
PA-51	41569-99	01-391	lab test tissue dep	M. nasuta	SA	0.13	J		0.05	U		0.04	U		0.04	U		0.04	U	
PA-52	41569-107	01-389	lab test tissue dep	M. nasuta	SA	0.19	J		0.06	U		0.05	U		0.14	J		0.05	U	

Table C-4. Chlorinated Pesticides in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Chlorinated Pesticides in M. nasuta Tissues (ug/kg wet weight)														
						Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PA-53	41569-192	01-389	lab test tissue dep	M. nasuta	SA	0.21	J		0.07	U		0.06	U		0.16	J		0.06	U	
PC-63	41569-111	01-390	lab test tissue dep	M. nasuta	SA	0.1	J		0.07	U		0.06	U		0.06	J		0.06	U	
PC-63	41569-179	01-390	lab test tissue dep	M. nasuta	SA	0.07	U		0.07	U		0.06	U		0.07	J		0.06	U	
PC-63	41569-38	01-387	lab test tissue dep	M. nasuta	SA	0.2	J	J	0.04	U	UJ	0.01	U	UJ	0.1	J	J	0.02	U	UJ
PC-63	41569-52	01-387	lab test tissue dep	M. nasuta	SA	0.36	J	J	0.04	U	UJ	0.01	U	UJ	0.13	J	J	0.02	U	UJ
PC-63	41569-76	01-390	lab test tissue dep	M. nasuta	SA	0.08	J		0.07	U		0.06	U		0.05	J		0.06	U	
RR-65	41569-153	01-391	lab test tissue dep	M. nasuta	SA	0.1	J		0.05	U		0.04	U		0.05	J		0.04	U	
RR-65	41569-165	01-391	lab test tissue dep	M. nasuta	SA	0.13	J		0.05	U		0.04	U		0.07	J		0.04	U	
RR-65	41569-185	01-391	lab test tissue dep	M. nasuta	SA	0.12	J		0.05	U		0.04	U		0.08	J		0.04	U	
RR-65	41569-78	01-390	lab test tissue dep	M. nasuta	SA	0.1	J		0.07	U		0.06	U		0.06	J		0.06	U	
RR-65	41569-82	01-391	lab test tissue dep	M. nasuta	SA	0.11	J		0.06	U		0.06	U		0.06	J		0.05	U	
SB-01	41569-39	01-389	lab test tissue dep	M. nasuta	SA	4.69			0.08	U		0.07	U		3.74			0.06	U	
SB-02	41569-115	01-388	lab test tissue dep	M. nasuta	SA	1.91			0.06	U		0.05	U		2.19			0.05	U	
SB-03	41569-98	01-389	lab test tissue dep	M. nasuta	SA	0.74			0.07	U		0.06	U		0.93			0.06	U	
SB-04	41569-101	01-388	lab test tissue dep	M. nasuta	SA	0.56	J		0.09	U		0.08	U		0.74	J		0.07	U	
SB-05	41569-114	01-388	lab test tissue dep	M. nasuta	SA	0.06	U		0.06	U		0.05	U		0.47	J		0.05	U	
SB-06	41569-26	01-391	lab test tissue dep	M. nasuta	SA	0.43	J		0.11	U		0.09	U		0.52	J		0.09	U	
SB-07	41569-173	01-390	lab test tissue dep	M. nasuta	SA	0.48	J		0.07	U		0.06	U		0.76			0.06	U	
SB-08	41569-155	01-388	lab test tissue dep	M. nasuta	SA	0.67			0.07	U		0.06	U		0.63	J		0.06	U	
SB-09	41569-95	01-391	lab test tissue dep	M. nasuta	SA	0.34	J		0.05	U		0.04	U		0.63			0.04	U	
SB-10	41569-168	01-388	lab test tissue dep	M. nasuta	SA	0.71	J		0.08	U		0.07	U		0.82			0.06	U	
SB-11	41569-5	01-390	lab test tissue dep	M. nasuta	SA	1.35			0.08	U		0.07	U		1.09			0.06	U	
SB-12	41569-157	01-388	lab test tissue dep	M. nasuta	SA	1.07			0.06	U		0.05	U		0.85			0.05	U	
SB-13	41569-102	01-391	lab test tissue dep	M. nasuta	SA	0.82			0.05	U		0.04	U		0.66			0.04	U	
SB-14	41569-77	01-387	lab test tissue dep	M. nasuta	SA	1.45		J	0.04	U	UJ	0.01	U	UJ	0.72		J	0.02	U	UJ
SB-15	41569-200	01-389	lab test tissue dep	M. nasuta	SA	0.46	J		0.06	U		0.05	U		0.56			0.05	U	
SB-16	41569-116	01-391	lab test tissue dep	M. nasuta	SA	0.55			0.05	U		0.04	U		0.51			0.04	U	
SB-17	41569-41	01-390	lab test tissue dep	M. nasuta	SA	0.47	J		0.07	U		0.06	U		0.55	J		0.06	U	
SB-18	41569-141	01-388	lab test tissue dep	M. nasuta	SA	0.67			0.07	U		0.06	U		0.71			0.06	U	
SB-19	41569-203	01-389	lab test tissue dep	M. nasuta	SA	0.1	U		0.1	U		0.09	U		0.09	J		0.09	U	
SB-20	41569-147	01-387	lab test tissue dep	M. nasuta	SA	2.1		J	0.04	U	UJ	0.01	U	UJ	0.75		J	0.02	U	UJ
SB-21	41569-11	01-389	lab test tissue dep	M. nasuta	SA	0.62	J		0.07	U		0.06	U		0.5	J		0.06	U	
SB-21	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	1.08		J	0.04	U	UJ	0.01	U	UJ	0.41	J	J	0.02	U	UJ
SB-22	41569-90	01-389	lab test tissue dep	M. nasuta	SA	0.94			0.06	U		0.06	U		0.76			0.05	U	
SB-23	41569-100	01-389	lab test tissue dep	M. nasuta	SA	0.51	J		0.05	U		0.05	U		0.37	J		0.05	U	
NA	41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.25	J	J	0.04	U	UJ	0.01	U	UJ	0.01	U	UJ	0.02	U	UJ
NA	41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.24	J	J	0.04	U	UJ	0.01	U	UJ	0.02	U	UJ	0.02	U	UJ
NA	41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.3	J	J	0.04	U	UJ	0.01	U	UJ	0.01	U	UJ	0.02	U	UJ

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.

Table C-5. Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissues (ug/kg wet weight)																				
						2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	01-391	lab test tissue dep	M. nasuta	SA	0.30	J	U	0.21	J		0.37	J		0.91		J	0.22	J		1.13		U	1.91		
AB-67	41569-211	01-391	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.24	J		0.28	J		0.85		J	0.21	J		0.84		U	1.76		
AB-67	41569-28	01-391	lab test tissue dep	M. nasuta	SA	0.35	J	U	0.17	J		0.37	J		1.00		J	0.24	J		1.33		U	1.91		U
AB-67	41569-35	01-391	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.14	J		0.25	J		0.66		J	0.15	J		0.95		U	1.41		
AB-67	41569-53	01-391	lab test tissue dep	M. nasuta	SA	0.40	J	U	0.15	J		0.23	J		0.82	J	J	0.20	J		1.99		U	1.66		
AL-64	41569-204	01-390	lab test tissue dep	M. nasuta	SA	0.22	J	U	0.15	J		0.33	J		1.92		J	0.38	J		0.84	J	U	4.58		
AL-64	41569-205	01-390	lab test tissue dep	M. nasuta	SA	0.21	J	U	0.17	J		0.35	J		2.21		J	0.39	J		0.84	J	U	4.45		
AL-64	41569-51	01-389	lab test tissue dep	M. nasuta	SA	0.40	J	U	0.27	J		0.40	J		2.14		J	0.44	J		0.93	J	U	4.62		
AL-64	41569-59	01-389	lab test tissue dep	M. nasuta	SA	0.36	J	U	0.13	J		0.29	J		1.44		J	0.28	J		0.91	J	U	3.39		
AL-64	41569-66	01-390	lab test tissue dep	M. nasuta	SA	0.20	J	U	0.15	J		0.33	J		1.47		J	0.29	J		0.50	J	U	3.55		
BF-66	41569-120	01-388	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.22	J	U	0.24	J	U	0.73		J	0.26	J	U	0.76		U	1.73		
BF-66	41569-127	01-388	lab test tissue dep	M. nasuta	SA	0.29	J	U	0.16	J	U	0.25	J	U	0.70	J	J	0.27	J	U	0.66	J	U	1.84		
BF-66	41569-191	01-388	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.19	J	U	0.20	J	U	0.59	J	J	0.21	J	U	0.53	J	U	1.39		
BF-66	41569-210	01-388	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.20	J	U	0.32	J	U	0.73		J	0.27	J	U	0.65	J	U	2.08		
BF-66	41569-44	01-388	lab test tissue dep	M. nasuta	SA	0.33	J	U	0.23	J	U	0.34	J	U	0.86	J	J	0.31	J	U	0.84	J	U	2.28		
EW-30	41569-125	01-390	lab test tissue dep	M. nasuta	SA	0.24	J	U	0.14	J		0.31	J		3.19		J	0.37	J		0.71	J	U	2.31		
EW-31	41569-48	01-387	lab test tissue dep	M. nasuta	SA	0.19	J	U	0.22	J		0.25	J		0.96		J	0.22	J		0.50	J	U	1.74		
EW-32	41569-65	01-387	lab test tissue dep	M. nasuta	SA	0.27	J	U	0.24	J		0.41	J		1.74		J	0.36	J		0.78		U	2.27		
EW-33	41569-152	01-390	lab test tissue dep	M. nasuta	SA	0.22	J	U	0.18	J		0.21	J		1.82		J	0.40	J		0.56	J	U	3.14		
EW-34	41569-23	01-387	lab test tissue dep	M. nasuta	SA	0.19	J	U	0.28	J		0.28	J		1.46		J	0.32	J		0.53	J	U	2.14		
EW-35	41569-135	01-388	lab test tissue dep	M. nasuta	SA	0.26	J	U	0.19	J	U	0.24	J	U	0.96		J	0.26	J	U	0.58	J	U	1.08		
EW-36	41569-61	01-390	lab test tissue dep	M. nasuta	SA	0.27	J	U	0.18	J		0.26	J		1.24		J	0.38	J		1.09		U	2.32		
EW-36	41569-89	01-387	lab test tissue nondep	M. nasuta	SA	0.34	J		0.35	J		0.66			2.88		J	0.52	J		0.91		U	4.55		
EW-37	41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.12	J	UJ	0.05	J	UJ	0.07	J	UJ	0.20	J	UJ	0.07	J	UJ	0.39	J	UJ	0.37	J	UJ
IB-54	41569-106	01-388	lab test tissue dep	M. nasuta	SA	0.32	J	U	0.23	J	U	0.35	J	U	2.18		J	0.33	J	U	0.68	J	U	1.78		
IB-55	41569-10	01-387	lab test tissue dep	M. nasuta	SA	0.17	J	U	0.27	J		0.55	J		3.06		J	0.30	J		0.52	J	U	1.82		
IB-56	41569-164	01-388	lab test tissue dep	M. nasuta	SA	0.21	J	U	0.13	J	U	0.25	J	U	1.46		J	0.17	J	U	0.57	J	U	1.22		
IB-56	41569-198	01-387	lab test tissue nondep	M. nasuta	SA	0.15	J	U	0.28	J		0.47	J		1.77		J	0.31	J		0.65		U	2.83		
IB-57	41569-189	01-390	lab test tissue dep	M. nasuta	SA	0.39	J	U	0.39	J		0.41	J		2.41		J	0.41	J		1.83		U	2.25		
IB-58	41569-63	01-387	lab test tissue dep	M. nasuta	SA	0.19	J	U	0.27	J		0.65			4.77		J	0.45	J		1.04		U	4.45		
IB-59	41569-175	01-389	lab test tissue dep	M. nasuta	SA	0.46	J	U	0.43	J		0.87			10.06		J	0.62	J		0.73	J	U	3.07		
OR-24	41569-202	01-390	lab test tissue dep	M. nasuta	SA	0.31	J	U	0.20	J		0.38	J		1.42	J	J	0.30	J		1.02	J	U	2.52		
OR-25	41569-142	01-388	lab test tissue dep	M. nasuta	SA	0.36	J	U	0.18	J	U	0.54	J		1.51		J	0.27	J	U	0.67	J	U	2.88		
OR-26	41569-162	01-390	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.12	J		0.27	J		1.20		J	0.22	J		0.77	J	U	2.35		
OR-26	41569-30	01-387	lab test tissue nondep	M. nasuta	SA	0.42	J		0.35	J		0.73			2.28		J	0.57			1.23		U	4.37		
OR-27	41569-151	01-390	lab test tissue dep	M. nasuta	SA	0.25	J	U	0.13	J		0.23	J		0.69	J	J	0.18	J		0.81	J	U	1.12		
OR-28	41569-33	01-389	lab test tissue dep	M. nasuta	SA	0.50	J	U	0.10	J		0.33	J		0.90		J	0.21	J		0.81	J	U	1.50		
OR-29	41569-150	01-388	lab test tissue dep	M. nasuta	SA	0.33	J	U	0.21	J	U	0.29	J	U	0.92		J	0.28	J	U	0.74	J	U	1.81		
PA-38	41569-60	01-390	lab test tissue dep	M. nasuta	SA	0.17	J	U	0.26	J		0.45	J		5.02		J	0.37	J		0.44	J	U	2.29		
PA-39	41569-75	01-389	lab test tissue dep	M. nasuta	SA	0.31	J	U	0.25	J		0.57	J		5.01		J	0.37	J		0.76	J	U	2.50		
PA-40	41569-110	01-391	lab test tissue dep	M. nasuta	SA	0.29	J	U	0.30	J		0.58			4.45		J	0.47	J		1.04		U	3.58		
PA-41	41569-158	01-389	lab test tissue dep	M. nasuta	SA	0.47	J	U	0.26	J		0.52	J		2.33		J	0.38	J		1.08	J	U	2.22		
PA-42	41569-187	01-389	lab test tissue dep	M. nasuta	SA	0.31	J	U	0.27	J		0.47	J		2.14		J	0.36	J		0.80	J	U	2.67		
PA-43	41569-161	01-389	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.19	J		0.25	J		1.06		J	0.20	J		0.73		U	1.28		
PA-44	41569-70	01-388	lab test tissue dep	M. nasuta	SA	0.27	J	U	0.20	J	U	0.31	J	U	1.58		J	0.26	J	U	0.60	J	U	1.79		
PA-45	41569-85	01-391	lab test tissue dep	M. nasuta	SA	0.37	J	U	0.20	J	J	0.41	J	J	2.60		J	0.31	J	J	1.25		U	1.98		UJ
PA-46	41569-163	01-387	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.22	J		0.58			2.12		J	0.62			0.52	J	U	3.48		
PA-46	41569-46	01-387	lab test tissue nondep	M. nasuta	SA	0.20	J	U	0.25	J		0.42	J		1.83		J	0.26	J		0.75		U	2.33		
PA-47	41569-132	01-389	lab test tissue dep	M. nasuta	SA	0.35	J	U	0.29	J		0.69			2.23		J	0.45	J		0.87		U	3.76		
PA-48	41569-131	01-389	lab test tissue dep	M. nasuta	SA	0.31	J	UJ	0.24	J	J	0.41	J	J	2.00		J	0.32	J	J	0.80	J	UJ	2.07		J
PA-49	41569-182	01-390	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.24	J		0.35	J		1.98		J	0.38	J		0.77	J	U	2.62		
PA-50	41569-143	01-387	lab test tissue dep	M. nasuta	SA	0.16	J	U	0.22	J		0.34	J		1.79		J	0.27	J		0.43	J	U	1.61		
PA-51	41569-99	01-391	lab test tissue dep	M. nasuta	SA	0.26	J	U	0.33	J		0.40	J		2.05		J	0.46	J		0.87		U	3.09		
PA-52	41569-107	01-389	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.34	J		0.48	J		2.28		J	0.43	J		0.82		U	4.06		
PA-53	41569-192	01-389	lab test tissue dep	M. nasuta	SA	0.41	J	U	0.49	J		0.66	J		3.71		J	0.70	J		1.10		U	5.87		
PC-63	41569-111	01-390	lab test tissue dep	M. nasuta	SA	0.24	J	UJ	0.14	J	J	0.20	J	J	0.74	J	J	0.21	J	J	0.75	J	UJ	1.27		J
PC-63	41569-179	01-390	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.16	J		0.19	J		0.55	J	J	0.21	J		1.58		U	1.91		
PC-63	41569-38	01-387	lab test tissue dep	M. nasuta	SA	0.18	J	U	0.20	J		0.31	J		0.96		J	0.23	J		0.62		U	1.68		
PC-63	41569-52	01-387	lab test tissue dep	M. nasuta	SA	0.27	J	U	0.21	J		0.54	J		1.91		J	0.34	J		0.87		U	3.11		
PC-63	41569-76	01-390	lab test tissue dep	M. nasuta	SA	0.17	J	U	0.09	J		0.14	J		0.32	J	J	0.17	J		0.54	J	U	0.84	J	

Table C-5. Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissues (ug/kg wet weight)																				
						2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
RR-65	41569-153	01-391	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.15	J		0.24	J		0.86		J	0.23	J		0.84		U	1.83		U
RR-65	41569-165	01-391	lab test tissue dep	M. nasuta	SA	0.23	J	U	0.15	J		0.20	J		0.67		J	0.15	J		0.85		U	1.26		U
RR-65	41569-185	01-391	lab test tissue dep	M. nasuta	SA	0.30	J	U	0.24	J		0.47	J		1.09		J	0.27	J		1.11		U	2.58		U
RR-65	41569-78	01-390	lab test tissue dep	M. nasuta	SA	0.31	J	U	0.14	J		0.20	J		0.60	J	J	0.17	J		1.10		U	1.23		
RR-65	41569-82	01-391	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.22	J		0.20	J		0.62	J	J	0.22	J		1.17		U	1.75		U
SB-01	41569-39	01-389	lab test tissue dep	M. nasuta	SA	0.65	J		0.19	J		0.42	J		1.15		J	0.28	J		1.98			1.77		
SB-02	41569-115	01-388	lab test tissue dep	M. nasuta	SA	0.33	J	U	0.25	J	U	0.25	J	U	0.74		J	0.21	J	U	0.59	J	U	1.45		
SB-03	41569-98	01-389	lab test tissue dep	M. nasuta	SA	0.47	J	U	0.21	J		0.45	J		1.05		J	0.26	J		1.13		U	1.90		
SB-04	41569-101	01-388	lab test tissue dep	M. nasuta	SA	0.39	J	U	0.20	J	U	0.29	J	U	0.71	J	J	0.22	J	U	0.84	J	U	1.63		
SB-05	41569-114	01-388	lab test tissue dep	M. nasuta	SA	0.28	J	U	0.17	J	U	0.27	J	U	0.60	J	J	0.18	J	U	0.65	J	U	1.19		
SB-06	41569-26	01-391	lab test tissue dep	M. nasuta	SA	0.41	J	U	0.21	J		0.38	J		1.21	J	J	0.25	J		1.72		U	2.14		
SB-07	41569-173	01-390	lab test tissue dep	M. nasuta	SA	0.27	J	UJ	0.20	J		0.31	J		0.80	J	J	0.19	J	J	0.88		UJ	1.94		
SB-08	41569-155	01-388	lab test tissue dep	M. nasuta	SA	0.32	J	U	0.40	J	U	0.32	J	U	1.44		J	0.30	J	U	0.79	J	U	1.98		
SB-09	41569-95	01-391	lab test tissue dep	M. nasuta	SA	0.45	J	U	0.21	J		0.66			1.80		J	0.36	J		1.57		U	3.16		
SB-10	41569-168	01-388	lab test tissue dep	M. nasuta	SA	0.40	J	U	0.46	J	UJ	0.44	J	UJ	2.33		J	0.57	J	J	0.98		U	4.32		J
SB-11	41569-5	01-390	lab test tissue dep	M. nasuta	SA	0.35	J	U	0.19	J		0.41	J		1.12		J	0.25	J		0.88	J	U	2.29		
SB-12	41569-157	01-388	lab test tissue dep	M. nasuta	SA	0.31	J	U	0.20	J	U	0.33	J	U	0.95		J	0.24	J	U	0.58	J	U	1.77		
SB-13	41569-102	01-391	lab test tissue dep	M. nasuta	SA	0.45	J	U	0.43	J		0.65			2.67		J	0.43	J		1.49		U	3.50		U
SB-14	41569-77	01-387	lab test tissue dep	M. nasuta	SA	0.26	J	U	0.26	J		0.64			2.32		J	0.36	J		0.75		U	2.37		
SB-15	41569-200	01-389	lab test tissue dep	M. nasuta	SA	0.40	J	U	0.22	J		0.72			1.94		J	0.34	J		0.86		U	2.37		
SB-16	41569-116	01-391	lab test tissue dep	M. nasuta	SA	0.33	J	U	0.21	J		0.43	J		1.52		J	0.26	J		0.81		U	2.05		U
SB-17	41569-41	01-390	lab test tissue dep	M. nasuta	SA	0.26	J	U	0.17	J		0.35	J		1.41		J	0.24	J		0.71	J	U	2.22		
SB-18	41569-141	01-388	lab test tissue dep	M. nasuta	SA	0.48	J	U	0.38	J	U	0.52	J		3.10		J	0.60	J		1.21		U	5.75		
SB-19	41569-203	01-389	lab test tissue dep	M. nasuta	SA	0.29	J	U	0.09	J		0.11	J		0.47	J	J	0.13	J		1.00	J	U	0.97	J	
SB-20	41569-147	01-387	lab test tissue dep	M. nasuta	SA	0.40	J		1.01			0.90			2.84		J	0.55	J		0.95		U	4.41		
SB-21	41569-11	01-389	lab test tissue dep	M. nasuta	SA	0.34	J	U	0.34	J		0.46	J		2.22		J	0.39	J		0.91		U	3.94		
SB-21	41569-171	01-387	lab test tissue nondep	M. nasuta	SA	0.72			0.86			0.99			4.23		J	0.97			1.58			7.18		
SB-22	41569-90	01-389	lab test tissue dep	M. nasuta	SA	0.44	J	U	0.10	J		0.43	J		1.11		J	0.24	J		1.10		U	1.85		
SB-23	41569-100	01-389	lab test tissue dep	M. nasuta	SA	0.30	J	U	0.39	J		0.47	J		3.40		J	0.65			0.67		U	6.50		
NA	41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.27	J	U	0.16	J		0.11	J		0.36	J	J	0.24	J		0.57		U	1.20		
NA	41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.28	J	U	0.16	J		0.11	J		0.33	J	J	0.20	J		0.52	J	U	1.25		
NA	41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.27	J	U	0.17	J		0.12	J		0.30	J	J	0.16	J		0.52	J	U	0.97		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

N Presumptive evidence of presence of the constituent.

Table C-5. Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissues (ug/kg wet weight)																												
					Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
41569-167	01-391	lab test tissue dep	M. nasuta	SA	2.13			5.68			5.09		J	4.34		J	5.54		NJ	3.09			0.22	J		6.67			2.87		J	7.34		
41569-211	01-391	lab test tissue dep	M. nasuta	SA	1.67			4.99			4.53		J	3.51		J	4.87		NJ	2.35			0.21	J		5.27			2.58		J	5.64		
41569-28	01-391	lab test tissue dep	M. nasuta	SA	2.26			5.53			5.07		J	4.78		J	6.33		NJ	3.11			0.26	J		6.01			2.80		J	7.71		U
41569-35	01-391	lab test tissue dep	M. nasuta	SA	1.45			4.90			4.78		J	3.82		J	4.74		NJ	2.14			0.23	J		4.72			2.77		J	5.79		
41569-53	01-391	lab test tissue dep	M. nasuta	SA	1.17	J		4.52			4.57		J	4.08		J	4.87		NJ	2.22			0.20	J		3.86			2.21		J	4.60		
41569-204	01-390	lab test tissue dep	M. nasuta	SA	3.36			2.80		J	2.53		J	1.37			3.05		NJ	7.22			0.11	J		15.64			0.70	J	J	22.50		
41569-205	01-390	lab test tissue dep	M. nasuta	SA	4.19			3.09		J	3.07		J	1.54			3.21		NJ	7.95			0.17	J		17.24			0.97		J	22.35		
41569-51	01-389	lab test tissue dep	M. nasuta	SA	3.48			2.82			1.67			1.01	J	J	3.45		NJ	6.43			0.03	U		16.35			0.68	J		21.13		
41569-59	01-389	lab test tissue dep	M. nasuta	SA	2.73			2.23			1.30			0.80	J	J	2.40		NJ	5.00			0.03	U		11.05			0.47	J		16.52		
41569-66	01-390	lab test tissue dep	M. nasuta	SA	3.28			2.65		J	1.66		J	0.95			2.94		NJ	6.44			0.02	U		13.62			0.54	J	J	18.89		
41569-120	01-388	lab test tissue dep	M. nasuta	SA	2.08			3.68			3.81			3.15		J	4.52		NJ	4.05			0.02	U		10.38			2.08			11.50		
41569-127	01-388	lab test tissue dep	M. nasuta	SA	2.16			3.57			3.14			2.83		J	4.27		NJ	3.76			0.02	U		10.00			1.56			10.73		
41569-191	01-388	lab test tissue dep	M. nasuta	SA	1.54			2.57			2.41			2.16		J	3.14		NJ	2.92			0.02	U		8.25			1.17			9.09		
41569-210	01-388	lab test tissue dep	M. nasuta	SA	2.40			4.01			3.68			3.67		J	4.63		NJ	3.95			0.02	U		9.18			1.95			10.34		
41569-44	01-388	lab test tissue dep	M. nasuta	SA	2.60			3.78			4.14			3.63		J	4.20		NJ	4.41			0.02	U		11.19			1.70			12.65		
41569-125	01-390	lab test tissue dep	M. nasuta	SA	5.51			3.90		J	5.25		J	2.43			5.05		NJ	8.44			0.19	J		20.51			1.50		J	16.40		
41569-48	01-387	lab test tissue dep	M. nasuta	SA	2.15			3.28		J	3.59			3.32			3.38		NJ	3.51			0.19	J		7.28			1.57			8.84		
41569-65	01-387	lab test tissue dep	M. nasuta	SA	3.64			4.47		J	4.90			4.37			4.66		NJ	4.62			0.24	J		10.82			2.17			13.10		
41569-152	01-390	lab test tissue dep	M. nasuta	SA	3.15			3.16		J	3.70		J	2.09			4.34		NJ	5.17			0.02	U		15.64			1.04		J	14.83		
41569-23	01-387	lab test tissue dep	M. nasuta	SA	3.17			4.14		J	5.14			4.19			4.93		NJ	5.31			0.24	J		10.79			2.30			11.42		
41569-135	01-388	lab test tissue dep	M. nasuta	SA	2.45			2.76			3.82			2.61		J	3.24		NJ	3.70			0.18	J		10.61			1.47			12.91		
41569-61	01-390	lab test tissue dep	M. nasuta	SA	3.66			3.69		J	5.05		J	3.12			4.73		NJ	5.89			0.15	J		12.82			1.77		J	13.27		
41569-89	01-387	lab test tissue nondep	M. nasuta	SA	5.77			6.98		J	7.39			6.74			7.15		NJ	8.54			0.42	J		19.34			4.52			21.59		
41569-92	01-388	lab test tissue dep	M. nasuta	SA	0.52	J	UJ	0.62	J	J	0.57	J	J	0.41	J	UJ	0.88		NJ	0.79		J	0.02	U	UJ	2.29		J	0.19	J	UJ	2.39		J
41569-106	01-388	lab test tissue dep	M. nasuta	SA	4.50			4.03			5.13			2.82		J	4.29		NJ	6.09			0.02	U		15.78			1.83			20.06		
41569-10	01-387	lab test tissue dep	M. nasuta	SA	5.35			4.87		J	6.04			3.34			6.01		NJ	7.28			0.24	J		17.53			2.17			18.47		
41569-164	01-388	lab test tissue dep	M. nasuta	SA	2.94			3.08			3.20			1.85		J	4.03		NJ	4.74			0.02	U		10.30			0.83			13.01		
41569-198	01-387	lab test tissue nondep	M. nasuta	SA	3.92			3.96		J	3.86			3.21			3.84		NJ	5.12			0.26	J		10.64			1.83			14.49		
41569-189	01-390	lab test tissue dep	M. nasuta	SA	5.12			4.19		J	5.74		J	2.67			5.17		NJ	6.92			0.02	U		16.73			1.53		J	19.42		
41569-63	01-387	lab test tissue dep	M. nasuta	SA	7.83			7.45		J	7.41			4.83			7.54		NJ	10.08			0.40	J		24.61			3.20			28.12		
41569-175	01-389	lab test tissue dep	M. nasuta	SA	18.07			10.21			13.98			3.75		J	13.60		NJ	23.69			0.42	J		60.99			2.38			67.14		
41569-202	01-390	lab test tissue dep	M. nasuta	SA	5.28			6.53		J	7.66		J	3.09			9.83		NJ	12.14			0.02	U		23.25			2.25		J	24.25		
41569-142	01-388	lab test tissue dep	M. nasuta	SA	5.37			8.00			6.97			5.62		J	8.61		NJ	7.41			0.28	J		14.03			3.12			18.81		
41569-162	01-390	lab test tissue dep	M. nasuta	SA	3.32			3.63		J	4.75		J	2.30			4.86		NJ	5.68			0.16	J		11.91			1.76		J	14.92		
41569-30	01-387	lab test tissue nondep	M. nasuta	SA	5.21			6.62		J	7.29			6.54			7.29		NJ	7.67			0.58			13.84			4.87			19.44		
41569-151	01-390	lab test tissue dep	M. nasuta	SA	2.09			3.69		J	3.38		J	1.99			5.14		NJ	3.59			0.02	U		7.32			1.12		J	9.63		
41569-33	01-389	lab test tissue dep	M. nasuta	SA	2.60			3.97			4.14			2.89		J	4.86		NJ	3.74			0.14	J		7.43			1.49			10.21		
41569-150	01-388	lab test tissue dep	M. nasuta	SA	3.28			4.67			5.45			4.33		J	5.63		NJ	6.21			0.35	J		11.49			2.54			13.14		
41569-60	01-390	lab test tissue dep	M. nasuta	SA	8.67			5.80		J	5.31		J	1.60			7.51		NJ	11.59			0.13	J		29.71			0.87		J	38.07		
41569-75	01-389	lab test tissue dep	M. nasuta	SA	9.81			6.25			6.84			2.46		J	7.71		NJ	12.52			0.18	J		30.82			1.39			35.03		
41569-110	01-391	lab test tissue dep	M. nasuta	SA	8.08			7.10			7.07		J	4.29		J	8.25		NJ	10.19			0.31	J		24.25			3.03		J	28.71		
41569-158	01-389	lab test tissue dep	M. nasuta	SA	4.91			4.93			5.21			2.13		J	6.20		NJ	6.98			0.19	J		14.49			1.48			30.01		
41569-187	01-389	lab test tissue dep	M. nasuta	SA	4.02			3.93			3.63			2.11		J	4.61		NJ	5.82			0.18	J		14.34			1.06			18.82		
41569-161	01-389	lab test tissue dep	M. nasuta	SA	1.78			1.92			2.01			1.19		J	2.69		NJ	2.60			0.02	U		7.20			0.60	J		8.79		
41569-70	01-388	lab test tissue dep	M. nasuta	SA	3.15			4.30			3.91			2.54		J	5.17		NJ	5.26			0.02	U		15.27			1.26			17.00		
41569-85	01-391	lab test tissue dep	M. nasuta	SA	5.28		J	4.99		J	4.71		J	2.45		J	6.11		NJ	7.12		J	0.18	J	J	16.22		J	1.32		J	19.77		UJ
41569-163	01-387	lab test tissue dep	M. nasuta	SA	3.15			4.61		J	4.55			3.17			4.81		NJ	4.57			0.26	J		9.47			1.93			16.72		
41569-46	01-387	lab test tissue nondep	M. nasuta	SA	3.57			5.93		J	5.78			5.16			5.63		NJ	4.73			0.39	J		11.30			3.08			19.87		
41569-132	01-389	lab test tissue dep	M. nasuta	SA	4.29			5.43			6.03			3.40		J	6.59		NJ	5.27			0.26	J		17.65			2.19			21.62		
41569-131	01-389	lab test tissue dep	M. nasuta	SA	3.67		J	3.65		J	3.50		J	1.93		J	4.28		NJ	5.30		J	0.15	J	J	14.97		J	0.98		J	16.53		J
41569-182	01-390	lab test tissue dep	M. nasuta	SA	3.95			3.86		J	4.10		J	2.31			4.28		NJ	5.72			0.17	J		15.40			1.61		J	16.13		
41569-143	01-387	lab test tissue dep	M. nasuta	SA	2.84			3.15		J	3.47			2.75			3.36		NJ	4.18			0.17	J		11.78			1.42			13.37		
41569-99	01-391	lab test tissue dep	M. nasuta	SA	4.29			6.49			5.34		J	4.63		J	6.37		NJ	6.10			0.26	J		16.73			3.66		J	18.73		
41569-107	01-389	lab test tissue dep	M. nasuta	SA	4.74			5.59			5.23			3.80		J	5.70		NJ	6.48			0.24	J		17.87			2.76			21.43		
41569-192	01-389	lab test tissue dep	M. nasuta	SA	5.17			5.48			4.60			2.91		J	5.55		NJ	7.06			0.15	J		21.58			1.72			22.98		
41569-111	01-390	lab test tissue dep	M. nasuta	SA	1.50		J	2.55		J	2.84		J	2.09		J	2.68		NJ	2.55		J	0.11	J	J	5.95		J	1.18		J	5.97		J
41569-179	01-390	lab test tissue dep	M. nasuta	SA	1.19			1.84		J	2.33		J	1.60			1.93		NJ	2.46			0.02	U		6.18			0.87		J	6.35		
41569-38	01-387	lab test tissue dep	M. nasuta	SA	2.11			3.47		J	2.98			3.57			3.17		NJ	3.35			0.19	J		5.49			1.97			6.30		
41569-52	01-387	lab test tissue dep	M. nasuta	SA	3.30			4.93		J	4.47			4.62			4.54		NJ	4.98			0.32	J		9.77			2.76			12.15		
41569-76	01-390	lab test tissue dep	M. nasuta	SA	1.07			1.75		J	1.47		J	1.06			1.76		NJ	1.77			0.02	U		3.94			0.56	J	J	4.11		

Table C-5. Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in *M. nasuta* Tissues (ug/kg wet weight)																												
					Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
41569-153	01-391	lab test tissue dep	M. nasuta	SA	1.95			2.76			2.20		J	2.04		J	2.67		NJ	2.97			0.15	J		6.34			1.46		J	7.94		U
41569-165	01-391	lab test tissue dep	M. nasuta	SA	1.55			2.38			2.41		J	2.17		J	2.63		NJ	2.54			0.11	J		5.47			1.46		J	6.74		U
41569-185	01-391	lab test tissue dep	M. nasuta	SA	2.93			3.80			2.72		J	2.98		J	3.57		NJ	3.88			0.15	J		8.62			1.63		J	10.94		U
41569-78	01-390	lab test tissue dep	M. nasuta	SA	1.22			1.81		J	2.44		J	1.40			1.92		NJ	2.40			0.02	U		6.32			0.78	J	J	7.65		
41569-82	01-391	lab test tissue dep	M. nasuta	SA	1.65			2.21			1.84		J	1.98		J	2.47		NJ	2.34			0.11	J		5.42			1.26		J	6.23		U
41569-39	01-389	lab test tissue dep	M. nasuta	SA	3.15			5.65			7.22			4.26		J	8.10		NJ	5.08			0.27	J		8.43			2.02			18.53		
41569-115	01-388	lab test tissue dep	M. nasuta	SA	2.42			4.88			5.21			3.64		J	6.37		NJ	3.42			0.23	J		6.22			1.70			10.06		
41569-98	01-389	lab test tissue dep	M. nasuta	SA	4.03			5.19			6.17			3.75		J	6.68		NJ	5.54			0.25	J		11.29			2.61			15.85		
41569-101	01-388	lab test tissue dep	M. nasuta	SA	3.00			4.36			4.80			4.01		J	5.84		NJ	4.12			0.02	U		8.60			2.41			12.22		
41569-114	01-388	lab test tissue dep	M. nasuta	SA	2.70			4.60			4.36			3.20		J	5.68		NJ	3.83			0.02	U		7.15			1.36			12.00		
41569-26	01-391	lab test tissue dep	M. nasuta	SA	3.96			5.83			6.88		J	5.11		J	8.19		NJ	5.89			0.32	J		10.78			3.17		J	16.12		
41569-173	01-390	lab test tissue dep	M. nasuta	SA	2.57			4.34		J	5.92		J	3.71			6.05		NJ	4.19			0.23	J	J	8.42			2.34		J	11.16		
41569-155	01-388	lab test tissue dep	M. nasuta	SA	4.36			6.63			6.56			5.06		J	8.47		NJ	6.79			0.25	J		21.81			2.83			22.86		
41569-95	01-391	lab test tissue dep	M. nasuta	SA	7.11			16.53			15.49		J	9.65		J	16.17		NJ	9.26			0.94			12.96			7.30		J	28.22		
41569-168	01-388	lab test tissue dep	M. nasuta	SA	6.08		J	7.50		J	7.19		J	3.79		J	8.95		NJ	9.19		J	0.25	J	J	30.30		J	2.13		J	30.71		J
41569-5	01-390	lab test tissue dep	M. nasuta	SA	4.62			8.14		J	7.99		J	5.60			10.65		NJ	7.20			0.33	J		12.58			3.76		J	17.16		
41569-157	01-388	lab test tissue dep	M. nasuta	SA	3.34			5.84			6.58			4.64		J	7.58		NJ	4.87			0.26	J		10.38			2.62			14.46		
41569-102	01-391	lab test tissue dep	M. nasuta	SA	6.78			8.87			9.70		J	6.08		J	11.41		NJ	10.44			0.55	J		32.04			4.86		J	34.68		U
41569-77	01-387	lab test tissue dep	M. nasuta	SA	5.84			8.03		J	9.75			6.86			9.23		NJ	8.53			0.46	J		21.88			4.65			24.82		
41569-200	01-389	lab test tissue dep	M. nasuta	SA	6.31			7.29			8.29			4.10		J	8.98		NJ	8.28			0.36	J		13.24			3.53			19.38		
41569-116	01-391	lab test tissue dep	M. nasuta	SA	3.86			6.41			8.26		J	4.94		J	8.52		NJ	7.20			0.41	J		13.53			3.70		J	18.71		U
41569-41	01-390	lab test tissue dep	M. nasuta	SA	4.10			6.02		J	9.19		J	4.38			7.69		NJ	6.81			0.36	J		18.16			3.17		J	28.34		
41569-141	01-388	lab test tissue dep	M. nasuta	SA	8.13			10.86			13.42			6.48		J	16.46		NJ	16.56			0.49	J		46.42			3.61			80.75		
41569-203	01-389	lab test tissue dep	M. nasuta	SA	0.39	J		0.44	J		0.63	J		0.43	J	J	0.62	J	NJ	1.95			0.03	U		3.25			0.19	J		2.80		
41569-147	01-387	lab test tissue dep	M. nasuta	SA	6.92			10.01		J	11.28			8.24			11.09		NJ	9.91			0.81			22.33			6.35			28.35		
41569-11	01-389	lab test tissue dep	M. nasuta	SA	4.97			5.76			8.62			4.03		J	8.99		NJ	11.64			0.35	J		30.09			2.42			41.64		
41569-171	01-387	lab test tissue nondep	M. nasuta	SA	8.52			10.80		J	15.03			10.56			14.04		NJ	17.65			1.12			39.30			7.30			50.67		
41569-90	01-389	lab test tissue dep	M. nasuta	SA	2.78			6.09			7.75			4.15		J	8.12		NJ	5.00			0.30	J		8.04			2.18			12.86		
41569-100	01-389	lab test tissue dep	M. nasuta	SA	7.31			6.01			8.40			3.20		J	9.30		NJ	16.25			0.29	J		53.86			2.45			47.26		
41569-MAC-213	01-387	background tissue	M. nasuta	SA	0.43	J		0.24	J	J	0.55	J		0.01	U		0.37	J	NJ	1.59			0.01	U		4.41			0.01	U		2.64		
41569-MAC-214	01-387	background tissue	M. nasuta	SA	0.38	J		0.24	J	J	0.53	J		0.01	U		0.45	J	NJ	1.54			0.01	U		4.48			0.01	U		2.56		
41569-MAC-215	01-387	background tissue	M. nasuta	SA	0.38	J		0.19	J	J	0.42	J		0.01	U		0.34	J	NJ	1.35			0.01	U		3.70			0.01	U		2.33		

was less than the IDL or the analyte was not detected.
the compound or analyte was analyzed for but not detected. The sample
t is an estimated value.
value.
ive evidence of presence of the constituent.

Table C-6. Butyltins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Butyltins in *M. nasuta* Tissues (ug/kg wet weight)											
						Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AB-67	41569-167	01-353	lab test tissue dep	M. nasuta	SA	8.86	U		1.94	J		7.49			20.20	U	
AB-67	41569-211	01-354	lab test tissue dep	M. nasuta	SA	4.86	U		2.01	J		2.86			11.08	U	
AB-67	41569-28	01-353	lab test tissue dep	M. nasuta	SA	9.22	U		1.27	J		3.16	J		21.01	U	
AB-67	41569-35	01-353	lab test tissue dep	M. nasuta	SA	5.61	U		1.21	J		2.98			12.78	U	
AB-67	41569-53	01-353	lab test tissue dep	M. nasuta	SA	5.79	U		1.07	J		2.44	J		13.18	U	
AL-64	41569-204	01-355	lab test tissue dep	M. nasuta	SA	4.93	U		1.43	J		4.85			11.24	U	
AL-64	41569-205	01-355	lab test tissue dep	M. nasuta	SA	4.89	U		1.80	J		5.17			11.15	U	
AL-64	41569-51	01-354	lab test tissue dep	M. nasuta	SA	11.08	U		2.52	J		12.44			25.25	U	
AL-64	41569-59	01-354	lab test tissue dep	M. nasuta	SA	6.53	U		1.65	J		7.76			14.88	U	
AL-64	41569-66	01-354	lab test tissue dep	M. nasuta	SA	6.38	U		2.02	J		6.83			14.53	U	
BF-66	41569-120	01-355	lab test tissue dep	M. nasuta	SA	4.91	U		1.05	J		2.69			11.18	U	
BF-66	41569-127	01-355	lab test tissue dep	M. nasuta	SA	4.94	U		1.15	J		2.48			11.25	U	
BF-66	41569-191	01-355	lab test tissue dep	M. nasuta	SA	4.87	U		1.21	J		2.17			11.10	U	
BF-66	41569-210	01-355	lab test tissue dep	M. nasuta	SA	4.89	U		1.36	J		2.51			11.14	U	
BF-66	41569-44	01-355	lab test tissue dep	M. nasuta	SA	4.84	U		1.11	J		2.02	J		11.02	U	
EW-30	41569-125	01-353	lab test tissue dep	M. nasuta	SA	5.90	U		1.41	J		4.89			13.44	U	
EW-31	41569-19	01-386	lab test tissue dep	M. nasuta	SA	5.53	U		1.02	J		2.86			12.60	U	
EW-32	41569-65	01-356	lab test tissue dep	M. nasuta	SA	12.67	U		1.39	J		4.40	J		28.87	U	
EW-33	41569-152	01-353	lab test tissue dep	M. nasuta	SA	5.89	U		1.66	J		4.77			13.43	U	
EW-34	41569-83	01-386	lab test tissue dep	M. nasuta	SA	6.04	U		1.46	J		3.82			13.76	U	
EW-35	41569-135	01-355	lab test tissue dep	M. nasuta	SA	0.87	J		1.31	J		3.56			10.85	U	
EW-36	41569-61	01-355	lab test tissue dep	M. nasuta	SA	4.68	U		1.39	J		4.29			10.67	U	
EW-36	41569-89	01-386	lab test tissue nondep	M. nasuta	SA	5.77	U		1.14	J		3.83			13.14	U	
EW-37	41569-92	01-356	lab test tissue dep	M. nasuta	SA	4.87	U		1.47	J		4.42			11.10	U	
IB-54	41569-106	01-386	lab test tissue dep	M. nasuta	SA	5.61	U		1.18	J		3.81			12.78	U	
IB-55	41569-10	01-386	lab test tissue dep	M. nasuta	SA	5.17	U		0.92	J		2.89			11.78	U	
IB-56	41569-164	01-355	lab test tissue dep	M. nasuta	SA	4.71	U		1.72	J		4.42			10.72	U	
IB-56	41569-198	01-386	lab test tissue nondep	M. nasuta	SA	5.71	U		1.50	J		3.99			13.00	U	
IB-57	41569-189	01-353	lab test tissue dep	M. nasuta	SA	5.88	U		1.62	J		4.53			13.40	U	
IB-58	41569-24	01-386	lab test tissue dep	M. nasuta	SA	5.36	U		1.14	J		5.46			12.22	U	
IB-59	41569-175	01-356	lab test tissue dep	M. nasuta	SA	4.94	U		2.04	J		9.97			11.25	U	
OR-24	41569-202	01-353	lab test tissue dep	M. nasuta	SA	5.82	U		5.31			52.78			13.26	U	
OR-25	41569-142	01-356	lab test tissue dep	M. nasuta	SA	4.84	U		1.96	J		5.20			11.04	U	
OR-26	41569-162	01-353	lab test tissue dep	M. nasuta	SA	5.58	U		2.15	J		18.54			12.72	U	
OR-26	41569-30	01-386	lab test tissue nondep	M. nasuta	SA	5.81	U		1.99	J		10.26			13.25	U	
OR-27	41569-151	01-354	lab test tissue dep	M. nasuta	SA	4.89	U		2.71			14.83			11.15	U	
OR-28	41569-33	01-356	lab test tissue dep	M. nasuta	SA	6.47	U		1.43	J		4.10			14.75	U	
OR-29	41569-150	01-355	lab test tissue dep	M. nasuta	SA	4.82	U		1.80	J		6.18			10.99	U	
PA-38	41569-60	01-354	lab test tissue dep	M. nasuta	SA	1.60	J		14.84			78.59	D		10.87	U	
PA-39	41569-75	01-354	lab test tissue dep	M. nasuta	SA	4.94	U		4.38			42.23			11.25	U	
PA-40	41569-110	01-354	lab test tissue dep	M. nasuta	SA	4.94	U		6.71			78.76	D		11.26	U	
PA-41	41569-158	01-354	lab test tissue dep	M. nasuta	SA	10.98	U		20.04			208.97	D		25.02	U	
PA-42	41569-187	01-354	lab test tissue dep	M. nasuta	SA	4.85	U		10.54			134.62	D		11.05	U	
PA-43	41569-161	01-354	lab test tissue dep	M. nasuta	SA	1.34	J		5.50			30.33			11.24	U	
PA-44	41569-70	01-356	lab test tissue dep	M. nasuta	SA	4.90	U		7.81			89.88	D		11.16	U	
PA-45	41569-85	01-353	lab test tissue dep	M. nasuta	SA	5.86	U		4.97			58.75		J	13.35	U	
PA-46	41569-163	01-356	lab test tissue dep	M. nasuta	SA	5.69	U		4.60			64.37			12.97	U	
PA-46	41569-46	01-386	lab test tissue nondep	M. nasuta	SA	11.56	U		4.21	J		39.34			26.34	U	
PA-47	41569-132	01-356	lab test tissue dep	M. nasuta	SA	4.92	U		5.22			71.18			11.20	U	
PA-48	41569-131	01-354	lab test tissue dep	M. nasuta	SA	4.86	U		1.39	J		8.21			11.07	U	
PA-49	41569-182	01-353	lab test tissue dep	M. nasuta	SA	5.56	U		1.66	J		7.60			12.66	U	
PA-50	41569-143	01-356	lab test tissue dep	M. nasuta	SA	4.84	U		1.20	J		5.26			11.03	U	
PA-51	41569-99	01-354	lab test tissue dep	M. nasuta	SA	4.84	U		1.54	J		5.52			11.03	U	
PA-52	41569-107	01-356	lab test tissue dep	M. nasuta	SA	5.57	U		1.29	J		4.80			12.70	U	

Table C-6. Butyltins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Butyltins in *M. nasuta* Tissues (ug/kg wet weight)											
						Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Station_ID	Client_Samp_ID	Lab_Batch	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
PA-53	41569-192	01-354	lab test tissue dep	M. nasuta	SA	4.89	U		1.52	J		5.92			11.15	U	
PC-63	41569-111	01-355	lab test tissue dep	M. nasuta	SA	4.86	U		1.46	J		2.40			11.08	U	
PC-63	41569-179	01-355	lab test tissue dep	M. nasuta	SA	4.69	U		1.18	J		2.38			10.69	U	
PC-63	41569-52	01-356	lab test tissue dep	M. nasuta	SA	9.92	U		1.46	J		3.71	J		22.59	U	
PC-63	41569-76	01-355	lab test tissue dep	M. nasuta	SA	5.91	U		18.70	U		2.12	J		13.46	U	
RR-65	41569-153	01-353	lab test tissue dep	M. nasuta	SA	5.47	U		1.22	J		2.80			12.46	U	
RR-65	41569-165	01-353	lab test tissue dep	M. nasuta	SA	5.24	U		1.24	J		2.84			11.94	U	
RR-65	41569-185	01-353	lab test tissue dep	M. nasuta	SA	5.62	U		1.50	J		3.10			12.79	U	
RR-65	41569-78	01-353	lab test tissue dep	M. nasuta	SA	5.61	U		1.17	J		3.41			12.78	U	
RR-65	41569-82	01-353	lab test tissue dep	M. nasuta	SA	5.80	U		1.43	J		2.47	J		13.22	U	
SB-01	41569-39	01-354	lab test tissue dep	M. nasuta	SA	4.90	U		1.70	J		4.30			11.16	U	
SB-02	41569-115	01-355	lab test tissue dep	M. nasuta	SA	4.74	U		15.02	U		2.40			10.81	U	
SB-03	41569-98	01-356	lab test tissue dep	M. nasuta	SA	4.92	U		1.37	J		5.18			11.21	U	
SB-04	41569-101	01-355	lab test tissue dep	M. nasuta	SA	7.18	U		1.39	J		4.37			16.36	U	
SB-05	41569-114	01-355	lab test tissue dep	M. nasuta	SA	5.02	U		1.03	J		2.11	J		11.43	U	
SB-06	41569-26	01-353	lab test tissue dep	M. nasuta	SA	5.77	U		1.80	J		6.68			13.16	U	
SB-07	41569-173	01-355	lab test tissue dep	M. nasuta	SA	4.93	U		1.80	J		4.26			11.23	U	
SB-08	41569-155	01-356	lab test tissue dep	M. nasuta	SA	5.87	U		2.00	J		5.36			13.38	U	
SB-09	41569-95	01-354	lab test tissue dep	M. nasuta	SA	4.76	U		1.57	J		4.63			10.85	U	
SB-10	41569-168	01-356	lab test tissue dep	M. nasuta	SA	4.83	U		1.56	J		4.58			11.01	U	
SB-11	41569-5	01-355	lab test tissue dep	M. nasuta	SA	5.79	U		1.55	J		4.92			13.19	U	
SB-12	41569-157	01-355	lab test tissue dep	M. nasuta	SA	4.92	U		1.70	J		4.87			11.20	U	
SB-13	41569-102	01-353	lab test tissue dep	M. nasuta	SA	5.64	U		2.04	J		9.01			12.86	U	
SB-14	41569-113	01-386	lab test tissue dep	M. nasuta	SA	5.54	U		1.62	J		6.00			12.63	U	
SB-15	41569-200	01-354	lab test tissue dep	M. nasuta	SA	4.83	U		2.07	J		7.96			11.00	U	
SB-16	41569-116	01-353	lab test tissue dep	M. nasuta	SA	4.57	U		2.66			16.87			10.42	U	
SB-17	41569-41	01-353	lab test tissue dep	M. nasuta	SA	5.67	U		3.17			21.17			12.93	U	
SB-18	41569-141	01-356	lab test tissue dep	M. nasuta	SA	7.87	U		2.04	J		8.41			17.94	U	
SB-19	41569-203	01-354	lab test tissue dep	M. nasuta	SA	7.26	U		1.78	J		3.00	J		16.54	U	
SB-20	41569-147	01-386	lab test tissue dep	M. nasuta	SA	6.07	U		19.22	U		10.42			13.83	U	
SB-21	41569-11	01-354	lab test tissue dep	M. nasuta	SA	4.82	U		3.23			25.79			10.99	U	
SB-21	41569-171	01-386	lab test tissue nondep	M. nasuta	SA	5.62	U		4.07			19.71			12.79	U	
SB-22	41569-90	01-356	lab test tissue dep	M. nasuta	SA	5.24	U		4.10			10.69			11.94	U	
SB-23	41569-100	01-354	lab test tissue dep	M. nasuta	SA	4.92	U		4.30			34.07			11.20	U	
NA	41569-MAC-213	01-386	background tissue	M. nasuta	SA	5.91	U		1.00	J		1.47	J		13.47	U	
NA	41569-MAC-214	01-386	background tissue	M. nasuta	SA	5.83	U		0.77	J		1.27	J		13.29	U	
NA	41569-MAC-215	01-386	background tissue	M. nasuta	SA	5.84	U		1.04	J		1.47	J		13.30	U	

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table C-7. Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Dioxins in *M. nasuta* Tissues (pg/g wet weight)																	
					1,2,3,4,6,7,8-HpCDD			1,2,3,4,6,7,8-HpCDF			1,2,3,4,7,8,9-HpCDF			1,2,3,4,7,8-HxCDD			1,2,3,4,7,8-HxCDF			1,2,3,6,7,8-HxCDD		
Station_ID	Client_ Samp_ ID	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AL-64	41569-204-F	lab test tissue dep	M. nasuta	SA	0.45	U	UJ	0.25	U	UJ	0.31	U		0.31	U		0.25	U		0.25	U	UJ
EW-30	41569-125-D	lab test tissue dep	M. nasuta	SA	2.4	J		0.64	J		0.31	U		0.31	U		0.25	U		0.25	U	
SB-16	41569-116-D	lab test tissue dep	M. nasuta	SA	6			1.8	J		0.31	U		0.31	U		0.25	U		0.25	U	
OR-26	41569-162-D	lab test tissue dep	M. nasuta	SA	2.1	J		0.65	J		0.31	U		0.31	U		0.25	U		0.25	U	
EW-33	41569-152-D	lab test tissue dep	M. nasuta	SA	2	J		0.64	J		0.31	U		0.31	U		0.25	U		0.25	U	
OR-24	41569-202-D	lab test tissue dep	M. nasuta	SA	4	J		0.25	U		0.31	U		0.31	U		0.25	U		0.25	U	
SB-17	41569-41-D	lab test tissue dep	M. nasuta	SA	4.4	J		1.2	J		0.31	U		0.31	U		0.25	U		0.25	U	
BF-66	41569-120-F	lab test tissue dep	M. nasuta	SA	1.9	J	J	0.33	J	J	0.31	U		0.31	U		0.25	U		0.25	U	UJ
AB-67	41569-167-F	lab test tissue dep	M. nasuta	SA	0.45	U	UJ	0.25	U	UJ	0.31	U		0.31	U		0.25	U		0.25	U	UJ
PC-63	41569-52-F	lab test tissue dep	M. nasuta	SA	2.5	J	J	0.25	U	UJ	0.31	U		0.31	U		0.25	U		0.25	U	UJ
RR-65	41569-153-F	lab test tissue dep	M. nasuta	SA	0.95	J	J	0.25	U	UJ	0.31	U		0.31	U		0.25	U		0.25	U	UJ
	41569-MAC-213	background tissue	M. nasuta	SA	0.45	U	UJ	0.25	U	UJ	0.31	U	UJ	0.31	U		0.25	U		0.25	U	
	41569-MAC-214	background tissue	M. nasuta	SA	0.45	U		0.25	U		0.31	U		0.31	U		0.25	U		0.25	U	
	41569-MAC-215	background tissue	M. nasuta	SA	0.96	J		0.25	U		0.31	U		0.31	U		0.25	U		0.25	U	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-7. Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Dioxins in *M. nasuta* Tissues (pg/g wet weight)																	
					1,2,3,6,7,8-HxCDF			1,2,3,7,8,9-HxCDD			1,2,3,7,8,9-HxCDF			1,2,3,7,8-PeCDD			1,2,3,7,8-PeCDF			13C-1,2,3,4,6,7,8-HpCDD		
Station_ID	Client_ Samp_ ID	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AL-64	41569-204-F	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U	UJ	0.25	U		0.31	U	UJ	0.25	U		91		
EW-30	41569-125-D	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		100		
SB-16	41569-116-D	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		101		
OR-26	41569-162-D	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		91		
EW-33	41569-152-D	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		88		
OR-24	41569-202-D	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		97		
SB-17	41569-41-D	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		99		
BF-66	41569-120-F	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U	UJ	0.25	U		0.31	U	UJ	0.25	U		90		
AB-67	41569-167-F	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U	UJ	0.25	U		0.31	U	UJ	0.25	U		72		
PC-63	41569-52-F	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U	UJ	0.25	U		0.31	U	UJ	0.25	U		90		
RR-65	41569-153-F	lab test tissue dep	M. nasuta	SA	0.25	U		0.31	U	UJ	0.25	U		0.31	U	UJ	0.25	U		77		
	41569-MAC-213	background tissue	M. nasuta	SA	0.25	U	UJ	0.31	U		0.25	U		0.31	U		0.25	U		74		
	41569-MAC-214	background tissue	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		101		
	41569-MAC-215	background tissue	M. nasuta	SA	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		94		

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J Estimated value.

Table C-7. Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Dioxins in *M. nasuta* Tissues (pg/g wet weight)																
					13C-1,2,3,4,6,7,8-HpCDF			13C-1,2,3,4,7,8-HxCDF			13C-1,2,3,6,7,8-HxCDD			13C-1,2,3,7,8-PeCDD			13C-1,2,3,7,8-PeCDF			13C-2,3,7,8-TCDD		
Station_ID	Client_ Samp_ ID	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AL-64	41569-204-F	lab test tissue dep	M. nasuta	SA	86			80			73			84			101			85		
EW-30	41569-125-D	lab test tissue dep	M. nasuta	SA	117			92			88			83			97			84		
SB-16	41569-116-D	lab test tissue dep	M. nasuta	SA	115			97			88			82			88			87		
OR-26	41569-162-D	lab test tissue dep	M. nasuta	SA	110			93			87			75			83			76		
EW-33	41569-152-D	lab test tissue dep	M. nasuta	SA	106			95			90			80			86			81		
OR-24	41569-202-D	lab test tissue dep	M. nasuta	SA	110			97			91			110			116			86		
SB-17	41569-41-D	lab test tissue dep	M. nasuta	SA	111			92			86			80			93			84		
BF-66	41569-120-F	lab test tissue dep	M. nasuta	SA	78			74			69			75			89			75		
AB-67	41569-167-F	lab test tissue dep	M. nasuta	SA	68			64			58			59			70			67		
PC-63	41569-52-F	lab test tissue dep	M. nasuta	SA	83			74			69			77			92			75		
RR-65	41569-153-F	lab test tissue dep	M. nasuta	SA	66			66			61			77			90			82		
	41569-MAC-213	background tissue	M. nasuta	SA	66			92			81			81			85			75		
	41569-MAC-214	background tissue	M. nasuta	SA	120			95			90			81			94			85		
	41569-MAC-215	background tissue	M. nasuta	SA	105			91			79			84			92			82		

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J Estimated value.

Table C-7. Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Dioxins in *M. nasuta* Tissues (pg/g wet weight)																				
					13C-2,3,7,8-TCDF			13C-OCDD			2,3,4,6,7,8-HxCDF			2,3,4,7,8-PeCDF			2,3,7,8-TCDD			2,3,7,8-TCDF			OCDD		
Station_ID	Client_ Samp_ ID	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AL-64	41569-204-F	lab test tissue dep	M. nasuta	SA	74			101			0.26	U		0.25	U	UJ	0.13	U	UJ	0.06	U	UJ	3.4	J	J
EW-30	41569-125-D	lab test tissue dep	M. nasuta	SA	100			96			0.26	U		0.25	U		0.13	U		0.94	J CON		14		
SB-16	41569-116-D	lab test tissue dep	M. nasuta	SA	95			91			0.26	U		1	J		0.13	U		1.7			40		
OR-26	41569-162-D	lab test tissue dep	M. nasuta	SA	83			81			0.26	U		0.25	U		0.13	U		0.67	J CON		12		
EW-33	41569-152-D	lab test tissue dep	M. nasuta	SA	93			83			0.26	U		0.25	U		0.13	U		0.88	J CON		10		
OR-24	41569-202-D	lab test tissue dep	M. nasuta	SA	114			95			0.26	U		0.87	J		0.13	U		1.5			24		J
SB-17	41569-41-D	lab test tissue dep	M. nasuta	SA	94			94			0.26	U		0.25	U		0.13	U		1.2			23		
BF-66	41569-120-F	lab test tissue dep	M. nasuta	SA	68			97			0.26	U		0.25	U	UJ	0.13	U	UJ	0.06	U	UJ	11		J
AB-67	41569-167-F	lab test tissue dep	M. nasuta	SA	53			81			0.26	U		0.25	U	UJ	0.13	U	UJ	0.06	U	UJ	8.8	J	J
PC-63	41569-52-F	lab test tissue dep	M. nasuta	SA	69			103			0.26	U		0.25	U	UJ	0.13	U	UJ	0.06	U	UJ	14		J
RR-65	41569-153-F	lab test tissue dep	M. nasuta	SA	72			83			0.26	U		0.25	U	UJ	0.13	U	UJ	0.06	U	UJ	6	J	J
	41569-MAC-213	background tissue	M. nasuta	SA	82			78			0.26	U		0.25	U		0.13	U		0.06	U		6.3	J	J
	41569-MAC-214	background tissue	M. nasuta	SA	94			97			0.26	U		0.25	U		0.13	U		0.06	U		2.7	J	
	41569-MAC-215	background tissue	M. nasuta	SA	90			90			0.26	U		0.25	U		0.13	U		0.06	U		6.8	J	

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UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-7. Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Dioxins in *M. nasuta* Tissues (pg/g wet weight)																				
					OCDF			Total HpCDD			Total HpCDF			Total HxCDD			Total HxCDF			Total PeCDD			Total PeCDF		
Station_ID	Client_ Samp_ ID	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AL-64	41569-204-F	lab test tissue dep	M. nasuta	SA	0.54	U		0.45	U		0.25	U		0.25	U		0.25	U		0.31	U		0.25	U	
EW-30	41569-125-D	lab test tissue dep	M. nasuta	SA	1.1	J		5.9			0.64			0.25	U		0.25	U		0.31	U		0.25	U	
SB-16	41569-116-D	lab test tissue dep	M. nasuta	SA	3.8	J		16			1.8			0.25	U		0.25	U		0.31	U		6.6		
OR-26	41569-162-D	lab test tissue dep	M. nasuta	SA	1.6	J		5.1			0.65			0.25	U		0.25	U		0.31	U		0.25	U	
EW-33	41569-152-D	lab test tissue dep	M. nasuta	SA	1.1	J		5.3			0.64			0.25	U		0.25	U		0.31	U		0.25	U	
OR-24	41569-202-D	lab test tissue dep	M. nasuta	SA	2	J		12			0.25	U		0.25	U		0.25	U		0.31	U		4.3		
SB-17	41569-41-D	lab test tissue dep	M. nasuta	SA	2.6	J		12			1.2			0.25	U		0.25	U		0.31	U		0.25	U	
BF-66	41569-120-F	lab test tissue dep	M. nasuta	SA	0.54	U		5.3			0.33			0.25	U		0.25	U		0.31	U		0.25	U	
AB-67	41569-167-F	lab test tissue dep	M. nasuta	SA	0.54	J		0.45	U		0.25	U		0.25	U		0.25	U		0.31	U		0.25	U	
PC-63	41569-52-F	lab test tissue dep	M. nasuta	SA	0.54	U		5			0.25	U		0.25	U		0.25	U		0.31	U		0.25	U	
RR-65	41569-153-F	lab test tissue dep	M. nasuta	SA	0.54	U		0.95			0.25	U		0.25	U		0.25	U		0.31	U		0.25	U	
	41569-MAC-213	background tissue	M. nasuta	SA	0.54	U	UJ	0.45	U	UJ	0.25	U	UJ	0.25	U		0.25	U		0.31	U		0.25	U	
	41569-MAC-214	background tissue	M. nasuta	SA	0.54	U		0.45	U		0.25	U		0.25	U		0.25	U		0.31	U		0.25	U	
	41569-MAC-215	background tissue	M. nasuta	SA	0.54	U		0.96			0.25	U		0.25	U		0.25	U		0.31	U		0.25	U	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-7. Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

					Dioxins in *M. nasuta* Tissues (pg/g wet weight)					
					Total TCDD			Total TCDF		
Station_ID	Client_ Samp_ ID	Field_Samp_Type	Species_Code	Samp_ Type	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
AL-64	41569-204-F	lab test tissue dep	M. nasuta	SA	0.13	U	UJ	0.06	U	
EW-30	41569-125-D	lab test tissue dep	M. nasuta	SA	1.1			3.9		
SB-16	41569-116-D	lab test tissue dep	M. nasuta	SA	0.13	U		20		
OR-26	41569-162-D	lab test tissue dep	M. nasuta	SA	0.13	U		4.4		
EW-33	41569-152-D	lab test tissue dep	M. nasuta	SA	1.1			2.5		
OR-24	41569-202-D	lab test tissue dep	M. nasuta	SA	1.2			12		
SB-17	41569-41-D	lab test tissue dep	M. nasuta	SA	0.13	U		13		
BF-66	41569-120-F	lab test tissue dep	M. nasuta	SA	1.1		J	0.06	U	
AB-67	41569-167-F	lab test tissue dep	M. nasuta	SA	0.13	U	UJ	0.06	U	
PC-63	41569-52-F	lab test tissue dep	M. nasuta	SA	0.13	U	UJ	0.06	U	
RR-65	41569-153-F	lab test tissue dep	M. nasuta	SA	0.13	U	UJ	0.06	U	
	41569-MAC-213	background tissue	M. nasuta	SA	0.13	U		0.06	U	
	41569-MAC-214	background tissue	M. nasuta	SA	0.13	U		0.06	U	
	41569-MAC-215	background tissue	M. nasuta	SA	0.13	U		0.06	U	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-8. Metals in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Metals in Invertebrate Tissues (mg/kg dry weight)																													
							Ag			Al			As			Ba			Cd			Co			Cr			Cu			Fe			Hg		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	Forage F/I	0.345	J	J	3490			7.37			32			0.521	J	J	2.44			13.9		J	31.6			2720			0.126		
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	Forage F/I	0.366	J	J	28100			18.7			163			0.435	J	J	8.32			76.2		J	37.7			19000			0.2		
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	Forage F/I	0.715	J	J	27600			23.5			161			3.08	J	J	9.97			75.6		J	313			19600			0.559		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	Forage F/I	0.297	J	J	593			7.16	J		5.25			0.789	J	J	1.21			3.3	J	J	11.4			708			0.154		
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	Forage F/I	0.345	J	J	25400			17.5			150			0.568	J	J	8.4			61.1		J	41.1			18400			0.2		
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	Forage F/I	0.669	J	J	1950			6.84	J		14.5			0.753	J	J	1.59			10.4		J	9.09			1930			0.181		
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	Forage F/I	0.0957	J	J	6290			10.4			38.4			0.957	J	J	4.18			33.6		J	18.2			5270			0.157		
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	Forage F/I	0.119	J	J	1270			6.43	J		15.6			0.83	J	J	1.2			7.86		J	15.2			1220			0.195		
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	Forage F/I	0.248	J	J	12900			9.95			121			0.786	J	J	4.92			58.2		J	73			9470			0.305		

J Estimated value.

Table C-8. Metals in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Metals in Invertebrate Tissues (mg/kg dry weight)																							
							Mn			Mo			Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	Forage F/I	70.9			0.888	J		13.6	J		10.3			0.218			3.74	J	J	7.21			115		
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	Forage F/I	228			1.87			51	J		13.3			0.378			4.83	J	J	51			95.8		
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	Forage F/I	254			2.52			46.6	J		33.6			1.31			9.87		J	54.9			165		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	Forage F/I	22.1			0.389	J		8.98	J		2.77			0.182			3.78	J	J	2.25	J		109		
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	Forage F/I	247			1.89			38.4	J		11.9			0.34			9.67		J	53.6			97.3		
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	Forage F/I	35.7			0.601	J		11.4	J		2.48			0.109	J		4.67	J	J	4.84			87.5		
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	Forage F/I	99.9			1.07	J		18.2	J		6			0.184			4.68	J	J	15.1			111		
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	Forage F/I	34.5			0.543	J		8.62	J		5.25			0.104	J		5.04	J	J	3.08	J		110		
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	Forage F/I	131			1.4	J		33.6	J		30.7			1.14			4.96	J	J	25.3			151		

J Estimated value.

Table C-9. Polychlorinated Biphenyls as Congeners in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in Invertebrate Tissues (ug/kg wet weight)																							
							Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	0.40	U	UJ	0.04	U	UJ	0.06	U	UJ	0.79		J	1.57		J	0.04	U	UJ	0.11	U	UJ	1.66		J
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	0.42	U	UJ	0.05	U	UJ	0.06	U	UJ	0.04	U	UJ	0.78		J	0.04	U	UJ	0.12	U	UJ	2.09		J
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	0.39	U	UJ	0.04	U	UJ	0.06	U	UJ	0.04	U	UJ	5.77		J	0.04	U	UJ	0.11	U	UJ	4.20		J
Eastern Wetland Area VIII		AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	0.39	U	UJ	0.04	U	UJ	0.06	U	UJ	0.04	U	UJ	0.49	J	J	0.04	U	UJ	0.11	U	UJ	2.43		J
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	0.41	U	UJ	0.04	U	UJ	0.06	U	UJ	0.04	U	UJ	0.03	U	UJ	0.04	U	UJ	0.11	U	UJ	1.75		J
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	0.39	U		0.04	U		0.06	U		0.04	U		0.86			0.04	U		0.11	U		4.01		
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	0.41	U	UJ	0.04	U	UJ	0.06	U	UJ	2.02		J	2.05		J	0.04	U	UJ	0.11	U	UJ	13.00		J
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	0.37	U	UJ	0.04	U	UJ	0.05	U	UJ	0.73		J	3.43		J	0.03	U	UJ	0.10	U	UJ	12.02		J
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	0.41	U		0.04	U		0.97			1.55			6.05			0.04	U		0.11	U		65.25	D	

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UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-9. Polychlorinated Biphenyls as Congeners in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in Invertebrate Tissues (ug/kg wet weight)																						
							Cl5(105)			Cl5(110)			Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	0.49	J	J	2.06		J	1.31		J	0.51	U	UJ	0.59	J	J	0.05	U	UJ	3.92		J	4.98		J
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	0.65	J	J	3.10		J	2.77		J	0.53	U	UJ	0.71	J	J	0.05	U	UJ	5.48		J	10.14		J
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	0.05	U	UJ	8.16		J	0.04	U	UJ	0.49	U	UJ	1.42		J	0.05	U	UJ	21.69		J	42.01		J
Eastern Wetland Area VIII		AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	0.19	J	J	1.49		J	1.07		J	0.49	U	UJ	0.55	J	J	0.05	U	UJ	7.40		J	11.48		J
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	0.05	U	UJ	2.17		J	1.14		J	0.51	U	UJ	0.59	J	J	0.05	U	UJ	5.41		J	9.91		J
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	0.44	J		2.55			2.22			0.49	U		1.09			0.05	U		13.81			21.03		
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	5.65		J	58.56		J	50.90		J	0.51	U	UJ	18.01		J	0.05	U	UJ	197.15	D	J	298.44	D	J
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	1.27		J	8.89		J	6.94		J	0.46	U	UJ	2.67		J	0.05	U	UJ	32.65	D	J	52.44	D	J
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	13.63			56.32	D		52.61	D		0.51	U		32.99			0.05	U		308.28	D		504.93	D	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-9. Polychlorinated Biphenyls as Congeners in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in Invertebrate Tissues (ug/kg wet weight)																	
							Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	0.65	J	J	2.57		J	1.59		J	0.13	J	J	0.23	J	J	0.20	J	J
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	1.18		J	3.34		J	2.73		J	0.37	J	J	0.30	J	J	0.36	J	J
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	9.70		J	16.03		J	11.63		J	1.17		J	0.99		J	0.80		J
Eastern Wetland Area VIII		AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	2.32		J	6.34		J	5.03		J	0.34	J	J	0.32	J	J	0.12	J	J
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	1.49		J	3.24		J	2.83		J	0.41	J	J	0.16	J	J	0.62	J	J
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	4.75		J	12.30			9.13			0.70			0.39	J		0.17	J	
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	32.52		J	94.43	D	J	104.86	D	J	4.59		J	0.60	J	J	1.42		J
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	11.71		J	26.65	D	J	21.03	D	J	1.49		J	0.85		J	0.26	J	J
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	98.20	D	J	221.45	D		157.60	D		21.45			5.41			1.13		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-10. Polychlorinated Biphenyls as Aroclors in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Aroclors in Invertebrate Tissues (ug/kg wet weight)																				
							Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	8.68	U	UJ	8.68	U	UJ	8.68	U	UJ	8.68	U	UJ	8.68	U	UJ	8.68	U	UJ	36.28		J
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	9.05	U	UJ	9.05	U	UJ	9.05	U	UJ	9.05	U	UJ	9.05	U	UJ	9.05	U	UJ	56.12		J
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	8.39	U	UJ	8.39	U	UJ	8.39	U	UJ	8.39	U	UJ	8.39	U	UJ	8.39	U	UJ	258.27		J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	77.71		J
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	8.79	U	UJ	8.79	U	UJ	8.79	U	UJ	8.79	U	UJ	8.79	U	UJ	8.79	U	UJ	64.27		J
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	8.41	U		8.41	U		8.41	U		8.41	U		8.41	U		8.41	U		133.50		
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	8.74	U	UJ	8.74	U	UJ	8.74	U	UJ	8.74	U	UJ	8.74	U	UJ	8.74	U	UJ	1970.71		J
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	7.97	U	UJ	7.97	U	UJ	7.97	U	UJ	7.97	U	UJ	7.97	U	UJ	7.97	U	UJ	361.02		J
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	8.80	U		8.80	U		8.80	U		8.80	U		8.80	U		8.80	U		2676.72	D	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-11. Chlorinated Pesticides in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Pesticides in Invertebrate Tissues (ug/kg wet weight)																	
							2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	0.03	U	UJ	0.12	U	UJ	0.04	U	UJ	1.59		J	2.86		J	0.85		J
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	0.04	U	UJ	0.12	U	UJ	0.04	U	UJ	2.95		J	2.73		J	1.69		J
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	0.03	U	UJ	0.11	U	UJ	0.04	U	UJ	5.11			6.17			1.96		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	0.03	U	UJ	0.11	U	UJ	0.04	U	UJ	0.66	J	J	1.34		J	0.19	J	J
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	0.03	U	UJ	0.12	U	UJ	0.04	U	UJ	2.27		J	2.42		J	0.03	U	UJ
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	0.03	U		0.11	U		0.04	U		0.61	J		1.53			0.12	J	
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	0.03	U	UJ	0.12	U	UJ	0.04	U	UJ	10.17		J	15.04		J	6.48		J
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	0.03	U	UJ	0.11	U	UJ	0.04	U	UJ	1.34		J	4.14		J	0.37	J	J
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	0.03	U		0.12	U		0.04	U		11.37			27.94			3.30		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-11. Chlorinated Pesticides in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Pesticides in Invertebrate Tissues (ug/kg wet weight)																	
							a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	1.11		J	0.03	U	UJ	0.06	U	UJ	0.02	U	UJ	0.46	J	J	0.03	U	UJ
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	0.89		J	0.03	U	UJ	0.06	U	UJ	0.02	U	UJ	0.26	J	J	0.04	U	UJ
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	0.10	J		0.03	U	UJ	0.06	U	UJ	0.02	U	UJ	0.08	J	J	0.03	U	UJ
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	0.25	J	J	0.64	J	J	0.06	U	UJ	0.02	U	UJ	0.20	J	J	0.03	U	UJ
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	0.21	J	J	0.03	U	UJ	0.06	U	UJ	0.02	U	UJ	0.25	J	J	0.03	U	UJ
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	0.19	J		0.32	J		0.06	U		0.02	U		0.25	J		0.03	U	
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	0.32	J	J	4.32		J	0.06	U	UJ	0.02	U	UJ	0.42	J	J	0.03	U	UJ
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	0.36	J	J	0.70		J	0.06	U	UJ	0.02	U	UJ	0.54	J	J	0.03	U	UJ
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	0.45	J		5.83			0.06	U		0.02	U		0.84			0.03	U	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-12. Polycyclic Aromatic Hydrocarbons in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polycyclic Aromatic Hydrocarbons in Invertebrate Tissues (ug/kg wet weight)																				
							2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	1.66			9.74			2.02			18.81		J	7.75			2.12			51.12		
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	1.73			4.52			1.41			13.32		J	6.85			2.18			40.43		
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	3.10			9.70			4.31			31.17		J	10.91			3.66			81.04		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	DU	WHOLEBODY	01-338	0.37	J		1.05			0.24	J		2.07			0.89			0.52	J		5.41		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	0.35	J	U	0.92			0.26	J		1.69		J	0.72	J		0.59	J	U	4.59		
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	0.74	J		0.91			0.88	J		2.72		J	1.23			1.33			8.10		
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	0.38	J	U	0.37	J		0.22	J		0.67	J	J	0.47	J		0.65	J	U	3.08		
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	0.58	J		0.75	J		0.55	J		1.52		J	1.01			0.94		U	4.84		
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	0.35	J	U	0.54	J		0.41	J		0.90		J	0.62	J		0.71	J	U	5.75		
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	1.33			2.50			1.52			9.42		J	2.25			2.90			14.36		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table C-12. Polycyclic Aromatic Hydrocarbons in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polycyclic Aromatic Hydrocarbons in Invertebrate Tissues (ug/kg wet weight)																									
							Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene	
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	33.62			15.86		J	16.82			8.64		J	14.60		J	38.64			1.63			131.80		J	7.77			118.60	
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	29.00			20.23		J	22.06			12.14		J	20.10		J	31.54			1.50			86.16		J	8.82			72.02	
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	79.09			82.93		J	70.87			51.65		J	73.76		J	88.68			10.22			183.40		J	49.15			184.73	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	DU	WHOLEBODY	01-338	4.53			2.30			2.65			1.76			2.25			4.47			0.23	J		16.26			1.40			12.48	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	3.82			1.91		J	2.26			1.52		J	1.88		J	3.77			0.18	J		13.66		J	1.15			10.45	
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	7.89			13.00		J	12.06			13.47		J	10.39		J	10.61			1.11			19.57		J	9.52			23.99	
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	2.49			3.06		J	2.86			3.43		J	2.39		J	3.60			0.27	J		7.77		J	2.25			8.55	
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	4.30			5.76		J	7.74			7.31		J	6.09		J	8.48			0.73	J		13.71		J	4.99			15.26	
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	3.78			4.42		J	4.43			4.43		J	4.21		J	5.56			0.47	J		17.14		J	3.04			17.53	
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	15.75			22.39		J	27.22			22.18		J	23.58		J	30.67			3.17			48.53		J	17.76			52.46	

U The value was less than the IDL or the analyte was not detected.

J Estimated value.

Table C-12. Polycyclic Aromatic Hydrocarbons in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-338	J
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-338	J
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-338	J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	DU	WHOLEBODY	01-338	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-338	J
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-338	J
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-338	J
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-338	J
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-338	J
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-338	J

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table C-13. Butyltins in Invertebrate Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Butyltins in Invertebrate Tissues (ug/kg wet weight)											
							Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ID	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I HBI	AAB-369	bivalve (clam)	SA	WHOLEBODY	01-348	5.26			45.76		J	149.44	D	J	13.19	U	
India Basin Area I	Area I SBI	AAB-398	polychaete	SA	WHOLEBODY	01-348	1.41			10.19		J	32.60		J	5.40	U	
Point Avisadero Area III	Area III SBI	AAB-460	polychaete	SA	WHOLEBODY	01-348	32.30			229.57	D	J	392.24	D	J	5.40	U	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	bivalve (clam)	SA	WHOLEBODY	01-348	4.99	J		13.55		J	53.83		J	52.37	U	
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	polychaete	SA	WHOLEBODY	01-348	0.81	J		6.85		J	25.89		J	5.40	U	
Oil Reclamation Area IX	Area IX HBI	AAB-404	bivalve (clam)	SA	WHOLEBODY	01-348	2.34	U		2.00		J	7.61		J	5.33	U	
Oil Reclamation Area IX	Area IX SBI	AAB-456	polychaete	SA	WHOLEBODY	01-348	2.66			12.10		J	16.60		J	5.35	U	
South Basin Area X	Area X HBI	AAB-399	bivalve (clam)	SA	WHOLEBODY	01-348	0.56	J		2.38		J	12.80		J	5.29	U	
South Basin Area X	Area X SBI	AAB-453	polychaete	SA	WHOLEBODY	01-348	2.81			24.22		J	46.72		J	5.38	U	

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table C-14. Metals in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Metals in Forage Fish Tissue (mg/kg dry weight)																										
						Ag			Al			As			Ba			Cd			Co			Cr			Cu			Fe			Hg		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	Forage F/I	0.0394	J	J	699			2.01	J	U	6.52			0.0287	J	J	0.392	J		3.04	J	J	7.75			475			0.255		
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	Forage F/I	0.0252	J	J	210			2.91	J		5.21			0.0583	J	J	0.242	J		2.53	J	J	4.94			195			0.213		
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	Forage F/I	0.0377	J	J	729			2.89	J		7.01			0.0355	J	J	0.341	J		3.3	J	J	5.53			557			0.326		
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	Forage F/I	0.0363	J	J	694			1.64	J	U	5.17			0.0224	J	J	0.358	J		2.9	J	J	6.26			515			0.254		
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	Forage F/I	0.0283	J	J	499			1.4	J	U	4.29			0.0254	J	J	0.282	J		1.65	J	J	5.86			413			0.219		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table C-14. Metals in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Metals in Forage Fish Tissue (mg/kg dry weight)

						Mn			Mo			Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	Forage F/I	15.7			0.0812	J		3.15	J	J	0.969			0.0229	J	U	2.96	J	J	2.97	J		67.5		
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	Forage F/I	9.9			0.131	J		1.52	J	J	0.272	J		0.0129	J	U	1.96	J	J	1.51	J		56.5		
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	Forage F/I	17.4			0.0818	J		1.55	J	J	0.598	J		0.0633	J	U	1.75	J	J	3.24	J		66.9		
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	Forage F/I	11.4			0.11	J		1.85	J	J	0.795	J		0.0245	J	U	2.36	J	J	2.01	J		60.5		
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	Forage F/I	8.56			0.0489	J	U	1.11	J	J	1.16			0.0287	J	U	2.21	J	J	2.34	J		55.3		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table C-15. Polychlorinated Biphenyls as Congeners in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Polychlorinated Biphenyls as Congeners in Forage Fish Tissue (ug/kg wet weight)

						Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110)			Cl5(118)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	0.38	U	R	0.04	U	R	0.05	U	R	1.52		J	4.44		J	0.03	U	R	0.11	U	R	11.68		J	3.77		J	14.52		J	14.81		J
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	0.40	U	UJ	0.04	U	UJ	0.06	U	UJ	0.04	U	UJ	2.82		J	0.04	U	UJ	0.11	U	UJ	5.90		J	0.99		J	7.00		J	6.82		J
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	0.40	U	R	0.04	U	R	0.06	U	R	0.04	U	R	2.52		J	0.04	U	R	0.11	U	R	10.43		J	1.33		J	8.35		J	10.40		J
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	0.41	U	R	0.04	U	R	0.06	U	R	0.89		J	2.79		J	0.04	U	R	0.11	U	R	22.82	D	J	3.96		J	17.35		J	18.15		J
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	0.37	U	UJ	0.04	U	UJ	0.05	U	UJ	1.87		J	7.19		J	0.03	U	UJ	0.10	U	UJ	56.87	D	J	10.25		J	40.91	D	J	44.92	D	J

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table C-15. Polychlorinated Biphenyls as Congeners in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Polychlorinated Biphenyls as Congeners in Forage Fish Tissue (ug/kg wet weight)

						Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	0.48	U	R	3.47		J	0.05	U	R	31.28		J	46.24		J	6.92		J	24.95		J	16.60		J	0.94		J	0.41	J	J	0.18	J	J
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	0.50	U	UJ	2.54		J	0.05	U	UJ	29.81		J	44.74		J	9.64		J	25.91		J	18.66		J	1.28		J	0.38	J	J	0.16	J	J
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	0.50	U	R	3.12		J	0.05	U	R	33.61	D	J	50.48	D	J	8.48		J	23.46		J	22.44		J	1.01		J	0.39	J	J	0.17	J	J
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	0.52	U	R	6.20		J	0.05	U	R	64.49	D	J	99.52	D	J	19.53	D	J	47.99	D	J	33.28	D	J	3.01		J	1.08		J	0.24	J	J
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	0.46	U	UJ	19.70		J	0.05	U	UJ	168.61	D	J	249.63	D	J	43.92	D	J	102.56	D	J	80.29	D	J	6.29		J	1.68		J	0.35	J	J

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table C-16. Polychlorinated Biphenyls as Aroclors in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polychlorinated Biphenyls as Aroclors in Forage Fish Tissue (ug/kg wet weight)																				
						Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	8.24	U	R	8.24	U	R	8.24	U	R	8.24	U	R	8.24	U	R	8.24	U	R	266.04		J
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	8.56	U	UJ	8.56	U	UJ	8.56	U	UJ	8.56	U	UJ	8.56	U	UJ	8.56	U	UJ	268.38		J
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	8.62	U	R	8.62	U	R	8.62	U	R	8.62	U	R	8.62	U	R	8.62	U	R	278.68		J
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	8.85	U	R	8.85	U	R	8.85	U	R	8.85	U	R	8.85	U	R	8.85	U	R	532.37	D	J
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	7.82	U	UJ	7.82	U	UJ	7.82	U	UJ	7.82	U	UJ	7.82	U	UJ	7.82	U	UJ	1324.04	D	J

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table C-17. Chlorinated Pesticides in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Chlorinated Pesticides in Forage Fish Tissue (ug/kg wet weight)																										
						2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane			Dieldrin			Endosulfan II		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	0.03	U	R	0.11	U	R	0.04	U	R	4.23		J	10.64		J	0.65	J	J	0.81		J	1.20		J	0.06	U	R
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	0.03	U	UJ	0.11	U	UJ	0.04	U	UJ	2.87		J	14.66		J	1.54		J	0.29	J	J	0.03	U	UJ	0.06	U	UJ
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	0.03	U	R	0.11	U	R	0.04	U	R	3.94		J	14.48		J	0.54	J	J	0.74		J	3.56		J	0.06	U	R
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	0.03	U	R	0.12	U	R	0.04	U	R	3.56		J	15.79		J	0.32	J	J	0.87		J	1.29		J	0.06	U	R
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	0.03	U	UJ	0.10	U	UJ	0.04	U	UJ	7.31		J	33.76	D	J	0.59	J	J	1.08		J	4.16		J	0.06	U	UJ

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UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table C-17. Chlorinated Pesticides in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Chlorinated Pesticides in Forage Fish Tissue (ug/kg wet weight)								
						Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	0.02	U	R	0.77		J	0.03	U	R
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	0.02	U	UJ	0.28	J	J	0.03	U	UJ
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	0.02	U	R	0.77		J	0.03	U	R
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	0.02	U	R	0.74		J	0.04	U	R
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	0.02	U	UJ	1.58		J	0.03	U	UJ

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J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table C-18. Polycyclic Aromatic Hydrocarbons in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polycyclic Aromatic Hydrocarbons in Forage Fish Tissue (ug/kg wet weight)																				
						2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	0.33	J	U	1.28			0.26	J		0.60	J	J	0.62	J		0.76	J	U	1.28		
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	0.88			7.96			0.42	J		0.41	J	J	1.47			2.23			2.72		
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	0.62	J		5.03			0.33	J		0.58	J	J	2.32			0.87		U	6.14		
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	0.25	J	U	0.39	J		0.03	U		0.31	J	J	0.26	J		0.56	J	U	0.67	J	
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	0.24	J	U	0.29	J		0.02	U		0.37	J	J	0.21	J		0.48	J	U	0.51	J	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.

Table C-18. Polycyclic Aromatic Hydrocarbons in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Polycyclic Aromatic Hydrocarbons in Forage Fish Tissue (ug/kg wet weight)																													
						Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			zo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-338	0.48	J		0.65	J	J	0.66	J		0.61	J	J	0.58	J	J	0.66	J		0.02	U		1.61		J	0.42	J		1.56		J
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-338	0.36	J		0.28	J	J	0.27	J		0.26	J	J	0.25	J	J	0.38	J		0.02	U		1.52		J	0.16	J		1.13		J
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-338	0.19	J		0.33	J	J	0.39	J		0.38	J	J	0.37	J	J	0.72	J		0.02	U		3.44		J	0.22	J		1.99		J
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-338	0.21	J		0.26	J	J	0.26	J		0.36	J	J	0.28	J	J	0.29	J		0.02	U		0.27	U	UJ	0.24	J		0.59	J	UJ
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-338	0.16	J		0.16	J	J	0.22	J		0.23	J	J	0.16	J	J	0.22	J		0.02	U		0.36	J	J	0.01	U		0.46	J	UJ

U The value was less than the IDL or the analyte was not detected.

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J Estimated value.

Table C-19. Butyltins in Forage Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

						Butyltins in Forage Fish Tissue (ug/kg wet weight)											
						Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	WHOLEBODY	01-348	2.33	UD	UJ	2.22	D	J	8.73	D	J	5.30	UD	UJ
Point Avisadero Area III	Area III FF	AAB-401	SA	WHOLEBODY	01-348	0.80	J		6.16		J	23.55		J	5.25	U	
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	WHOLEBODY	01-348	2.36	U		1.91		J	8.50		J	5.37	U	
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	WHOLEBODY	01-348	2.30	U		2.08		J	5.69		J	5.23	U	
South Basin Area X	Area X FF	AAB-465	SA	WHOLEBODY	01-348	0.38	J	J	1.57		J	4.96		J	5.24	U	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

Table C-20. Metals in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Metals in Fish (mg/kg dry weight)																				
							Ag			As			Cd			Cr			Cu			Hg			Ni		
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	Forage F/I	0.052	J	J	1.56			0.124	J	J	0.922		J	3.43			0.737			0.235	J	J
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	Forage F/I	0.0478	J	J	1.89			0.123	J	J	1.81		J	4.01			1.12			0.732		J
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	Forage F/I	0.0119	J	J	2.78			0.0376	J	J	0.952		J	1.55			0.595			0.166	J	J
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	Forage F/I	0.0206	J	J	3.27			0.02	J	J	0.802		UJ	1.51			0.597			0.198	J	J
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	Forage F/I	0.0273	J	J	1.8			0.182	J	J	0.854		UJ	2.47			0.557			0.177	J	J
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	Forage F/I	0.0418	J	J	1.22			0.132	J	J	0.865		UJ	5.12			0.595			0.19	J	J
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	Forage F/I	0.309		J	3.55			0.0239	J	J	0.757	J	UJ	1.57			0.409			0.22	J	J
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	Forage F/I	0.0124	J	J	3.36			0.0308	J	J	0.843		UJ	1.82			0.53			0.479	J	J
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	Forage F/I	0.0206	J	J	1.4			0.066	J	J	0.713	J	UJ	2.21			0.825			0.168	J	J
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	Forage F/I	0.0565	J	J	1.62			0.102	J	J	0.772		UJ	4.75			0.754			0.238	J	J
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	Forage F/I	0.0107	U	UJ	2.6			0.0198	J	J	0.87		UJ	1.46			0.629			0.237	J	J
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	Forage F/I	0.125		J	2.48			0.0191	J	J	0.712	J	UJ	1.68			0.538			0.186	J	J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	Forage F/I	0.0202	J	J	1.95			0.114	J	J	0.888		J	2.16			0.408			0.29	J	J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	Forage F/I	0.0227	J	J	2.12			0.108	J	J	0.808		UJ	2.2			0.29			0.209	J	J
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	Forage F/I	0.0107	U	UJ	2.27			0.0259	J	J	1		J	1.43			0.572			0.419	J	J
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	Forage F/I	0.0117	J	J	2.88			0.017	J	J	0.593	J	UJ	1.47			0.552			0.211	J	J
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	Forage F/I	0.627		J	1.34			0.0616	J	J	0.709	J	UJ	1.91			0.739			0.257	J	J
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	Forage F/I	0.0336	J	J	1.2			0.054	J	J	0.595	J	UJ	2.16			0.692			0.193	J	J
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	Forage F/I	0.0107	U	UJ	1.99			0.011	J	J	0.59	J	UJ	1.21			0.589			0.138	J	J
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	Forage F/I	0.0107	U	UJ	2.42			0.0165	J	J	0.686	J	UJ	1.57			0.824			0.156	J	J
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	Forage F/I	0.0107	U	UJ	1.28			0.0412	J	J	2.07		J	1.29			0.544			1.05		J
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	Forage F/I	0.0153	J	J	1.41			0.0818	J	J	0.93		J	2.01			0.356			0.455	J	J
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	Forage F/I	0.0251	J	J	2.99			0.0546	J	J	0.98		J	3.04			0.55			0.313	J	J
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	Forage F/I	0.127		J	2.06			0.0137	J	J	1.94		J	2.9			0.874			1.19		J
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	Forage F/I	0.0107	U	UJ	1.86	J	U	0.00968	J	J	0.539	J	UJ	1.58	J		1.14			0.128	J	J
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	Forage F/I	0.0107	U	UJ	2.92	J		0.0378	J	J	1.35	J	J	1.82			0.741			0.202	J	J

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J Estimated value.

Table C-20. Metals in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Metals in Fish (mg/kg dry weight)											
							Pb			Sb			Se			Zn		
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	Forage F/I	0.0476	J	J	0.01	J		0.775	J	J	66.3		J
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	Forage F/I	0.0496	J	J	0.00968	J		1.15		J	71.7		J
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	Forage F/I	0.0523	J	J	0.0113	J		1.21		J	35.1		J
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	Forage F/I	0.0493	J	J	0.0179	J		1.17		J	41.1		J
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	Forage F/I	0.0593	J	J	0.00815	J		1.26		J	119		J
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	Forage F/I	122		J	0.00638	J		0.471	J	J	91.8		J
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	Forage F/I	0.0966	J	J	0.0073	U		1.81		J	37.8		J
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	Forage F/I	0.0949	J	J	0.0073	U		1.02		J	42.1		J
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	Forage F/I	0.043	J	J	0.0073	U		1.27		J	84.1		J
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	Forage F/I	0.0744	J	J	0.00841	J		1.22		J	70.8		J
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	Forage F/I	0.0324	J	J	0.0073	U		1.55		J	39.1		J
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	Forage F/I	0.0414	J	J	0.0073	U		1.82		J	39.5		J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	Forage F/I	0.0736	J	J	0.0393			1.11		J	106		J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	Forage F/I	0.0374	J	J	0.0073	U		1.7		J	106		J
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	Forage F/I	0.0272	U		0.0137	J		0.777	J	J	35.1		J
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	Forage F/I	0.0331	J	J	0.00924	J		1.76		J	38.9		J
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	Forage F/I	0.07	J	J	0.0073	U		1.22		J	74		J
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	Forage F/I	0.11		J	0.00763	J		0.898		J	69.2		J
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	Forage F/I	0.0277	J	J	0.012	J		1.56		J	26.9		J
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	Forage F/I	0.0306	J	J	0.0156	J		1.64		J	27.4		J
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	Forage F/I	0.0343	J	J	0.0106	J		1.49		J	67.3		J
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	Forage F/I	0.0365	J	J	0.0073	U		1.09		J	96.6		J
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	Forage F/I	0.0362	J	J	0.00991	J		1.59		J	32.1		J
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	Forage F/I	0.103		J	0.0165	J		1.24		J	51.8		J
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	Forage F/I	0.0413	J		0.0104	J	U	1.71	J	J	30.7		
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	Forage F/I	0.0461	J		0.0123	J	U	1.62	J	J	33.6		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-21. Polychlorinated Biphenyls as Congeners in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in Fish (ug/kg wet weight)																						
							Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)			Cl4(77)			Cl5(101)	
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	0.28	U	UJ	0.03	U	UJ	0.04	U	UJ	0.3	J	J	0.78		J	0.03	U	UJ	0.08	U	UJ	3.62	
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.2	J	J	0.51		J	0.02	U	UJ	0.07	U	UJ	2.51	
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.3	J	J	0.59		J	0.02	U	UJ	0.07	U	UJ	2.24	
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	0.28	U	UJ	0.03	U	UJ	0.04	U	UJ	0.44	J	J	0.87		J	0.03	U	UJ	0.08	U	UJ	3.1	
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.28	J	J	0.66		J	0.25	J	J	0.07	U	UJ	2.81	
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.24	J	J	0.6		J	0.26	J	J	0.07	U	UJ	2.23	
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	0.27	U	R	0.03	U	R	0.04	U	R	0.51		J	1.85		J	0.02	U	R	0.07	U	R	3.84	
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	0.27	U	R	0.2	J	J	0.04	U	R	0.56		J	1.13		J	0.02	U	R	0.07	U	R	2.71	
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.44	J	J	1.43		J	0.02	U	UJ	0.07	U	UJ	7.08	
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.41	J	J	1.11		J	0.02	U	UJ	0.07	U	UJ	5.53	
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	0.3	U	UJ	0.13	J	J	0.04	U	UJ	0.58		J	1.08		J	0.03	U	UJ	0.08	U	UJ	3.86	
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	0.42	U	UJ	0.04	U	UJ	0.06	U	J	0.19	J	J	0.51	J	J	0.04	U	UJ	0.11	U	UJ	2.2	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	0.27	U		0.03	U		0.04	U		0.17	J		0.32	J		0.02	U		0.07	U		1.42	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	0.27	U		0.03	U		0.04	U		0.14	J		0.32	J		0.22	J		0.07	U		1.51	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	0.35	U		0.04	U		0.05	U		0.03	U		0.26	J		0.03	U		0.1	U		0.73	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	0.43	U		0.05	U		0.06	U		0.31	J		0.72	J		0.04	U		0.12	U		2.06	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	0.27	U		0.03	U		0.04	U		0.31	J		0.59			0.02	U		0.07	U		2.43	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	0.28	U		0.03	U		0.04	U		0.23	J		0.44	J		0.02	U		0.08	U		1.62	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	0.32	U	R	0.03	U	R	0.04	U	R	0.03	U	R	0.6		J	0.03	U	R	0.09	U	R	1.99	
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	0.36	U	R	0.04	U	R	0.05	U	R	0.28	J	J	0.69		J	0.03	U	R	0.1	U	R	2.31	
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	0.28	U		0.03	U		0.04	U		0.14	J		0.29	J		0.03	U		0.08	U		1.17	
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	0.28	U		0.03	U		0.04	U		0.16	J		0.32	J		0.03	U		0.08	U		1.74	
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	0.55	U		0.06	U		0.08	U		0.21	J		0.55	J		0.05	U		0.15	U		1.49	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	0.43	U		0.05	U		0.06	U		0.04	U		0.49	J		0.04	U		0.12	U		1.78	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	0.28	U		0.03	U		0.04	U		0.11	J		0.38	J		0.03	U		0.08	U		1.49	
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	0.27	U	UJ	0.03	U	UJ	0.04	U	UJ	0.33	J	J	0.86		J	0.02	U	UJ	0.07	U	UJ	3.4	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.
R Quality control indicates the data are not useable.

Table C-21. Polychlorinated Biphenyls as Congeners in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in Fish (ug/kg wet weight)																					
							Cl5(105)			Cl5(110)			Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)			Cl
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	J	0.68		J	2.26		J	3.04		J	0.35	U	UJ	0.9		J	0.04	U	UJ	9.77		J	17.19
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	J	0.53		J	1.49		J	2.18		J	0.34	U	UJ	0.72		J	0.03	U	UJ	7.65		J	14.7
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	J	0.53		J	1.23		J	2.3		J	0.33	U	UJ	0.58		J	0.03	U	UJ	6.13		J	9.51
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	J	0.84		J	2.07		J	3.71		J	0.35	U	UJ	0.88		J	0.04	U	UJ	9.1		J	14.02
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	J	0.51		J	1.5		J	1.87		J	0.34	U	UJ	0.63		J	0.03	U	UJ	6.12		J	10.67
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	J	0.43	J	J	1.23		J	1.64		J	0.33	U	UJ	0.52		J	0.03	U	UJ	4.44		J	7.62
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	J	0.5		J	3.98		J	5.75		J	0.34	U	R	1.17		J	0.03	U	R	16.12		J	27.32
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	J	0.85		J	2.54		J	3.61		J	0.34	U	R	0.69		J	0.03	U	R	8.66		J	14.47
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	J	1.05		J	4.27		J	4.93		J	0.33	U	UJ	1.56		J	0.03	U	UJ	20.31	D		35.93
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	J	0.79		J	3.11		J	4.18		J	0.34	U	UJ	1.43		J	0.03	U	UJ	15.36	D		26.03
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	J	1.02		J	2.64		J	4.66		J	0.37	U	UJ	1.08		J	0.04	U	UJ	12.46		J	19.01
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	J	0.48	J	J	1.06		J	2.11		J	0.52	U	UJ	0.5	J	J	0.05	U	UJ	5.37		J	8.08
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336		0.26	J		0.97			1.39			0.34	U		0.41	J		0.03	U		3.62			5.71
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336		0.32	J		1.06			1.57			0.34	U		0.39	J		0.03	U		3.38			5.4
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336		0.17	J		0.26	J		0.93			0.44	U		0.09	J		0.04	U		1.89		J	3.34
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337		0.45	J		0.49	J		2.45			0.53	U		0.25	J		0.05	U		5.03			8.51
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337		0.64			1.7			3.21			0.34	U		0.89			0.03	U		7.44			11.44
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337		0.3	J		1.14			1.82			0.34	U		0.52			0.04	U		4.24			6.79
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	J	0.3	J	J	1.42		J	3.6		J	0.39	U	R	0.73		J	0.04	U	R	7.91		J	11.85
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	J	0.47	J	J	1.9		J	3.88		J	0.45	U	R	0.82		J	0.05	U	R	8.63		J	13.04
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337		0.27	J		0.98			1.39			0.35	U		0.32	J		0.04	U		3.11			5.27
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337		0.36	J		1.33			2.09			0.35	U		0.57			0.04	U		4.98			7.87
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337		0.35	J		0.83	J		1.74			0.68	U		0.39	J		0.07	U		3.7			5.42
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337		0.52	J		0.62	J		2.53			0.53	U		0.57	J		0.05	U		5.24			8.43
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337		0.31	J		0.53			1.6			0.35	U		0.38	J		0.04	U		4.4			6.89
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	J	0.72		J	1.92		J	3.65		J	0.34	U	UJ	1.		J	0.03	U	UJ	10.52		J	15.49

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
D Dilution run. Initial run outside linear range of instrument.
R Quality control indicates the data are not useable.

Table C-21. Polychlorinated Biphenyls as Congeners in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Congeners in Fish (ug/kg wet weight)																			
							5(153)			Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)	
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336		J	2.14		J	6.61		J	6.08		J	0.51		J	0.28	J	J	0.19	J	J
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336		J	1.79		J	5.07		J	4.48		J	0.36	J	J	0.17	J	J	0.1	J	J
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336		J	1.26		J	5.16		J	3.28		J	0.17	J	J	0.1	J	J	0.07	J	J
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336		J	1.66		J	7.7		J	4.75		J	0.23	J	J	0.14	J	J	0.07	J	J
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336		J	1.81		J	5.32		J	3.97		J	0.48		J	0.29	J	J	0.17	J	J
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336		J	1.33		J	4.38		J	2.93		J	0.36	J	J	0.27	J	J	0.18	J	J
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336		J	5.35		J	19.06		J	11.73		J	0.54		J	0.27	J	J	0.24	J	J
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336		J	2.14		J	8.57		J	4.93		J	0.29	J	J	0.17	J	J	0.07	J	J
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	D		4.7		J	16.23	D		12.47		J	0.96		J	0.39	J	J	0.14	J	J
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	D		3.72		J	12.27	D		9.97	D		0.77		J	0.39	J	J	0.16	J	J
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336		J	2.77		J	10.3		J	6.8		J	0.33	J	J	0.18	J	J	0.06	J	J
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336		J	1.24		J	5.31		J	2.96		J	0.17	J	J	0.1	J	J	0.04	J	J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336			0.71			1.53			2.33			0.18	J		0.13	J		0.09	J	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336			0.61			1.56			1.97			0.16	J		0.13	J		0.11	J	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336		J	0.45	J		1.45		J	1.14		J	0.06	J		0.05	J		0.03	J	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337			0.94			3.71			2.76			0.14	J		0.1	J		0.04	J	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337			1.38			5.55			4.99			0.37	J		0.31	J		0.24	J	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337			0.86			3.31			3.04			0.24	J		0.2	J		0.17	J	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337		J	1.1		J	5.44		J	5.15		J	0.13	J	J	0.04	J	J	0.06	J	J
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337		J	1.25		J	6.39		J	5.		J	0.17	J	J	0.1	J	J	0.06	J	J
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337			0.54			2.			2.13			0.13	J		0.08	J		0.1	J	
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337			0.82			3.12			3.16			0.21	J		0.14	J		0.15	J	
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337			0.8	J		3.13			2.04			0.11	J		0.1	J		0.08	J	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337			0.99			4.93			2.67			0.13	J		0.12	J		0.09	J	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337			0.87			3.39			2.18			0.11	J		0.07	J		0.04	J	
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337		J	2.23		J	9.51		J	5.99		J	0.29	J	J	0.14	J	J	0.07	J	J

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

D Dilution run. Initial run outside linear range of instrument.

R Quality control indicates the data are not useable.

Table C-22. Polychlorinated Biphenyls as Aroclors in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polychlorinated Biphenyls as Aroclors in Fish (ug/kg wet weight)																				
							Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	5.95	U		119.34	U		119.34	U		119.34	U		119.34	U		119.22	U		5.95	U	
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	5.83	U		116.88	U		116.88	U		116.88	U		116.88	U		116.76	U		5.83	U	
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	5.75	U		115.2	U		115.2	U		115.2	U		115.2	U		115.09	U		5.74	U	
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	5.95	U		119.34	U		119.34	U		119.34	U		119.34	U		119.22	U		5.95	U	
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	5.79	U		115.94	U		115.94	U		115.94	U		115.94	U		115.82	U		5.78	U	
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	5.72	U		114.67	U		114.67	U		114.67	U		114.67	U		114.55	U		5.72	U	
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	5.81	U		116.36	U		116.36	U		116.36	U		116.36	U		116.25	U		5.8	U	
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	5.87	U		117.63	U		117.63	U		117.63	U		117.63	U		117.51	U		5.86	U	
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	5.71	U		114.4	U		114.4	U		114.4	U		114.4	U		114.29	U		5.7	U	
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	5.76	U		115.36	U		115.36	U		115.36	U		115.36	U		115.24	U		5.75	U	
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	6.35	U		127.19	U		127.19	U		127.19	U		127.19	U		127.06	U		6.34	U	
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	8.91	U		178.63	U		178.63	U		178.63	U		178.63	U		178.46	U		8.9	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	5.87	U		117.67	U		117.67	U		117.67	U		117.67	U		117.55	U		5.87	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	5.81	U		116.36	U		116.36	U		116.36	U		116.36	U		116.25	U		5.8	U	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	7.55	U		151.35	U		151.35	U		151.35	U		151.35	U		151.2	U		7.54	U	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	9.18	U		9.18	U		9.18	U		9.18	U		9.18	U		9.18	U		9.18	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	5.85	U		5.85	U		5.85	U		5.85	U		5.85	U		5.85	U		5.85	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	5.9	U		5.9	U		5.9	U		5.9	U		5.9	U		5.9	U		5.9	U	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	6.75	U		6.75	U		6.75	U		6.75	U		6.75	U		6.75	U		6.75	U	
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	7.69	U		7.69	U		7.69	U		7.69	U		7.69	U		7.69	U		7.69	U	
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	5.95	U		5.95	U		5.95	U		5.95	U		5.95	U		5.95	U		5.95	U	
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	5.97	U		5.97	U		5.97	U		5.97	U		5.97	U		5.97	U		5.97	U	
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	11.74	U		11.74	U		11.74	U		11.74	U		11.74	U		11.74	U		11.74	U	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	9.17	U		9.17	U		9.17	U		9.17	U		9.17	U		9.17	U		9.17	U	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	5.98	U		5.98	U		5.98	U		5.98	U		5.98	U		5.98	U		5.98	U	
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	5.79	U		5.79	U		5.79	U		5.79	U		5.79	U		5.79	U		5.79	U	

U The value was less than the IDL or the analyte was not detected.

Table C-23. Chlorinated Pesticides in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Chlorinated Pesticides in Fish (ug/kg wet weight)																						
							2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT			a-Chlordane			Dieldrin	
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	0.98		J	7.38		J	0.15	J	J	0.32	J	J	0.32	J
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.14		J	7.4		J	0.2	J	J	0.4	J	J	0.28	J
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.44		J	7.43		J	0.29	J	J	0.33	J	J	0.45	J
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	2.59		J	11.22		J	0.48	J	J	0.51		J	1.12	
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.38		J	9.73		J	0.4	J	J	0.35	J	J	0.27	J
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.01		J	5.91		J	0.25	J	J	0.31	J	J	0.18	J
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	0.02	U	R	0.08	U	R	0.03	U	R	3.25		J	18.33		J	1.03		J	0.37	J	J	2.03	
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	0.02	U	R	0.08	U	R	0.03	U	R	2.15		J	13.06		J	0.5		J	0.37	J	J	1.6	
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	2.05		J	9.64		J	0.37	J	J	0.54		J	0.51	
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	2.32		J	12.94	D		0.49		J	0.74		J	0.42	J
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	2.38		J	11.13		J	0.6		J	0.52		J	1.6	
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	0.04	U	UJ	0.12	U	UJ	0.04	U	UJ	1.09		J	6.6		J	0.23	J	J	0.32	J	J	0.43	J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	0.02	U		0.08	U		0.03	U		0.87			14.02			0.58		J	0.23	J		0.39	J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	0.02	U		0.08	U		0.03	U		0.9			22.32			0.79		J	0.2	J		0.15	J
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	0.03	U		0.1	U		0.04	U		0.75			9.31		J	0.32	J	J	0.16	J		0.28	J
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	0.04	U		0.12	U		0.04	U	UJ	1.9			18.73		J	0.48	J		0.35	J		0.73	J
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	0.02	U		0.08	U		0.03	U	UJ	1.7			14.19		J	0.25	J		0.56			0.65	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	0.02	U		0.08	U		0.03	U	UJ	1.17			6.43		J	0.18	J		0.41	J		0.53	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	0.03	U	R	0.09	U	R	0.03	U	R	2.04		J	9.5		J	0.27	J	J	0.31	J	J	1.77	
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	0.03	U	R	0.1	U	R	0.04	U	R	2.38		J	10.5		J	0.42	J	J	0.32	J	J	1.22	
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	0.02	U		0.08	U		0.03	U	UJ	0.57			4.38		J	0.12	J		0.12	J		0.41	J
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	0.02	U		0.08	U		0.03	U	UJ	0.83			8.82		J	0.29	J		0.2	J		0.37	J
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	0.05	U		0.16	U		0.06	U	UJ	1.09			3.65		J	0.16	J		0.29	J		0.56	J
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	0.04	U		0.12	U		0.04	U	UJ	0.98			5.72		J	0.3	J		0.31	J		0.23	J
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	0.02	U		0.08	U		0.03	U	UJ	0.65			2.8		J	0.19	J		0.21	J		0.34	J
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	0.02	U	UJ	0.08	U	UJ	0.03	U	UJ	1.96		J	8.29		J	0.44	J	J	0.37	J	J	0.8	

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R Quality control indicates the data are not useable.

Table C-23. Chlorinated Pesticides in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	J
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	J
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	J
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	J
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	J
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	J
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	J
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	J
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	J
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	J
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	J
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	J
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	J
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	J

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J Estimated value.
D Dilution run. Initial run outside linear range of instrument.
R Quality control indicates the data are not useable.

Table C-23. Chlorinated Pesticides in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Pesticides in Fish (ug/kg wet weight)											
							Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.11 J		J	0.02	U	UJ
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.14 J		J	0.02	U	UJ
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.12 J		J	0.02	U	UJ
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.23 J		J	0.02	U	UJ
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.12 J		J	0.02	U	UJ
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.11 J		J	0.02	U	UJ
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	0.04	U	R	0.01	U	R	0.26 J		J	0.02	U	R
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	0.04	U	R	0.01	U	R	0.21 J		J	0.02	U	R
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.23 J		J	0.02	U	UJ
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	0.04	U	UJ	0.01	U	UJ	0.27 J		J	0.02	U	UJ
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	0.05	U	UJ	0.02	U	UJ	0.25 J		J	0.03	U	UJ
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	0.06	U	UJ	0.02	U	UJ	0.11 J		J	0.04	U	UJ
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	0.04	U		0.01	U		0.06 J		J	0.02	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	0.04	U		0.01	U		0.05 J		J	0.02	U	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	0.05	U		0.02	U		0.04 J		J	0.03	U	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	0.07	U		0.02	U		0.08 J		J	0.04	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	0.04	U		0.01	U		0.19 J		J	0.02	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	0.04	U		0.01	U		0.17 J		J	0.02	U	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	0.05	U	R	0.02	U	R	0.15 J		J	0.03	U	R
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	0.05	U	R	0.02	U	R	0.16 J		J	0.03	U	R
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	0.04	U		0.01	U		0.04 J		J	0.02	U	
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	0.04	U		0.01	U		0.05 J		J	0.02	U	
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	0.08	U		0.03	U		0.06 J		J	0.05	U	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	0.07	U		0.02	U		0.07 J		J	0.04	U	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	0.04	U		0.01	U		0.04 J		J	0.02	U	
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	0.04	U	UJ	0.01	U	UJ	0.13 J		J	0.02	U	UJ

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Table C-24. Polycyclic Aromatic Hydrocarbons in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polycyclic Aromatic Hydrocarbons in Fish (ug/kg wet weight)																				
							2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	0.22	J	U	0.26	J		0.02	U		0.05	J		0.13	J		0.34	J	U	0.79		
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	0.13	J	U	0.14	J		0.02	U		0.04	J		0.08	J		0.32	J	U	0.32	J	U
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	0.32	J		1.09			0.08	J		0.19	J		0.80			0.42	J	U	2.90		
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	0.39	J		2.04			0.08	J		0.30	J		1.23			0.50	J	U	2.88		
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	0.17	J	U	0.38	J		0.04	J		0.05	J		0.20	J		0.35	J	U	0.26	J	U
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	0.17	J	U	0.25	J		0.02	U		0.03	J		0.10	J		0.32	J	U	0.17	J	U
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	0.83			3.84			0.02	U		0.50	J		2.35			0.90		U	4.92		
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	0.68			3.04			0.13	J		0.45	J		2.12			0.77		U	4.57		
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	0.14	J	U	0.38	J		0.02	U		0.05	J		0.18	J		0.38	J	U	0.20	J	U
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	0.14	J	U	0.14	J		0.02	U		0.01	U		0.09	J		0.31	J	U	0.15	J	U
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	0.26	J	U	0.97			0.02	U		0.13	J		0.75			0.46	J	U	1.90		
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	0.25	J	U	0.45	J		0.03	U		0.07	J		0.35	J		0.50	J	U	0.68	J	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	0.22	J	U	0.30	J		0.02	U		0.04	J		0.22	J		0.39	J	U	0.46	J	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	0.14	J	U	0.18	J		0.02	U		0.03	J		0.13	J		0.40	J	U	0.33	J	U
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	2.11			4.09			0.12	J		0.14	J		2.93			2.24			7.64		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	0.97			2.83			0.13	J		0.16	J		1.95			1.14		U	5.08		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	0.22	J	U	0.12	J		0.03	J		0.03	J		0.12	J	U	0.54	J	U	0.19	J	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	0.17	J	U	0.10	J		0.02	U		0.03	J	J	0.09	J	U	0.37	J	U	0.13	J	U
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	0.23	J	U	0.02	U		0.02	U		0.07	J		0.30	J		0.52	J	U	0.54	J	
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	0.23	J	U	0.14	J		0.02	U		0.04	J		0.22	J		0.42	J	U	0.49	J	U
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	0.14	J	U	0.13	J		0.02	U		0.03	J		0.10	J	U	0.39	J	U	0.18	J	U
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	0.16	J	U	0.16	J		0.02	U		0.03	J		0.11	J	U	0.30	J	U	0.22	J	U
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	0.25	J	U	0.31	J		0.03	U		0.05	J		0.34	J		0.61	J	U	0.83	J	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	0.17	J	U	0.31	J		0.03	U		0.07	J		0.27	J		0.51	J	U	1.37		
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	0.29	J	U	0.36	J		0.02	U		0.04	J		0.24	J		0.45	J	U	1.00		
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	0.30	J	U	0.68			0.02	U		0.14	J		0.56	J		0.59		U	2.80		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-24. Polycyclic Aromatic Hydrocarbons in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Polycyclic Aromatic Hydrocarbons in Fish (ug/kg wet weight)																										
							Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-336	0.10	J		0.02	U		0.20	J		0.20	J	U	0.15	J	J	0.22	J		0.01	U		0.76			0.14	J		0.60		U
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-336	0.08	J		0.02	U		0.18	J		0.23	J	U	0.14	J	J	0.15	J		0.01	U		0.35	J	U	0.13	J		0.30	J	U
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-336	0.16	J		0.11	J		0.23	J		0.30	J	U	0.24	J	J	0.43	J		0.01	U		2.17			0.16	J		1.34		
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-336	0.20	J		0.20	J		0.30	J		0.30	J	U	0.33	J	J	0.43	J		0.01	U		1.67			0.21	J		0.92		U
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-336	0.03	J		0.02	U		0.01	U		0.13	J	U	0.02	U	UJ	0.05	J		0.01	U		0.12	J	U	0.01	U		0.14	J	U
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-336	0.04	J		0.02	U		0.01	U		0.10	J	U	0.02	U	UJ	0.06	J		0.01	U		0.11	J	U	0.01	U		0.12	J	U
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-336	0.06	J		0.02	U		0.01	U		0.28	J	U	0.02	U	UJ	0.33	J		0.01	U		2.56			0.17	J		0.82		U
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-336	0.10	J		0.02	U		0.17	J		0.17	J	U	0.13	J	J	0.33	J		0.01	U		2.82			0.10	J		1.16		
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-336	0.10	J		0.08	J		0.17	J		0.22	J	U	0.14	J	J	0.13	J		0.01	U		0.16	J	U	0.12	J		0.16	J	U
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-336	0.01	U		0.02	U		0.01	U		0.13	J	U	0.02	U	UJ	0.05	J		0.01	U		0.08	J	U	0.01	U		0.12	J	U
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-336	0.09	J		0.02	U		0.15	J		0.20	J	U	0.11	J	J	0.29	J		0.02	U		1.13			0.01	U		0.52	J	U
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-336	0.12	J		0.03	U		0.22	J		0.24	J	U	0.18	J	J	0.20	J		0.02	U		0.44	J	U	0.01	U		0.30	J	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-336	0.04	J		0.02	U		0.01	U		0.12	J	U	0.02	U	UJ	0.11	J		0.01	U		0.01	J	U	0.01	U		0.21	J	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-336	0.03	J		0.02	U		0.01	U		0.16	J	U	0.02	U	UJ	0.08	J		0.01	U		0.23	J	U	0.01	U		0.19	J	U
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-336	0.06	J		0.03	U		0.02	U		0.17	J	U	0.02	U	UJ	0.27	J		0.02	U		3.73			0.01	U		1.09		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-337	0.04	J		0.03	U		0.16	J		0.35	J	U	0.03	U	UJ	0.25	J		0.02	U		2.85			0.18	J		0.99		U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-337	0.09	J		0.09	J		0.19	J		0.29	J	U	0.13	J	J	0.14	J	U	0.01	U		0.16	J	U	0.21	J		0.20	J	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-337	0.06	J		0.02	U		0.10	J		0.14	J	UJ	0.08	J	J	0.09	J	U	0.01	U		0.13	J	U	0.10	J		0.18	J	U
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-337	0.04	J		0.02	U		0.15	J		0.24	J	U	0.02	U	UJ	0.21	J		0.02	U		0.43	J		0.14	J		0.29	J	U
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-337	0.10	J		0.03	U		0.14	J		0.22	J	U	0.13	J	J	0.21	J		0.02	U		0.43	J		0.15	J		0.32	J	U
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-337	0.04	J		0.02	U		0.08	J		0.16	J	U	0.07	J	J	0.06	J	U	0.01	U		0.14	J	U	0.08	J		0.13	J	U
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-337	0.01	U		0.02	U		0.02	U		0.14	J	U	0.02	U	UJ	0.02	U		0.01	U		0.13	J	U	0.01	U		0.13	J	U
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-337	0.04	J		0.04	U		0.03	U		0.26	J	U	0.03	U	UJ	0.11	J	U	0.03	U		0.54	J		0.12	J		0.52	J	U
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-337	0.02	U		0.03	U		0.10	J		0.20	J	U	0.03	U	UJ	0.14	J	U	0.02	U		0.79	J		0.01	U		0.23	J	U
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-337	0.03	J		0.02	U		0.02	U		0.12	J	U	0.02	U	UJ	0.14	J	U	0.01	U		0.75			0.01	U		0.34	J	U
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-337	0.11	J		0.07	J		0.25	J		0.01	U		0.24	J	J	1.10			0.01	U		2.93			0.01	U		1.94		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table C-25. Butyltins in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Butyltins in Fish (ug/kg wet weight)										
							Monobutyltin			Dibutyltin			Tributyltin			Tetrabutylti	
Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-334	2.91	U		9.23	U		5.57			6.64	U
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-334	2.93	U		0.73	J		8.96			6.67	U
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-334	2.92	U		9.26	U		2.16			6.66	U
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-334	2.93	U		9.28	U		2.76			6.68	U
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-334	2.96	U		9.37	U		8.86			6.75	U
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-334	2.96	U		9.36	U		3.61			6.74	U
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-334	2.95	U		1.25	J		6.73			6.72	U
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-334	2.94	U		1.15	J		7.85			6.69	U
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-334	2.95	U		9.33	U		5.11			6.71	U
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-334	2.93	U		0.47	J		5.83			6.68	U
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-334	2.91	U		0.89	J		4.			6.63	U
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-334	2.94	U		0.5	J		2.01			6.7	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-334	2.93	U		9.27	U		2.92			6.67	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-334	2.94	U		9.29	U		2.64			6.69	U
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-334	2.94	U		9.3	U		1.02	J		6.7	U
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-335	5.03	U		15.91	U		1.98	J		11.45	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-335	2.95	U		9.33	U		3.78			6.71	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-335	2.92	U		9.24	U		3.89			6.65	U
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-335	2.96	U		9.36	U		1.84			6.74	U
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-335	2.86	U		9.06	U		2.64			6.52	U
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-335	2.93	U		9.27	U		3.18			6.67	U
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-335	2.94	U		9.31	U		3.23			6.7	U
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-335	5.86	U		18.55	U		3.06			13.35	U
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-335	4.64	U		0.74	J		1.99	J		10.57	U
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-348	3.89	U		0.62	J	J	1.69	J	J	8.86	U
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-348	3.93	U		0.61	J	J	2.99		J	8.96	U

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table C-25. Butyltins in Sport Fish Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Composite_Desc	Samp_ID	Species_Code	Samp_ Type	Fraction	Lab_Batch	n Final Qual
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	Jacksmelt	SA	EDIBLE	01-334	
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	Jacksmelt	SA	EDIBLE	01-334	
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	Perch spp	SA	EDIBLE	01-334	
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	Perch spp	SA	EDIBLE	01-334	
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	Jacksmelt	SA	EDIBLE	01-334	
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	Jacksmelt	SA	EDIBLE	01-334	
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	Perch spp	SA	EDIBLE	01-334	
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	Perch spp	SA	EDIBLE	01-334	
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	Jacksmelt	SA	EDIBLE	01-334	
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	Jacksmelt	SA	EDIBLE	01-334	
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	Perch spp	SA	EDIBLE	01-334	
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	Perch spp	SA	EDIBLE	01-334	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	Jacksmelt	SA	EDIBLE	01-334	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	Jacksmelt	SA	EDIBLE	01-334	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	Perch spp	SA	EDIBLE	01-334	
San Francisco Pier 7	SFP7_REF_PERCH_COMP_2	ZA40	Perch spp	SA	EDIBLE	01-335	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	Jacksmelt	SA	EDIBLE	01-335	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	Jacksmelt	SA	EDIBLE	01-335	
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	Perch spp	SA	EDIBLE	01-335	
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	Perch spp	SA	EDIBLE	01-335	
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	Jacksmelt	SA	EDIBLE	01-335	
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	Jacksmelt	SA	EDIBLE	01-335	
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	Perch spp	SA	EDIBLE	01-335	
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	Perch spp	SA	EDIBLE	01-335	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	Black surfperch	SA	EDIBLE	01-348	
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	Walleye surfperch	SA	EDIBLE	01-348	

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Ag			Al			As			Ba			Cd			Co		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)																								
		BSL-Blank	FORAGE F/I	PB			0.0107	U		1.73	J		0.411	J		0.0951	J		0.0096	U		0.00554	J	
		BSL-BLANK 1 HH	HHE FISH	PB			0.0107	U		NA			0.194	J		NA			0.0096	U		NA		
		BSL-BLANK 2 HH	HHE FISH	PB			0.0107	U		NA			0.161	J		NA			0.0096	U		NA		
		BSL-BLANK	BIOACCUM2	PB			0.052	U		6.93	J		0.132	J		0.0499	J		0.0096	U		0.00483	J	
		BSL-BLANK R1	BIOACCUM	PB			0.0529	J		0.636	U		0.166	J		0.0582	J		0.0284	J		0.00258	J	
		BSL-BLANK R2	BIOACCUM	PB			0.0554	J		0.636	U		0.152	J		0.0691	J		0.0163	J		0.00977	J	
		BSL-BLANK R3	BIOACCUM	PB			0.052	U		0.636	U		0.288	J		0.0261	J		0.0096	U		0.0189	J	
		BSL-BLANK R4	BIOACCUM	PB			0.052	U		2.39	J		0.275	J		0.0229	J		0.0096	U		0.0018	U	
		BSL-BLANK R5	BIOACCUM	PB			0.052	U		0.636	U		0.178	J		0.0215	J		0.0096	U		0.00669	J	
Laboratory Control Samples (percent recovery)																								
		BSL-BLANK SPIKE 1XX	FORAGE F/I	LCS			66	N		89			100			105			95			99		
		BSL-BLANK SPIK 1 HH	HHE FISH	LCS			99			NA			97			NA			98			NA		
		BSL-BLANK SPIK 2 HH	HHE FISH	LCS			79			NA			97			NA			97			NA		
		BSL-BLANK SPIKE	BIOACCUM2	LCS			41	N		97			99			102			92			89		
		BSL-BLANK SPIKE 1X	BIOACCUM	LCS			95			89			94			100			96			99		
		BSL-BLANK SPIKE 2X	BIOACCUM	LCS			91			91			97			103			95			101		
		BSL-BLANK SPIKE 3X	BIOACCUM	LCS			76			89			97			102			98			99		
		BSL-BLANK SPIKE 4X	BIOACCUM	LCS			89			105			102			100			99			102		
		BSL-BLANK SPIKE 5X	BIOACCUM	LCS			99			106			96			103			95			107		
Standard Reference Material (percent difference)																								
		DOLT2-FORAGE F/I	FORAGE F/I	SRM			9			9			14			NA			8			17		
		DORM2-FORAGE F/I	FORAGE F/I	SRM			10			20			5			NA			21	N		13		
		DOLT-2 R1-BIOACCUM	BIOACCUM	SRM			14			0			14			NA			10			6		
		DOLT-2 R2-BIOACCUM	BIOACCUM	SRM			5			4			12			NA			5			20		
		DOLT-2 R3-BIOACCUM	BIOACCUM	SRM			5			2			15			NA			9			25	N	
		DOLT-2 R4-BIOACCUM	BIOACCUM	SRM			2			5			13			NA			8			23	N	
		DOLT-2 R5-BIOACCUM	BIOACCUM	SRM			9			1			9			NA			7			16		
		DOLT-2-BIOACCUM2	BIOACCUM2	SRM			20			1			22	*		NA			20			19		
		DORM-2 R1-BIOACCUM	BIOACCUM	SRM			NA			48	N		7			NA			27	N		1		
		DORM-2 R2-BIOACCUM	BIOACCUM	SRM			NA			6			3			NA			54	N		1		
		DORM-2 R3-BIOACCUM	BIOACCUM	SRM			61	N		19			8			NA			18			6		
		DORM-2 R4-BIOACCUM	BIOACCUM	SRM			NA			14			3			NA			6			7		
		DORM-2 R5-BIOACCUM	BIOACCUM	SRM			29	N		10			6			NA			2			1		
		DORM-2-BIOACCUM2	BIOACCUM2	SRM			13			35	*		14			NA			9			9		

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Ag			Al			As			Ba			Cd			Co		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates (relative percent difference)																								
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	SA	EDIBLE	Jacksmelt	0.0206	J	J	NA			1.4			NA			0.066	J	J	NA		
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	QADU	EDIBLE	Jacksmelt	0.0224	J		NA			1.4			NA			0.0597	J		NA		
RPD							***8***						***0***						***10***					
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	SA	EDIBLE	Jacksmelt	0.627		J	NA			1.34			NA			0.0616	J	J	NA		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	QADU	EDIBLE	Jacksmelt	0.0176	J		NA			1.49			NA			0.0533	J		NA		
RPD							***189***						***11***						***14***					
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	SA	Wholebody	bivalve (clam)	0.297	J	J	593			7.16	J		5.25			0.789	J	J	1.21		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	QADU	Wholebody	bivalve (clam)	0.307	J		601			6.82	J		4.5			0.797	J		1.19		
RPD							***3***						***5***			***15***			***1***			***2***		
Eastern Wetland Area VIII	EW-35	41569-135	BIOACCUM	SA	lab test tissue dep	M. nasuta	0.142	J	UJ	1230		J	19.8			11.4			0.255	J	J	1.9		
Eastern Wetland Area VIII	EW-35	41569-135	BIOACCUM	QADU	lab test tissue dep	M. nasuta	0.157	J		1370			19.7			9.38			0.283	J		1.83		
RPD							***10***						***1***			***19***			***10***			***4***		
South Basin Area X	SB-20	41569-147	BIOACCUM	SA	lab test tissue dep	M. nasuta	0.224	J	J	1060			19			10.7			0.211	J		1.71		
South Basin Area X	SB-20	41569-147	BIOACCUM	QADU	lab test tissue dep	M. nasuta	0.256	J		1010			19.3			12.2			0.188	J		1.74		
RPD							***13***						***2***			***13***			***12***			***2***		
Alameda Buoy	AB-67	41569-35	BIOACCUM	SA	lab test tissue dep	M. nasuta	0.209	J	UJ	1810		J	18.9			22.8			0.418	J		2.85		
Alameda Buoy	AB-67	41569-35	BIOACCUM	QADU	lab test tissue dep	M. nasuta	0.201	J		1840			19.8			24.5			0.42	J		2.87		
RPD							***4***						***5***			***7***			***0***			***1***		
Point Avisadero Area III	PA-46	41569-46	BIOACCUM	SA	lab test tissue nondep	M. nasuta	0.133	J	J	2690		J	19.4		J	22		J	0.287	J		2.32		
Point Avisadero Area III	PA-46	41569-46	BIOACCUM	QADU	lab test tissue nondep	M. nasuta	0.139	J		2760			19.4			31.2			0.28	J		2.27		
RPD							***4***						***0***			***35***			***2***			***2***		
Alcatraz Environs	AL-64	41569-66	BIOACCUM	SA	lab test tissue dep	M. nasuta	0.129	J	J	312			21.5			5.08			0.74	J		2.92		
Alcatraz Environs	AL-64	41569-66	BIOACCUM	QADU	lab test tissue dep	M. nasuta	0.152	J		384			20.			4.26			0.68	J		2.78		
RPD							***16***						***7***			***18***			***8***			***5***		
South Basin Area X	SB-03	41569-98	01-389	SA	lab test tissue dep	M. nasuta	0.165	J	UJ	1540		J	17.6			15.6			0.182	J	J	1.78		
South Basin Area X	SB-03	41569-98	01-389	QADU	lab test tissue dep	M. nasuta	0.189	J		1770			18.3			14.6			0.189	J		1.67		
RPD							***14***						***4***			***7***			***4***			***6***		
Matrix Spike/Matrix Spike Duplicates (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	MS	Edible	Jacksmelt	89			NA			102			NA			95			NA		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	MS	Edible	Jacksmelt	75			NA			104			NA			95			NA		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	MS	Wholebody	bivalve (clam)	39	N		132	N		95			104			95			95		
India Basin Area I	IB-55	41569-10-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	40	N		58	N		97			91			98			107		
Point Avisadero Area III	PA-52	41569-107-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	91			0	N		99			95			104			111		

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Ag			Al			As			Ba			Cd			Co		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-36	41569-89-E	BIOACCUM	MS	lab test tissue nondep	M. nasuta	34	N		NA			100			104			86			81		
Eastern Wetland Area VIII	EW-36	41569-89-E	BIOACCUM	MSD	lab test tissue nondep	M. nasuta	70			NA			92			328	N		86			77		
RPD							***69***						***8***			***104***			***0***			***5***		
South Basin Area X	SB-04	41569-101-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	84			580	N		99			100			99			97		
Alameda Buoy	AB-67	41569-53-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	61	N		460	N		95			99			94			94		
Alcatraz Environs	AL-64	41569-51-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	75			88			100			113			99			107		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
N Value is not within control limits.
* Replicate precision not within control limits.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cr			Cu			Fe			Hg			Mn			Mo		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)																								
		BSL-Blank	FORAGE F/I	PB			0.206	J		0.0276	U		1.22	J		0.0043	J		0.02	U		0.0109	J	
		BSL-BLANK 1 HH	HHE FISH	PB			0.115	J		0.0276	U		NA			0.0067			NA			NA		
		BSL-BLANK 2 HH	HHE FISH	PB			0.176	J		0.0787	J		NA			0.0062			NA			NA		
		BSL-BLANK	BIOACCUM2	PB			0.138	J		0.0276	U		3.53	J		0.00163	U		0.0686	J		0.0216	J	
		BSL-BLANK R1	BIOACCUM	PB			0.0939	U		0.0276	U		0.691	J		0.00163	U		0.0216	U		0.00767	U	
		BSL-BLANK R2	BIOACCUM	PB			0.145	J		0.0411	J		0.303	J		0.00163	U		0.03139	J		0.027	J	
		BSL-BLANK R3	BIOACCUM	PB			0.0939	U		0.0276	U		0.15	U		0.00163	U		0.0216	U		0.03288	J	
		BSL-BLANK R4	BIOACCUM	PB			0.388	J		0.0276	U		0.314	J		0.0932	J		0.02261	J		0.0131	J	
		BSL-BLANK R5	BIOACCUM	PB			0.255	J		0.0452	J		1.32	J		0.0053	J		0.03894	J		0.00767	U	
Laboratory Control Samples (percent recovery)																								
		BSL-BLANK SPIKE 1XX	FORAGE F/I	LCS			100			101			105			111			100			103		
		BSL-BLANK SPIK 1 HH	HHE FISH	LCS			99			99			NA			108			NA			NA		
		BSL-BLANK SPIK 2 HH	HHE FISH	LCS			101			102			NA			114			NA			NA		
		BSL-BLANK SPIKE	BIOACCUM2	LCS			88			104			93			69	N		99			98		
		BSL-BLANK SPIKE 1X	BIOACCUM	LCS			97			98			102			108			97			99		
		BSL-BLANK SPIKE 2X	BIOACCUM	LCS			103			100			109			105			103			101		
		BSL-BLANK SPIKE 3X	BIOACCUM	LCS			99			99			108			106			98			107		
		BSL-BLANK SPIKE 4X	BIOACCUM	LCS			109			103			105			98			112			103		
		BSL-BLANK SPIKE 5X	BIOACCUM	LCS			104			102			106			109			108			105		
Standard Reference Material (percent difference)																								
		DOLT2-FORAGE F/I	FORAGE F/I	SRM			273	N		5			1			10			11			NA		
		DORM2-FORAGE F/I	FORAGE F/I	SRM			15			5			6			2			4			NA		
		DOLT-2 R1-BIOACCUM	BIOACCUM	SRM			278	N		3			7			7			14			NA		
		DOLT-2 R2-BIOACCUM	BIOACCUM	SRM			316	N		0			1			13			7			NA		
		DOLT-2 R3-BIOACCUM	BIOACCUM	SRM			211	N		5			5			10			15			NA		
		DOLT-2 R4-BIOACCUM	BIOACCUM	SRM			185	N		1			1			11			9			NA		
		DOLT-2 R5-BIOACCUM	BIOACCUM	SRM			262	N		3			0			11			5			NA		
		DOLT-2-BIOACCUM2	BIOACCUM2	SRM			238	*		2			11			11			19			NA		
		DORM-2 R1-BIOACCUM	BIOACCUM	SRM			15			10			30	N		5			4			NA		
		DORM-2 R2-BIOACCUM	BIOACCUM	SRM			12			6			20			5			1			NA		
		DORM-2 R3-BIOACCUM	BIOACCUM	SRM			12			12			11			5			7			NA		
		DORM-2 R4-BIOACCUM	BIOACCUM	SRM			4			6			11			2			0			NA		
		DORM-2 R5-BIOACCUM	BIOACCUM	SRM			16			7			1			2			7			NA		
		DORM-2-BIOACCUM2	BIOACCUM2	SRM			17			15			22	*		3			7			NA		

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cr			Cu			Fe			Hg			Mn			Mo		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates (relative percent difference)																								
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	SA	EDIBLE	Jacksmelt	0.713	J	UJ	2.21			NA			0.825			NA			NA		
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	QADU	EDIBLE	Jacksmelt	0.794			2.38			NA			0.82			NA			NA		
RPD							***11***			***7***						***1***								
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	SA	EDIBLE	Jacksmelt	0.709	J	UJ	1.91			NA			0.739			NA			NA		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	QADU	EDIBLE	Jacksmelt	0.903			2.02			NA			0.751			NA			NA		
RPD							***24***			***6***						***2***								
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	SA	Wholebody	bivalve (clam)	3.3	J	J	11.4			708			0.154			22.1			0.389	J	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	QADU	Wholebody	bivalve (clam)	3.34	J		11.2			720			0.15			22			0.373	J	
RPD							***1***			***2***			***2***			***3***			***0***			***4***		
Eastern Wetland Area VIII	EW-35	41569-135	BIOACCUM	SA	lab test tissue dep	M. nasuta	15.2		J	12.8			1930		J	0.101			29.7			2.27		
Eastern Wetland Area VIII	EW-35	41569-135	BIOACCUM	QADU	lab test tissue dep	M. nasuta	8.78			12.5			1740			0.106			27.3			2.19		
RPD							***54***			***2***			***10***			***5***			***8***			***4***		
South Basin Area X	SB-20	41569-147	BIOACCUM	SA	lab test tissue dep	M. nasuta	6.7	J	J	23			1510			0.161		U	17.8			2.71		
South Basin Area X	SB-20	41569-147	BIOACCUM	QADU	lab test tissue dep	M. nasuta	7.23			20.7			1510			0.16			19			2.68		
RPD							***8***			***11***			***0***			***1***			***7***			***1***		
Alameda Buoy	AB-67	41569-35	BIOACCUM	SA	lab test tissue dep	M. nasuta	29.9		J	13.1			2900			0.107			49.3			2.72		
Alameda Buoy	AB-67	41569-35	BIOACCUM	QADU	lab test tissue dep	M. nasuta	41.7			12.8			2911			0.107			44.2			2.59		
RPD							***33***			***2***			***0***			***0***			***11***			***5***		
Point Avisadero Area III	PA-46	41569-46	BIOACCUM	SA	lab test tissue nondep	M. nasuta	18.5		J	29.3			3120		J	0.167		J	53.4			2.6		
Point Avisadero Area III	PA-46	41569-46	BIOACCUM	QADU	lab test tissue nondep	M. nasuta	15.3			34.4			3350			0.163			52.8			2.56		
RPD							***19***			***16***			***7***			***2***			***1***			***2***		
Alcatraz Environs	AL-64	41569-66	BIOACCUM	SA	lab test tissue dep	M. nasuta	5.07	J	J	11.1			780			0.129		U	27			3.39		
Alcatraz Environs	AL-64	41569-66	BIOACCUM	QADU	lab test tissue dep	M. nasuta	9.48			10.2			811			0.127			28.8			3.15		
RPD							***61***			***8***			***4***			***2***			***6***			***7***		
South Basin Area X	SB-03	41569-98	01-389	SA	lab test tissue dep	M. nasuta	9.43		J	15.4			2040		J	0.118			18.8			2.4		
South Basin Area X	SB-03	41569-98	01-389	QADU	lab test tissue dep	M. nasuta	7.72			14			2040			0.117			19.3			2.28		
RPD							***20***			***10***			***0***			***1***			***3***			***5***		
Matrix Spike/Matrix Spike Duplicates (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	MS	Edible	Jacksmelt	94			96			NA			104			NA			NA		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	MS	Edible	Jacksmelt	79			100			NA			110			NA			NA		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	MS	Wholebody	bivalve (clam)	95			92			298	N		103			107			100		
India Basin Area I	IB-55	41569-10-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	90			98			75			106			104			105		
Point Avisadero Area III	PA-52	41569-107-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	75			94			300	N		113			70			112		

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cr			Cu			Fe			Hg			Mn			Mo		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-36	41569-89-E	BIOACCUM	MS	lab test tissue nondep	M. nasuta	102			92			345	N		93			124			101		
Eastern Wetland Area VIII	EW-36	41569-89-E	BIOACCUM	MSD	lab test tissue nondep	M. nasuta	178	N		78			364	N		93			80			99		
RPD							***54***			***16***			***5***			***0***			***43***			***2***		
South Basin Area X	SB-04	41569-101-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	90			92			500	N		103			98			105		
Alameda Buoy	AB-67	41569-53-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	99			92			540	N		105			93			101		
Alcatraz Environs	AL-64	41569-51-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	89			97			105			103			121			102		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
N Value is not within control limits.
* Replicate precision not within control limits.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (mg/kg dry weight)																								
		BSL-Blank	FORAGE F/I	PB			0.0386	U		0.0272	U		0.0185	J		0.548	J		0.146	J		0.398	J	
		BSL-BLANK 1 HH	HHE FISH	PB			0.0386	U		0.0272	U		0.0073	U		0.142	U		NA			0.218	J	
		BSL-BLANK 2 HH	HHE FISH	PB			0.0386	U		0.0272	U		0.0073	U		0.142	U		NA			0.202	J	
		BSL-BLANK	BIOACCUM2	PB			0.0386	U		0.0272	U		0.156	J		0.234	J		0.136	U		0.259	J	
		BSL-BLANK R1	BIOACCUM	PB			0.0386	U		0.0272	U		0.0117	J		0.16	J		0.136	U		0.448	J	
		BSL-BLANK R2	BIOACCUM	PB			0.0535	J		0.0272	U		0.0188	J		0.188	J		0.136	U		5.15	J	
		BSL-BLANK R3	BIOACCUM	PB			0.0561	J		0.0272	U		0.0155	J		0.398	J		0.136	U		0.245	J	
		BSL-BLANK R4	BIOACCUM	PB			0.0386	U		0.0272	U		0.0148	J		0.142	U		0.136	U		0.112	J	
		BSL-BLANK R5	BIOACCUM	PB			0.0386	U		0.0272	U		0.0133	J		0.142	U		0.136	U		0.175	J	
Laboratory Control Samples (percent recovery)																								
		BSL-BLANK SPIKE 1XX	FORAGE F/I	LCS			98			97			98			91			105			96		
		BSL-BLANK SPIK 1 HH	HHE FISH	LCS			97			99			95			86			NA			94		
		BSL-BLANK SPIK 2 HH	HHE FISH	LCS			102			101			100			82			NA			95		
		BSL-BLANK SPIKE	BIOACCUM2	LCS			102			99			92			116			98			96		
		BSL-BLANK SPIKE 1X	BIOACCUM	LCS			101			97			98			91			98			91		
		BSL-BLANK SPIKE 2X	BIOACCUM	LCS			99			100			99			87			101			84		
		BSL-BLANK SPIKE 3X	BIOACCUM	LCS			102			101			100			93			101			97		
		BSL-BLANK SPIKE 4X	BIOACCUM	LCS			99			105			101			93			104			100		
		BSL-BLANK SPIKE 5X	BIOACCUM	LCS			102			107			97			91			107			96		
Standard Reference Material (percent difference)																								
		DOLT2-FORAGE F/I	FORAGE F/I	SRM			33	N		13			NA			7			NA			9		
		DORM2-FORAGE F/I	FORAGE F/I	SRM			21	N		5			NA			27	N		NA			18		
		DOLT-2 R1-BIOACCUM	BIOACCUM	SRM			8			24	N		NA			12			NA			9		
		DOLT-2 R2-BIOACCUM	BIOACCUM	SRM			36	N		1			NA			12			NA			4		
		DOLT-2 R3-BIOACCUM	BIOACCUM	SRM			56	N		322	N		NA			12			NA			6		
		DOLT-2 R4-BIOACCUM	BIOACCUM	SRM			12			1			NA			13			NA			5		
		DOLT-2 R5-BIOACCUM	BIOACCUM	SRM			2			0			NA			14			NA			2		
		DOLT-2-BIOACCUM2	BIOACCUM2	SRM			88	*		15			NA			14			NA			19		
		DORM-2 R1-BIOACCUM	BIOACCUM	SRM			15			10			NA			49	N		NA			18		
		DORM-2 R2-BIOACCUM	BIOACCUM	SRM			11			3			NA			2			NA			8		
		DORM-2 R3-BIOACCUM	BIOACCUM	SRM			16			6			NA			44	N		NA			19		
		DORM-2 R4-BIOACCUM	BIOACCUM	SRM			8			5			NA			1			NA			16		
		DORM-2 R5-BIOACCUM	BIOACCUM	SRM			19			23	N		NA			18			NA			11		
		DORM-2-BIOACCUM2	BIOACCUM2	SRM			11			12			NA			45	*		NA			34	*	

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates (relative percent difference)																								
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	SA	EDIBLE	Jacksmelt	0.168	J	J	0.043	J	J	0.0073	U		1.27		J	NA			84.1		J
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	QADU	EDIBLE	Jacksmelt	0.176	J		0.051	J		0.0073	U		1.22			NA			85.6		
RPD							***5***			***17***			***NA***			***4***						***2***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	SA	EDIBLE	Jacksmelt	0.257	J	J	0.07	J	J	0.0073	U		1.22		J	NA			74		J
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	QADU	EDIBLE	Jacksmelt	0.252	J		0.0894	J		0.0073	U		1.31			NA			71.1		
RPD							***2***			***24***			***NA***			***7***						***4***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	SA	Wholebody	bivalve (clam)	8.98		J	2.77			0.182			3.78	J	J	2.25	J		109		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	QADU	Wholebody	bivalve (clam)	8.49			2.66			0.0786	J		4.54	J		2.08	J		108		
RPD							***6***			***4***			***79***			***18***			***8***			***1***		
Eastern Wetland Area VIII	EW-35	41569-135	BIOACCUM	SA	lab test tissue dep	M. nasuta	5.65		J	1.94		J	0.1	J		5.12	J	J	6.88			124		
Eastern Wetland Area VIII	EW-35	41569-135	BIOACCUM	QADU	lab test tissue dep	M. nasuta	4.8	J		1.8			0.119	J		5.59	J		5.85			120		
RPD							***16***			***7***			***17***			***9***			***16***			***3***		
South Basin Area X	SB-20	41569-147	BIOACCUM	SA	lab test tissue dep	M. nasuta	5.93			6.34		J	0.173	J		3.04	J		4.83			108		
South Basin Area X	SB-20	41569-147	BIOACCUM	QADU	lab test tissue dep	M. nasuta	6.11			6.71			0.25			3.96	J		5.26			108		
RPD							***3***			***6***			***36***			***26***			***9***			***0***		
Alameda Buoy	AB-67	41569-35	BIOACCUM	SA	lab test tissue dep	M. nasuta	7.49			3.23		J	0.138	J		3	J	J	11.4			125		
Alameda Buoy	AB-67	41569-35	BIOACCUM	QADU	lab test tissue dep	M. nasuta	7.2			3.1			0.139	J		2.86	J		11.3			127		
RPD							***4***			***4***			***1***			***5***			***1***			***2***		
Point Avisadero Area III	PA-46	41569-46	BIOACCUM	SA	lab test tissue nondep	M. nasuta	9.27		J	3.6			0.141	J	U	2.43	J	J	8.42			129		J
Point Avisadero Area III	PA-46	41569-46	BIOACCUM	QADU	lab test tissue nondep	M. nasuta	13			4.08			0.134	J		2.33	J		8.8			128		
RPD							***33***			***13***			***5***			***4***			***4***			***1***		
Alcatraz Environs	AL-64	41569-66	BIOACCUM	SA	lab test tissue dep	M. nasuta	4.73	J		1.69		J	0.179	J		5.34	J		3.67			106		
Alcatraz Environs	AL-64	41569-66	BIOACCUM	QADU	lab test tissue dep	M. nasuta	4.53	J		1.7			0.125	J		6.26	J		3.84			95.9		
RPD							***4***			***1***			***36***			***16***			***5***			***10***		
South Basin Area X	SB-03	41569-98	01-389	SA	lab test tissue dep	M. nasuta	7		J	5.3		J	0.173	J		3.59	J	J	6.75			84.2		
South Basin Area X	SB-03	41569-98	01-389	QADU	lab test tissue dep	M. nasuta	6.73			5.27			0.136	J		3.88	J		5.89			83.2		
RPD							***4***			***1***			***24***			***8***			***14***			***1***		
Matrix Spike/Matrix Spike Duplicates (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	HHE FISH	MS	Edible	Jacksmelt	97			96			96			89			NA			96		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	HHE FISH	MS	Edible	Jacksmelt	97			100			98			86			NA			101		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	FORAGE F/I	MS	Wholebody	bivalve (clam)	94			98			97			91			93			102		
India Basin Area I	IB-55	41569-10-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	98			113			100			91			101			88		
Point Avisadero Area III	PA-52	41569-107-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	93			114			108			83			97			90		

Table C-26. Quality Control Data for Metals in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Ni			Pb			Sb			Se			V			Zn		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-36	41569-89-E	BIOACCUM	MS	lab test tissue nondep	M. nasuta	101			107			93			84			78			76		
Eastern Wetland Area VIII	EW-36	41569-89-E	BIOACCUM	MSD	lab test tissue nondep	M. nasuta	97			101			92			95			74			72		
RPD							***4***			***6***			***1***			***12***			***5***			***5***		
South Basin Area X	SB-04	41569-101-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	95			97			100			91			95			86		
Alameda Buoy	AB-67	41569-53-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	93			91			102			90			94			92		
Alcatraz Environs	AL-64	41569-51-E	BIOACCUM	MS	lab test tissue dep	M. nasuta	96			111			98			93			100			94		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
N Value is not within control limits.
* Replicate precision not within control limits.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																								
		BDO-ZB63PB	PB		01-336		0.29	U		0.03	U		0.04	U		0.03	U		0.02	U		0.03	U	
		BDO-ZB67PB	PB		01-337		0.32	U		0.03	U		0.05	U		0.03	U		0.02	U		0.03	U	
		BDO-ZB71PB	PB		01-338		0.40	U		0.04	U		0.06	U		0.04	U		0.03	U		0.04	U	
		BDO-ZD55PB	PB		01-387		0.27	U		0.03	U		0.04	U		0.03	U		0.02	U		0.02	U	
		BDO-ZD59PB	PB		01-388		0.11	U		0.05	U		0.07	U		0.07	U		0.07	U		0.08	U	
		BDO-ZD63PB	PB		01-389		0.12	U		0.06	U		0.08	U		0.07	U		0.08	U		0.09	U	
		BDO-ZD67PB	PB		01-390		0.12	U		0.05	U		0.08	U		0.07	U		0.08	U		0.08	U	
		BDO-ZD71PB	PB		01-391		0.09	U		0.04	U		0.07	U		0.06	U		0.06	U		0.07	U	
Laboratory Control Samples (percent recovery)																								
		BDO-ZB64LCS	LCS		01-336		71.76			52.75			72.93			74.46			73.96			75.22		
		BDO-ZB68LCS	LCS		01-337		60.07			48.05			58.48			61.75			64.68			58.87		
		BDO-ZB72LCS	LCS		01-338		54.03			43.05			60.29			60.20			59.88			60.99		
		BDO-ZD56LCS	LCS		01-387		63.19			50.29			64.55			67.24			67.84			66.93		
		BDO-ZD60LCS	LCS		01-388		68.04			54.73			81.16			80.92			79.86			86.94		
		BDO-ZD64LCS	LCS		01-389		57.19			48.91			72.58			72.59			72.53			76.58		
		BDO-ZD68LCS	LCS		01-390		62.64			51.76			71.48			73.79			75.7			75.84		
		BDO-ZD72LCS	LCS		01-391		59.04			49.05			72.91			71.74			69.67			77.58		
Standard Reference Material (percent difference)																								
		NIST 1974a-01-338	SRM		01-338		NA			NA			NA			23.07			0			31.42		
		NIST 1974a-01-336	SRM		01-336		NA			NA			NA			18.5			25.06			24.03		
		NIST 1974a-01-337	SRM		01-337		NA			NA			NA			10.27			13.46			20.71		
		NIST 1974a-01-338	SRM		01-338		NA			NA			NA			23.07			0			31.42		
		NIST 1974a-01-387	SRM		01-387		NA			NA			NA			0			9.72			0		
		NIST 1974a-01-388	SRM		01-388		NA			NA			NA			17.59			6.64			28.13		
		NIST 1974a-01-389	SRM		01-389		NA			NA			NA			6.15			0			11.19		
		NIST 1974a-01-390	SRM		01-390		NA			NA			NA			0			0.38			0		
		NIST 1974a-01-391	SRM		01-391		NA			NA			NA			0			0			8.55		

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates																								
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	0.27	U		0.03	U		0.04	U		0.14	J		0.32	J		0.22	J	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	QADU	EDIBLE	01-336	Jacksmelt	0.27	U		0.03	U		0.04	U		0.16	J		0.37	J		0.24	J	
RPD							***NA***			***NA***			***NA***			***13***			***14***			***9***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	EDIBLE	01-337	Jacksmelt	0.28	U		0.03	U		0.04	U		0.23	J		0.44	J		0.02	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	QADU	EDIBLE	01-337	Jacksmelt	0.27	U		0.03	U		0.04	U		0.25	J		0.49			0.02	U	
RPD							***NA***			***NA***			***NA***			***8***			***11***			***NA***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	EDIBLE	01-338	bivalve (clam)	0.39	U	UJ	0.04	U	UJ	0.06	U	UJ	0.04	U	UJ	0.49	J	J	0.04	U	UJ
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	QADU	EDIBLE	01-338	bivalve (clam)	0.38	U		0.04	U		0.05	U		0.04	U		0.56	J		0.03	U	
RPD							***NA***			***NA***			***NA***			***NA***			***13***			***NA***		
South Basin Area X	SB-10	AAB-144	SA	lab test tissue dep	01-388	M. nasuta	0.13	U		0.11	J		0.44	J		0.37	J		3.26			1.4		
South Basin Area X	SB-10	AAB-144	QADU	lab test tissue dep	01-388	M. nasuta	0.13	U		0.15	J		0.52	J		0.45	J		3.79			1.61		
RPD							***NA***			***31***			***17***			***20***			***15***			***14***		
South Basin Area X	SB-07	AAB-119	SA	lab test tissue dep	01-390	M. nasuta	0.12	U		0.06	U		0.31	J		0.24	J		1.88			0.94		
South Basin Area X	SB-07	AAB-119	QADU	lab test tissue dep	01-390	M. nasuta	0.12	U		0.06	U		0.34	J		0.18	J		1.93			1.		
RPD							***NA***			***NA***			***9***			***29***			***3***			***6***		
Point Avisadero Area III	PA-42	AAB-086	SA	lab test tissue dep	01-389	M. nasuta	0.13	U		0.06	U		0.09	U		0.19	J		0.93			0.1	U	
Point Avisadero Area III	PA-42	AAB-086	QADU	lab test tissue dep	01-389	M. nasuta	0.13	U		0.06	U		0.09	U		0.14	J		0.86			0.1	U	
RPD							***NA***			***NA***			***NA***			***30***			***8***			***NA***		
Eastern Wetland Area VIII	EW-31	AAB-104	SA	lab test tissue dep	01-387	M. nasuta	0.25	U	UJ	0.03	U	UJ	0.04	U	UJ	0.02	U	UJ	0.26	J	J	0.02	U	UJ
Eastern Wetland Area VIII	EW-31	AAB-104	QADU	lab test tissue dep	01-387	M. nasuta	0.28	U		0.03	U		0.04	U		0.03	U		0.25	J		0.03	U	
RPD							***NA***			***NA***			***NA***			***NA***			***4***			***NA***		
Point Avisadero Area III	PA-45	AAB-126	SA	lab test tissue dep	01-391	M. nasuta	0.15	U		0.07	U		0.11	U		0.2	J		0.77	J		0.11	U	
Point Avisadero Area III	PA-45	AAB-126	QADU	lab test tissue dep	01-391	M. nasuta	0.15	U		0.07	U		0.1	U		0.1	J		1.04			0.11	U	
RPD							***NA***			***NA***			***NA***			***67***			***30***			***NA***		
Matrix Spikes (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	MS	EDIBLE	01-336	Jacksmelt	66.25			51.			69.83			63.7			62.06			84.63		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	EDIBLE	01-337	Jacksmelt	69.41			54.07			66.81			61.19			64.26			75.91		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	MS	EDIBLE	01-338	bivalve (clam)	30.27	N		65.68			77.85			80.91			75.98			77.22		
South Basin Area X	SB-13	AAB-113	MS	lab test tissue dep	01-391	M. nasuta	81.12			57.09			82.27			81.86			79.35			86.27		
Point Avisadero Area III	PA-48	AAB-088	MS	lab test tissue dep	01-389	M. nasuta	6.88	N		5.16	N		7.07	N		3.83	N		1.14	N		7.6	N	
Oil Reclamation Area IX	OR-26	AAB-116	MS	lab test tissue dep	01-390	M. nasuta	75.14			59.61			81.36			81.62			83.78			86.23		
Point Avisadero Area III	PA-44	AAB-091	MS	lab test tissue dep	01-388	M. nasuta	80.36			60.14			90.47			89.22			83.15			98.99		
Background Tissue		41569-MAC-213	MS	background tissue	01-387	M. nasuta	47.27			54.13			72.16			84.27			67.36			73.96		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
N Value is not within control limits.
D Dilution run. Initial run outside linear range of instrument.

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110)			Cl5(118)			Cl5(126)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																								
		BDO-ZB63PB	PB		01-336		0.08	U		0.02	U		0.04	U		0.03	U		0.03	U		0.36	U	
		BDO-ZB67PB	PB		01-337		0.09	U		0.02	U		0.04	U		0.03	U		0.04	U		0.4	U	
		BDO-ZB71PB	PB		01-338		0.11	U		0.03	U		0.05	U		0.04	U		0.05	U		0.50	U	
		BDO-ZD55PB	PB		01-387		0.07	U		0.02	U		0.04	U		0.03	U		0.03	U		0.33	U	
		BDO-ZD59PB	PB		01-388		0.11	U		0.07	U		0.06	U		0.07	U		0.08	U		0.09	U	
		BDO-ZD63PB	PB		01-389		0.12	U		0.07	U		0.06	U		0.08	U		0.08	U		0.1	U	
		BDO-ZD67PB	PB		01-390		0.12	U		0.07	U		0.06	U		0.08	U		0.08	U		0.1	U	
		BDO-ZD71PB	PB		01-391		0.1	U		0.06	U		0.05	U		0.07	U		0.07	U		0.08	U	
Laboratory Control Samples (percent recovery)																								
		BDO-ZB64LCS	LCS		01-336		69.89			78.89			80.32			85.23			77			68.19		
		BDO-ZB68LCS	LCS		01-337		77.11			62.35			60.96			80.25			70.67			76.89		
		BDO-ZB72LCS	LCS		01-338		64.94			62.60			68.51			74.46			68.54			56.90		
		BDO-ZD56LCS	LCS		01-387		73.58			71.24			75.56			81.59			75.67			66.38		
		BDO-ZD60LCS	LCS		01-388		96.13			87.98			88.25			84.12			86.53			91.38		
		BDO-ZD64LCS	LCS		01-389		99.08			80.74			86.6			82.27			85.31			80.69		
		BDO-ZD68LCS	LCS		01-390		97.04			81.79			84.19			80.57			83.19			95.17		
		BDO-ZD72LCS	LCS		01-391		95.77			75.94			81.52			78.54			81.71			76.12		
Standard Reference Material (percent difference)																								
		NIST 1974a-01-338	SRM		01-338		NA			13.41			5.2			5.4			1.3			NA		
		NIST 1974a-01-336	SRM		01-336		NA			17.38			22.96			21.2			25.43			NA		
		NIST 1974a-01-337	SRM		01-337		NA			12.78			25.17			11.59			17.24			NA		
		NIST 1974a-01-338	SRM		01-338		NA			13.41			5.2			5.4			1.3			NA		
		NIST 1974a-01-387	SRM		01-387		NA			11.94			0			0			9.8			NA		
		NIST 1974a-01-388	SRM		01-388		NA			26.7			28.51			11.64			29.17			NA		
		NIST 1974a-01-389	SRM		01-389		NA			15.65			16.46			3.97			19.67			NA		
		NIST 1974a-01-390	SRM		01-390		NA			0			0			3.42			0			NA		
		NIST 1974a-01-391	SRM		01-391		NA			7.78			11.2			0			12.49			NA		

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Cl4(77) Result	Cl4(77) Lab Qual	Cl4(77) Final Qual	Cl5(101) Result	Cl5(101) Lab Qual	Cl5(101) Final Qual	Cl5(105) Result	Cl5(105) Lab Qual	Cl5(105) Final Qual	Cl5(110) Result	Cl5(110) Lab Qual	Cl5(110) Final Qual	Cl5(118) Result	Cl5(118) Lab Qual	Cl5(118) Final Qual	Cl5(126) Result	Cl5(126) Lab Qual	Cl5(126) Final Qual
Analytical Duplicates																								
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	0.07	U		1.51			0.32	J		1.06			1.57			0.34	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	QADU	EDIBLE	01-336	Jacksmelt	0.07	U		1.78			0.38	J		1.2			1.75			0.34	U	
RPD							***NA***			***16***			***17***			***12***			***11***			***NA***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	EDIBLE	01-337	Jacksmelt	0.08	U		1.62			0.3	J		1.14			1.82			0.34	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	QADU	EDIBLE	01-337	Jacksmelt	0.07	U		1.75			0.37	J		1.35			2.07			0.34	U	
RPD							***NA***			***8***			***21***			***17***			***13***			***NA***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	EDIBLE	01-338	bivalve (clam)	0.11	U	UJ	2.43		J	0.19	J	J	1.49		J	1.07		J	0.49	U	UJ
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	QADU	EDIBLE	01-338	bivalve (clam)	0.11	U		2.77			0.24	J		1.71			1.40			0.48	U	
RPD							***NA***			***13***			***21***			***14***			***27***			***NA***		
South Basin Area X	SB-10	AAB-144	SA	lab test tissue dep	01-388	M. nasuta	0.13	U		13.22	D		2.16			9.8	D		8.31	D		0.11	U	
South Basin Area X	SB-10	AAB-144	QADU	lab test tissue dep	01-388	M. nasuta	0.13	U		16.37	D		2.5			11.5	D		9.95	D		0.11	U	
RPD							***NA***			***21***			***15***			***16***			***18***			***NA***		
South Basin Area X	SB-07	AAB-119	SA	lab test tissue dep	01-390	M. nasuta	0.12	U		8.21	D		1.11			5.32			4.81			0.1	U	
South Basin Area X	SB-07	AAB-119	QADU	lab test tissue dep	01-390	M. nasuta	0.12	U		8.59			1.37			5.88			5.35			0.11	U	
RPD							***NA***			***5***			***21***			***10***			***11***			***NA***		
Point Avisadero Area III	PA-42	AAB-086	SA	lab test tissue dep	01-389	M. nasuta	0.13	U		1.5			0.2	J		0.75	J		0.54	J		0.12	U	
Point Avisadero Area III	PA-42	AAB-086	QADU	lab test tissue dep	01-389	M. nasuta	0.14	U		1.41			0.12	J		0.75			0.54	J		0.12	U	
RPD							***NA***			***6***			***50***			***0***			***0***			***NA***		
Eastern Wetland Area VIII	EW-31	AAB-104	SA	lab test tissue dep	01-387	M. nasuta	0.07	U	UJ	0.73		J	0.03	U	UJ	0.91		J	0.45		J	0.32	U	UJ
Eastern Wetland Area VIII	EW-31	AAB-104	QADU	lab test tissue dep	01-387	M. nasuta	0.08	U		0.84			0.04	U		0.98			0.44	J		0.35	U	
RPD							***NA***			***14***			***NA***			***7***			***2***			***NA***		
Point Avisadero Area III	PA-45	AAB-126	SA	lab test tissue dep	01-391	M. nasuta	0.16	U		1.86			0.12	J		0.85	J		0.45	J		0.13	U	
Point Avisadero Area III	PA-45	AAB-126	QADU	lab test tissue dep	01-391	M. nasuta	0.15	U		2.62			0.19	J		1.13			0.65	J		0.13	U	
RPD							***NA***			***34***			***45***			***28***			***36***			***NA***		
Matrix Spikes (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	MS	EDIBLE	01-336	Jacksmelt	47.49			64.58			74.6			59.			41.52			60.74		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	EDIBLE	01-337	Jacksmelt	72.41			61.13			64.25			82.37			77.97			63.62		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	MS	EDIBLE	01-338	bivalve (clam)	148.34	N		67.62			105.64			193.82	N		149.59	N		117.34		
South Basin Area X	SB-13	AAB-113	MS	lab test tissue dep	01-391	M. nasuta	90.71			82.16			91.16			103.07			103.88			85.94		
Point Avisadero Area III	PA-48	AAB-088	MS	lab test tissue dep	01-389	M. nasuta	8.83	N		0.	N		8.29	N		2.88	N		4.42	N		8.1	N	
Oil Reclamation Area IX	OR-26	AAB-116	MS	lab test tissue dep	01-390	M. nasuta	103.69			95.94			88.42			95.78			0.	N		98.04		
Point Avisadero Area III	PA-44	AAB-091	MS	lab test tissue dep	01-388	M. nasuta	109.25			88.28			96.67			86.58			90.3			81.99		
Background Tissue		41569-MAC-213	MS	background tissue	01-387	M. nasuta	70.8			56.44			94.74			141.59	N		78.1			90.71		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
N Value is not within control limits.
D Dilution run. Initial run outside linear range of instrument.

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																								
		BDO-ZB63PB	PB		01-336		0.08	U		0.04	U		0.03	U		0.06	U		0.03	U		0.03	U	
		BDO-ZB67PB	PB		01-337		0.09	U		0.04	U		0.04	U		0.07	U		0.04	U		0.04	U	
		BDO-ZB71PB	PB		01-338		0.11	U		0.05	U		0.05	U		0.08	U		0.05	U		0.05	U	
		BDO-ZD55PB	PB		01-387		0.07	U		0.03	U		0.03	U		0.06	U		0.03	U		0.03	U	
		BDO-ZD59PB	PB		01-388		0.12	U		0.05	U		0.06	U		0.09	U		0.06	U		0.07	U	
		BDO-ZD63PB	PB		01-389		0.14	U		0.06	U		0.07	U		0.1	U		0.07	U		0.07	U	
		BDO-ZD67PB	PB		01-390		0.13	U		0.06	U		0.07	U		0.1	U		0.07	U		0.07	U	
		BDO-ZD71PB	PB		01-391		0.11	U		0.05	U		0.06	U		0.08	U		0.06	U		0.06	U	
Laboratory Control Samples (percent recovery)																								
		BDO-ZB64LCS	LCS		01-336		84.66			93.87			79.57			77.62			92.47			88.54		
		BDO-ZB68LCS	LCS		01-337		67.1			66.37			69.6			77.94			65.12			68.09		
		BDO-ZB72LCS	LCS		01-338		68.12			70.52			67.93			65.89			66.67			65.53		
		BDO-ZD56LCS	LCS		01-387		75.75			79.41			75.66			75.59			76.05			76.79		
		BDO-ZD60LCS	LCS		01-388		85.33			80.6			85.69			80.9			86.3			86.88		
		BDO-ZD64LCS	LCS		01-389		83.34			86.14			85.76			83.23			86.85			87.69		
		BDO-ZD68LCS	LCS		01-390		81.59			74			81.95			90.79			84.36			85.75		
		BDO-ZD72LCS	LCS		01-391		79.56			81.6			80.39			78.83			81.58			81.08		
Standard Reference Material (percent difference)																								
		NIST 1974a-01-338	SRM		01-338		0			NA			0			14.3			42.7	N		0		
		NIST 1974a-01-336	SRM		01-336		7.93			NA			19.38			12.04			0			0.03		
		NIST 1974a-01-337	SRM		01-337		19.51			NA			18.39			0			5.72			3.32		
		NIST 1974a-01-338	SRM		01-338		0			NA			0			14.3			42.7	N		0		
		NIST 1974a-01-387	SRM		01-387		0			NA			1.7			0			0			0		
		NIST 1974a-01-388	SRM		01-388		19.94			NA			18.6			34.22			4.16			5.16		
		NIST 1974a-01-389	SRM		01-389		2.38			NA			11.11			24.81			12.5			16.65		
		NIST 1974a-01-390	SRM		01-390		0			NA			0			5.49			0			0		
		NIST 1974a-01-391	SRM		01-391		0			NA			3.09			13.47			21.68			26.27		

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Cl6(128) Result	Cl6(128) Lab Qual	Cl6(128) Final Qual	Cl6(129) Result	Cl6(129) Lab Qual	Cl6(129) Final Qual	Cl6(138) Result	Cl6(138) Lab Qual	Cl6(138) Final Qual	Cl6(153) Result	Cl6(153) Lab Qual	Cl6(153) Final Qual	Cl7(170) Result	Cl7(170) Lab Qual	Cl7(170) Final Qual	Cl7(180) Result	Cl7(180) Lab Qual	Cl7(180) Final Qual
Analytical Duplicates																								
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	0.39	J		0.03	U		3.38			5.4			0.61			1.56		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	QADU	EDIBLE	01-336	Jacksmelt	0.44	J		0.03	U		3.9			6.13			0.7			1.8		
RPD							***12***			***NA***			***14***			***13***			***14***			***14***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	EDIBLE	01-337	Jacksmelt	0.52			0.04	U		4.24			6.79			0.86			3.31		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	QADU	EDIBLE	01-337	Jacksmelt	0.59			0.03	U		4.84			7.63			0.94			3.53		
RPD							***13***			***NA***			***13***			***12***			***9***			***6***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	EDIBLE	01-338	bivalve (clam)	0.55	J	J	0.05	U	UJ	7.40		J	11.48		J	2.32		J	6.34		J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	QADU	EDIBLE	01-338	bivalve (clam)	0.70			0.05	U		8.70			13.47			2.75			7.74		
RPD							***24***			***NA***			***16***			***16***			***17***			***20***		
South Basin Area X	SB-10	AAB-144	SA	lab test tissue dep	01-388	M. nasuta	1.96			0.06	U		18.58	D		25.28	D		4.02			6.71		
South Basin Area X	SB-10	AAB-144	QADU	lab test tissue dep	01-388	M. nasuta	2.26			0.06	U		22.3	D		30.36	D		4.76			8.35	D	
RPD							***14***			***NA***			***18***			***18***			***17***			***22***		
South Basin Area X	SB-07	AAB-119	SA	lab test tissue dep	01-390	M. nasuta	1.27			0.06	U		12.05	D		16.83	D		2.96			4.95		
South Basin Area X	SB-07	AAB-119	QADU	lab test tissue dep	01-390	M. nasuta	1.38			0.06	U		13.86			21.79			3.22			5.34		
RPD							***8***			***NA***			***14***			***26***			***8***			***8***		
Point Avisadero Area III	PA-42	AAB-086	SA	lab test tissue dep	01-389	M. nasuta	0.17	J		0.07	U		1.84			2.74			0.71	J		1.68		
Point Avisadero Area III	PA-42	AAB-086	QADU	lab test tissue dep	01-389	M. nasuta	0.17	J		0.07	U		1.64			2.35			0.52	J		1.35		
RPD							***0***			***NA***			***11***			***15***			***31***			***22***		
Eastern Wetland Area VIII	EW-31	AAB-104	SA	lab test tissue dep	01-387	M. nasuta	0.25	J	J	0.03	U	UJ	2.24		J	3.39		J	0.44		J	1.23		J
Eastern Wetland Area VIII	EW-31	AAB-104	QADU	lab test tissue dep	01-387	M. nasuta	0.23	J		0.04	U		2.32			3.55			0.5			1.33		
RPD							***8***			***NA***			***4***			***5***			***13***			***8***		
Point Avisadero Area III	PA-45	AAB-126	SA	lab test tissue dep	01-391	M. nasuta	0.16	J		0.08	U		2.21			3.47			0.42	J		1.14		
Point Avisadero Area III	PA-45	AAB-126	QADU	lab test tissue dep	01-391	M. nasuta	0.24	J		0.07	U		2.95			4.79			0.58	J		1.57		
RPD							***40***			***NA***			***29***			***32***			***32***			***32***		
Matrix Spikes (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	MS	EDIBLE	01-336	Jacksmelt	65.32			79.94			8.56	N		0	N		79.68			44.96		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	EDIBLE	01-337	Jacksmelt	66.2			77.02			82.08			111.25			61.87			71.45		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	MS	EDIBLE	01-338	bivalve (clam)	155.92	N		181.40	N		239.95	N		323.66	N		19.17	N		187.46	N	
South Basin Area X	SB-13	AAB-113	MS	lab test tissue dep	01-391	M. nasuta	85.02			92.87			139.58	N		218.51	N		88.25			96.94		
Point Avisadero Area III	PA-48	AAB-088	MS	lab test tissue dep	01-389	M. nasuta	8.42	N		8.99	N		0	N		0	N		9.46	N		0.63	N	
Oil Reclamation Area IX	OR-26	AAB-116	MS	lab test tissue dep	01-390	M. nasuta	89.42			86			116.03			207.27	N		96.69			105.8		
Point Avisadero Area III	PA-44	AAB-091	MS	lab test tissue dep	01-388	M. nasuta	92.26			94.57			85.29			84.18			88.18			89.72		
Background Tissue		41569-MAC-213	MS	background tissue	01-387	M. nasuta	106.45			99.24			114.79			87.16			64.25			97.96		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
N Value is not within control limits.
D Dilution run. Initial run outside linear range of instrument.

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																		
		BDO-ZB63PB	PB		01-336		0.04	U		0.03	U		0.03	U		0.03	U	
		BDO-ZB67PB	PB		01-337		0.04	U		0.04	U		0.03	U		0.04	U	
		BDO-ZB71PB	PB		01-338		0.05	U		0.05	U		0.04	U		0.05	U	
		BDO-ZD55PB	PB		01-387		0.03	U		0.03	U		0.03	U		0.03	U	
		BDO-ZD59PB	PB		01-388		0.06	U		0.06	U		0.06	U		0.06	U	
		BDO-ZD63PB	PB		01-389		0.07	U		0.06	U		0.06	U		0.07	U	
		BDO-ZD67PB	PB		01-390		0.07	U		0.06	U		0.06	U		0.07	U	
		BDO-ZD71PB	PB		01-391		0.05	U		0.05	U		0.05	U		0.05	U	
Laboratory Control Samples (percent recovery)																		
		BDO-ZB64LCS	LCS		01-336		78.98			95.2			92.77			106.27		
		BDO-ZB68LCS	LCS		01-337		73.15			65.91			62.17			72.61		
		BDO-ZB72LCS	LCS		01-338		66.68			64.43			60.91			65.37		
		BDO-ZD56LCS	LCS		01-387		77.29			74.23			68.73			74.56		
		BDO-ZD60LCS	LCS		01-388		81.11			85.39			79.91			85.94		
		BDO-ZD64LCS	LCS		01-389		83.66			84.93			87.79			89.79		
		BDO-ZD68LCS	LCS		01-390		82.12			84.65			85.14			87.68		
		BDO-ZD72LCS	LCS		01-391		77.68			83.98			88.63			88.15		
Standard Reference Material (percent difference)																		
		NIST 1974a-01-338	SRM		01-338		0			NA			NA			NA		
		NIST 1974a-01-336	SRM		01-336		19.58			NA			NA			NA		
		NIST 1974a-01-337	SRM		01-337		16.36			NA			NA			NA		
		NIST 1974a-01-338	SRM		01-338		0			NA			NA			NA		
		NIST 1974a-01-387	SRM		01-387		5.9			NA			NA			NA		
		NIST 1974a-01-388	SRM		01-388		8.84			NA			NA			NA		
		NIST 1974a-01-389	SRM		01-389		9.29			NA			NA			NA		
		NIST 1974a-01-390	SRM		01-390		0			NA			NA			NA		
		NIST 1974a-01-391	SRM		01-391		0			NA			NA			NA		

Table C-27. Quality Control Data for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates																		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	1.97			0.16	J		0.13	J		0.11	J	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	QADU	EDIBLE	01-336	Jacksmelt	2.28			0.19	J		0.16	J		0.12	J	
RPD							***15***			***17***			***21***			***9***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	EDIBLE	01-337	Jacksmelt	3.04			0.24	J		0.2	J		0.17	J	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	QADU	EDIBLE	01-337	Jacksmelt	3.35			0.25	J		0.19	J		0.16	J	
RPD							***10***			***4***			***5***			***6***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	EDIBLE	01-338	bivalve (clam)	5.03		J	0.34	J	J	0.32	J	J	0.12	J	J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	QADU	EDIBLE	01-338	bivalve (clam)	5.85			0.42	J		0.25	J		0.15	J	
RPD							***15***			***21***			***25***			***19***		
South Basin Area X	SB-10	AAB-144	SA	lab test tissue dep	01-388	M. nasuta	5.21			0.54	J		0.19	J		0.07	J	
South Basin Area X	SB-10	AAB-144	QADU	lab test tissue dep	01-388	M. nasuta	5.86			0.62	J		0.24	J		0.08	J	
RPD							***12***			***14***			***23***			***13***		
South Basin Area X	SB-07	AAB-119	SA	lab test tissue dep	01-390	M. nasuta	3.88			0.41	J		0.16	J		0.06	J	
South Basin Area X	SB-07	AAB-119	QADU	lab test tissue dep	01-390	M. nasuta	4.21			0.45	J		0.17	J		0.07	J	
RPD							***8***			***9***			***6***			***15***		
Point Avisadero Area III	PA-42	AAB-086	SA	lab test tissue dep	01-389	M. nasuta	0.79			0.17	J		0.1	J		0.01	J	
Point Avisadero Area III	PA-42	AAB-086	QADU	lab test tissue dep	01-389	M. nasuta	0.66	J		0.12	J		0.06	J		0.08	U	
RPD							***18***			***34***			***50***			***NA***		
Eastern Wetland Area VIII	EW-31	AAB-104	SA	lab test tissue dep	01-387	M. nasuta	0.94		J	0.1	J	J	0.04	J	J	0.03	U	UJ
Eastern Wetland Area VIII	EW-31	AAB-104	QADU	lab test tissue dep	01-387	M. nasuta	1.01			0.11	J		0.03	U		0.03	U	
RPD							***7***			***10***			***NA***			***NA***		
Point Avisadero Area III	PA-45	AAB-126	SA	lab test tissue dep	01-391	M. nasuta	0.67	J		0.08	J		0.04	J		0.09	U	
Point Avisadero Area III	PA-45	AAB-126	QADU	lab test tissue dep	01-391	M. nasuta	1.01			0.11	J		0.08	U		0.09	U	
RPD							***40***			***32***			***NA***			***NA***		
Matrix Spikes (percent recoveries)																		
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	MS	EDIBLE	01-336	Jacksmelt	15.39	N		77.85			76.29			86.6		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	EDIBLE	01-337	Jacksmelt	80.4			61.03			54.02			62.7		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	MS	EDIBLE	01-338	bivalve (clam)	224.11	N		137.95	N		112.55			127.48	N	
South Basin Area X	SB-13	AAB-113	MS	lab test tissue dep	01-391	M. nasuta	82.72			88.86			95.13			94.94		
Point Avisadero Area III	PA-48	AAB-088	MS	lab test tissue dep	01-389	M. nasuta	5.77	N		8.74	N		8.83	N		10.05	N	
Oil Reclamation Area IX	OR-26	AAB-116	MS	lab test tissue dep	01-390	M. nasuta	99.64			89.86			89.6			91.55		
Point Avisadero Area III	PA-44	AAB-091	MS	lab test tissue dep	01-388	M. nasuta	81.86			89.16			81.57			87.25		
Background Tissue		41569-MAC-213	MS	background tissue	01-387	M. nasuta	112.65			95.73			87.02			94.49		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.
N Value is not within control limits.
D Dilution run. Initial run outside linear range of instrument.

Table C-28. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)					
							Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	Wholebody	01-338	gobies,sculpin	56.13			7.23	N	
Point Avisadero Area III	Area III FF	AAB-401	SA	Wholebody	01-338	gobies,sculpin	55.41			12.37	N	
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	Wholebody	01-338	gobies,sculpin	64.68			7.90	N	
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	Wholebody	01-338	gobies,sculpin	47.87			8.01	N	
South Basin Area X	Area X FF	AAB-465	SA	Wholebody	01-338	gobies,sculpin	53.12			14.05	N	
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	SA	EDIBLE	01-336	Jacksmelt	65.00			56.03		
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	SA	EDIBLE	01-336	Jacksmelt	49.70			45.44		
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	SA	EDIBLE	01-336	Perch spp	67.54			34.77	N	
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	SA	EDIBLE	01-336	Perch spp	65.73			18.34	N	
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	SA	EDIBLE	01-336	Jacksmelt	58.51			53.99		
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	SA	EDIBLE	01-336	Jacksmelt	65.85			62.86		
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	SA	EDIBLE	01-336	Perch spp	56.74			5.09	N	
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	SA	EDIBLE	01-336	Perch spp	55.39			4.26	N	
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	SA	EDIBLE	01-336	Jacksmelt	62.66			64.38		
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	SA	EDIBLE	01-336	Jacksmelt	66.65			65.93		
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	SA	EDIBLE	01-336	Perch spp	69.21			16.26	N	
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	SA	EDIBLE	01-336	Perch spp	61.33			54.23		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	SA	EDIBLE	01-336	Jacksmelt	67.83			53.45		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	55.92			56.97		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	SA	EDIBLE	01-336	Perch spp	56.25			46.86		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA40	SA	EDIBLE	01-337	Perch spp	70.67			49.96		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	SA	EDIBLE	01-337	Jacksmelt	60.90			50.30		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	EDIBLE	01-337	Jacksmelt	59.71			52.62		
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	SA	EDIBLE	01-337	Perch spp	61.82			0.00	N	
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	SA	EDIBLE	01-337	Perch spp	64.58			0.00	N	
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	SA	EDIBLE	01-337	Jacksmelt	65.88			70.42		
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	SA	EDIBLE	01-337	Jacksmelt	60.70			56.70		
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	SA	EDIBLE	01-337	Perch spp	63.16			64.24		
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	SA	EDIBLE	01-337	Perch spp	59.08			44.30		
Various	MULTILOCATION_BLACK_COMP_1	ZC48	SA	EDIBLE	01-337	Black surfperch	61.88			54.62		
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	SA	EDIBLE	01-337	Walleye surfperch	64.76			32.82	N	
India Basin Area I	Area I HBI	AAB-369	SA	Wholebody	01-338	bivalve (clam)	80.31			28.35	N	
India Basin Area I	Area I SBI	AAB-398	SA	Wholebody	01-338	polychaete	77.58			109.93		
Point Avisadero Area III	Area III SBI	AAB-460	SA	Wholebody	01-338	polychaete	59.10			430.41	N	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	Wholebody	01-338	bivalve (clam)	67.18			28.35	N	
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	SA	Wholebody	01-338	polychaete	51.41			96.71		
Oil Reclamation Area IX	Area IX HBI	AAB-404	SA	Wholebody	01-338	bivalve (clam)	70.56			46.93		
Oil Reclamation Area IX	Area IX SBI	AAB-456	SA	Wholebody	01-338	polychaete	59.39			25.91	N	
South Basin Area X	Area X HBI	AAB-399	SA	Wholebody	01-338	bivalve (clam)	71.80			28.39	N	
South Basin Area X	Area X SBI	AAB-453	SA	Wholebody	01-338	polychaete	42.85			85.66		

Table C-28. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)					
							Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Alameda Buoy	41569-167	AB-67	SA	lab test tissue dep	01-391	M. nasuta	84.21			58.01		
Alameda Buoy	41569-211	AB-67	SA	lab test tissue dep	01-391	M. nasuta	78.08			54.81		
Alameda Buoy	41569-28	AB-67	SA	lab test tissue dep	01-391	M. nasuta	76.46			63.11		
Alameda Buoy	41569-35	AB-67	SA	lab test tissue dep	01-391	M. nasuta	86.75			59.36		
Alameda Buoy	41569-53	AB-67	SA	lab test tissue dep	01-391	M. nasuta	79.07			68.41		
Alcatraz Environs	41569-204	AL-64	SA	lab test tissue dep	01-390	M. nasuta	72.33			60.23		
Alcatraz Environs	41569-205	AL-64	SA	lab test tissue dep	01-390	M. nasuta	73.07			59.29		
Alcatraz Environs	41569-51	AL-64	SA	lab test tissue dep	01-389	M. nasuta	75.81			58.82		
Alcatraz Environs	41569-59	AL-64	SA	lab test tissue dep	01-389	M. nasuta	59.31			47.66		
Alcatraz Environs	41569-66	AL-64	SA	lab test tissue dep	01-390	M. nasuta	74.02			66.48		
Bay Farm	41569-120	BF-66	SA	lab test tissue dep	01-388	M. nasuta	76.10			55.72		
Bay Farm	41569-127	BF-66	SA	lab test tissue dep	01-388	M. nasuta	72.59			60.69		
Bay Farm	41569-191	BF-66	SA	lab test tissue dep	01-388	M. nasuta	74.02			51.63		
Bay Farm	41569-210	BF-66	SA	lab test tissue dep	01-388	M. nasuta	75.45			50.78		
Bay Farm	41569-44	BF-66	SA	lab test tissue dep	01-388	M. nasuta	73.45			61.31		
Eastern Wetland Area VIII	41569-125	EW-30	SA	lab test tissue dep	01-390	M. nasuta	76.84			63.94		
Eastern Wetland Area VIII	41569-48	EW-31	SA	lab test tissue dep	01-387	M. nasuta	65.92			16.91	N	
Eastern Wetland Area VIII	41569-65	EW-32	SA	lab test tissue dep	01-387	M. nasuta	65.87			21.36	N	
Eastern Wetland Area VIII	41569-152	EW-33	SA	lab test tissue dep	01-390	M. nasuta	84.60			65.46		
Eastern Wetland Area VIII	41569-23	EW-34	SA	lab test tissue dep	01-387	M. nasuta	66.55			17.12	N	
Eastern Wetland Area VIII	41569-135	EW-35	SA	lab test tissue dep	01-388	M. nasuta	77.51			59.07		
Eastern Wetland Area VIII	41569-61	EW-36	SA	lab test tissue dep	01-390	M. nasuta	77.43			66.24		
Eastern Wetland Area VIII	41569-89	EW-36	SA	lab test tissue nondep	01-387	M. nasuta	68.98			21.49	N	
Eastern Wetland Area VIII	41569-92	EW-37	SA	lab test tissue dep	01-388	M. nasuta	17.98	N		16.33	N	
India Basin Area I	41569-106	IB-54	SA	lab test tissue dep	01-388	M. nasuta	77.37			65.15		
India Basin Area I	41569-10	IB-55	SA	lab test tissue dep	01-387	M. nasuta	69.60			22.03	N	
India Basin Area I	41569-164	IB-56	SA	lab test tissue dep	01-388	M. nasuta	80.46			61.15		
India Basin Area I	41569-198	IB-56	SA	lab test tissue nondep	01-387	M. nasuta	41.17			11.62	N	
India Basin Area I	41569-189	IB-57	SA	lab test tissue dep	01-390	M. nasuta	76.57			65.07		
India Basin Area I	41569-63	IB-58	SA	lab test tissue dep	01-387	M. nasuta	65.94			17.70	N	
India Basin Area I	41569-175	IB-59	SA	lab test tissue dep	01-389	M. nasuta	77.71			66.81		
Oil Reclamation Area IX	41569-202	OR-24	SA	lab test tissue dep	01-390	M. nasuta	74.16			50.30		
Oil Reclamation Area IX	41569-142	OR-25	SA	lab test tissue dep	01-388	M. nasuta	74.23			65.62		
Oil Reclamation Area IX	41569-162	OR-26	SA	lab test tissue dep	01-390	M. nasuta	79.86			57.74		
Oil Reclamation Area IX	41569-30	OR-26	SA	lab test tissue nondep	01-387	M. nasuta	65.65			24.77	N	
Oil Reclamation Area IX	41569-151	OR-27	SA	lab test tissue dep	01-390	M. nasuta	72.03			61.57		
Oil Reclamation Area IX	41569-33	OR-28	SA	lab test tissue dep	01-389	M. nasuta	72.89			57.18		
Oil Reclamation Area IX	41569-150	OR-29	SA	lab test tissue dep	01-388	M. nasuta	70.07			58.80		
Point Avisadero Area III	41569-60	PA-38	SA	lab test tissue dep	01-390	M. nasuta	63.02			60.11		
Point Avisadero Area III	41569-75	PA-39	SA	lab test tissue dep	01-389	M. nasuta	71.36			61.58		
Point Avisadero Area III	41569-110	PA-40	SA	lab test tissue dep	01-391	M. nasuta	79.13			63.54		
Point Avisadero Area III	41569-158	PA-41	SA	lab test tissue dep	01-389	M. nasuta	72.51			59.04		
Point Avisadero Area III	41569-187	PA-42	SA	lab test tissue dep	01-389	M. nasuta	73.38			60.54		
Point Avisadero Area III	41569-161	PA-43	SA	lab test tissue dep	01-389	M. nasuta	81.35			57.17		
Point Avisadero Area III	41569-70	PA-44	SA	lab test tissue dep	01-388	M. nasuta	75.02			60.17		
Point Avisadero Area III	41569-85	PA-45	SA	lab test tissue dep	01-391	M. nasuta	76.08			65.69		
Point Avisadero Area III	41569-163	PA-46	SA	lab test tissue dep	01-387	M. nasuta	63.71			13.46	N	
Point Avisadero Area III	41569-46	PA-46	SA	lab test tissue nondep	01-387	M. nasuta	67.40			16.72	N	
Point Avisadero Area III	41569-132	PA-47	SA	lab test tissue dep	01-389	M. nasuta	79.26			63.89		

Table C-28. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)					
							Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Point Avisadero Area III	41569-131	PA-48	SA	lab test tissue dep	01-389	M. nasuta	77.71			50.14		
Point Avisadero Area III	41569-182	PA-49	SA	lab test tissue dep	01-390	M. nasuta	76.53			60.94		
Point Avisadero Area III	41569-143	PA-50	SA	lab test tissue dep	01-387	M. nasuta	65.71			21.78	N	
Point Avisadero Area III	41569-99	PA-51	SA	lab test tissue dep	01-391	M. nasuta	84.50			63.36		
Point Avisadero Area III	41569-107	PA-52	SA	lab test tissue dep	01-389	M. nasuta	79.88			62.57		
Point Avisadero Area III	41569-192	PA-53	SA	lab test tissue dep	01-389	M. nasuta	78.99			55.46		
Paradise Cove	41569-111	PC-63	SA	lab test tissue dep	01-390	M. nasuta	78.09			63.76		
Paradise Cove	41569-179	PC-63	SA	lab test tissue dep	01-390	M. nasuta	76.14			63.28		
Paradise Cove	41569-38	PC-63	SA	lab test tissue dep	01-387	M. nasuta	66.61			15.82	N	
Paradise Cove	41569-52	PC-63	SA	lab test tissue dep	01-387	M. nasuta	74.76			25.96	N	
Paradise Cove	41569-76	PC-63	SA	lab test tissue dep	01-390	M. nasuta	73.18			67.16		
Red Rock	41569-153	RR-65	SA	lab test tissue dep	01-391	M. nasuta	80.25			65.21		
Red Rock	41569-165	RR-65	SA	lab test tissue dep	01-391	M. nasuta	88.98			71.64		
Red Rock	41569-185	RR-65	SA	lab test tissue dep	01-391	M. nasuta	87.94			66.66		
Red Rock	41569-78	RR-65	SA	lab test tissue dep	01-390	M. nasuta	79.36			65.06		
Red Rock	41569-82	RR-65	SA	lab test tissue dep	01-391	M. nasuta	74.92			65.19		
South Basin Area X	41569-39	SB-01	SA	lab test tissue dep	01-389	M. nasuta	65.06			58.87		
South Basin Area X	41569-115	SB-02	SA	lab test tissue dep	01-388	M. nasuta	70.62			61.43		
South Basin Area X	41569-98	SB-03	SA	lab test tissue dep	01-389	M. nasuta	72.85			63.89		
South Basin Area X	41569-101	SB-04	SA	lab test tissue dep	01-388	M. nasuta	64.85			48.53		
South Basin Area X	41569-114	SB-05	SA	lab test tissue dep	01-388	M. nasuta	75.88			59.51		
South Basin Area X	41569-26	SB-06	SA	lab test tissue dep	01-391	M. nasuta	77.37			70.14		
South Basin Area X	41569-173	SB-07	SA	lab test tissue dep	01-390	M. nasuta	70.93			59.33		
South Basin Area X	41569-155	SB-08	SA	lab test tissue dep	01-388	M. nasuta	76.76			63.13		
South Basin Area X	41569-95	SB-09	SA	lab test tissue dep	01-391	M. nasuta	77.26			57.06		
South Basin Area X	41569-168	SB-10	SA	lab test tissue dep	01-388	M. nasuta	68.14			50.38		
South Basin Area X	41569-5	SB-11	SA	lab test tissue dep	01-390	M. nasuta	65.11			57.07		
South Basin Area X	41569-157	SB-12	SA	lab test tissue dep	01-388	M. nasuta	63.85			50.39		
South Basin Area X	41569-102	SB-13	SA	lab test tissue dep	01-391	M. nasuta	76.30			56.17		
South Basin Area X	41569-77	SB-14	SA	lab test tissue dep	01-387	M. nasuta	62.80			23.47	N	
South Basin Area X	41569-200	SB-15	SA	lab test tissue dep	01-389	M. nasuta	68.90			50.52		
South Basin Area X	41569-116	SB-16	SA	lab test tissue dep	01-391	M. nasuta	64.20			53.58		
South Basin Area X	41569-41	SB-17	SA	lab test tissue dep	01-390	M. nasuta	70.42			58.72		
South Basin Area X	41569-141	SB-18	SA	lab test tissue dep	01-388	M. nasuta	61.16			41.40		
South Basin Area X	41569-203	SB-19	SA	lab test tissue dep	01-389	M. nasuta	61.03			55.70		
South Basin Area X	41569-147	SB-20	SA	lab test tissue dep	01-387	M. nasuta	48.59			17.21	N	
South Basin Area X	41569-11	SB-21	SA	lab test tissue dep	01-389	M. nasuta	50.22			41.16		
South Basin Area X	41569-171	SB-21	SA	lab test tissue nondep	01-387	M. nasuta	41.81			26.90	N	
South Basin Area X	41569-90	SB-22	SA	lab test tissue dep	01-389	M. nasuta	58.17			48.50		
South Basin Area X	41569-100	SB-23	SA	lab test tissue dep	01-389	M. nasuta	45.49			20.42	N	
Background Tissue	41569-MAC-213		SA	background tissue	01-387	M. nasuta	67.76			28.34	N	
Background Tissue	41569-MAC-214		SA	background tissue	01-387	M. nasuta	71.81			34.39	N	
Background Tissue	41569-MAC-215		SA	background tissue	01-387	M. nasuta	69.42			29.93	N	

Table C-28. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)					
							Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks												
		BDO-ZB63PB	PB		01-336		62.87			60.55		
		BDO-ZB67PB	PB		01-337		60.56			69.06		
		BDO-ZB71PB	PB		01-338		61.56			74.55		
		BDO-ZD55PB	PB		01-387		52.8			63.98		
		BDO-ZD59PB	PB		01-388		71.56			75.1		
		BDO-ZD63PB	PB		01-389		56.67			68.2		
		BDO-ZD67PB	PB		01-390		63.97			73.54		
		BDO-ZD71PB	PB		01-391		72.97			78.89		
Laboratory Control Samples												
		BDO-ZB64LCS	LCS		01-336		78.39			70.89		
		BDO-ZB68LCS	LCS		01-337		71.08			71.11		
		BDO-ZB72LCS	LCS		01-338		65.08			69.36		
		BDO-ZD56LCS	LCS		01-387		72.99			72.19		
		BDO-ZD60LCS	LCS		01-388		80.59			78.32		
		BDO-ZD64LCS	LCS		01-389		77.03			80.5		
		BDO-ZD68LCS	LCS		01-390		82.14			80.04		
		BDO-ZD72LCS	LCS		01-391		71.9			76.86		
Standard Reference Material												
		NIST 1974a-01-336	SRM		01-336		74.62	N		70.49	N	
		NIST 1974a-01-337	SRM		01-337		74.73	N		79.92	N	
		NIST 1974a-01-338	SRM		01-338		77.87			20.06	N	
		NIST 1974a-01-387	SRM		01-387		74.14			22.02	N	
		NIST 1974a-01-388	SRM		01-388		70.55			64.8		
		NIST 1974a-01-389	SRM		01-389		70.11			68.06		
		NIST 1974a-01-390	SRM		01-390		76.16			71.62		
		NIST 1974a-01-391	SRM		01-391		82.62			76.23		
Analytical duplicates												
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	55.92			56.97		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	QADU	EDIBLE	01-336	Jacksmelt	68.13			66.51		
RPD							***20***			***15***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	EDIBLE	01-337	Jacksmelt	59.71			52.62		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	QADU	EDIBLE	01-337	Jacksmelt	64.04			46.5		
RPD							***7***			***12***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	EDIBLE	01-338	bivalve (clam)	67.18			28.35	N	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	QADU	EDIBLE	01-338	bivalve (clam)	78.76			45.16		
RPD							***16***			***46***		
South Basin Area X	SB-10	AAB-144	SA	lab test tissue dep	01-388	M. nasuta	68.14			50.38		
South Basin Area X	SB-10	AAB-144	QADU	lab test tissue dep	01-388	M. nasuta	74.84			55.04		
RPD							***9***			***9***		

Table C-28. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)					
							Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_Batch	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
South Basin Area X	SB-07	AAB-119	SA	lab test tissue dep	01-390	M. nasuta	70.93			59.33		
South Basin Area X	SB-07	AAB-119	QADU	lab test tissue dep	01-390	M. nasuta	70.63			62.58		
RPD							***0***			***5***		
Point Avisadero Area III	PA-42	AAB-086	SA	lab test tissue dep	01-389	M. nasuta	73.38			60.54		
Point Avisadero Area III	PA-42	AAB-086	QADU	lab test tissue dep	01-389	M. nasuta	70.81			55.32		
RPD							***4***			***9***		
Eastern Wetland Area VIII	EW-31	AAB-104	SA	lab test tissue dep	01-387	M. nasuta	65.92			16.91	N	
Eastern Wetland Area VIII	EW-31	AAB-104	QADU	lab test tissue dep	01-387	M. nasuta	62.49			13.62		
RPD							***5***			***22***		
Point Avisadero Area III	PA-45	AAB-126	SA	lab test tissue dep	01-391	M. nasuta	76.08			65.69		
Point Avisadero Area III	PA-45	AAB-126	QADU	lab test tissue dep	01-391	M. nasuta	77.19			60.95		
RPD							***1***			***7***		
Matrix Spikes (percent recoveries)												
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	MS	EDIBLE	01-336	Jacksmelt	74.95			57.48		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	EDIBLE	01-337	Jacksmelt	66.99			53.52		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	MS	EDIBLE	01-338	bivalve (clam)	88.54			19.01	N	
South Basin Area X	SB-13	AAB-113	MS	lab test tissue dep	01-391	M. nasuta	80.88			68.66		
Point Avisadero Area III	PA-48	AAB-088	MS	lab test tissue dep	01-389	M. nasuta	6.7	N		8.15	N	
Oil Reclamation Area IX	OR-26	AAB-116	MS	lab test tissue dep	01-390	M. nasuta	96.02			70.34		
Point Avisadero Area III	PA-44	AAB-091	MS	lab test tissue dep	01-388	M. nasuta	81.3			62.52		
Background Tissue		41569-MAC-213	MS	background tissue	01-387	M. nasuta	70.02			11.63	N	

N Value is not within control limits.

Table C-29. Quality Control Data for Polychlorinated Biphenyls as Aroclors in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																											
		BDO-ZB71PB	01-338	PB			8.34	U		8.34	U		8.34	U		8.34	U		8.34	U		8.34	U		8.34	U	
		BDO-ZB63PB	01-336	PB			5.96	U		119.43	U		119.43	U		119.43	U		119.43	U		119.31	U		5.95	U	
		BDO-ZB67PB	01-337	PB			6.67	U		6.67	U		6.67	U		6.67	U		6.67	U		6.67	U		6.67	U	
		BDO-ZB71PB	01-338	PB			8.34	U		8.34	U		8.34	U		8.34	U		8.34	U		8.34	U		8.34	U	
		BDO-ZD55PB	01-387	PB			5.56	U		5.56	U		5.56	U		5.56	U		5.56	U		5.56	U		5.56	U	
		BDO-ZD59PB	01-388	PB			7.25	U		7.25	U		7.25	U		7.25	U		7.25	U		7.25	U		7.25	U	
		BDO-ZD63PB	01-389	PB			8.02	U		8.02	U		8.02	U		8.02	U		8.02	U		8.02	U		8.02	U	
		BDO-ZD67PB	01-390	PB			7.89	U		7.89	U		7.89	U		7.89	U		7.89	U		7.89	U		7.89	U	
		BDO-ZD71PB	01-391	PB			6.45	U		6.45	U		6.45	U		6.45	U		6.45	U		6.45	U		6.45	U	
Analytical Duplicates (relative percent difference)																											
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	8.44	U	UJ	77.71		J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	7.97	U		7.97	U		7.97	U		7.97	U		7.97	U		7.97	U		89.02		
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***14***		
Eastern Wetland Area VIII	EW-31	41569-48	01-387	SA	lab test tissue dep	M. nasuta	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	5.42	U	UJ	20.26		J
Eastern Wetland Area VIII	EW-31	41569-48	01-387	QADU	lab test tissue dep	M. nasuta	5.88	U		5.88	U		5.88	U		5.88	U		5.88	U		5.88	U		20.76		
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***2***		
Point Avisadero Area III	PA-42	41569-187	01-389	SA	lab test tissue dep	M. nasuta	9.36	U		9.36	U		9.36	U		9.36	U		9.36	U		9.36	U		9.36	U	
Point Avisadero Area III	PA-42	41569-187	01-389	QADU	lab test tissue dep	M. nasuta	9.07	U		9.07	U		9.07	U		9.07	U		9.07	U		9.07	U		9.07	U	
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***3***		
Point Avisadero Area III	PA-45	41569-85	01-391	SA	lab test tissue dep	M. nasuta	10.78	U		10.78	U		10.78	U		10.78	U		10.78	U		10.78	U		21.3		
Point Avisadero Area III	PA-45	41569-85	01-391	QADU	lab test tissue dep	M. nasuta	10.18	U		10.18	U		10.18	U		10.18	U		10.18	U		10.18	U		30.18		
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***34***		
South Basin Area X	SB-07	41569-173	01-390	SA	lab test tissue dep	M. nasuta	8.26	U		8.26	U		8.26	U		8.26	U		8.26	U		8.26	U		106.33		
South Basin Area X	SB-07	41569-173	01-390	QADU	lab test tissue dep	M. nasuta	8.22	U		8.22	U		8.22	U		8.22	U		8.22	U		8.22	U		114.73		
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***8***		
South Basin Area X	SB-10	41569-168	01-388	SA	lab test tissue dep	M. nasuta	9.04	U		9.04	U		9.04	U		9.04	U		9.04	U		9.04	U		155.16		
South Basin Area X	SB-10	41569-168	01-388	QADU	lab test tissue dep	M. nasuta	8.71	U		8.71	U		8.71	U		8.71	U		8.71	U		8.71	U		175.02		
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***12***		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_	ZA38	01-336	SA	Edible	Jacksmelt	5.81	U		116.36	U		116.36	U		116.36	U		116.36	U		116.25	U		5.8	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_	ZA38	01-336	QADU	Edible	Jacksmelt	5.62	U		112.63	U		112.63	U		112.63	U		112.63	U		112.52	U		5.61	U	
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	5.9	U		5.9	U		5.9	U		5.9	U		5.9	U		5.9	U		5.9	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	5.58	U		5.58	U		5.58	U		5.58	U		5.58	U		5.58	U		5.58	U	
RPD							***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-30. Quality Control Data for Chlorinated Pesticides in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	2,4'-DDD Result	2,4'-DDD Lab Qual	2,4'-DDD Final Qual	2,4'-DDE Result	2,4'-DDE Lab Qual	2,4'-DDE Final Qual	2,4'-DDT Result	2,4'-DDT Lab Qual	2,4'-DDT Final Qual	4,4'-DDD Result	4,4'-DDD Lab Qual	4,4'-DDD Final Qual	4,4'-DDE Result	4,4'-DDE Lab Qual	4,4'-DDE Final Qual	4,4'-DDT Result	4,4'-DDT Lab Qual	4,4'-DDT Final Qual
Procedural Blanks (ug/kg wet weight)																								
		BDO-ZB63PB	01-336	PB			0.02	U		0.08	U		0.03	U		0.04	U		0.03	U		0.02	U	
		BDO-ZB67PB	01-337	PB			0.03	U		0.09	U		0.03	U		0.04	U		0.04	U		0.02	U	
		BDO-ZB71PB	01-338	PB			0.03	U		0.11	U		0.04	U		0.05	U		0.04	U		0.03	U	
		BDO-ZD55PB	01-387	PB			0.02	U		0.08	U		0.03	U		0.03	U		0.03	U		0.02	U	
		BDO-ZD59PB	01-388	PB			0.07	U		0.09	U		0.08	U		0.06	U		0.06	U		0.06	U	
		BDO-ZD63PB	01-389	PB			0.08	U		0.1	U		0.09	U		0.07	U		0.06	U		0.07	U	
		BDO-ZD67PB	01-390	PB			0.07	U		0.09	U		0.09	U		0.07	U		0.06	U		0.06	U	
		BDO-ZD71PB	01-391	PB			0.06	U		0.08	U		0.07	U		0.06	U		0.05	U		0.05	U	
Laboratory Control Samples (percent recovery)																								
		BDO-ZB64LCS	01-336	LCS			78.52			75.26			48.32			82.21			74.22			87.5		
		BDO-ZB68LCS	01-337	LCS			70.97			48.86			35.64	N		61.46			56.64			70.16		
		BDO-ZB72LCS	01-338	LCS			63.05			61.27			44.88			63.12			64.21			66.38		
		BDO-ZD56LCS	01-387	LCS			67.35			54.86			43.86			67.26			69.07			68.31		
		BDO-ZD60LCS	01-388	LCS			76.46			74.71			38.75	N		84.91			80.97			85.38		
		BDO-ZD64LCS	01-389	LCS			76.14			73.33			38.55	N		80.89			79.16			82.38		
		BDO-ZD68LCS	01-390	LCS			68.18			71.11			29.1	N		72.46			72.39			71.71		
		BDO-ZD72LCS	01-391	LCS			75.71			69.27			38.35	N		83.42			78.58			84.25		
Standard Reference Material (percent difference)																								
		NIST 1974a-01-336	01-336	SRM			NA			NA			NA			3.78			29.53			41.26	N	
		NIST 1974a-01-337	01-337	SRM			NA			NA			NA			24.23			35.69	N		25.78		
		NIST 1974a-01-338	01-338	SRM			NA			NA			NA			2.2			0.1			0		
		NIST 1974a-01-387	01-387	SRM			NA			NA			NA			0			17.5			28.7		
		NIST 1974a-01-388	01-388	SRM			NA			NA			NA			18.74			4.01			1.12		
		NIST 1974a-01-389	01-389	SRM			NA			NA			NA			7.86			0			30.49		
		NIST 1974a-01-390	01-390	SRM			NA			NA			NA			0			7.34			45.97	N	
		NIST 1974a-01-391	01-391	SRM			NA			NA			NA			16.29			0			36.62	N	
Analytical Duplicates (relative percent difference)																								
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	EDIBLE	Jacksmelt	0.02	U		0.08	U		0.03	U		0.9			22.32			0.79		J
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	EDIBLE	Jacksmelt	0.02	U		0.08	U		0.03	U		1.01			23.34			0.89		
RPD							***NA***			***NA***			***NA***			***12***			***4***			***12***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	EDIBLE	Jacksmelt	0.02	U		0.08	U		0.03	U	UJ	1.17			6.43		J	0.18	J	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	EDIBLE	Jacksmelt	0.02	U		0.08	U		0.03	U		1.32			7.31			0.19	J	
RPD							***NA***			***NA***			***NA***			***12***			***13***			***5***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	EDIBLE	bivalve (clam)	0.03	U	UJ	0.11	U	UJ	0.04	U	UJ	0.66	J	J	1.34		J	0.19	J	J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	EDIBLE	Jacksmelt	0.03	U		0.11	U		0.04	U		0.78			1.55			0.20	J	
RPD							***NA***			***NA***			***NA***			***18***			***15***			***1***		
South Basin Area X	SB-10	AAB-144	01-388	SA	lab test tissue dep	M. nasuta	0.08	U		0.1	U		0.1	U		1.38			7.58			0.38	J	
South Basin Area X	SB-10	AAB-144	01-388	QADU	lab test tissue dep	M. nasuta	0.08	U		0.1	U		0.1	U		1.59			8.61	D		0.43	J	
RPD							***NA***			***NA***			***NA***			***14***			***13***			***12***		
South Basin Area X	SB-07	AAB-119	01-390	SA	lab test tissue dep	M. nasuta	0.08	U		0.09	U		0.09	U		0.93			3.19			0.07	U	
South Basin Area X	SB-07	AAB-119	01-390	QADU	lab test tissue dep	M. nasuta	0.08	U		0.1	U		0.09	U		1.13			3.53			0.07	U	
RPD							***NA***			***NA***			***NA***			***19***			***10***			***NA***		

Table C-30. Quality Control Data for Chlorinated Pesticides in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Point Avisadero Area III	PA-42	AAB-086	01-389	SA	lab test tissue dep	M. nasuta	0.09	U		0.11	U		0.1	U		0.52	J		0.84			0.07	U	
Point Avisadero Area III	PA-42	AAB-086	01-389	QADU	lab test tissue dep	M. nasuta	0.09	U		0.11	U		0.1	U		0.48	J		0.82			0.07	U	
RPD							***NA***			***NA***			***NA***			***8***			***2***			***NA***		
Eastern Wetland Area VIII	EW-31	AAB-104	01-387	SA	lab test tissue dep	M. nasuta	0.02	U	UJ	0.07	U	UJ	0.03	U	UJ	0.44		J	0.87		J	0.02	U	UJ
Eastern Wetland Area VIII	EW-31	AAB-104	01-387	QADU	lab test tissue dep	M. nasuta	0.02	U		0.08	U		0.03	U		0.55			0.96			0.02	U	
RPD							***NA***			***NA***			***NA***			***22***			***10***			***NA***		
Point Avisadero Area III	PA-45	AAB-126	01-391	SA	lab test tissue dep	M. nasuta	0.1	U		0.12	U		0.12	U		0.43	J		0.84	J		0.09	U	
Point Avisadero Area III	PA-45	AAB-126	01-391	QADU	lab test tissue dep	M. nasuta	0.1	U		0.12	U		0.11	U		0.54	J		1.17			0.08	U	
RPD							***NA***			***NA***			***NA***			***23***			***33***			***NA***		
Matrix Spikes (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	01-336	MS	EDIBLE	Jacksmelt	86.24			70.21			54.06			55.45			0	N		69.71		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	01-337	MS	EDIBLE	Jacksmelt	79.35			42.17			44.74			62.35			80.26			70.49		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	MS	EDIBLE	bivalve (clam)	155.92	N		43.67			54.28			132.20	N		154.78	N		152.26	N	
AAB-113	SB-13	41569-102-F	01-391	MS	lab test tissue dep	M. nasuta	94.66			65.98			43.25			86.47			81.84			91.83		
AAB-088	PA-48	41569-131-F	01-389	MS	lab test tissue dep	M. nasuta	8	N		7.47	N		4.61	N		0	N		0	N		7.81	N	
AAB-116	OR-26	41569-162-F	01-390	MS	lab test tissue dep	M. nasuta	85.64			61.93			38.11	N		75.48			80.07			76.94		
AAB-091	PA-44	41569-70-F	01-388	MS	lab test tissue dep	M. nasuta	87.77			71			36.46	N		94.45			90.16			90.99		
		41569-MAC-213	01-387	MS	background tissue	M. nasuta	120.96	N		100.93			44.08			109.02			98.24			95.34		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table C-30. Quality Control Data for Chlorinated Pesticides in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																								
		BDO-ZB63PB	01-336	PB			0.02	U		0.02	U		0.04	U		0.02	U		0.02	U		0.02	U	
		BDO-ZB67PB	01-337	PB			0.02	U		0.02	U		0.05	U		0.02	U		0.02	U		0.03	U	
		BDO-ZB71PB	01-338	PB			0.03	U		0.03	U		0.06	U		0.02	U		0.02	U		0.03	U	
		BDO-ZD55PB	01-387	PB			0.02	U		0.02	U		0.04	U		0.01	U		0.02	U		0.02	U	
		BDO-ZD59PB	01-388	PB			0.05	U		0.06	U		0.06	U		0.06	U		0.05	J		0.05	U	
		BDO-ZD63PB	01-389	PB			0.05	U		0.07	U		0.07	U		0.06	U		0.06	U		0.06	U	
		BDO-ZD67PB	01-390	PB			0.05	U		0.07	U		0.07	U		0.06	U		0.05	U		0.06	U	
		BDO-ZD71PB	01-391	PB			0.04	U		0.06	U		0.06	U		0.05	U		0.04	U		0.05	U	
Laboratory Control Samples (percent recovery)																								
		BDO-ZB64LCS	01-336	LCS			77.71			78.34			68.33			77.46			56.06			77.82		
		BDO-ZB68LCS	01-337	LCS			49.81			62.95			53.27			68.14			47.68			56.98		
		BDO-ZB72LCS	01-338	LCS			58.60			66.09			54.69			66.36			45.27			57.25		
		BDO-ZD56LCS	01-387	LCS			63.46			69.95			42.94			69.22			47.9			59.48		
		BDO-ZD60LCS	01-388	LCS			83.36			77.25			72.4			77.84			78.54			78.49		
		BDO-ZD64LCS	01-389	LCS			72.52			76.47			59.78			76.15			54.78			66.57		
		BDO-ZD68LCS	01-390	LCS			69.77			69.08			54.91			68.61			51.15			62.83		
		BDO-ZD72LCS	01-391	LCS			74.28			74.43			71.78			75			55.54			71.46		
Standard Reference Material (percent difference)																								
		NIST 1974a-01-336	01-336	SRM			0			NA			NA			NA			36.03	N		NA		
		NIST 1974a-01-337	01-337	SRM			29.22			NA			NA			NA			39.52	N		NA		
		NIST 1974a-01-338	01-338	SRM			0			NA			NA			NA			0.18			NA		
		NIST 1974a-01-387	01-387	SRM			26.5			NA			NA			NA			14.11			NA		
		NIST 1974a-01-388	01-388	SRM			17.22			NA			NA			NA			0			NA		
		NIST 1974a-01-389	01-389	SRM			0.98			NA			NA			NA			0			NA		
		NIST 1974a-01-390	01-390	SRM			0			NA			NA			NA			15.53			NA		
		NIST 1974a-01-391	01-391	SRM			1.7			NA			NA			NA			0.84			NA		
Analytical Duplicates (relative percent difference)																								
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	EDIBLE	Jacksmelt	0.2	J		0.15	J		0.04	U		0.01	U		0.05	J	J	0.02	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	EDIBLE	Jacksmelt	0.25	J		0.2	J		0.04	U		0.01	U		0.06	J		0.02	U	
RPD							***22***			***29***			***NA***			***NA***			***18***			***NA***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	EDIBLE	Jacksmelt	0.41	J		0.53			0.04	U		0.01	U		0.17	J	J	0.02	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	EDIBLE	Jacksmelt	0.46			0.66			0.04	U		0.01	U		0.2	J		0.02	U	
RPD							***11***			***22***									***16***			***NA***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	EDIBLE	bivalve (clam)	0.25	J	J	0.64	J	J	0.06	U	UJ	0.02	U	UJ	0.20	J	J	0.03	U	UJ
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	EDIBLE	Jacksmelt	0.27	J		0.53	J		0.06	U		0.02	U		0.23	J		0.03	U	
RPD							***7***			***19***			***NA***			***NA***			***14***			***NA***		
South Basin Area X	SB-10	AAB-144	01-388	SA	lab test tissue dep	M. nasuta	0.53	J		0.71	J		0.08	U		0.07	U		0.82			0.06	U	
South Basin Area X	SB-10	AAB-144	01-388	QADU	lab test tissue dep	M. nasuta	0.63	J		0.82			0.08	U		0.07	U		0.92			0.06	U	
RPD							***17***			***14***			***NA***			***NA***			***11***			***NA***		
South Basin Area X	SB-07	AAB-119	01-390	SA	lab test tissue dep	M. nasuta	0.56	J		0.48	J		0.07	U		0.06	U		0.76			0.06	U	
South Basin Area X	SB-07	AAB-119	01-390	QADU	lab test tissue dep	M. nasuta	0.7			0.58	J		0.07	U		0.06	U		0.06	U		0.06	U	
RPD							***22***			***19***			***NA***			***NA***			***NA***			***NA***		

Table C-30. Quality Control Data for Chlorinated Pesticides in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			Heptachlor		
Area_Name	Station_ID	Samp_ID	Lab_Batch	Samp_Type	Fraction	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Point Avisadero Area III	PA-42	AAB-086	01-389	SA	lab test tissue dep	M. nasuta	0.08	J		0.08	U		0.08	U		0.07	U		0.18	J		0.07	U	
Point Avisadero Area III	PA-42	AAB-086	01-389	QADU	lab test tissue dep	M. nasuta	0.11	J		0.11	J		0.08	U		0.07	U		0.11	J		0.07	U	
RPD							***32***			***NA***			***NA***			***NA***			***48***			***NA***		
Eastern Wetland Area VIII	EW-31	AAB-104	01-387	SA	lab test tissue dep	M. nasuta	0.12	J	J	0.32	J	J	0.04	U	UJ	0.01	U	UJ	0.11	J	J	0.02	U	UJ
Eastern Wetland Area VIII	EW-31	AAB-104	01-387	QADU	lab test tissue dep	M. nasuta	0.15	J		0.35	J		0.04	U		0.01	U		0.15	J		0.02	U	
RPD							***22***			***9***			***NA***			***NA***			***31***			***NA***		
Point Avisadero Area III	PA-45	AAB-126	01-391	SA	lab test tissue dep	M. nasuta	0.07	J		0.1	J		0.09	U		0.08	U		0.12	J		0.08	U	
Point Avisadero Area III	PA-45	AAB-126	01-391	QADU	lab test tissue dep	M. nasuta	0.15	J		0.13	J		0.09	U		0.08	U		0.05	J		0.07	U	
RPD							***73***			***26***			***NA***			***NA***			***82***			***NA***		
Matrix Spikes (percent recoveries)																								
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	01-336	MS	EDIBLE	Jacksmelt	68.87			69.98			57.19			68.64			49.2			71.97		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	01-337	MS	EDIBLE	Jacksmelt	49.7			63.82			46.32			71.43			51.55			59.33		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	MS	EDIBLE	bivalve (clam)	44.97			156.74	N		144.58	N		156.77	N		64.16			54.32		
AAB-113	SB-13	41569-102-F	01-391	MS	lab test tissue dep	M. nasuta	80.54			77.17			95.25			80.17			59.08			76.69		
AAB-088	PA-48	41569-131-F	01-389	MS	lab test tissue dep	M. nasuta	5.14	N		7.19	N		7.6	N		8.4	N		5.56	N		6.98	N	
AAB-116	OR-26	41569-162-F	01-390	MS	lab test tissue dep	M. nasuta	76.14			73.3			61.38			73.81			57.7			69.3		
AAB-091	PA-44	41569-70-F	01-388	MS	lab test tissue dep	M. nasuta	89.33			80.61			81.57			81.26			63.92			80.97		
		41569-MAC-213	01-387	MS	background tissue	M. nasuta	54.62			92.41			66.67			92.66			58.39			40.5		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
D Dilution run. Initial run outside linear range of instrument.

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)																											
	BDO-ZB63PB		01-336	PB			0.06	J		0.02	U		0.02	U		0.01	U		0.02	U		0.19	J		0.08	J	
	BDO-ZB67PB		01-337	PB			0.11	J		0.02	U		0.02	U		0.02	U		0.04	J		0.42	J		0.10	J	
	BDO-ZB71PB		01-338	PB			0.10	J		0.03	U		0.03	U		0.02	U		0.03	U		0.22	J		0.10	J	
	BDO-ZB71PB		01-338	PB			0.10	J		0.03	U		0.03	U		0.02	U		0.03	U		0.22	J		0.10	J	
	BDO-ZD55PB		01-387	PB			0.06	J		0.02	U		0.02	U		0.01	U		0.02	U		0.31	J		0.14	U	
	BDO-ZD59PB		01-388	PB			0.10	J		0.10	J		0.09	J		0.04	J		0.08	J		0.50	J		0.13	J	
	BDO-ZD63PB		01-389	PB			0.1	J		0.03	U		0.02	U		0.02	U		0.03	U		0.36	J		0.17	J	
	BDO-ZD67PB		01-390	PB			0.1	J		0.03	U		0.02	U		0.02	U		0.03	U		0.4	J		0.16	J	
	BDO-ZD71PB		01-391	PB			0.1	J		0.02	U		0.02	U		0.02	U		0.03	U		0.63	J		0.21	J	
Laboratory Control Samples (percent recovery)																											
	BDO-ZB64LCS		01-336	LCS			67.69			66.09			66.84			68.16			65.77			67.62			67.03		
	BDO-ZB68LCS		01-337	LCS			59.37			58.78			59.76			59.48			58.00			57.45			57.63		
	BDO-ZB72LCS		01-338	LCS			72.46			69.34			68.89			69.22			68.93			68.89			70.56		
	BDO-ZB72LCS		01-338	LCS			72.46			69.34			68.89			69.22			68.93			68.89			70.56		
	BDO-ZD56LCS		01-387	LCS			65.41			61.77			50.34			56.76			62.37			64.84			63.95		
	BDO-ZD60LCS		01-388	LCS			78.57			75.58			69.62			75.02			77.80			76.94			77.89		
	BDO-ZD64LCS		01-389	LCS			74.52			71.77			65.95			66.12			72.64			73.5			72.46		
	BDO-ZD68LCS		01-390	LCS			70.17			67.24			62.17			63.88			68.99			70.38			69.83		
	BDO-ZD72LCS		01-391	LCS			71.8			69.52			64.76			65.44			70.91			71.92			70.51		
Standard Reference Material (percent difference)																											
	Nist_1974a-01-336		01-336	SRM			NA			NA			NA			25.65			NA			11.63			0		
	Nist_1974a-01-337		01-337	SRM			NA			NA			NA			9.54			NA			0.94			0		
	Nist_1974a-01-338		01-338	SRM			NA			NA			NA			164.05	N		NA			0			33.50		
	Nist_1974a-01-338		01-338	SRM			NA			NA			NA			164.05	N		NA			0			33.50		
	Nist_1974a-01-387		01-387	SRM			NA			NA			NA			218.14	N		NA			21.07			0		
	Nist_1974a-01-388		01-388	SRM			NA			NA			NA			201.31	N		NA			0			10.10		
	Nist_1974a-01-389		01-389	SRM			NA			NA			NA			159.5	N		NA			6.34			34.29		
	Nist_1974a-01-390		01-390	SRM			NA			NA			NA			107.39	N		NA			0			0		
	Nist_1974a-01-391		01-391	SRM			NA			NA			NA			216.47	N		NA			8.79			21.92		

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
							Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates (relative percent difference)																											
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	Edible	Jacksmelt	0.14	J	U	0.18	J		0.02	U		0.03	J		0.13	J		0.40	J	U	0.33	J	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	Edible	Jacksmelt	0.17	J		0.21	J		0.02	U		0.03	J		0.16	J		0.41	J		0.42	J	
RPD							***24***			***13***			***NA***			***4***			***20***			***1***			***24***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	0.17	J	U	0.10	J		0.02	U		0.03	J	J	0.09	J	U	0.37	J	U	0.13	J	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	0.16	J		0.09	J		0.02	U		0.02	J		0.09	J		0.37	J		0.16	J	
RPD							***5***			***2***			***NA***			***36***			***0***			***2***			***21***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	0.35	J	U	0.92			0.26	J		1.69		J	0.72	J		0.59	J	U	4.59		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	0.37	J		1.05			0.24	J		2.07			0.89			0.52	J		5.41		
RPD							***6***			***14***			***11***			***20***			***21***			***12***			***16***		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	Edible	Jacksmelt	0.14	J	U	0.18	J		0.02	U		0.03	J		0.13	J		0.40	J	U	0.33	J	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	Edible	Jacksmelt	0.17	J		0.21	J		0.02	U		0.03	J		0.16	J		0.41	J		0.42	J	
RPD							***24***			***13***			***NA***			***4***			***20***			***1***			***24***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	0.17	J	U	0.10	J		0.02	U		0.03	J	J	0.09	J	U	0.37	J	U	0.13	J	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	0.16	J		0.09	J		0.02	U		0.02	J		0.09	J		0.37	J		0.16	J	
RPD							***5***			***2***			***NA***			***36***			***0***			***2***			***21***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	0.35	J	U	0.92			0.26	J		1.69		J	0.72	J		0.59	J	U	4.59		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	0.37	J		1.05			0.24	J		2.07			0.89			0.52	J		5.41		
RPD							***6***			***14***			***11***			***20***			***21***			***12***			***16***		
Point Avisadero Area III	41569-187	PA-42	01-389	SA	lab test tissue dep	M. nasuta	0.31	J	U	0.27	J		0.47	J		2.14		J	0.36	J		0.80	J	U	2.67		
Point Avisadero Area III	41569-187	PA-42	01-389	QADU	lab test tissue dep	M. nasuta	0.25	J		0.28	J		0.39	J		1.92			0.33	J		1.04			2.44		
RPD							***21***			***4***			***19***			***11***			***9***			***26***			***9***		
Point Avisadero Area III	41569-85	PA-45	01-391	SA	lab test tissue dep	M. nasuta	0.37	J	U	0.20	J	J	0.41	J	J	2.60		J	0.31	J	J	1.25		U	1.98		UJ
Point Avisadero Area III	41569-85	PA-45	01-391	QADU	lab test tissue dep	M. nasuta	0.37	J		0.32	J		0.71	J		4.3			0.43	J		1.31			3.42		
RPD							***0***			***46***			***54***			***49***			***32***			***5***			***53***		
Eastern Wetland Area VIII	41569-48	EW-31	01-387	SA	lab test tissue dep	M. nasuta	0.19	J	U	0.22	J		0.25	J		0.96		J	0.22	J		0.50	J	U	1.74		
Eastern Wetland Area VIII	41569-48	EW-31	01-387	QADU	lab test tissue dep	M. nasuta	0.19	J		0.21	J		0.23	J		0.93			0.23	J		0.55	J		1.68		
RPD							***2***			***3***			***6***			***4***			***1***			***8***			***4***		
South Basin Area X	41569-173	SB-07	01-390	SA	lab test tissue dep	M. nasuta	0.27	J	UJ	0.20	J		0.31	J		0.80	J	J	0.19	J	J	0.88		UJ	1.94		
South Basin Area X	41569-173	SB-07	01-390	QADU	lab test tissue dep	M. nasuta	0.38	J		0.19	J		0.32	J		0.74	J		0.26	J		1.69			1.73		
RPD							***34***			***5***			***3***			***8***			***31***			***63***			***11***		
South Basin Area X	41569-168	SB-10	01-388	SA	lab test tissue dep	M. nasuta	0.40	J	U	0.46	J	UJ	0.44	J	UJ	2.33		J	0.57	J	J	0.98		U	4.32		J
South Basin Area X	41569-168	SB-10	01-388	QADU	lab test tissue dep	M. nasuta	0.44	J		0.62	J		0.68	J		4.31			0.86	J		1.00			8.07		
RPD							***10***			***30***			***42***			***60***			***40***			***2***			***60***		

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthrene		
Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spikes (percent recoveries)																											
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	01-336	MS	Edible	Jacksmelt	57.08			57.02			58.30			62.83			58.94			55.41			61.14		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	01-337	MS	Edible	Jacksmelt	58.66			58.67			60.91			61.63			59.77			55.76			59.57		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	MS	Wholebody	bivalve (clam)	86.70			86.83			86.46			91.88			88.55			81.16			91.84		
Background tissue	41569-MAC-213	NA	01-387	MS	background tissue	M. nasuta	69.25			70.57			62.54			74.15			73.09			64.43			76.10		
Point Avisadero Area III	41569-70-F	PA-44	01-388	MS	lab test tissue dep	M. nasuta	84.31			80.62			73.46			81.02			84.25			79.08			86.65		
Point Avisadero Area III	41569-131-F	PA-48	01-389	MS	lab test tissue dep	M. nasuta	6.42	N		6.45	N		5.2	N		3.61	N		6.33	N		6.71	N		4.99	N	
Oil Reclamation Area IX	41569-162-F	OR-26	01-390	MS	lab test tissue dep	M. nasuta	81.77			78.74			72.29			76.41			81.73			76.9			83.88		
South Basin Area X	41569-102-F	SB-13	01-391	MS	lab test tissue dep	M. nasuta	85.55			81.4			75.06			80.05			83.49			80.29			84.27		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Benzo(a)anthracene Result	Benzo(a)anthracene Lab Qual	Benzo(a)anthracene Final Qual	Benzo(a)pyrene Result	Benzo(a)pyrene Lab Qual	Benzo(a)pyrene Final Qual	Benzo(b)fluoranthene Result	Benzo(b)fluoranthene Lab Qual	Benzo(b)fluoranthene Final Qual	Benzo(ghi)perylene Result	Benzo(ghi)perylene Lab Qual	Benzo(ghi)perylene Final Qual	Benzo(k)fluoranthene Result	Benzo(k)fluoranthene Lab Qual	Benzo(k)fluoranthene Final Qual	Chrysene Result	Chrysene Lab Qual	Chrysene Final Qual	Dibenz(ah)anthracene Result	Dibenz(ah)anthracene Lab Qual	Dibenz(ah)anthracene Final Qual
Procedural Blanks (ug/kg wet weight)																											
	BDO-ZB63PB		01-336	PB			0.02	U		0.02	U		0.02	U		0.11	J		0.02	U		0.02	U		0.01	U	
	BDO-ZB67PB		01-337	PB			0.02	U		0.02	U		0.02	U		0.24	J		0.02	U		0.04	J		0.02	U	
	BDO-ZB71PB		01-338	PB			0.02	U		0.03	U		0.02	U		0.02	U		0.03	U		0.03	U		0.02	U	
	BDO-ZB71PB		01-338	PB			0.02	U		0.03	U		0.02	U		0.02	U		0.03	U		0.03	U		0.02	U	
	BDO-ZD55PB		01-387	PB			0.01	U		0.02	U		0.01	U		0.14	J		0.02	U		0.04	J		0.01	U	
	BDO-ZD59PB		01-388	PB			0.09	J		0.03	U		0.14	J		0.28	J		0.10	J		0.13	J		0.02	U	
	BDO-ZD63PB		01-389	PB			0.02	U		0.03	U		0.02	U		0.01	U		0.02	U		0.03	J		0.02	U	
	BDO-ZD67PB		01-390	PB			0.04	J		0.03	U		0.02	U		0.01	U		0.02	U		0.1	J		0.02	U	
	BDO-ZD71PB		01-391	PB			0.02	U		0.02	U		0.02	U		0.01	U		0.02	U		0.02	U		0.02	U	
Laboratory Control Samples (percent recovery)																											
	BDO-ZB64LCS		01-336	LCS			74.12			69.85			69.93			69.29			79.30			76.70			67.20		
	BDO-ZB68LCS		01-337	LCS			62.31			57.58			60.50			59.05			62.57			60.75			59.13		
	BDO-ZB72LCS		01-338	LCS			77.84			71.08			76.24			71.67			82.36			81.02			70.17		
	BDO-ZB72LCS		01-338	LCS			77.84			71.08			76.24			71.67			82.36			81.02			70.17		
	BDO-ZD56LCS		01-387	LCS			65.37			59.16			67.78			57.95			71.06			72.78			49.31		
	BDO-ZD60LCS		01-388	LCS			81.20			76.03			85.05			83.60			86.96			82.99			84.86		
	BDO-ZD64LCS		01-389	LCS			69.81			61.12			71.15			53.66			76.98			78.77			56.6		
	BDO-ZD68LCS		01-390	LCS			65.31			59.72			59.15			58.13			77.23			75.65			46.58		
	BDO-ZD72LCS		01-391	LCS			64.03			56.67			55.23			44			73.78			74.2			44.38		
Standard Reference Material (percent difference)																											
	Nist_1974a-01-336		01-336	SRM			NA			8.26			21.59			116.71	N		47.88	N		28.35			NA		
	Nist_1974a-01-337		01-337	SRM			NA			1.31			10.50			27.41			43.29	N		21.58			NA		
	Nist_1974a-01-338		01-338	SRM			NA			55.36	N		0			107.45	N		118.47	N		0			NA		
	Nist_1974a-01-338		01-338	SRM			NA			55.36	N		0			107.45	N		118.47	N		0			NA		
	Nist_1974a-01-387		01-387	SRM			NA			38.14	N		30.28			0			42.87	N		12.07			NA		
	Nist_1974a-01-388		01-388	SRM			NA			25.09			0			50.60	N		86.74	N		0.00			NA		
	Nist_1974a-01-389		01-389	SRM			NA			2.58			31.69			114.81	N		35.81	N		0			NA		
	Nist_1974a-01-390		01-390	SRM			NA			84.55	N		44.83	N		31.44			8.37			3.92			NA		
	Nist_1974a-01-391		01-391	SRM			NA			23.14			50.38	N		57.78	N		0.6			0			NA		

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Benzo(a)anthracene Result	Benzo(a)anthracene Lab Qual	Benzo(a)anthracene Final Qual	Benzo(a)pyrene Result	Benzo(a)pyrene Lab Qual	Benzo(a)pyrene Final Qual	Benzo(b)fluoranthene Result	Benzo(b)fluoranthene Lab Qual	Benzo(b)fluoranthene Final Qual	Benzo(ghi)perylene Result	Benzo(ghi)perylene Lab Qual	Benzo(ghi)perylene Final Qual	Benzo(k)fluoranthene Result	Benzo(k)fluoranthene Lab Qual	Benzo(k)fluoranthene Final Qual	Chrysene Result	Chrysene Lab Qual	Chrysene Final Qual	Dibenz(ah)anthracene Result	Dibenz(ah)anthracene Lab Qual	Dibenz(ah)anthracene Final Qual
Analytical Duplicates (relative percent difference)																											
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	Edible	Jacksmelt	0.03	J		0.02	U		0.01	U		0.16	J	U	0.02	U	UJ	0.08	J		0.01	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	Edible	Jacksmelt	0.04	J		0.02	U		0.01	U		0.13	J		0.02	U		0.08	J		0.01	U	
RPD							***11***			***NA***			***NA***			***19***			***NA***			***3***			***NA***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	0.06	J		0.02	U		0.10	J		0.14	J	UJ	0.08	J	J	0.09	J	U	0.01	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	0.05	J		0.02	U		0.13	J		0.21	J		0.08	J		0.07	J		0.01	U	
RPD							***14***			***NA***			***28***			***39***			***8***			***24***			***NA***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	3.82			1.91		J	2.26			1.52		J	1.88		J	3.77			0.18	J	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	4.53			2.30			2.65			1.76			2.25			4.47			0.23	J	
RPD							***17***			***19***			***16***			***14***			***18***			***17***			***23***		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	Edible	Jacksmelt	0.03	J		0.02	U		0.01	U		0.16	J	U	0.02	U	UJ	0.08	J		0.01	U	
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	Edible	Jacksmelt	0.04	J		0.02	U		0.01	U		0.13	J		0.02	U		0.08	J		0.01	U	
RPD							***11***			***NA***			***NA***			***19***			***NA***			***3***			***NA***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	0.06	J		0.02	U		0.10	J		0.14	J	UJ	0.08	J	J	0.09	J	U	0.01	U	
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	0.05	J		0.02	U		0.13	J		0.21	J		0.08	J		0.07	J		0.01	U	
RPD							***14***			***NA***			***28***			***39***			***8***			***24***			***NA***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	3.82			1.91		J	2.26			1.52		J	1.88		J	3.77			0.18	J	
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	4.53			2.30			2.65			1.76			2.25			4.47			0.23	J	
RPD							***17***			***19***			***16***			***14***			***18***			***17***			***23***		
Point Avisadero Area III	41569-187	PA-42	01-389	SA	lab test tissue dep	M. nasuta	4.02			3.93			3.63			2.11		J	4.61		NJ	5.82			0.18	J	
Point Avisadero Area III	41569-187	PA-42	01-389	QADU	lab test tissue dep	M. nasuta	3.46			3.6			3.33			1.73			4.11			5.26			0.14	J	
RPD							***15***			***9***			***9***			***20***			***11***			***10***			***25***		
Point Avisadero Area III	41569-85	PA-45	01-391	SA	lab test tissue dep	M. nasuta	5.28		J	4.99		J	4.71		J	2.45		J	6.11		NJ	7.12		J	0.18	J	J
Point Avisadero Area III	41569-85	PA-45	01-391	QADU	lab test tissue dep	M. nasuta	8.3			8.77			8.23			4.71			9.78			11.05			0.34	J	
RPD							***44***			***55***			***54***			***63***			***46***			***43***			***62***		
Eastern Wetland Area VIII	41569-48	EW-31	01-387	SA	lab test tissue dep	M. nasuta	2.15			3.28		J	3.59			3.32			3.38		NJ	3.51			0.19	J	
Eastern Wetland Area VIII	41569-48	EW-31	01-387	QADU	lab test tissue dep	M. nasuta	1.95			3.25			3.54			3.19			3.45			3.52			0.19	J	
RPD							***10***			***1***			***1***			***4***			***2***			***0***			***2***		
South Basin Area X	41569-173	SB-07	01-390	SA	lab test tissue dep	M. nasuta	2.57			4.34		J	5.92		J	3.71			6.05		NJ	4.19			0.23	J	J
South Basin Area X	41569-173	SB-07	01-390	QADU	lab test tissue dep	M. nasuta	2.77			4.23			6.72			4.21			6.93			4.06			0.02	U	
RPD							***7***			***3***			***13***			***13***			***14***			***3***			***168***		
South Basin Area X	41569-168	SB-10	01-388	SA	lab test tissue dep	M. nasuta	6.08		J	7.50		J	7.19		J	3.79		J	8.95		NJ	9.19		J	0.25	J	J
South Basin Area X	41569-168	SB-10	01-388	QADU	lab test tissue dep	M. nasuta	9.70			11.77			10.35			6.50			13.17			13.72			0.41	J	
RPD							***46***			***44***			***36***			***53***			***38***			***40***			***48***		

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene		
							Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spikes (percent recoveries)																											
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	01-336	MS	Edible	Jacksmelt	76.36			62.32			60.90			59.68			69.44			65.55			57.12		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	01-337	MS	Edible	Jacksmelt	76.64			59.86			68.83			58.91			61.96			60.83			59.30		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	MS	Wholebody	bivalve (clam)	95.43			92.07			93.56			92.63			98.59			93.80			90.34		
Background tissue	41569-MAC-213	NA	01-387	MS	background tissue	M. nasuta	85.37			73.43			84.18			83.91			83.22			81.45			72.67		
Point Avisadero Area III	41569-70-F	PA-44	01-388	MS	lab test tissue dep	M. nasuta	89.81			86.14			93.09			90.00			92.83			89.23			88.10		
Point Avisadero Area III	41569-131-F	PA-48	01-389	MS	lab test tissue dep	M. nasuta	1.82	N		2.21	N		2.42	N		2.78	N		2.1	N		3.19	N		2.17	N	
Oil Reclamation Area IX	41569-162-F	OR-26	01-390	MS	lab test tissue dep	M. nasuta	84.58			74.86			74.67			73.31			94.26			88.72			58.63		
South Basin Area X	41569-102-F	SB-13	01-391	MS	lab test tissue dep	M. nasuta	86.3			74.18			75.39			57.64			92.84			90.91			55.55		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (ug/kg wet weight)															
	BDO-ZB63PB		01-336	PB			0.10	J		0.01	U		0.20	J	
	BDO-ZB67PB		01-337	PB			0.07	J		0.01	U		0.21	J	
	BDO-ZB71PB		01-338	PB			0.27	U		0.01	U		0.17	J	
	BDO-ZB71PB		01-338	PB			0.27	U		0.01	U		0.17	J	
	BDO-ZD55PB		01-387	PB			0.18	U		0.01	U		0.06	J	
	BDO-ZD59PB		01-388	PB			0.14	J		0.13	J		0.29	J	
	BDO-ZD63PB		01-389	PB			0.06	J		0.01	U		0.15	J	
	BDO-ZD67PB		01-390	PB			0.12	J		0.01	U		0.2	J	
	BDO-ZD71PB		01-391	PB			0.2	U		0.01	U		0.1	J	
Laboratory Control Samples (percent recovery)															
	BDO-ZB64LCS		01-336	LCS			72.68			72.75			72.72		
	BDO-ZB68LCS		01-337	LCS			62.30			64.46			62.26		
	BDO-ZB72LCS		01-338	LCS			78.88			69.82			78.21		
	BDO-ZB72LCS		01-338	LCS			78.88			69.82			78.21		
	BDO-ZD56LCS		01-387	LCS			69.61			49.28			69.35		
	BDO-ZD60LCS		01-388	LCS			81.74			84.68			81.44		
	BDO-ZD64LCS		01-389	LCS			76.77			52.19			75.79		
	BDO-ZD68LCS		01-390	LCS			73.24			41.34			72.87		
	BDO-ZD72LCS		01-391	LCS			73.76			35.33	N		73.41		
Standard Reference Material (percent difference)															
	Nist_1974a-01-336		01-336	SRM			10.92			20.62			4.46		
	Nist_1974a-01-337		01-337	SRM			0.00			7.47			0.00		
	Nist_1974a-01-338		01-338	SRM			36.74	N		26.02			37.86	N	
	Nist_1974a-01-338		01-338	SRM			36.74	N		26.02			37.86	N	
	Nist_1974a-01-387		01-387	SRM			0.00			20.80			0.55		
	Nist_1974a-01-388		01-388	SRM			30.71			0.00			30.27		
	Nist_1974a-01-389		01-389	SRM			12.95			33.04			25.9		
	Nist_1974a-01-390		01-390	SRM			0.79			70.53	N		0		
	Nist_1974a-01-391		01-391	SRM			5.15			54.02	N		18.29		

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates (relative percent difference)															
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	Edible	Jacksmelt	0.23	J	U	0.01	U		0.19	J	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	Edible	Jacksmelt	0.28	J		0.01	U		0.24	J	
RPD							***18***			***NA***			***21***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	0.13	J	U	0.10	J		0.18	J	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	0.11	J		0.11	J		0.17	J	
RPD							***13***			***13***			***6***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	13.66		J	1.15			10.45		J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	16.26			1.40			12.48		
RPD							***17***			***20***			***18***		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	SA	Edible	Jacksmelt	0.23	J	U	0.01	U		0.19	J	U
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	01-336	QADU	Edible	Jacksmelt	0.28	J		0.01	U		0.24	J	
RPD							***18***			***NA***			***21***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	SA	Edible	Jacksmelt	0.13	J	U	0.10	J		0.18	J	U
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	01-337	QADU	Edible	Jacksmelt	0.11	J		0.11	J		0.17	J	
RPD							***13***			***13***			***6***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	SA	Wholebody	bivalve (clam)	13.66		J	1.15			10.45		J
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	QADU	Wholebody	bivalve (clam)	16.26			1.40			12.48		
RPD							***17***			***20***			***18***		
Point Avisadero Area III	41569-187	PA-42	01-389	SA	lab test tissue dep	M. nasuta	14.34			1.06			18.82		
Point Avisadero Area III	41569-187	PA-42	01-389	QADU	lab test tissue dep	M. nasuta	13.09			1.08			17.48		
RPD							***9***			***2***			***7***		
Point Avisadero Area III	41569-85	PA-45	01-391	SA	lab test tissue dep	M. nasuta	16.22		J	1.32		J	19.77		UJ
Point Avisadero Area III	41569-85	PA-45	01-391	QADU	lab test tissue dep	M. nasuta	24.2			3.44			30.33		
RPD							***39***			***89***			***42***		
Eastern Wetland Area VIII	41569-48	EW-31	01-387	SA	lab test tissue dep	M. nasuta	7.28			1.57			8.84		
Eastern Wetland Area VIII	41569-48	EW-31	01-387	QADU	lab test tissue dep	M. nasuta	7.78			1.50			9.05		
RPD							***7***			***5***			***2***		
South Basin Area X	41569-173	SB-07	01-390	SA	lab test tissue dep	M. nasuta	8.42			2.34		J	11.16		
South Basin Area X	41569-173	SB-07	01-390	QADU	lab test tissue dep	M. nasuta	8.33			2.56			11.39		
RPD							***1***			***9***			***2***		
South Basin Area X	41569-168	SB-10	01-388	SA	lab test tissue dep	M. nasuta	30.30		J	2.13		J	30.71		J
South Basin Area X	41569-168	SB-10	01-388	QADU	lab test tissue dep	M. nasuta	41.17			4.81			42.64		
RPD							***30***			***77***			***33***		

Table C-31. Quality Control Data for Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Matrix Spikes (percent recoveries)															
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	01-336	MS	Edible	Jacksmelt	66.14			61.10			66.14		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	01-337	MS	Edible	Jacksmelt	63.76			64.08			63.17		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	01-338	MS	Wholebody	bivalve (clam)	94.23			90.21			95.32		
Background tissue	41569-MAC-213	NA	01-387	MS	background tissue	M. nasuta	83.63			76.78			83.76		
Point Avisadero Area III	41569-70-F	PA-44	01-388	MS	lab test tissue dep	M. nasuta	93.91			89.23			93.02		
Point Avisadero Area III	41569-131-F	PA-48	01-389	MS	lab test tissue dep	M. nasuta	0	N		1.8	N		0	N	
Oil Reclamation Area IX	41569-162-F	OR-26	01-390	MS	lab test tissue dep	M. nasuta	89.29			53.17			89.21		
South Basin Area X	41569-102-F	SB-13	01-391	MS	lab test tissue dep	M. nasuta	90.71			49.89			89.18		

U The value was less than the IDL or the analyte was not detected.
N Value is not within control limits.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table C-32. Surrogate Recoveries of Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)								
							Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	Wholebody	01-338	gobies,sculpin	59.18			53.69			52.75		
Point Avisadero Area III	Area III FF	AAB-401	SA	Wholebody	01-338	gobies,sculpin	64.60			59.90			59.78		
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	Wholebody	01-338	gobies,sculpin	65.23			61.33			60.90		
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	Wholebody	01-338	gobies,sculpin	64.78			59.31			58.49		
South Basin Area X	Area X FF	AAB-465	SA	Wholebody	01-338	gobies,sculpin	65.47			62.84			61.42		
India Basin Area I	Area I HBI	AAB-369	SA	Wholebody	01-338	bivalve (clam)	70.50			66.77			64.83		
India Basin Area I	Area I SBI	AAB-398	SA	Wholebody	01-338	polychaete	71.56			65.11			65.10		
Point Avisadero Area III	Area III SBI	AAB-460	SA	Wholebody	01-338	polychaete	73.41			66.46			57.16		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	Wholebody	01-338	bivalve (clam)	64.34			60.53			57.91		
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	SA	Wholebody	01-338	polychaete	54.00			48.08			48.26		
Oil Reclamation Area IX	Area IX HBI	AAB-404	SA	Wholebody	01-338	bivalve (clam)	70.13			67.06			62.55		
Oil Reclamation Area IX	Area IX SBI	AAB-456	SA	Wholebody	01-338	polychaete	69.11			62.16			54.08		
South Basin Area X	Area X HBI	AAB-399	SA	Wholebody	01-338	bivalve (clam)	74.49			66.99			66.80		
South Basin Area X	Area X SBI	AAB-453	SA	Wholebody	01-338	polychaete	67.19			62.58			52.03		
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	SA	Edible	01-336	Jacksmelt	62.54			55.52			55.63		
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	SA	Edible	01-336	Jacksmelt	48.88			43.74			43.49		
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	SA	Edible	01-336	Perch spp	65.23			57.94			58.60		
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	SA	Edible	01-336	Perch spp	61.88			53.77			55.28		
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	SA	Edible	01-336	Jacksmelt	57.89			50.07			50.72		
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	SA	Edible	01-336	Jacksmelt	66.16			58.33			58.35		
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	SA	Edible	01-336	Perch spp	61.21			51.80			53.97		
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	SA	Edible	01-336	Perch spp	49.25			44.81			44.85		
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	SA	Edible	01-336	Jacksmelt	63.60			56.59			57.31		
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	SA	Edible	01-336	Jacksmelt	66.19			58.21			59.46		
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	SA	Edible	01-336	Perch spp	63.33			58.21			58.75		
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	SA	Edible	01-336	Perch spp	55.84			49.86			50.85		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	SA	Edible	01-336	Jacksmelt	65.26			56.01			58.59		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	Edible	01-336	Jacksmelt	56.48			48.22			49.76		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	SA	Edible	01-336	Perch spp	59.33			49.28			48.83		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA40	SA	Edible	01-337	Perch spp	67.64			60.49			61.60		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	SA	Edible	01-337	Jacksmelt	62.90			51.43			52.35		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	Edible	01-337	Jacksmelt	56.94			51.29			51.62		
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	SA	Edible	01-337	Perch spp	55.36			48.75			51.71		
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	SA	Edible	01-337	Perch spp	58.47			52.63			55.17		
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	SA	Edible	01-337	Jacksmelt	69.73			55.75			58.04		
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	SA	Edible	01-337	Jacksmelt	59.36			51.82			53.11		
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	SA	Edible	01-337	Perch spp	67.69			55.80			55.78		
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	SA	Edible	01-337	Perch spp	63.81			51.82			52.13		
Various	MULTILOCATION_BLACK_COMP_1	ZC48	SA	Edible	01-337	Black surfperch	69.98			54.79			56.34		
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	SA	Edible	01-337	Walleye surfperch	64.84			57.03			60.22		

Table C-32. Surrogate Recoveries of Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)								
							Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Alameda Buoy	41569-167	AB-67	SA	lab test tissue dep	01-391	M. nasuta	92.84			80.13			82.15		
Alameda Buoy	41569-211	AB-67	SA	lab test tissue dep	01-391	M. nasuta	87.79			75.22			76.97		
Alameda Buoy	41569-28	AB-67	SA	lab test tissue dep	01-391	M. nasuta	85.58			74.51			75.68		
Alameda Buoy	41569-35	AB-67	SA	lab test tissue dep	01-391	M. nasuta	94.13			81.55			83.82		
Alameda Buoy	41569-53	AB-67	SA	lab test tissue dep	01-391	M. nasuta	87.71			75.54			77.87		
Alcatraz Environs	41569-204	AL-64	SA	lab test tissue dep	01-390	M. nasuta	74.55			70.65			67.31		
Alcatraz Environs	41569-205	AL-64	SA	lab test tissue dep	01-390	M. nasuta	77.56			71.12			68.81		
Alcatraz Environs	41569-51	AL-64	SA	lab test tissue dep	01-389	M. nasuta	73.40			76.44			70.71		
Alcatraz Environs	41569-59	AL-64	SA	lab test tissue dep	01-389	M. nasuta	57.07			56.75			54.91		
Alcatraz Environs	41569-66	AL-64	SA	lab test tissue dep	01-390	M. nasuta	72.93			68.47			68.89		
Bay Farm	41569-120	BF-66	SA	lab test tissue dep	01-388	M. nasuta	74.83			70.09			69.73		
Bay Farm	41569-127	BF-66	SA	lab test tissue dep	01-388	M. nasuta	71.27			65.29			67.73		
Bay Farm	41569-191	BF-66	SA	lab test tissue dep	01-388	M. nasuta	71.41			69.97			67.67		
Bay Farm	41569-210	BF-66	SA	lab test tissue dep	01-388	M. nasuta	78.58			72.31			73.35		
Bay Farm	41569-44	BF-66	SA	lab test tissue dep	01-388	M. nasuta	75.77			72.68			70.23		
Eastern Wetland Area VIII	41569-125	EW-30	SA	lab test tissue dep	01-390	M. nasuta	83.46			72.62			73.00		
Eastern Wetland Area VIII	41569-48	EW-31	SA	lab test tissue dep	01-387	M. nasuta	70.68			59.51			65.49		
Eastern Wetland Area VIII	41569-65	EW-32	SA	lab test tissue dep	01-387	M. nasuta	79.27			63.58			71.51		
Eastern Wetland Area VIII	41569-152	EW-33	SA	lab test tissue dep	01-390	M. nasuta	83.98			80.35			77.66		
Eastern Wetland Area VIII	41569-23	EW-34	SA	lab test tissue dep	01-387	M. nasuta	75.57			64.76			69.98		
Eastern Wetland Area VIII	41569-135	EW-35	SA	lab test tissue dep	01-388	M. nasuta	75.17			72.88			70.85		
Eastern Wetland Area VIII	41569-61	EW-36	SA	lab test tissue dep	01-390	M. nasuta	88.38			76.86			77.20		
Eastern Wetland Area VIII	41569-89	EW-36	SA	lab test tissue nondep	01-387	M. nasuta	79.94			66.75			72.54		
Eastern Wetland Area VIII	41569-92	EW-37	SA	lab test tissue dep	01-388	M. nasuta	16.17	N		18.47	N		15.95	N	
India Basin Area I	41569-106	IB-54	SA	lab test tissue dep	01-388	M. nasuta	78.32			74.19			73.40		
India Basin Area I	41569-10	IB-55	SA	lab test tissue dep	01-387	M. nasuta	76.58			65.14			70.69		
India Basin Area I	41569-164	IB-56	SA	lab test tissue dep	01-388	M. nasuta	78.03			73.82			73.39		
India Basin Area I	41569-198	IB-56	SA	lab test tissue nondep	01-387	M. nasuta	44.41			37.74	N		40.18		
India Basin Area I	41569-189	IB-57	SA	lab test tissue dep	01-390	M. nasuta	87.31			73.59			76.03		
India Basin Area I	41569-63	IB-58	SA	lab test tissue dep	01-387	M. nasuta	75.60			61.22			69.13		
India Basin Area I	41569-175	IB-59	SA	lab test tissue dep	01-389	M. nasuta	81.80			71.77			74.87		
Oil Reclamation Area IX	41569-202	OR-24	SA	lab test tissue dep	01-390	M. nasuta	69.78			69.71			65.04		
Oil Reclamation Area IX	41569-142	OR-25	SA	lab test tissue dep	01-388	M. nasuta	80.51			76.37			74.93		
Oil Reclamation Area IX	41569-162	OR-26	SA	lab test tissue dep	01-390	M. nasuta	85.57			67.19			75.35		
Oil Reclamation Area IX	41569-30	OR-26	SA	lab test tissue nondep	01-387	M. nasuta	80.16			68.45			74.19		
Oil Reclamation Area IX	41569-151	OR-27	SA	lab test tissue dep	01-390	M. nasuta	76.38			72.83			70.70		
Oil Reclamation Area IX	41569-33	OR-28	SA	lab test tissue dep	01-389	M. nasuta	75.53			66.02			68.90		
Oil Reclamation Area IX	41569-150	OR-29	SA	lab test tissue dep	01-388	M. nasuta	78.03			72.01			71.26		
Point Avisadero Area III	41569-60	PA-38	SA	lab test tissue dep	01-390	M. nasuta	75.14			68.95			67.82		
Point Avisadero Area III	41569-75	PA-39	SA	lab test tissue dep	01-389	M. nasuta	75.15			67.09			69.22		
Point Avisadero Area III	41569-110	PA-40	SA	lab test tissue dep	01-391	M. nasuta	91.61			78.21			80.31		
Point Avisadero Area III	41569-158	PA-41	SA	lab test tissue dep	01-389	M. nasuta	77.72			71.72			73.13		
Point Avisadero Area III	41569-187	PA-42	SA	lab test tissue dep	01-389	M. nasuta	77.74			68.99			71.13		
Point Avisadero Area III	41569-161	PA-43	SA	lab test tissue dep	01-389	M. nasuta	79.21			74.53			74.65		
Point Avisadero Area III	41569-70	PA-44	SA	lab test tissue dep	01-388	M. nasuta	76.06			72.50			71.06		
Point Avisadero Area III	41569-85	PA-45	SA	lab test tissue dep	01-391	M. nasuta	85.44			73.43			76.66		
Point Avisadero Area III	41569-163	PA-46	SA	lab test tissue dep	01-387	M. nasuta	75.88			67.20			70.44		
Point Avisadero Area III	41569-46	PA-46	SA	lab test tissue nondep	01-387	M. nasuta	80.47			69.42			74.14		
Point Avisadero Area III	41569-132	PA-47	SA	lab test tissue dep	01-389	M. nasuta	82.17			75.18			74.71		
Point Avisadero Area III	41569-131	PA-48	SA	lab test tissue dep	01-389	M. nasuta	79.00			74.90			75.65		
Point Avisadero Area III	41569-182	PA-49	SA	lab test tissue dep	01-390	M. nasuta	84.07			73.76			74.59		

Table C-32. Surrogate Recoveries of Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)								
							Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Point Avisadero Area III	41569-143	PA-50	SA	lab test tissue dep	01-387	M. nasuta	78.71			64.10			69.97		
Point Avisadero Area III	41569-99	PA-51	SA	lab test tissue dep	01-391	M. nasuta	93.79			82.51			83.06		
Point Avisadero Area III	41569-107	PA-52	SA	lab test tissue dep	01-389	M. nasuta	81.18			75.80			75.99		
Point Avisadero Area III	41569-192	PA-53	SA	lab test tissue dep	01-389	M. nasuta	80.57			79.15			75.26		
Paradise Cove	41569-111	PC-63	SA	lab test tissue dep	01-390	M. nasuta	90.02			76.60			76.87		
Paradise Cove	41569-179	PC-63	SA	lab test tissue dep	01-390	M. nasuta	83.31			75.04			72.90		
Paradise Cove	41569-38	PC-63	SA	lab test tissue dep	01-387	M. nasuta	80.85			67.58			74.05		
Paradise Cove	41569-52	PC-63	SA	lab test tissue dep	01-387	M. nasuta	81.10			71.08			76.08		
Paradise Cove	41569-76	PC-63	SA	lab test tissue dep	01-390	M. nasuta	76.17			72.14			70.40		
Red Rock	41569-153	RR-65	SA	lab test tissue dep	01-391	M. nasuta	86.52			73.42			76.61		
Red Rock	41569-165	RR-65	SA	lab test tissue dep	01-391	M. nasuta	98.36			83.20			85.30		
Red Rock	41569-185	RR-65	SA	lab test tissue dep	01-391	M. nasuta	95.84			80.43			84.28		
Red Rock	41569-78	RR-65	SA	lab test tissue dep	01-390	M. nasuta	88.73			71.19			76.25		
Red Rock	41569-82	RR-65	SA	lab test tissue dep	01-391	M. nasuta	85.42			72.82			75.41		
South Basin Area X	41569-39	SB-01	SA	lab test tissue dep	01-389	M. nasuta	82.08			76.15			75.70		
South Basin Area X	41569-115	SB-02	SA	lab test tissue dep	01-388	M. nasuta	78.56			71.36			71.79		
South Basin Area X	41569-98	SB-03	SA	lab test tissue dep	01-389	M. nasuta	82.58			75.36			75.11		
South Basin Area X	41569-101	SB-04	SA	lab test tissue dep	01-388	M. nasuta	65.24			61.68			60.35		
South Basin Area X	41569-114	SB-05	SA	lab test tissue dep	01-388	M. nasuta	76.64			73.99			72.11		
South Basin Area X	41569-26	SB-06	SA	lab test tissue dep	01-391	M. nasuta	90.03			77.99			79.12		
South Basin Area X	41569-173	SB-07	SA	lab test tissue dep	01-390	M. nasuta	77.64			67.77			68.97		
South Basin Area X	41569-155	SB-08	SA	lab test tissue dep	01-388	M. nasuta	81.22			76.26			75.14		
South Basin Area X	41569-95	SB-09	SA	lab test tissue dep	01-391	M. nasuta	88.33			72.77			77.87		
South Basin Area X	41569-168	SB-10	SA	lab test tissue dep	01-388	M. nasuta	68.16			64.46			63.46		
South Basin Area X	41569-5	SB-11	SA	lab test tissue dep	01-390	M. nasuta	83.86			74.66			74.66		
South Basin Area X	41569-157	SB-12	SA	lab test tissue dep	01-388	M. nasuta	80.16			70.19			72.58		
South Basin Area X	41569-102	SB-13	SA	lab test tissue dep	01-391	M. nasuta	92.77			82.42			81.72		
South Basin Area X	41569-77	SB-14	SA	lab test tissue dep	01-387	M. nasuta	82.42			65.99			74.50		
South Basin Area X	41569-200	SB-15	SA	lab test tissue dep	01-389	M. nasuta	81.18			75.27			74.62		
South Basin Area X	41569-116	SB-16	SA	lab test tissue dep	01-391	M. nasuta	93.95			80.87			82.38		
South Basin Area X	41569-41	SB-17	SA	lab test tissue dep	01-390	M. nasuta	97.13			78.55			80.56		
South Basin Area X	41569-141	SB-18	SA	lab test tissue dep	01-388	M. nasuta	75.78			68.76			68.23		
South Basin Area X	41569-203	SB-19	SA	lab test tissue dep	01-389	M. nasuta	61.33			64.64			61.44		
South Basin Area X	41569-147	SB-20	SA	lab test tissue dep	01-387	M. nasuta	76.87			63.37			69.61		
South Basin Area X	41569-11	SB-21	SA	lab test tissue dep	01-389	M. nasuta	76.19			70.40			71.72		
South Basin Area X	41569-171	SB-21	SA	lab test tissue nondep	01-387	M. nasuta	85.25			67.31			76.13		
South Basin Area X	41569-90	SB-22	SA	lab test tissue dep	01-389	M. nasuta	76.19			69.59			69.44		
South Basin Area X	41569-100	SB-23	SA	lab test tissue dep	01-389	M. nasuta	77.22			68.00			71.73		
Background Tissue	41569-MAC-213		SA	background tissue	01-387	M. nasuta	82.94			71.89			75.78		
Background Tissue	41569-MAC-214		SA	background tissue	01-387	M. nasuta	84.12			73.79			77.21		
Background Tissue	41569-MAC-215		SA	background tissue	01-387	M. nasuta	77.07			70.04			72.12		

Table C-32. Surrogate Recoveries of Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)								
							Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks															
	BDO-ZB63PB		PB		01-336		67.21			63.48			57.01		
	BDO-ZB67PB		PB		01-337		66.21			60.71			54.82		
	BDO-ZB71PB		PB		01-338		70.66			64.83			56.75		
	BDO-ZB71PB		PB		01-338		70.66			64.83			56.75		
	BDO-ZD55PB		PB		01-387		60.04			60.41			51.31		
	BDO-ZD59PB		PB		01-388		76.51			70.97			68.03		
	BDO-ZD63PB		PB		01-389		60.7			66.43			56.35		
	BDO-ZD67PB		PB		01-390		68.6			72.37			65.51		
	BDO-ZD71PB		PB		01-391		69.64			86.41			72.39		
Laboratory Control Samples															
	BDO-ZB64LCS		LCS		01-336		81.75			70.46			64.98		
	BDO-ZB68LCS		LCS		01-337		66.53			61.77			57.01		
	BDO-ZB72LCS		LCS		01-338		67.03			61.15			54.07		
	BDO-ZB72LCS		LCS		01-338		67.03			61.15			54.07		
	BDO-ZD56LCS		LCS		01-387		74.86			69.05			59.91		
	BDO-ZD60LCS		LCS		01-388		82.57			81.60			72.92		
	BDO-ZD64LCS		LCS		01-389		82.82			80.43			70.12		
	BDO-ZD68LCS		LCS		01-390		81.08			79.72			69.12		
	BDO-ZD72LCS		LCS		01-391		78.14			80.12			69.45		
Standard Reference Material															
	Nist_1974a-01-336		SRM		01-336		77.69			67.64			67.48		
	Nist_1974a-01-337		SRM		01-337		72.27			61.98			63.70		
	Nist_1974a-01-338		SRM		01-338		69.68			61.45			61.73		
	Nist_1974a-01-338		SRM		01-338		69.68			61.45			61.73		
	Nist_1974a-01-387		SRM		01-387		77.64			68.00			71.87		
	Nist_1974a-01-388		SRM		01-388		74.70			69.88			70.51		
	Nist_1974a-01-389		SRM		01-389		79.04			72.98			75.9		
	Nist_1974a-01-390		SRM		01-390		77.11			77.63			74.67		
	Nist_1974a-01-391		SRM		01-391		82.19			86.03			79.93		

Table C-32. Surrogate Recoveries of Polycyclic Aromatic Hydrocarbons in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recoveries (percent)								
							Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Analytical Duplicates (relative percent difference)															
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	EDIBLE	01-336	Jacksmelt	56.48			48.22			49.76		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	QADU	Edible	01-336	Jacksmelt	71.07			62.14			63.69		
RPD							***23***			***25***			***25***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	Edible	01-337	Jacksmelt	56.94			51.29			51.62		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	QADU	Edible	01-337	Jacksmelt	61.33			53.54			56.18		
RPD							***7***			***4***			***8***		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	Wholebody	01-338	bivalve (clam)	64.34			60.53			57.91		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	QADU	Wholebody	01-338	bivalve (clam)	77.00			70.15			68.24		
RPD							***18***			***15***			***16***		
Point Avisadero Area III	41569-187	PA-42	SA	lab test tissue dep	01-389	M. nasuta	77.74			68.99			71.13		
Point Avisadero Area III	41569-187	PA-42	QADU	lab test tissue dep	01-389	M. nasuta	72.89			64.32			67.02		
RPD							***6***			***7***			***6***		
Point Avisadero Area III	41569-85	PA-45	SA	lab test tissue dep	01-391	M. nasuta	85.44			73.43			76.66		
Point Avisadero Area III	41569-85	PA-45	QADU	lab test tissue dep	01-391	M. nasuta	89.24			78.38			78.47		
RPD							***4***			***7***			***2***		
Eastern Wetland Area VIII	41569-48	EW-31	SA	lab test tissue dep	01-387	M. nasuta	70.68			59.51			65.49		
Eastern Wetland Area VIII	41569-48	EW-31	QADU	lab test tissue dep	01-387	M. nasuta	75.36			66.30			70.27		
RPD							***6***			***11***			***7***		
South Basin Area X	41569-173	SB-07	SA	lab test tissue dep	01-390	M. nasuta	77.64			67.77			68.97		
South Basin Area X	41569-173	SB-07	QADU	lab test tissue dep	01-390	M. nasuta	83.45			73.14			73.57		
RPD							***7***			***8***			***6***		
South Basin Area X	41569-168	SB-10	SA	lab test tissue dep	01-388	M. nasuta	68.16			64.46			63.46		
South Basin Area X	41569-168	SB-10	QADU	lab test tissue dep	01-388	M. nasuta	83.40			76.62			75.67		
RPD							***20***			***17***			***18***		
Matrix Spikes															
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	MS	Edible	01-336	Jacksmelt	68.33			57.61			58.28		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	Edible	01-337	Jacksmelt	63.75			56.59			57.39		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	MS	Wholebody	01-338	bivalve (clam)	76.37			70.46			70.28		
Background tissue	41569-MAC-213	NA	MS	background tissue	01-387	M. nasuta	80.55			67.15			71.52		
Point Avisadero Area III	41569-70-F	PA-44	MS	lab test tissue dep	01-388	M. nasuta	85.54			82.49			78.61	N	
Point Avisadero Area III	41569-131-F	PA-48	MS	lab test tissue dep	01-389	M. nasuta	5.62	N		7.82	N		5.74		
Oil Reclamation Area IX	41569-162-F	OR-26	MS	lab test tissue dep	01-390	M. nasuta	90.31			83.4			80.26		
South Basin Area X	41569-102-F	SB-13	MS	lab test tissue dep	01-391	M. nasuta	90.26			86.86			81.8		

N Value is not within control limits.

Table C-33. Quality Control Data for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Monobutyltin Result	Monobutyltin Lab Qual	Monobutyltin Final Qual	Dibutyltin Result	Dibutyltin Lab Qual	Dibutyltin Final Qual	Tributyltin Result	Tributyltin Lab Qual	Tributyltin Final Qual	Tetrabutyltin Result	Tetrabutyltin Lab Qual	Tetrabutyltin Final Qual
Procedural Blanks (ug/kg wet weight)																		
		BDO-ZC50PB	01-348	PB			2.70	U		8.53	U		6.75	U		6.14	U	
		BDO-ZB55PB	01-334	PB			2.96	U		9.39	U		7.43	U		6.76	U	
		BDO-ZB59PB	01-335	PB			3.49	U		11.04	U		8.74	U		7.95	U	
		BDO-ZC50PB	01-348	PB			2.70	U		8.53	U		6.75	U		6.14	U	
		BDO-ZC67PB	01-353	PB			5.93	U		18.77	U		14.86	U		13.51	U	
		BDO-ZC71PB	01-354	PB			5.39	U		17.07	U		13.51	U		12.28	U	
		BDO-ZC75PB	01-355	PB			4.94	U		15.65	U		12.38	U		11.26	U	
		BDO-ZC79PB	01-356	PB			5.93	U		18.77	U		14.86	U		13.51	U	
		BDO-ZD51PB	01-386	PB			5.93	U		18.77	U		14.86	U		13.51	U	
Laboratory Control Samples (percent recovery)																		
		BDO-ZC51LCS	01-348	LCS			60.68	D		162.60	DN		152.21	DN		35.65	D	
		BDO-ZB56LCS	01-334	LCS			19.00			93.00			93.00			62.00		
		BDO-ZB60LCS	01-335	LCS			31.00			95.00			103.00			58.00		
		BDO-ZC51LCS	01-348	LCS			60.68	D		162.60	DN		152.21	DN		35.65	D	
		BDO-ZC68LCS	01-353	LCS			17.70			91.10			109.85			73.31		
		BDO-ZC72LCS	01-354	LCS			30.44			96.31			97.50			78.31		
		BDO-ZC76LCS	01-355	LCS			35.60			87.81			74.13			48.61		
		BDO-ZC80LCS	01-356	LCS			20.31			91.24			75.72			51.11		
		BDO-ZD52LCS	01-386	LCS			27.07			86.87			82.92			66.55		

Table C-33. Quality Control Data for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Samp_ID	Lab_ Batch	Samp_ Type	Fraction	Species_ Code	Monobutyltin Result	Monobutyltin Lab Qual	Monobutyltin Final Qual	Dibutyltin Result	Dibutyltin Lab Qual	Dibutyltin Final Qual	Tributyltin Result	Tributyltin Lab Qual	Tributyltin Final Qual	Tetrabutyltin Result	Tetrabutyltin Lab Qual	Tetrabutyltin Final Qual
Matrix Spike/Matrix Spike Duplicates (relative percent difference)																		
Point Avisadero Area III	PA-45	41569-85	01-353	MS	lab test tissue dep	M. nasuta	25.51			86.50			111.46			72.55		
Point Avisadero Area III	PA-45	41569-85	01-353	MSD	lab test tissue dep	M. nasuta	25.73			84.45			124.45	DN		78.48		
RPD							***1***			***2***			***11***			***8***		
Point Avisadero Area III	PA-51	41569-99	01-354	MS	lab test tissue dep	M. nasuta	31.36			86.43			88.31			77		
Point Avisadero Area III	PA-51	41569-99	01-354	MSD	lab test tissue dep	M. nasuta	32.22			84.03			83.87			70.37		
RPD							***3***			***3***			***5***			***9***		
South Basin Area X	SB-08	41569-155	01-356	MS	lab test tissue dep	M. nasuta	35.12			88.69			82.84			70.48		
South Basin Area X	SB-08	41569-155	01-356	MSD	lab test tissue dep	M. nasuta	27.96			84.60			80.34			60.58		
RPD							***23***			***5***			***3***			***15***		
Bay Farm	BF-66	41569-127	01-355	MS	lab test tissue dep	M. nasuta	0			68.23			67.73			57.85		
Bay Farm	BF-66	41569-127	01-355	MSD	lab test tissue dep	M. nasuta	0			79.37			72.73			52.77		
RPD							***NA***			***15***			***7***			***9***		
Background tissue	NA	41569-MAC-214	01-386	MS	background tissue	M. nasuta	30.51			82.63			79.25			67.41		
Background tissue	NA	41569-MAC-214	01-386	MSD	background tissue	M. nasuta	26.35			81.50			78.42			71.94		
RPD							***15***			***1***			***1***			***6***		
Oil Reclamation Area IX	Area IX HBI	AAB-404	01-348	MS	Wholebody	bivalve (clam)	38.84			80.05			68.20			52.55		
Oil Reclamation Area IX	Area IX HBI	AAB-404	01-348	MSD	Wholebody	bivalve (clam)	41.61			77.73			68.32			50.67		
RPD							***7***			***3***			***0***			***4***		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_	ZA37	01-334	MS	Edible	Jacksmelt	27			84			88			74		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_	ZA37	01-334	MSD	Edible	Jacksmelt	20			82			88			77		
RPD							***30***			***2***			***0***			***4***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_	ZA41	01-335	MS	Edible	Jacksmelt	26			85			89			71		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_	ZA41	01-335	MSD	Edible	Jacksmelt	24			85			87			71		
RPD							***8***			***0***			***2***			***0***		

U The value was less than the IDL or the analyte was not detected.
D Dilution run. Initial run outside linear range of instrument.
N Value is not within control limits.

Table C-34. Surrogate Recoveries for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recovery (percent)		
							TPET (SIS)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual
India Basin Area I	Area I FF	AAB-400	SA	Wholebody	01-338	gobies,sculpin	62.46		
Point Avisadero Area III	Area III FF	AAB-401	SA	Wholebody	01-338	gobies,sculpin	55.97		
Eastern Wetland Area VIII	Area VIII FF	AAB-402	SA	Wholebody	01-338	gobies,sculpin	43.65		
Oil Reclamation Area IX	Area IX FF	AAB-403	SA	Wholebody	01-338	gobies,sculpin	68.08		
South Basin Area X	Area X FF	AAB-465	SA	Wholebody	01-338	gobies,sculpin	127.28	N	
Various	MULTILOCATION_BLACK_COMP_1	ZC48	SA	Edible	01-337	Black surfperch	84.95		
Various	MULTILOCATION_WALLEYE_COMP_1	ZC49	SA	Edible	01-337	Walleye surfperch	93.69		
Bay Farm	BF_REF_JACKSMELT_COMP_1	ZA45	SA	Edible	01-337	Jacksmelt	77.57		
Bay Farm	BF_REF_JACKSMELT_COMP_2	ZA46	SA	Edible	01-337	Jacksmelt	73.87		
Bay Farm	BF_REF_PERCH_COMP_1	ZA47	SA	Edible	01-337	PERCH SPP	81.69		
Bay Farm	BF_REF_PERCH_COMP_2	ZA48	SA	Edible	01-337	PERCH SPP	84.85		
Hunters Point East	HPSE_JACKSMELT_COMP_1	ZA29	SA	Edible	01-336	Jacksmelt	83.08		
Hunters Point East	HPSE_JACKSMELT_COMP_2	ZA30	SA	Edible	01-336	Jacksmelt	79.06		
Hunters Point East	HPSE_PERCH_COMP_1	ZA31	SA	Edible	01-336	PERCH SPP	88.16		
Hunters Point East	HPSE_PERCH_COMP_2	ZA32	SA	Edible	01-336	PERCH SPP	85.76		
Hunters Point North	HPSN_JACKSMELT_COMP_1	ZA25	SA	Edible	01-336	Jacksmelt	67.95		
Hunters Point North	HPSN_JACKSMELT_COMP_2	ZA26	SA	Edible	01-336	Jacksmelt	71.01		
Hunters Point North	HPSN_PERCH_COMP_1	ZA27	SA	Edible	01-336	PERCH SPP	65.48		
Hunters Point North	HPSN_PERCH_COMP_2	ZA28	SA	Edible	01-336	PERCH SPP	70.84		
Hunters Point South	HPSS_JACKSMELT_COMP_1	ZA33	SA	Edible	01-336	Jacksmelt	52.74		
Hunters Point South	HPSS_JACKSMELT_COMP_2	ZA34	SA	Edible	01-336	Jacksmelt	87.31		
Hunters Point South	HPSS_PERCH_COMP_1	ZA35	SA	Edible	01-336	PERCH SPP	84.35		
Hunters Point South	HPSS_PERCH_COMP_2	ZA36	SA	Edible	01-336	PERCH SPP	84.66		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	SA	Edible	01-336	Jacksmelt	76.5		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_2	ZA38	SA	Edible	01-336	Jacksmelt	66.4		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA39	SA	Edible	01-336	PERCH SPP	93.18		
San Francisco Pier 7	SFP7_REF_PERCH_COMP_1	ZA40	SA	Edible	01-337	PERCH SPP	86.4		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	SA	Edible	01-337	Jacksmelt	81.71		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_2	ZA42	SA	Edible	01-337	Jacksmelt	90.4		
San Mateo Bridge	SMB_REF_PERCH_COMP_1	ZA43	SA	Edible	01-337	PERCH SPP	70.31		
San Mateo Bridge	SMB_REF_PERCH_COMP_2	ZA44	SA	Edible	01-337	PERCH SPP	71.37		
India Basin Area I	Area I HBI	AAB-369	SA	Wholebody	01-338	bivalve (clam)	94.98		
India Basin Area I	Area I SBI	AAB-398	SA	Wholebody	01-338	polychaete	84.93		
Point Avisadero Area III	Area III SBI	AAB-460	SA	Wholebody	01-338	polychaete	83.68		
Eastern Wetland Area VIII	Area VIII HBI	AAB-377	SA	Wholebody	01-338	bivalve (clam)	71.38		
Eastern Wetland Area VIII	Area VIII SBI	AAB-372	SA	Wholebody	01-338	polychaete	88.62		
Oil Reclamation Area IX	Area IX HBI	AAB-404	SA	Wholebody	01-338	bivalve (clam)	73.22		
Oil Reclamation Area IX	Area IX SBI	AAB-456	SA	Wholebody	01-338	polychaete	52.32		
South Basin Area X	Area X HBI	AAB-399	SA	Wholebody	01-338	bivalve (clam)	80.32		
South Basin Area X	Area X SBI	AAB-453	SA	Wholebody	01-338	polychaete	45.43		
Alameda Buoy	41569-167	AB-67	SA	lab test tissue dep	01-353	M. nasuta	81.12		
Alameda Buoy	41569-211	AB-67	SA	lab test tissue dep	01-354	M. nasuta	77.90		
Alameda Buoy	41569-28	AB-67	SA	lab test tissue dep	01-353	M. nasuta	87.93		

Table C-34. Surrogate Recoveries for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recovery (percent)		
							TPET (SIS)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual
Alameda Buoy	41569-35	AB-67	SA	lab test tissue dep	01-353	M. nasuta	86.36		
Alameda Buoy	41569-53	AB-67	SA	lab test tissue dep	01-353	M. nasuta	88.01		
Alcatraz Environs	41569-204	AL-64	SA	lab test tissue dep	01-355	M. nasuta	109.66		
Alcatraz Environs	41569-205	AL-64	SA	lab test tissue dep	01-355	M. nasuta	105.45		
Alcatraz Environs	41569-51	AL-64	SA	lab test tissue dep	01-354	M. nasuta	66.04		
Alcatraz Environs	41569-59	AL-64	SA	lab test tissue dep	01-354	M. nasuta	80.56		
Alcatraz Environs	41569-66	AL-64	SA	lab test tissue dep	01-354	M. nasuta	68.26		
Bay Farm	41569-120	BF-66	SA	lab test tissue dep	01-355	M. nasuta	112.05		
Bay Farm	41569-127	BF-66	SA	lab test tissue dep	01-355	M. nasuta	107.05		
Bay Farm	41569-191	BF-66	SA	lab test tissue dep	01-355	M. nasuta	101.28		
Bay Farm	41569-210	BF-66	SA	lab test tissue dep	01-355	M. nasuta	66.37		
Bay Farm	41569-44	BF-66	SA	lab test tissue dep	01-355	M. nasuta	105.60		
Eastern Wetland Area VIII	41569-125	EW-30	SA	lab test tissue dep	01-353	M. nasuta	88.95		
Eastern Wetland Area VIII	41569-19	EW-31	SA	lab test tissue dep	01-386	M. nasuta	98.43		
Eastern Wetland Area VIII	41569-65	EW-32	SA	lab test tissue dep	01-356	M. nasuta	84.48		
Eastern Wetland Area VIII	41569-152	EW-33	SA	lab test tissue dep	01-353	M. nasuta	88.31		
Eastern Wetland Area VIII	41569-83	EW-34	SA	lab test tissue dep	01-386	M. nasuta	86.68		
Eastern Wetland Area VIII	41569-135	EW-35	SA	lab test tissue dep	01-355	M. nasuta	117.74		
Eastern Wetland Area VIII	41569-61	EW-36	SA	lab test tissue dep	01-355	M. nasuta	100.02		
Eastern Wetland Area VIII	41569-89	EW-36	SA	lab test tissue nondep	01-386	M. nasuta	102.54		
Eastern Wetland Area VIII	41569-92	EW-37	SA	lab test tissue dep	01-356	M. nasuta	86.87		
India Basin Area I	41569-106	IB-54	SA	lab test tissue dep	01-386	M. nasuta	101.72		
India Basin Area I	41569-10	IB-55	SA	lab test tissue dep	01-386	M. nasuta	102.70		
India Basin Area I	41569-164	IB-56	SA	lab test tissue dep	01-355	M. nasuta	68.53		
India Basin Area I	41569-198	IB-56	SA	lab test tissue nondep	01-386	M. nasuta	101.06		
India Basin Area I	41569-189	IB-57	SA	lab test tissue dep	01-353	M. nasuta	90.34		
India Basin Area I	41569-24	IB-58	SA	lab test tissue dep	01-386	M. nasuta	91.10		
India Basin Area I	41569-175	IB-59	SA	lab test tissue dep	01-356	M. nasuta	47.96		
Oil Reclamation Area IX	41569-202	OR-24	SA	lab test tissue dep	01-353	M. nasuta	90.65		
Oil Reclamation Area IX	41569-142	OR-25	SA	lab test tissue dep	01-356	M. nasuta	79.43		
Oil Reclamation Area IX	41569-162	OR-26	SA	lab test tissue dep	01-353	M. nasuta	96.52		
Oil Reclamation Area IX	41569-30	OR-26	SA	lab test tissue nondep	01-386	M. nasuta	91.14		
Oil Reclamation Area IX	41569-151	OR-27	SA	lab test tissue dep	01-354	M. nasuta	77.51		
Oil Reclamation Area IX	41569-33	OR-28	SA	lab test tissue dep	01-356	M. nasuta	89.36		
Oil Reclamation Area IX	41569-150	OR-29	SA	lab test tissue dep	01-355	M. nasuta	108.19		
Point Avisadero Area III	41569-60	PA-38	SA	lab test tissue dep	01-354	M. nasuta	86.77		
Point Avisadero Area III	41569-75	PA-39	SA	lab test tissue dep	01-354	M. nasuta	77.60		
Point Avisadero Area III	41569-110	PA-40	SA	lab test tissue dep	01-354	M. nasuta	82.66		
Point Avisadero Area III	41569-158	PA-41	SA	lab test tissue dep	01-354	M. nasuta	78.34		
Point Avisadero Area III	41569-187	PA-42	SA	lab test tissue dep	01-354	M. nasuta	79.75		

Table C-34. Surrogate Recoveries for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recovery (percent)		
							TPET (SIS)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual
Point Avisadero Area III	41569-161	PA-43	SA	lab test tissue dep	01-354	M. nasuta	70.99		
Point Avisadero Area III	41569-70	PA-44	SA	lab test tissue dep	01-356	M. nasuta	85.44		
Point Avisadero Area III	41569-85	PA-45	SA	lab test tissue dep	01-353	M. nasuta	81.36		
Point Avisadero Area III	41569-163	PA-46	SA	lab test tissue dep	01-356	M. nasuta	89.24		
Point Avisadero Area III	41569-46	PA-46	SA	lab test tissue nondep	01-386	M. nasuta	91.70		
Point Avisadero Area III	41569-132	PA-47	SA	lab test tissue dep	01-356	M. nasuta	87.36		
Point Avisadero Area III	41569-131	PA-48	SA	lab test tissue dep	01-354	M. nasuta	79.37		
Point Avisadero Area III	41569-182	PA-49	SA	lab test tissue dep	01-353	M. nasuta	90.35		
Point Avisadero Area III	41569-143	PA-50	SA	lab test tissue dep	01-356	M. nasuta	91.20		
Point Avisadero Area III	41569-99	PA-51	SA	lab test tissue dep	01-354	M. nasuta	54.42		
Point Avisadero Area III	41569-107	PA-52	SA	lab test tissue dep	01-356	M. nasuta	97.62		
Point Avisadero Area III	41569-192	PA-53	SA	lab test tissue dep	01-354	M. nasuta	74.57		
Paradise Cove	41569-111	PC-63	SA	lab test tissue dep	01-355	M. nasuta	104.52		
Paradise Cove	41569-179	PC-63	SA	lab test tissue dep	01-355	M. nasuta	105.80		
Paradise Cove	41569-52	PC-63	SA	lab test tissue dep	01-356	M. nasuta	91.26		
Paradise Cove	41569-76	PC-63	SA	lab test tissue dep	01-355	M. nasuta	107.82		
Red Rock	41569-153	RR-65	SA	lab test tissue dep	01-353	M. nasuta	86.67		
Red Rock	41569-165	RR-65	SA	lab test tissue dep	01-353	M. nasuta	94.09		
Red Rock	41569-185	RR-65	SA	lab test tissue dep	01-353	M. nasuta	88.99		
Red Rock	41569-78	RR-65	SA	lab test tissue dep	01-353	M. nasuta	92.43		
Red Rock	41569-82	RR-65	SA	lab test tissue dep	01-353	M. nasuta	86.82		
South Basin Area X	41569-39	SB-01	SA	lab test tissue dep	01-354	M. nasuta	65.54		
South Basin Area X	41569-115	SB-02	SA	lab test tissue dep	01-355	M. nasuta	108.96		
South Basin Area X	41569-98	SB-03	SA	lab test tissue dep	01-356	M. nasuta	78.13		
South Basin Area X	41569-101	SB-04	SA	lab test tissue dep	01-355	M. nasuta	105.76		
South Basin Area X	41569-114	SB-05	SA	lab test tissue dep	01-355	M. nasuta	101.39		
South Basin Area X	41569-26	SB-06	SA	lab test tissue dep	01-353	M. nasuta	91.51		
South Basin Area X	41569-173	SB-07	SA	lab test tissue dep	01-355	M. nasuta	109.31		
South Basin Area X	41569-155	SB-08	SA	lab test tissue dep	01-356	M. nasuta	92.66		
South Basin Area X	41569-95	SB-09	SA	lab test tissue dep	01-354	M. nasuta	70.36		
South Basin Area X	41569-168	SB-10	SA	lab test tissue dep	01-356	M. nasuta	90.92		
South Basin Area X	41569-5	SB-11	SA	lab test tissue dep	01-355	M. nasuta	104.77		
South Basin Area X	41569-157	SB-12	SA	lab test tissue dep	01-355	M. nasuta	118.50		
South Basin Area X	41569-102	SB-13	SA	lab test tissue dep	01-353	M. nasuta	84.43		
South Basin Area X	41569-113	SB-14	SA	lab test tissue dep	01-386	M. nasuta	89.09		
South Basin Area X	41569-200	SB-15	SA	lab test tissue dep	01-354	M. nasuta	66.73		
South Basin Area X	41569-116	SB-16	SA	lab test tissue dep	01-353	M. nasuta	94.96		
South Basin Area X	41569-41	SB-17	SA	lab test tissue dep	01-353	M. nasuta	80.27		
South Basin Area X	41569-141	SB-18	SA	lab test tissue dep	01-356	M. nasuta	97.25		
South Basin Area X	41569-203	SB-19	SA	lab test tissue dep	01-354	M. nasuta	62.72		
South Basin Area X	41569-147	SB-20	SA	lab test tissue dep	01-386	M. nasuta	94.52		
South Basin Area X	41569-11	SB-21	SA	lab test tissue dep	01-354	M. nasuta	77.62		
South Basin Area X	41569-171	SB-21	SA	lab test tissue nondep	01-386	M. nasuta	107.00		
South Basin Area X	41569-90	SB-22	SA	lab test tissue dep	01-356	M. nasuta	105.22		
South Basin Area X	41569-100	SB-23	SA	lab test tissue dep	01-354	M. nasuta	73.33		
Background Tissue	41569-MAC-213		SA	background tissue	01-386	M. nasuta	97.40		
Background Tissue	41569-MAC-214		SA	background tissue	01-386	M. nasuta	98.31		
Background Tissue	41569-MAC-215		SA	background tissue	01-386	M. nasuta	101.28		

Table C-34. Surrogate Recoveries for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recovery (percent)		
							TPET (SIS)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual
Procedural Blanks									
		BDO-ZC50PB	PB		01-348		65.07		
		BDO-ZB55PB	PB		01-334		73.58		
		BDO-ZB59PB	PB		01-335		64.61		
		BDO-ZC50PB	PB		01-348		65.07		
		BDO-ZC67PB	PB		01-353		75.97		
		BDO-ZC71PB	PB		01-354		75.67		
		BDO-ZC75PB	PB		01-355		91.18		
		BDO-ZC79PB	PB		01-356		73.19		
		BDO-ZD51PB	PB		01-386		85.2		
Laboratory Control Samples									
		BDO-ZC51LCS	LCS		01-348		46.13	D	
		BDO-ZB56LCS	LCS		01-334		75.59		
		BDO-ZB60LCS	LCS		01-335		70.79		
		BDO-ZC51LCS	LCS		01-348		46.13	D	
		BDO-ZC68LCS	LCS		01-353		76.26		
		BDO-ZC72LCS	LCS		01-354		74.08		
		BDO-ZC76LCS	LCS		01-355		91.23		
		BDO-ZC80LCS	LCS		01-356		70.84		
		BDO-ZD52LCS	LCS		01-386		62.99		
Matrix Spike/Matrix Spike Duplicates (relative percent difference)									
Point Avisadero Area III	PA-45	41569-85	MS	lab test tissue dep	01-353	M. nasuta	96.27		
Point Avisadero Area III	PA-45	41569-85	MSD	lab test tissue dep	01-353	M. nasuta	96.6		
RPD							***0***		
Point Avisadero Area III	PA-51	41569-99	MS	lab test tissue dep	01-354	M. nasuta	82.99		
Point Avisadero Area III	PA-51	41569-99	MSD	lab test tissue dep	01-354	M. nasuta	87.7		
RPD							***6***		
South Basin Area X	SB-08	41569-155	MS	lab test tissue dep	01-356	M. nasuta	90.35		
South Basin Area X	SB-08	41569-155	MSD	lab test tissue dep	01-356	M. nasuta	86.65		
RPD							***4***		
Bay Farm	BF-66	41569-127	MS	lab test tissue dep	01-355	M. nasuta	119.98		
Bay Farm	BF-66	41569-127	MSD	lab test tissue dep	01-355	M. nasuta	106.67		
RPD							***12***		
Background tissue	NA	41569-MAC-214	MS	background tissue	01-386	M. nasuta	96.34		
Background tissue	NA	41569-MAC-214	MSD	background tissue	01-386	M. nasuta	96.37		
RPD							***0***		

Table C-34. Surrogate Recoveries for Butyltins in Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

							Surrogate Recovery (percent)		
							TPET (SIS)		
Area_Name	Station_ID	Samp_ID	Samp_ Type	Fraction	Lab_ Batch	Species_ Code	Result	Lab Qual	Final Qual
Oil Reclamation Area IX	Area IX HBI	AAB-404	MS	Wholebody	01-348	bivalve (clam)	82.95		
Oil Reclamation Area IX	Area IX HBI	AAB-404	MSD	Wholebody	01-348	bivalve (clam)	104.44		
RPD							***23***		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	MS	Edible	01-334	Jacksmelt	90.3		
San Francisco Pier 7	SFP7_REF_JACKSMELT_COMP_1	ZA37	MSD	Edible	01-334	Jacksmelt	92.33		
RPD							***2***		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MS	Edible	01-335	Jacksmelt	90.52		
San Mateo Bridge	SMB_REF_JACKSMELT_COMP_1	ZA41	MSD	Edible	01-335	Jacksmelt	86.97		
RPD							***4***		

N Value is not within control limits.
D Dilution run. Initial run outside linear range of instrument.

Table C-35. Quality Control Data for Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

				1,2,3,4,6,7,8-HpCDD			1,2,3,4,6,7,8-HpCDF			1,2,3,4,7,8,9-HpCDF			1,2,3,4,7,8-HxCDD			1,2,3,4,7,8-HxCDF			1,2,3,6,7,8-HxCDD		
Samp_ID	Lab_Batch	Samp_Type	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (pg/g wet weight)																					
STL-SA-G1G200000493B	G1G100243	PB	M. nasuta	0.45	U		0.25	U		0.31	U		0.31	U		0.25	U		0.25	U	
STL-SA-G2A030000285B	G1L140363	PB	M. nasuta	0.45	U		0.25	U		0.31	U		0.31	U		0.25	U		0.25	U	
Laboratory Control Samples (percent recovery)																					
STL-SA-G1G200000493C	G1G100243	LCS	M. nasuta	98			90			88			98			87			103		
STL-SA-G2A030000285C	G1L140363	LCS	M. nasuta	106			87			103			115			93			114		
Standard Reference Material (pg/g wet weight)																					
G1L140363006-SRM-G1L140363	G1L140363	SRM	M. nasuta	86			92			72			63			81			69		
R554-SRM-G1G100243	G1G100243	SRM	M. nasuta	86			89			93			58			89			64		
Matrix Spike/Matrix Spike Duplicate (percent recovery)																					
41569-202-D	G1G100243	MS	M. nasuta	124			102			100			115			99			112		
41569-202-D	G1G100243	MSD	M. nasuta	111			101			93			103			97			114		
RPD				***11***			***1***			***7***			***11***			***2***			***2***		

Table C-35. Quality Control Data for Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

				1,2,3,6,7,8-HxCDF			1,2,3,7,8,9-HxCDD			1,2,3,7,8,9-HxCDF			1,2,3,7,8-PeCDD			1,2,3,7,8-PeCDF			2,3,4,6,7,8-HxCDF		
Samp_ID	Lab_Batch	Samp_Type	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (pg/g wet weight)																					
STL-SA-G1G200000493B	G1G100243	PB	M. nasuta	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		0.26	U	
STL-SA-G2A030000285B	G1L140363	PB	M. nasuta	0.25	U		0.31	U		0.25	U		0.31	U		0.25	U		0.26	U	
Laboratory Control Samples (percent recovery)																					
STL-SA-G1G200000493C	G1G100243	LCS	M. nasuta	86			103			89			95			98			96		
STL-SA-G2A030000285C	G1L140363	LCS	M. nasuta	93			122			96			112			98			107		
Standard Reference Material (pg/g wet weight)																					
G1L140363006-SRM-G1L140363	G1L140363	SRM	M. nasuta	62			70			57			51			42			65		
R554-SRM-G1G100243	G1G100243	SRM	M. nasuta	53			61			57			51			52			60		
Matrix Spike/Matrix Spike Duplicate (percent recovery)																					
41569-202-D	G1G100243	MS	M. nasuta	96			112			98			107			110			109		
41569-202-D	G1G100243	MSD	M. nasuta	100			109			97			106			109			107		
RPD				***4***			***3***			***1***			***1***			***1***			***2***		

Table C-35. Quality Control Data for Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

				2,3,4,7,8-PeCDF			2,3,7,8-TCDD			2,3,7,8-TCDF			OCDD			OCDF			Total HpCDD		
Samp_ID	Lab_Batch	Samp_Type	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (pg/g wet weight)																					
STL-SA-G1G200000493B	G1G100243	PB	M. nasuta	0.25	U		0.13	U		0.06	U		1.6	U		0.54	U		0.45	U	
STL-SA-G2A030000285B	G1L140363	PB	M. nasuta	0.25	U		0.13	U		0.06	U		1.6	U		0.54	U		0.45	U	
Laboratory Control Samples (percent recovery)																					
STL-SA-G1G200000493C	G1G100243	LCS	M. nasuta	102			97			91			98			108					
STL-SA-G2A030000285C	G1L140363	LCS	M. nasuta	97			99			90			108			97					
Standard Reference Material (pg/g wet weight)																					
G1L140363006-SRM-G1L140363	G1L140363	SRM	M. nasuta	43			21			23			230			190			86		
R554-SRM-G1G100243	G1G100243	SRM	M. nasuta	52			24			26			210			220			86		
Matrix Spike/Matrix Spike Duplicate (percent recovery)																					
41569-202-D	G1G100243	MS	M. nasuta	112			107			112			175	a		123					
41569-202-D	G1G100243	MSD	M. nasuta	112			109			112			107			118					
RPD				***0***			***2***			***0***			***48***			***4***					

Table C-35. Quality Control Data for Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

				Total HpCDF			Total HxCDD			Total HxCDF			Total PeCDD			Total PeCDF			Total TCDD			Total TCDF		
Samp_ID	Lab_Batch	Samp_Type	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks (pg/g wet weight)																								
STL-SA-G1G200000493B	G1G100243	PB	M. nasuta	0.25	U		0.25	U		0.25	U		0.31	U		0.25	U		0.13	U		0.06	U	
STL-SA-G2A030000285B	G1L140363	PB	M. nasuta	0.25	U		0.25	U		0.25	U		0.31	U		0.25	U		0.13	U		0.06	U	
Laboratory Control Samples (percent recovery)																								
STL-SA-G1G200000493C	G1G100243	LCS	M. nasuta																					
STL-SA-G2A030000285C	G1L140363	LCS	M. nasuta																					
Standard Reference Material (pg/g wet weight)																								
G1L140363006-SRM-G1L140363	G1L140363	SRM	M. nasuta	160			200			260			51			85			21			23		
R554-SRM-G1G100243	G1G100243	SRM	M. nasuta	180			180			270			51			100			24			26		
Matrix Spike/Matrix Spike Duplicate (percent recovery)																								
41569-202-D	G1G100243	MS	M. nasuta																					
41569-202-D	G1G100243	MSD	M. nasuta																					
RPD																								

Table C-36. Surrogate Recoveries for Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

				13C-1,2,3,4,6,7,8-HpCDD			13C-1,2,3,4,6,7,8-HpCDF			13C-1,2,3,4,7,8-HxCDF			13C-1,2,3,6,7,8-HxCDD			13C-1,2,3,7,8-PeCDD		
Samp_ID	Lab_Batch	Samp_Type	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks																		
STL-SA-G1G200000493B	G1G100243	PB	M. nasuta	96			113			96			89			87		
STL-SA-G2A030000285B	G1L140363	PB	M. nasuta	93			80			74			73			86		
Standard Reference Material																		
G1L140363006-SRM-G1L140363	G1L140363	SRM	M. nasuta	89			76			76			72			80		
R554-SRM-G1G100243	G1G100243	SRM	M. nasuta	78			71			91			86			78		

Table C-36. Surrogate Recoveries for Dioxins in *M. nasuta* Tissue Samples, Hunters Point Shipyard Parcel F Validation Study

				13C-1,2,3,7,8-PeCDF			13C-2,3,7,8-TCDD			13C-2,3,7,8-TCDF			13C-OCDD		
Samp_ID	Lab_Batch	Samp_Type	Species_Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blanks															
STL-SA-G1G200000493B	G1G100243	PB	M. nasuta	94			85			98			92		
STL-SA-G2A030000285B	G1L140363	PB	M. nasuta	95			85			76			105		
Standard Reference Material															
G1L140363006-SRM-G1L140363	G1L140363	SRM	M. nasuta	96			82			70			94		
R554-SRM-G1G100243	G1G100243	SRM	M. nasuta	92			80			96			83		

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
		background tissue	1	Total 4,4'-DDxs	2.9	2	1	0	3
		background tissue	2	Total 4,4'-DDxs	2.7	2	1	0	3
		background tissue	3	Total 4,4'-DDxs	3.3	2	1	0	3
Alameda Buoy	AB-67	lab test tissue dep	1	Total 4,4'-DDxs	6.9	1	2	0	3
Alameda Buoy	AB-67	lab test tissue dep	2	Total 4,4'-DDxs	6.6	1	2	0	3
Alameda Buoy	AB-67	lab test tissue dep	3	Total 4,4'-DDxs	7.9	1	2	0	3
Alameda Buoy	AB-67	lab test tissue dep	4	Total 4,4'-DDxs	6.6	1	2	0	3
Alameda Buoy	AB-67	lab test tissue dep	5	Total 4,4'-DDxs	7.5	1	2	0	3
Alcatraz Environs	AL-64	lab test tissue dep	1	Total 4,4'-DDxs	5.1	1	2	0	3
Alcatraz Environs	AL-64	lab test tissue dep	2	Total 4,4'-DDxs	6.2	1	2	0	3
Alcatraz Environs	AL-64	lab test tissue dep	3	Total 4,4'-DDxs	5.0	1	2	0	3
Alcatraz Environs	AL-64	lab test tissue dep	4	Total 4,4'-DDxs	3.6	1	2	0	3
Alcatraz Environs	AL-64	lab test tissue dep	5	Total 4,4'-DDxs	4.5	1	2	0	3
Bay Farm Borrow Pit	BF-66	lab test tissue dep	1	Total 4,4'-DDxs	8.1	1	2	0	3
Bay Farm Borrow Pit	BF-66	lab test tissue dep	2	Total 4,4'-DDxs	10.5	1	2	0	3
Bay Farm Borrow Pit	BF-66	lab test tissue dep	3	Total 4,4'-DDxs	8.1	1	2	0	3
Bay Farm Borrow Pit	BF-66	lab test tissue dep	4	Total 4,4'-DDxs	11.3	1	2	0	3
Bay Farm Borrow Pit	BF-66	lab test tissue dep	5	Total 4,4'-DDxs	15.5	0	3	0	3
Paradise Cove	PC-63	lab test tissue dep	1	Total 4,4'-DDxs	7.8	1	2	0	3
Paradise Cove	PC-63	lab test tissue dep	2	Total 4,4'-DDxs	8.1	1	2	0	3
Paradise Cove	PC-63	lab test tissue dep	3	Total 4,4'-DDxs	10.1	1	2	0	3
Paradise Cove	PC-63	lab test tissue dep	4	Total 4,4'-DDxs	12.4	1	2	0	3
Paradise Cove	PC-63	lab test tissue dep	5	Total 4,4'-DDxs	6.9	1	2	0	3
Red Rock	RR-65	lab test tissue dep	1	Total 4,4'-DDxs	8.3	1	2	0	3
Red Rock	RR-65	lab test tissue dep	2	Total 4,4'-DDxs	12.6	1	2	0	3
Red Rock	RR-65	lab test tissue dep	3	Total 4,4'-DDxs	9.7	1	2	0	3
Red Rock	RR-65	lab test tissue dep	4	Total 4,4'-DDxs	9.6	1	2	0	3
Red Rock	RR-65	lab test tissue dep	5	Total 4,4'-DDxs	7.3	1	2	0	3
Eastern Wetland Area VIII	EW-31	lab test tissue dep	1	Total 4,4'-DDxs	10.3	1	2	0	3
Eastern Wetland Area VIII	EW-32	lab test tissue dep	1	Total 4,4'-DDxs	14.2	1	2	0	3
Eastern Wetland Area VIII	EW-34	lab test tissue dep	1	Total 4,4'-DDxs	13.1	1	2	0	3
Eastern Wetland Area VIII	EW-35	lab test tissue dep	1	Total 4,4'-DDxs	11.1	1	2	0	3
Eastern Wetland Area VIII	EW-37	lab test tissue dep	1	Total 4,4'-DDxs	2.3	1	2	0	3
Eastern Wetland Area VIII	EW-30	lab test tissue dep	1	Total 4,4'-DDxs	9.3	1	2	0	3
Eastern Wetland Area VIII	EW-36	lab test tissue dep	1	Total 4,4'-DDxs	11.6	1	2	0	3
Eastern Wetland Area VIII	EW-36	lab test tissue nondep	1	Total 4,4'-DDxs	13.5	0	3	0	3
Eastern Wetland Area VIII	EW-33	lab test tissue dep	1	Total 4,4'-DDxs	8.3	1	2	0	3
India Basin Area I	IB-54	lab test tissue dep	1	Total 4,4'-DDxs	14.5	1	2	0	3
India Basin Area I	IB-56	lab test tissue dep	1	Total 4,4'-DDxs	8.6	1	2	0	3
India Basin Area I	IB-56	lab test tissue nondep	1	Total 4,4'-DDxs	5.0	2	1	0	3
India Basin Area I	IB-57	lab test tissue dep	1	Total 4,4'-DDxs	10.7	1	2	0	3
India Basin Area I	IB-58	lab test tissue dep	1	Total 4,4'-DDxs	11.7	1	2	0	3
India Basin Area I	IB-55	lab test tissue dep	1	Total 4,4'-DDxs	14.6	1	2	0	3
India Basin Area I	IB-59	lab test tissue dep	1	Total 4,4'-DDxs	15.6	1	2	0	3
Oil Reclamation Area IX	OR-25	lab test tissue dep	1	Total 4,4'-DDxs	18.6	0	3	0	3
Oil Reclamation Area IX	OR-27	lab test tissue dep	1	Total 4,4'-DDxs	31.8	1	2	0	3
Oil Reclamation Area IX	OR-28	lab test tissue dep	1	Total 4,4'-DDxs	13.2	1	2	0	3
Oil Reclamation Area IX	OR-29	lab test tissue dep	1	Total 4,4'-DDxs	21.8	1	2	0	3
Oil Reclamation Area IX	OR-24	lab test tissue dep	1	Total 4,4'-DDxs	23.4	1	2	0	3
Oil Reclamation Area IX	OR-26	lab test tissue dep	1	Total 4,4'-DDxs	19.4	1	2	0	3
Oil Reclamation Area IX	OR-26	lab test tissue nondep	1	Total 4,4'-DDxs	24.3	1	2	0	3
Point Avisadero Area III	PA-41	lab test tissue dep	1	Total 4,4'-DDxs	10.8	1	2	0	3
Point Avisadero Area III	PA-42	lab test tissue dep	1	Total 4,4'-DDxs	8.5	1	2	0	3
Point Avisadero Area III	PA-43	lab test tissue dep	1	Total 4,4'-DDxs	6.8	1	2	0	3
Point Avisadero Area III	PA-44	lab test tissue dep	1	Total 4,4'-DDxs	8.9	1	2	0	3
Point Avisadero Area III	PA-48	lab test tissue dep	1	Total 4,4'-DDxs	9.6	1	2	0	3
Point Avisadero Area III	PA-49	lab test tissue dep	1	Total 4,4'-DDxs	9.4	1	2	0	3
Point Avisadero Area III	PA-50	lab test tissue dep	1	Total 4,4'-DDxs	15.2	0	3	0	3
Point Avisadero Area III	PA-51	lab test tissue dep	1	Total 4,4'-DDxs	9.8	1	2	0	3
Point Avisadero Area III	PA-52	lab test tissue dep	1	Total 4,4'-DDxs	8.9	1	2	0	3
Point Avisadero Area III	PA-53	lab test tissue dep	1	Total 4,4'-DDxs	8.8	1	2	0	3
Point Avisadero Area III	PA-45	lab test tissue dep	1	Total 4,4'-DDxs	9.7	1	2	0	3
Point Avisadero Area III	PA-46	lab test tissue dep	1	Total 4,4'-DDxs	8.3	1	2	0	3
Point Avisadero Area III	PA-46	lab test tissue nondep	1	Total 4,4'-DDxs	7.3	1	2	0	3

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Point Avisadero Area III	PA-47	lab test tissue dep	1	Total 4,4'-DDxs	8.0	1	2	0	3
Point Avisadero Area III	PA-38	lab test tissue dep	1	Total 4,4'-DDxs	9.5	1	2	0	3
Point Avisadero Area III	PA-39	lab test tissue dep	1	Total 4,4'-DDxs	9.0	1	2	0	3
Point Avisadero Area III	PA-40	lab test tissue dep	1	Total 4,4'-DDxs	12.6	1	2	0	3
South Basin Area X	SB-01	lab test tissue dep	1	Total 4,4'-DDxs	74.5	1	2	0	3
South Basin Area X	SB-02	lab test tissue dep	1	Total 4,4'-DDxs	51.1	1	2	0	3
South Basin Area X	SB-03	lab test tissue dep	1	Total 4,4'-DDxs	30.9	1	2	0	3
South Basin Area X	SB-04	lab test tissue dep	1	Total 4,4'-DDxs	22.6	1	2	0	3
South Basin Area X	SB-05	lab test tissue dep	1	Total 4,4'-DDxs	20.0	1	2	0	3
South Basin Area X	SB-06	lab test tissue dep	1	Total 4,4'-DDxs	31.6	1	2	0	3
South Basin Area X	SB-07	lab test tissue dep	1	Total 4,4'-DDxs	24.7	1	2	0	3
South Basin Area X	SB-08	lab test tissue dep	1	Total 4,4'-DDxs	35.9	1	2	0	3
South Basin Area X	SB-09	lab test tissue dep	1	Total 4,4'-DDxs	71.5	0	3	0	3
South Basin Area X	SB-10	lab test tissue dep	1	Total 4,4'-DDxs	60.7	0	3	0	3
South Basin Area X	SB-11	lab test tissue dep	1	Total 4,4'-DDxs	74.6	0	3	0	3
South Basin Area X	SB-12	lab test tissue dep	1	Total 4,4'-DDxs	50.2	1	2	0	3
South Basin Area X	SB-13	lab test tissue dep	1	Total 4,4'-DDxs	46.8	0	3	0	3
South Basin Area X	SB-14	lab test tissue dep	1	Total 4,4'-DDxs	55.7	1	2	0	3
South Basin Area X	SB-15	lab test tissue dep	1	Total 4,4'-DDxs	34.9	0	3	0	3
South Basin Area X	SB-16	lab test tissue dep	1	Total 4,4'-DDxs	34.9	1	2	0	3
South Basin Area X	SB-17	lab test tissue dep	1	Total 4,4'-DDxs	28.4	1	2	0	3
South Basin Area X	SB-18	lab test tissue dep	1	Total 4,4'-DDxs	63.6	0	3	0	3
South Basin Area X	SB-19	lab test tissue dep	1	Total 4,4'-DDxs	7.4	1	2	0	3
South Basin Area X	SB-20	lab test tissue dep	1	Total 4,4'-DDxs	63.3	1	2	0	3
South Basin Area X	SB-21	lab test tissue dep	1	Total 4,4'-DDxs	44.6	1	2	0	3
South Basin Area X	SB-21	lab test tissue nondep	1	Total 4,4'-DDxs	52.4	0	3	0	3
South Basin Area X	SB-22	lab test tissue dep	1	Total 4,4'-DDxs	43.3	0	3	0	3
South Basin Area X	SB-23	lab test tissue dep	1	Total 4,4'-DDxs	41.4	1	2	0	3
		background tissue	1	Total PCBs	12.9	18	4	0	22
		background tissue	2	Total PCBs	10.1	19	3	0	22
		background tissue	3	Total PCBs	8.4	19	3	0	22
Alameda Buoy	AB-67	lab test tissue dep	1	Total PCBs	118.4	7	15	0	22
Alameda Buoy	AB-67	lab test tissue dep	2	Total PCBs	109.4	7	15	0	22
Alameda Buoy	AB-67	lab test tissue dep	3	Total PCBs	129.2	7	15	0	22
Alameda Buoy	AB-67	lab test tissue dep	4	Total PCBs	103.1	7	15	0	22
Alameda Buoy	AB-67	lab test tissue dep	5	Total PCBs	122.0	10	12	0	22
Alcatraz Environs	AL-64	lab test tissue dep	1	Total PCBs	44.5	9	13	0	22
Alcatraz Environs	AL-64	lab test tissue dep	2	Total PCBs	50.3	10	12	0	22
Alcatraz Environs	AL-64	lab test tissue dep	3	Total PCBs	42.0	11	11	0	22
Alcatraz Environs	AL-64	lab test tissue dep	4	Total PCBs	28.9	11	11	0	22
Alcatraz Environs	AL-64	lab test tissue dep	5	Total PCBs	28.2	12	10	0	22
Bay Farm Borrow Pit	BF-66	lab test tissue dep	1	Total PCBs	49.2	11	11	0	22
Bay Farm Borrow Pit	BF-66	lab test tissue dep	2	Total PCBs	67.9	10	12	0	22
Bay Farm Borrow Pit	BF-66	lab test tissue dep	3	Total PCBs	63.9	7	15	0	22
Bay Farm Borrow Pit	BF-66	lab test tissue dep	4	Total PCBs	78.4	9	13	0	22
Bay Farm Borrow Pit	BF-66	lab test tissue dep	5	Total PCBs	74.4	11	11	0	22
Paradise Cove	PC-63	lab test tissue dep	1	Total PCBs	35.3	11	11	0	22
Paradise Cove	PC-63	lab test tissue dep	2	Total PCBs	43.1	10	12	0	22
Paradise Cove	PC-63	lab test tissue dep	3	Total PCBs	32.4	15	7	0	22
Paradise Cove	PC-63	lab test tissue dep	4	Total PCBs	46.1	12	10	0	22
Paradise Cove	PC-63	lab test tissue dep	5	Total PCBs	34.9	11	11	0	22
Red Rock	RR-65	lab test tissue dep	1	Total PCBs	32.8	10	12	0	22
Red Rock	RR-65	lab test tissue dep	2	Total PCBs	49.4	10	12	0	22
Red Rock	RR-65	lab test tissue dep	3	Total PCBs	36.2	10	12	0	22
Red Rock	RR-65	lab test tissue dep	4	Total PCBs	39.5	11	11	0	22
Red Rock	RR-65	lab test tissue dep	5	Total PCBs	28.9	11	11	0	22
Eastern Wetland Area VIII	EW-31	lab test tissue dep	1	Total PCBs	172.5	10	12	0	22
Eastern Wetland Area VIII	EW-32	lab test tissue dep	1	Total PCBs	144.8	9	13	0	22
Eastern Wetland Area VIII	EW-34	lab test tissue dep	1	Total PCBs	269.3	8	14	0	22
Eastern Wetland Area VIII	EW-35	lab test tissue dep	1	Total PCBs	125.1	7	15	0	22
Eastern Wetland Area VIII	EW-37	lab test tissue dep	1	Total PCBs	27.6	9	13	0	22
Eastern Wetland Area VIII	EW-30	lab test tissue dep	1	Total PCBs	281.8	7	15	0	22
Eastern Wetland Area VIII	EW-36	lab test tissue dep	1	Total PCBs	388.0	7	15	0	22
Eastern Wetland Area VIII	EW-36	lab test tissue nondep	1	Total PCBs	409.6	8	14	0	22

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Eastern Wetland Area VIII	EW-33	lab test tissue dep	1	Total PCBs	248.9	6	16	0	22
India Basin Area I	IB-54	lab test tissue dep	1	Total PCBs	73.1	11	11	0	22
India Basin Area I	IB-56	lab test tissue dep	1	Total PCBs	53.0	10	12	0	22
India Basin Area I	IB-56	lab test tissue nondep	1	Total PCBs	32.1	15	7	0	22
India Basin Area I	IB-57	lab test tissue dep	1	Total PCBs	66.6	10	12	0	22
India Basin Area I	IB-58	lab test tissue dep	1	Total PCBs	55.3	13	9	0	22
India Basin Area I	IB-55	lab test tissue dep	1	Total PCBs	152.8	10	12	0	22
India Basin Area I	IB-59	lab test tissue dep	1	Total PCBs	137.1	7	15	0	22
Oil Reclamation Area IX	OR-25	lab test tissue dep	1	Total PCBs	564.5	5	17	0	22
Oil Reclamation Area IX	OR-27	lab test tissue dep	1	Total PCBs	1593.9	6	16	0	22
Oil Reclamation Area IX	OR-28	lab test tissue dep	1	Total PCBs	340.8	7	15	0	22
Oil Reclamation Area IX	OR-29	lab test tissue dep	1	Total PCBs	893.1	7	15	0	22
Oil Reclamation Area IX	OR-24	lab test tissue dep	1	Total PCBs	1360.2	7	15	0	22
Oil Reclamation Area IX	OR-26	lab test tissue dep	1	Total PCBs	915.0	5	17	0	22
Oil Reclamation Area IX	OR-26	lab test tissue nondep	1	Total PCBs	1133.0	8	14	0	22
Point Avisadero Area III	PA-41	lab test tissue dep	1	Total PCBs	146.1	7	15	0	22
Point Avisadero Area III	PA-42	lab test tissue dep	1	Total PCBs	154.0	7	15	0	22
Point Avisadero Area III	PA-43	lab test tissue dep	1	Total PCBs	50.2	10	12	0	22
Point Avisadero Area III	PA-44	lab test tissue dep	1	Total PCBs	113.6	8	14	0	22
Point Avisadero Area III	PA-48	lab test tissue dep	1	Total PCBs	54.4	8	14	0	22
Point Avisadero Area III	PA-49	lab test tissue dep	1	Total PCBs	60.0	7	15	0	22
Point Avisadero Area III	PA-50	lab test tissue dep	1	Total PCBs	49.3	15	7	0	22
Point Avisadero Area III	PA-51	lab test tissue dep	1	Total PCBs	56.1	8	14	0	22
Point Avisadero Area III	PA-52	lab test tissue dep	1	Total PCBs	55.3	8	14	0	22
Point Avisadero Area III	PA-53	lab test tissue dep	1	Total PCBs	57.2	7	15	0	22
Point Avisadero Area III	PA-45	lab test tissue dep	1	Total PCBs	190.8	8	14	0	22
Point Avisadero Area III	PA-46	lab test tissue dep	1	Total PCBs	106.3	12	10	0	22
Point Avisadero Area III	PA-46	lab test tissue nondep	1	Total PCBs	104.2	11	11	0	22
Point Avisadero Area III	PA-47	lab test tissue dep	1	Total PCBs	111.1	10	12	0	22
Point Avisadero Area III	PA-38	lab test tissue dep	1	Total PCBs	500.8	7	15	0	22
Point Avisadero Area III	PA-39	lab test tissue dep	1	Total PCBs	254.9	8	14	0	22
Point Avisadero Area III	PA-40	lab test tissue dep	1	Total PCBs	74.3	7	15	0	22
South Basin Area X	SB-01	lab test tissue dep	1	Total PCBs	1297.0	5	17	0	22
South Basin Area X	SB-02	lab test tissue dep	1	Total PCBs	1090.7	4	18	0	22
South Basin Area X	SB-03	lab test tissue dep	1	Total PCBs	841.5	6	16	0	22
South Basin Area X	SB-04	lab test tissue dep	1	Total PCBs	659.0	6	16	0	22
South Basin Area X	SB-05	lab test tissue dep	1	Total PCBs	622.3	5	17	0	22
South Basin Area X	SB-06	lab test tissue dep	1	Total PCBs	1024.0	7	15	0	22
South Basin Area X	SB-07	lab test tissue dep	1	Total PCBs	784.5	5	17	0	22
South Basin Area X	SB-08	lab test tissue dep	1	Total PCBs	1071.8	5	17	0	22
South Basin Area X	SB-09	lab test tissue dep	1	Total PCBs	1059.4	6	16	0	22
South Basin Area X	SB-10	lab test tissue dep	1	Total PCBs	1321.6	4	18	0	22
South Basin Area X	SB-11	lab test tissue dep	1	Total PCBs	2197.9	5	17	0	22
South Basin Area X	SB-12	lab test tissue dep	1	Total PCBs	1669.0	5	17	0	22
South Basin Area X	SB-13	lab test tissue dep	1	Total PCBs	1527.3	5	17	0	22
South Basin Area X	SB-14	lab test tissue dep	1	Total PCBs	1706.2	8	14	0	22
South Basin Area X	SB-15	lab test tissue dep	1	Total PCBs	1142.6	5	17	0	22
South Basin Area X	SB-16	lab test tissue dep	1	Total PCBs	2326.2	5	17	0	22
South Basin Area X	SB-17	lab test tissue dep	1	Total PCBs	1425.7	5	17	0	22
South Basin Area X	SB-18	lab test tissue dep	1	Total PCBs	2484.4	4	18	0	22
South Basin Area X	SB-19	lab test tissue dep	1	Total PCBs	1806.2	10	12	0	22
South Basin Area X	SB-20	lab test tissue dep	1	Total PCBs	2534.4	8	14	0	22
South Basin Area X	SB-21	lab test tissue dep	1	Total PCBs	4174.2	6	16	0	22
South Basin Area X	SB-21	lab test tissue nondep	1	Total PCBs	4865.3	7	15	0	22
South Basin Area X	SB-22	lab test tissue dep	1	Total PCBs	2474.4	5	17	0	22
South Basin Area X	SB-23	lab test tissue dep	1	Total PCBs	4651.0	5	17	0	22
		background tissue	1	Total DDxs	2.9	5	1	0	6
		background tissue	2	Total DDxs	2.7	5	1	0	6
		background tissue	3	Total DDxs	3.3	5	1	0	6
Alameda Buoy	AB-67	lab test tissue dep	1	Total DDxs	6.9	4	2	0	6
Alameda Buoy	AB-67	lab test tissue dep	2	Total DDxs	6.6	4	2	0	6
Alameda Buoy	AB-67	lab test tissue dep	3	Total DDxs	7.9	4	2	0	6
Alameda Buoy	AB-67	lab test tissue dep	4	Total DDxs	6.6	4	2	0	6
Alameda Buoy	AB-67	lab test tissue dep	5	Total DDxs	7.5	4	2	0	6

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Alcatraz Environs	AL-64	lab test tissue dep	1	Total DDxs	5.1	4	2	0	6
Alcatraz Environs	AL-64	lab test tissue dep	2	Total DDxs	6.2	4	2	0	6
Alcatraz Environs	AL-64	lab test tissue dep	3	Total DDxs	5.0	4	2	0	6
Alcatraz Environs	AL-64	lab test tissue dep	4	Total DDxs	3.6	4	2	0	6
Alcatraz Environs	AL-64	lab test tissue dep	5	Total DDxs	4.5	4	2	0	6
Bay Farm Borrow Pit	BF-66	lab test tissue dep	1	Total DDxs	8.1	4	2	0	6
Bay Farm Borrow Pit	BF-66	lab test tissue dep	2	Total DDxs	10.5	4	2	0	6
Bay Farm Borrow Pit	BF-66	lab test tissue dep	3	Total DDxs	8.1	4	2	0	6
Bay Farm Borrow Pit	BF-66	lab test tissue dep	4	Total DDxs	11.3	4	2	0	6
Bay Farm Borrow Pit	BF-66	lab test tissue dep	5	Total DDxs	15.5	3	3	0	6
Paradise Cove	PC-63	lab test tissue dep	1	Total DDxs	7.8	4	2	0	6
Paradise Cove	PC-63	lab test tissue dep	2	Total DDxs	8.1	4	2	0	6
Paradise Cove	PC-63	lab test tissue dep	3	Total DDxs	10.1	4	2	0	6
Paradise Cove	PC-63	lab test tissue dep	4	Total DDxs	12.4	4	2	0	6
Paradise Cove	PC-63	lab test tissue dep	5	Total DDxs	6.9	4	2	0	6
Red Rock	RR-65	lab test tissue dep	1	Total DDxs	8.3	4	2	0	6
Red Rock	RR-65	lab test tissue dep	2	Total DDxs	12.6	4	2	0	6
Red Rock	RR-65	lab test tissue dep	3	Total DDxs	9.7	4	2	0	6
Red Rock	RR-65	lab test tissue dep	4	Total DDxs	9.6	4	2	0	6
Red Rock	RR-65	lab test tissue dep	5	Total DDxs	7.3	4	2	0	6
Eastern Wetland Area VIII	EW-31	lab test tissue dep	1	Total DDxs	10.3	4	2	0	6
Eastern Wetland Area VIII	EW-32	lab test tissue dep	1	Total DDxs	14.2	4	2	0	6
Eastern Wetland Area VIII	EW-34	lab test tissue dep	1	Total DDxs	13.1	4	2	0	6
Eastern Wetland Area VIII	EW-35	lab test tissue dep	1	Total DDxs	11.1	4	2	0	6
Eastern Wetland Area VIII	EW-37	lab test tissue dep	1	Total DDxs	2.3	4	2	0	6
Eastern Wetland Area VIII	EW-30	lab test tissue dep	1	Total DDxs	9.3	4	2	0	6
Eastern Wetland Area VIII	EW-36	lab test tissue dep	1	Total DDxs	11.6	4	2	0	6
Eastern Wetland Area VIII	EW-36	lab test tissue nondep	1	Total DDxs	13.5	3	3	0	6
Eastern Wetland Area VIII	EW-33	lab test tissue dep	1	Total DDxs	8.3	4	2	0	6
India Basin Area I	IB-54	lab test tissue dep	1	Total DDxs	14.5	4	2	0	6
India Basin Area I	IB-56	lab test tissue dep	1	Total DDxs	8.6	4	2	0	6
India Basin Area I	IB-56	lab test tissue nondep	1	Total DDxs	5.0	5	1	0	6
India Basin Area I	IB-57	lab test tissue dep	1	Total DDxs	10.7	4	2	0	6
India Basin Area I	IB-58	lab test tissue dep	1	Total DDxs	11.7	4	2	0	6
India Basin Area I	IB-55	lab test tissue dep	1	Total DDxs	14.6	4	2	0	6
India Basin Area I	IB-59	lab test tissue dep	1	Total DDxs	15.6	4	2	0	6
Oil Reclamation Area IX	OR-25	lab test tissue dep	1	Total DDxs	18.6	3	3	0	6
Oil Reclamation Area IX	OR-27	lab test tissue dep	1	Total DDxs	31.8	4	2	0	6
Oil Reclamation Area IX	OR-28	lab test tissue dep	1	Total DDxs	13.2	4	2	0	6
Oil Reclamation Area IX	OR-29	lab test tissue dep	1	Total DDxs	21.8	4	2	0	6
Oil Reclamation Area IX	OR-24	lab test tissue dep	1	Total DDxs	23.4	4	2	0	6
Oil Reclamation Area IX	OR-26	lab test tissue dep	1	Total DDxs	19.4	4	2	0	6
Oil Reclamation Area IX	OR-26	lab test tissue nondep	1	Total DDxs	24.3	4	2	0	6
Point Avisadero Area III	PA-41	lab test tissue dep	1	Total DDxs	10.8	4	2	0	6
Point Avisadero Area III	PA-42	lab test tissue dep	1	Total DDxs	8.5	4	2	0	6
Point Avisadero Area III	PA-43	lab test tissue dep	1	Total DDxs	6.8	4	2	0	6
Point Avisadero Area III	PA-44	lab test tissue dep	1	Total DDxs	8.9	4	2	0	6
Point Avisadero Area III	PA-48	lab test tissue dep	1	Total DDxs	9.6	4	2	0	6
Point Avisadero Area III	PA-49	lab test tissue dep	1	Total DDxs	9.4	4	2	0	6
Point Avisadero Area III	PA-50	lab test tissue dep	1	Total DDxs	15.2	3	3	0	6
Point Avisadero Area III	PA-51	lab test tissue dep	1	Total DDxs	9.8	4	2	0	6
Point Avisadero Area III	PA-52	lab test tissue dep	1	Total DDxs	8.9	4	2	0	6
Point Avisadero Area III	PA-53	lab test tissue dep	1	Total DDxs	8.8	4	2	0	6
Point Avisadero Area III	PA-45	lab test tissue dep	1	Total DDxs	9.7	4	2	0	6
Point Avisadero Area III	PA-46	lab test tissue dep	1	Total DDxs	8.3	4	2	0	6
Point Avisadero Area III	PA-46	lab test tissue nondep	1	Total DDxs	7.3	4	2	0	6
Point Avisadero Area III	PA-47	lab test tissue dep	1	Total DDxs	8.0	4	2	0	6
Point Avisadero Area III	PA-38	lab test tissue dep	1	Total DDxs	9.5	4	2	0	6
Point Avisadero Area III	PA-39	lab test tissue dep	1	Total DDxs	9.0	4	2	0	6
Point Avisadero Area III	PA-40	lab test tissue dep	1	Total DDxs	12.6	4	2	0	6
South Basin Area X	SB-01	lab test tissue dep	1	Total DDxs	74.5	4	2	0	6
South Basin Area X	SB-02	lab test tissue dep	1	Total DDxs	51.1	4	2	0	6
South Basin Area X	SB-03	lab test tissue dep	1	Total DDxs	30.9	4	2	0	6
South Basin Area X	SB-04	lab test tissue dep	1	Total DDxs	22.6	4	2	0	6

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
South Basin Area X	SB-05	lab test tissue dep	1	Total DDxs	20.0	4	2	0	6
South Basin Area X	SB-06	lab test tissue dep	1	Total DDxs	31.6	4	2	0	6
South Basin Area X	SB-07	lab test tissue dep	1	Total DDxs	24.7	4	2	0	6
South Basin Area X	SB-08	lab test tissue dep	1	Total DDxs	35.9	4	2	0	6
South Basin Area X	SB-09	lab test tissue dep	1	Total DDxs	71.5	3	3	0	6
South Basin Area X	SB-10	lab test tissue dep	1	Total DDxs	60.7	3	3	0	6
South Basin Area X	SB-11	lab test tissue dep	1	Total DDxs	74.6	3	3	0	6
South Basin Area X	SB-12	lab test tissue dep	1	Total DDxs	50.2	4	2	0	6
South Basin Area X	SB-13	lab test tissue dep	1	Total DDxs	46.8	3	3	0	6
South Basin Area X	SB-14	lab test tissue dep	1	Total DDxs	55.7	4	2	0	6
South Basin Area X	SB-15	lab test tissue dep	1	Total DDxs	34.9	3	3	0	6
South Basin Area X	SB-16	lab test tissue dep	1	Total DDxs	34.9	4	2	0	6
South Basin Area X	SB-17	lab test tissue dep	1	Total DDxs	28.4	4	2	0	6
South Basin Area X	SB-18	lab test tissue dep	1	Total DDxs	63.6	3	3	0	6
South Basin Area X	SB-19	lab test tissue dep	1	Total DDxs	7.4	4	2	0	6
South Basin Area X	SB-20	lab test tissue dep	1	Total DDxs	63.3	4	2	0	6
South Basin Area X	SB-21	lab test tissue dep	1	Total DDxs	44.6	4	2	0	6
South Basin Area X	SB-21	lab test tissue nondep	1	Total DDxs	52.4	3	3	0	6
South Basin Area X	SB-22	lab test tissue dep	1	Total DDxs	43.3	3	3	0	6
South Basin Area X	SB-23	lab test tissue dep	1	Total DDxs	41.4	4	2	0	6
		background tissue	1	Total PAH HIGH	61.1	3	7	0	10
		background tissue	2	Total PAH HIGH	61.8	3	7	0	10
		background tissue	3	Total PAH HIGH	52.6	3	7	0	10
Alameda Buoy	AB-67	lab test tissue dep	1	Total PAH HIGH	265.6	0	10	0	10
Alameda Buoy	AB-67	lab test tissue dep	2	Total PAH HIGH	218.7	0	10	0	10
Alameda Buoy	AB-67	lab test tissue dep	3	Total PAH HIGH	215.1	1	9	0	10
Alameda Buoy	AB-67	lab test tissue dep	4	Total PAH HIGH	213.3	0	10	0	10
Alameda Buoy	AB-67	lab test tissue dep	5	Total PAH HIGH	231.2	0	10	0	10
Alcatraz Environs	AL-64	lab test tissue dep	1	Total PAH HIGH	366.4	0	10	0	10
Alcatraz Environs	AL-64	lab test tissue dep	2	Total PAH HIGH	453.3	0	10	0	10
Alcatraz Environs	AL-64	lab test tissue dep	3	Total PAH HIGH	365.5	1	9	0	10
Alcatraz Environs	AL-64	lab test tissue dep	4	Total PAH HIGH	260.7	1	9	0	10
Alcatraz Environs	AL-64	lab test tissue dep	5	Total PAH HIGH	309.3	1	9	0	10
Bay Farm Borrow Pit	BF-66	lab test tissue dep	1	Total PAH HIGH	224.0	1	9	0	10
Bay Farm Borrow Pit	BF-66	lab test tissue dep	2	Total PAH HIGH	266.0	1	9	0	10
Bay Farm Borrow Pit	BF-66	lab test tissue dep	3	Total PAH HIGH	212.7	1	9	0	10
Bay Farm Borrow Pit	BF-66	lab test tissue dep	4	Total PAH HIGH	296.2	1	9	0	10
Bay Farm Borrow Pit	BF-66	lab test tissue dep	5	Total PAH HIGH	357.8	1	9	0	10
Paradise Cove	PC-63	lab test tissue dep	1	Total PAH HIGH	195.7	0	10	0	10
Paradise Cove	PC-63	lab test tissue dep	2	Total PAH HIGH	162.9	1	9	0	10
Paradise Cove	PC-63	lab test tissue dep	3	Total PAH HIGH	217.2	0	10	0	10
Paradise Cove	PC-63	lab test tissue dep	4	Total PAH HIGH	314.8	0	10	0	10
Paradise Cove	PC-63	lab test tissue dep	5	Total PAH HIGH	121.6	1	9	0	10
Red Rock	RR-65	lab test tissue dep	1	Total PAH HIGH	147.2	1	9	0	10
Red Rock	RR-65	lab test tissue dep	2	Total PAH HIGH	158.9	1	9	0	10
Red Rock	RR-65	lab test tissue dep	3	Total PAH HIGH	200.1	1	9	0	10
Red Rock	RR-65	lab test tissue dep	4	Total PAH HIGH	172.4	1	9	0	10
Red Rock	RR-65	lab test tissue dep	5	Total PAH HIGH	118.6	1	9	0	10
Eastern Wetland Area VIII	EW-31	lab test tissue dep	1	Total PAH HIGH	291.3	0	10	0	10
Eastern Wetland Area VIII	EW-32	lab test tissue dep	1	Total PAH HIGH	369.3	0	10	0	10
Eastern Wetland Area VIII	EW-34	lab test tissue dep	1	Total PAH HIGH	311.1	0	10	0	10
Eastern Wetland Area VIII	EW-35	lab test tissue dep	1	Total PAH HIGH	265.0	0	10	0	10
Eastern Wetland Area VIII	EW-37	lab test tissue dep	1	Total PAH HIGH	50.3	4	6	0	10
Eastern Wetland Area VIII	EW-30	lab test tissue dep	1	Total PAH HIGH	415.0	0	10	0	10
Eastern Wetland Area VIII	EW-36	lab test tissue dep	1	Total PAH HIGH	324.8	0	10	0	10
Eastern Wetland Area VIII	EW-36	lab test tissue nondep	1	Total PAH HIGH	568.1	0	10	0	10
Eastern Wetland Area VIII	EW-33	lab test tissue dep	1	Total PAH HIGH	289.0	1	9	0	10
India Basin Area I	IB-54	lab test tissue dep	1	Total PAH HIGH	501.6	1	9	0	10
India Basin Area I	IB-56	lab test tissue dep	1	Total PAH HIGH	267.4	1	9	0	10
India Basin Area I	IB-56	lab test tissue nondep	1	Total PAH HIGH	312.1	0	10	0	10
India Basin Area I	IB-57	lab test tissue dep	1	Total PAH HIGH	438.8	1	9	0	10
India Basin Area I	IB-58	lab test tissue dep	1	Total PAH HIGH	617.4	0	10	0	10
India Basin Area I	IB-55	lab test tissue dep	1	Total PAH HIGH	570.5	0	10	0	10
India Basin Area I	IB-59	lab test tissue dep	1	Total PAH HIGH	1465.3	0	10	0	10

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Oil Reclamation Area IX	OR-25	lab test tissue dep	1	Total PAH HIGH	482.7	0	10	0	10
Oil Reclamation Area IX	OR-27	lab test tissue dep	1	Total PAH HIGH	381.8	1	9	0	10
Oil Reclamation Area IX	OR-28	lab test tissue dep	1	Total PAH HIGH	266.5	0	10	0	10
Oil Reclamation Area IX	OR-29	lab test tissue dep	1	Total PAH HIGH	407.4	0	10	0	10
Oil Reclamation Area IX	OR-24	lab test tissue dep	1	Total PAH HIGH	631.1	1	9	0	10
Oil Reclamation Area IX	OR-26	lab test tissue dep	1	Total PAH HIGH	364.8	0	10	0	10
Oil Reclamation Area IX	OR-26	lab test tissue nondep	1	Total PAH HIGH	531.0	0	10	0	10
Point Avisadero Area III	PA-41	lab test tissue dep	1	Total PAH HIGH	424.5	0	10	0	10
Point Avisadero Area III	PA-42	lab test tissue dep	1	Total PAH HIGH	365.8	0	10	0	10
Point Avisadero Area III	PA-43	lab test tissue dep	1	Total PAH HIGH	180.8	1	9	0	10
Point Avisadero Area III	PA-44	lab test tissue dep	1	Total PAH HIGH	385.2	1	9	0	10
Point Avisadero Area III	PA-48	lab test tissue dep	1	Total PAH HIGH	319.5	0	10	0	10
Point Avisadero Area III	PA-49	lab test tissue dep	1	Total PAH HIGH	361.2	0	10	0	10
Point Avisadero Area III	PA-50	lab test tissue dep	1	Total PAH HIGH	323.9	0	10	0	10
Point Avisadero Area III	PA-51	lab test tissue dep	1	Total PAH HIGH	487.2	0	10	0	10
Point Avisadero Area III	PA-52	lab test tissue dep	1	Total PAH HIGH	436.4	0	10	0	10
Point Avisadero Area III	PA-53	lab test tissue dep	1	Total PAH HIGH	439.1	0	10	0	10
Point Avisadero Area III	PA-45	lab test tissue dep	1	Total PAH HIGH	371.0	1	9	0	10
Point Avisadero Area III	PA-46	lab test tissue dep	1	Total PAH HIGH	374.4	0	10	0	10
Point Avisadero Area III	PA-46	lab test tissue nondep	1	Total PAH HIGH	406.2	0	10	0	10
Point Avisadero Area III	PA-47	lab test tissue dep	1	Total PAH HIGH	472.0	0	10	0	10
Point Avisadero Area III	PA-38	lab test tissue dep	1	Total PAH HIGH	830.9	0	10	0	10
Point Avisadero Area III	PA-39	lab test tissue dep	1	Total PAH HIGH	674.3	0	10	0	10
Point Avisadero Area III	PA-40	lab test tissue dep	1	Total PAH HIGH	669.8	0	10	0	10
South Basin Area X	SB-01	lab test tissue dep	1	Total PAH HIGH	376.2	0	10	0	10
South Basin Area X	SB-02	lab test tissue dep	1	Total PAH HIGH	345.9	0	10	0	10
South Basin Area X	SB-03	lab test tissue dep	1	Total PAH HIGH	425.5	0	10	0	10
South Basin Area X	SB-04	lab test tissue dep	1	Total PAH HIGH	278.3	1	9	0	10
South Basin Area X	SB-05	lab test tissue dep	1	Total PAH HIGH	277.5	1	9	0	10
South Basin Area X	SB-06	lab test tissue dep	1	Total PAH HIGH	421.7	0	10	0	10
South Basin Area X	SB-07	lab test tissue dep	1	Total PAH HIGH	293.5	0	10	0	10
South Basin Area X	SB-08	lab test tissue dep	1	Total PAH HIGH	529.5	0	10	0	10
South Basin Area X	SB-09	lab test tissue dep	1	Total PAH HIGH	701.6	0	10	0	10
South Basin Area X	SB-10	lab test tissue dep	1	Total PAH HIGH	689.6	0	10	0	10
South Basin Area X	SB-11	lab test tissue dep	1	Total PAH HIGH	542.6	0	10	0	10
South Basin Area X	SB-12	lab test tissue dep	1	Total PAH HIGH	424.1	0	10	0	10
South Basin Area X	SB-13	lab test tissue dep	1	Total PAH HIGH	584.6	1	9	0	10
South Basin Area X	SB-14	lab test tissue dep	1	Total PAH HIGH	618.0	0	10	0	10
South Basin Area X	SB-15	lab test tissue dep	1	Total PAH HIGH	486.9	0	10	0	10
South Basin Area X	SB-16	lab test tissue dep	1	Total PAH HIGH	356.1	1	9	0	10
South Basin Area X	SB-17	lab test tissue dep	1	Total PAH HIGH	506.7	0	10	0	10
South Basin Area X	SB-18	lab test tissue dep	1	Total PAH HIGH	1213.6	0	10	0	10
South Basin Area X	SB-19	lab test tissue dep	1	Total PAH HIGH	80.6	1	9	0	10
South Basin Area X	SB-20	lab test tissue dep	1	Total PAH HIGH	730.2	0	10	0	10
South Basin Area X	SB-21	lab test tissue dep	1	Total PAH HIGH	763.6	0	10	0	10
South Basin Area X	SB-21	lab test tissue nondep	1	Total PAH HIGH	1049.9	0	10	0	10
South Basin Area X	SB-22	lab test tissue dep	1	Total PAH HIGH	395.3	0	10	0	10
South Basin Area X	SB-23	lab test tissue dep	1	Total PAH HIGH	1085.3	0	10	0	10
		background tissue	1	Total PAH LOW	12.4	2	5	0	7
		background tissue	2	Total PAH LOW	12.5	2	5	0	7
		background tissue	3	Total PAH LOW	10.4	2	5	0	7
Alameda Buoy	AB-67	lab test tissue dep	1	Total PAH LOW	22.4	2	5	0	7
Alameda Buoy	AB-67	lab test tissue dep	2	Total PAH LOW	20.5	2	5	0	7
Alameda Buoy	AB-67	lab test tissue dep	3	Total PAH LOW	10.6	3	4	0	7
Alameda Buoy	AB-67	lab test tissue dep	4	Total PAH LOW	15.8	2	5	0	7
Alameda Buoy	AB-67	lab test tissue dep	5	Total PAH LOW	21.9	2	5	0	7
Alcatraz Environs	AL-64	lab test tissue dep	1	Total PAH LOW	45.5	2	5	0	7
Alcatraz Environs	AL-64	lab test tissue dep	2	Total PAH LOW	53.8	2	5	0	7
Alcatraz Environs	AL-64	lab test tissue dep	3	Total PAH LOW	50.5	2	5	0	7
Alcatraz Environs	AL-64	lab test tissue dep	4	Total PAH LOW	33.9	2	5	0	7
Alcatraz Environs	AL-64	lab test tissue dep	5	Total PAH LOW	35.1	2	5	0	7
Bay Farm Borrow Pit	BF-66	lab test tissue dep	1	Total PAH LOW	12.2	5	2	0	7
Bay Farm Borrow Pit	BF-66	lab test tissue dep	2	Total PAH LOW	16.1	5	2	0	7
Bay Farm Borrow Pit	BF-66	lab test tissue dep	3	Total PAH LOW	12.7	5	2	0	7

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Bay Farm Borrow Pit	BF-66	lab test tissue dep	4	Total PAH LOW	19.0	5	2	0	7
Bay Farm Borrow Pit	BF-66	lab test tissue dep	5	Total PAH LOW	23.2	5	2	0	7
Paradise Cove	PC-63	lab test tissue dep	1	Total PAH LOW	18.3	2	5	0	7
Paradise Cove	PC-63	lab test tissue dep	2	Total PAH LOW	19.9	2	5	0	7
Paradise Cove	PC-63	lab test tissue dep	3	Total PAH LOW	22.4	2	5	0	7
Paradise Cove	PC-63	lab test tissue dep	4	Total PAH LOW	37.1	2	5	0	7
Paradise Cove	PC-63	lab test tissue dep	5	Total PAH LOW	10.8	2	5	0	7
Red Rock	RR-65	lab test tissue dep	1	Total PAH LOW	9.7	3	4	0	7
Red Rock	RR-65	lab test tissue dep	2	Total PAH LOW	9.0	3	4	0	7
Red Rock	RR-65	lab test tissue dep	3	Total PAH LOW	13.7	3	4	0	7
Red Rock	RR-65	lab test tissue dep	4	Total PAH LOW	15.6	2	5	0	7
Red Rock	RR-65	lab test tissue dep	5	Total PAH LOW	7.7	3	4	0	7
Eastern Wetland Area VIII	EW-31	lab test tissue dep	1	Total PAH LOW	26.6	2	5	0	7
Eastern Wetland Area VIII	EW-32	lab test tissue dep	1	Total PAH LOW	35.0	2	5	0	7
Eastern Wetland Area VIII	EW-34	lab test tissue dep	1	Total PAH LOW	26.9	2	5	0	7
Eastern Wetland Area VIII	EW-35	lab test tissue dep	1	Total PAH LOW	12.4	5	2	0	7
Eastern Wetland Area VIII	EW-37	lab test tissue dep	1	Total PAH LOW	0.0	7	0	0	7
Eastern Wetland Area VIII	EW-30	lab test tissue dep	1	Total PAH LOW	37.9	2	5	0	7
Eastern Wetland Area VIII	EW-36	lab test tissue dep	1	Total PAH LOW	26.3	2	5	0	7
Eastern Wetland Area VIII	EW-36	lab test tissue nondep	1	Total PAH LOW	59.7	1	6	0	7
Eastern Wetland Area VIII	EW-33	lab test tissue dep	1	Total PAH LOW	31.3	2	5	0	7
India Basin Area I	IB-54	lab test tissue dep	1	Total PAH LOW	30.8	5	2	0	7
India Basin Area I	IB-56	lab test tissue dep	1	Total PAH LOW	16.3	5	2	0	7
India Basin Area I	IB-56	lab test tissue nondep	1	Total PAH LOW	34.6	2	5	0	7
India Basin Area I	IB-57	lab test tissue dep	1	Total PAH LOW	38.2	2	5	0	7
India Basin Area I	IB-58	lab test tissue dep	1	Total PAH LOW	64.4	2	5	0	7
India Basin Area I	IB-55	lab test tissue dep	1	Total PAH LOW	47.9	2	5	0	7
India Basin Area I	IB-59	lab test tissue dep	1	Total PAH LOW	102.9	2	5	0	7
Oil Reclamation Area IX	OR-25	lab test tissue dep	1	Total PAH LOW	30.5	4	3	0	7
Oil Reclamation Area IX	OR-27	lab test tissue dep	1	Total PAH LOW	23.6	2	5	0	7
Oil Reclamation Area IX	OR-28	lab test tissue dep	1	Total PAH LOW	19.5	2	5	0	7
Oil Reclamation Area IX	OR-29	lab test tissue dep	1	Total PAH LOW	19.5	5	2	0	7
Oil Reclamation Area IX	OR-24	lab test tissue dep	1	Total PAH LOW	32.3	2	5	0	7
Oil Reclamation Area IX	OR-26	lab test tissue dep	1	Total PAH LOW	28.5	2	5	0	7
Oil Reclamation Area IX	OR-26	lab test tissue nondep	1	Total PAH LOW	58.4	1	6	0	7
Point Avisadero Area III	PA-41	lab test tissue dep	1	Total PAH LOW	31.7	2	5	0	7
Point Avisadero Area III	PA-42	lab test tissue dep	1	Total PAH LOW	37.0	2	5	0	7
Point Avisadero Area III	PA-43	lab test tissue dep	1	Total PAH LOW	18.7	2	5	0	7
Point Avisadero Area III	PA-44	lab test tissue dep	1	Total PAH LOW	22.5	5	2	0	7
Point Avisadero Area III	PA-48	lab test tissue dep	1	Total PAH LOW	29.3	2	5	0	7
Point Avisadero Area III	PA-49	lab test tissue dep	1	Total PAH LOW	35.0	2	5	0	7
Point Avisadero Area III	PA-50	lab test tissue dep	1	Total PAH LOW	29.5	2	5	0	7
Point Avisadero Area III	PA-51	lab test tissue dep	1	Total PAH LOW	42.5	2	5	0	7
Point Avisadero Area III	PA-52	lab test tissue dep	1	Total PAH LOW	44.9	2	5	0	7
Point Avisadero Area III	PA-53	lab test tissue dep	1	Total PAH LOW	65.0	2	5	0	7
Point Avisadero Area III	PA-45	lab test tissue dep	1	Total PAH LOW	27.0	3	4	0	7
Point Avisadero Area III	PA-46	lab test tissue dep	1	Total PAH LOW	49.3	2	5	0	7
Point Avisadero Area III	PA-46	lab test tissue nondep	1	Total PAH LOW	31.6	2	5	0	7
Point Avisadero Area III	PA-47	lab test tissue dep	1	Total PAH LOW	48.2	2	5	0	7
Point Avisadero Area III	PA-38	lab test tissue dep	1	Total PAH LOW	63.8	2	5	0	7
Point Avisadero Area III	PA-39	lab test tissue dep	1	Total PAH LOW	51.9	2	5	0	7
Point Avisadero Area III	PA-40	lab test tissue dep	1	Total PAH LOW	62.0	2	5	0	7
South Basin Area X	SB-01	lab test tissue dep	1	Total PAH LOW	38.6	0	7	0	7
South Basin Area X	SB-02	lab test tissue dep	1	Total PAH LOW	17.2	5	2	0	7
South Basin Area X	SB-03	lab test tissue dep	1	Total PAH LOW	26.8	2	5	0	7
South Basin Area X	SB-04	lab test tissue dep	1	Total PAH LOW	13.2	5	2	0	7
South Basin Area X	SB-05	lab test tissue dep	1	Total PAH LOW	11.1	5	2	0	7
South Basin Area X	SB-06	lab test tissue dep	1	Total PAH LOW	26.7	2	5	0	7
South Basin Area X	SB-07	lab test tissue dep	1	Total PAH LOW	20.6	2	5	0	7
South Basin Area X	SB-08	lab test tissue dep	1	Total PAH LOW	21.1	5	2	0	7
South Basin Area X	SB-09	lab test tissue dep	1	Total PAH LOW	35.1	2	5	0	7
South Basin Area X	SB-10	lab test tissue dep	1	Total PAH LOW	47.0	4	3	0	7
South Basin Area X	SB-11	lab test tissue dep	1	Total PAH LOW	29.6	2	5	0	7
South Basin Area X	SB-12	lab test tissue dep	1	Total PAH LOW	19.1	5	2	0	7

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
South Basin Area X	SB-13	lab test tissue dep	1	Total PAH LOW	26.9	3	4	0	7
South Basin Area X	SB-14	lab test tissue dep	1	Total PAH LOW	36.8	2	5	0	7
South Basin Area X	SB-15	lab test tissue dep	1	Total PAH LOW	34.1	2	5	0	7
South Basin Area X	SB-16	lab test tissue dep	1	Total PAH LOW	15.2	3	4	0	7
South Basin Area X	SB-17	lab test tissue dep	1	Total PAH LOW	25.2	2	5	0	7
South Basin Area X	SB-18	lab test tissue dep	1	Total PAH LOW	59.6	3	4	0	7
South Basin Area X	SB-19	lab test tissue dep	1	Total PAH LOW	13.3	2	5	0	7
South Basin Area X	SB-20	lab test tissue dep	1	Total PAH LOW	64.1	1	6	0	7
South Basin Area X	SB-21	lab test tissue dep	1	Total PAH LOW	47.4	2	5	0	7
South Basin Area X	SB-21	lab test tissue nondep	1	Total PAH LOW	99.2	0	7	0	7
South Basin Area X	SB-22	lab test tissue dep	1	Total PAH LOW	25.8	2	5	0	7
South Basin Area X	SB-23	lab test tissue dep	1	Total PAH LOW	80.2	2	5	0	7
Area I		bivalve (clam)		Total 4,4'-DDxs	29.9	0	3	0	3
Area I		polychaete		Total 4,4'-DDxs	46.8	0	3	0	3
Area III		polychaete		Total 4,4'-DDxs	58.9	0	3	0	3
Area IX		bivalve (clam)		Total 4,4'-DDxs	14.5	0	3	0	3
Area IX		polychaete		Total 4,4'-DDxs	131.4	0	3	0	3
Area VIII		bivalve (clam)		Total 4,4'-DDxs	12.9	0	3	0	3
Area VIII		polychaete		Total 4,4'-DDxs	24.0	1	2	0	3
Area X		bivalve (clam)		Total 4,4'-DDxs	40.1	0	3	0	3
Area X		polychaete		Total 4,4'-DDxs	184.9	0	3	0	3
Area I		bivalve (clam)		Total PCBs	256.2	7	15	0	22
Area I		polychaete		Total PCBs	432.3	8	14	0	22
Area III		polychaete		Total PCBs	1098.9	10	12	0	22
Area IX		bivalve (clam)		Total PCBs	942.7	8	14	0	22
Area IX		polychaete		Total PCBs	7331.7	7	15	0	22
Area VIII		bivalve (clam)		Total PCBs	465.2	8	14	0	22
Area VIII		polychaete		Total PCBs	303.0	10	12	0	22
Area X		bivalve (clam)		Total PCBs	2510.9	7	15	0	22
Area X		polychaete		Total PCBs	13435.9	6	16	0	22
Area I		bivalve (clam)		Total DDxs	29.9	3	3	0	6
Area I		polychaete		Total DDxs	46.8	3	3	0	6
Area III		polychaete		Total DDxs	58.9	3	3	0	6
Area IX		bivalve (clam)		Total DDxs	14.5	3	3	0	6
Area IX		polychaete		Total DDxs	131.4	3	3	0	6
Area VIII		bivalve (clam)		Total DDxs	12.9	3	3	0	6
Area VIII		polychaete		Total DDxs	24.0	4	2	0	6
Area X		bivalve (clam)		Total DDxs	40.1	3	3	0	6
Area X		polychaete		Total DDxs	184.9	3	3	0	6
Area I		bivalve (clam)		Total PAH HIGH	2186.7	0	10	0	10
Area I		polychaete		Total PAH HIGH	1930.2	0	10	0	10
Area III		polychaete		Total PAH HIGH	3889.2	0	10	0	10
Area IX		bivalve (clam)		Total PAH HIGH	235.4	0	10	0	10
Area IX		polychaete		Total PAH HIGH	308.4	0	10	0	10
Area VIII		bivalve (clam)		Total PAH HIGH	238.8	0	10	0	10
Area VIII		polychaete		Total PAH HIGH	620.3	0	10	0	10
Area X		bivalve (clam)		Total PAH HIGH	445.9	0	10	0	10
Area X		polychaete		Total PAH HIGH	1144.4	0	10	0	10
Area I		bivalve (clam)		Total PAH LOW	525.4	0	7	0	7
Area I		polychaete		Total PAH LOW	447.9	0	7	0	7
Area III		polychaete		Total PAH LOW	640.0	0	7	0	7
Area IX		bivalve (clam)		Total PAH LOW	30.9	2	5	0	7
Area IX		polychaete		Total PAH LOW	38.4	1	6	0	7
Area VIII		bivalve (clam)		Total PAH LOW	48.1	2	5	0	7
Area VIII		polychaete		Total PAH LOW	81.1	0	7	0	7
Area X		bivalve (clam)		Total PAH LOW	56.4	2	5	0	7
Area X		polychaete		Total PAH LOW	148.7	0	7	0	7
Area I		gobies, sculpins		Total 4,4'-DDxs	80.7	0	3	0	3
Area III		gobies, sculpins		Total 4,4'-DDxs	97.1	0	3	0	3
Area IX		gobies, sculpins		Total 4,4'-DDxs	90.3	0	3	0	3
Area VIII		gobies, sculpins		Total 4,4'-DDxs	83.9	0	3	0	3
Area X		gobies, sculpins		Total 4,4'-DDxs	178.4	0	3	0	3
Area I		gobies, sculpins		Total PCBs	1889.1	0	15	7	15
Area III		gobies, sculpins		Total PCBs	1595.3	8	14	0	22

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Area IX		gobies, sculpins		Total PCBs	3132.8	0	15	7	15
Area VIII		gobies, sculpins		Total PCBs	1558.5	0	14	8	14
Area X		gobies, sculpins		Total PCBs	7149.4	7	15	0	22
Area I		gobies, sculpins		Total DDxs	80.7	0	3	3	3
Area III		gobies, sculpins		Total DDxs	97.1	3	3	0	6
Area IX		gobies, sculpins		Total DDxs	90.3	0	3	3	3
Area VIII		gobies, sculpins		Total DDxs	83.9	0	3	3	3
Area X		gobies, sculpins		Total DDxs	178.4	3	3	0	6
Area I		gobies, sculpins		Total PAH HIGH	37.6	1	9	0	10
Area III		gobies, sculpins		Total PAH HIGH	23.5	1	9	0	10
Area IX		gobies, sculpins		Total PAH HIGH	8.7	3	7	0	10
Area VIII		gobies, sculpins		Total PAH HIGH	35.6	1	9	0	10
Area X		gobies, sculpins		Total PAH HIGH	6.5	3	7	0	10
Area I		gobies, sculpins		Total PAH LOW	21.0	2	5	0	7
Area III		gobies, sculpins		Total PAH LOW	82.0	0	7	0	7
Area IX		gobies, sculpins		Total PAH LOW	7.5	3	4	0	7
Area VIII		gobies, sculpins		Total PAH LOW	66.4	1	6	0	7
Area X		gobies, sculpins		Total PAH LOW	5.9	3	4	0	7
Bay Farm		Jacksmelt		Total 4,4'-DDxs	20.4	0	3	0	3
Bay Farm		Jacksmelt		Total 4,4'-DDxs	41.4	0	3	0	3
Bay Farm		Perch spp.		Total 4,4'-DDxs	23.7	0	3	0	3
Bay Farm		Perch spp.		Total 4,4'-DDxs	32.1	0	3	0	3
San Francisco Pier 7		Jacksmelt		Total 4,4'-DDxs	69.9	0	3	0	3
San Francisco Pier 7		Jacksmelt		Total 4,4'-DDxs	104.0	0	3	0	3
San Francisco Pier 7		Perch spp.		Total 4,4'-DDxs	41.8	0	3	0	3
San Francisco Pier 7		Perch spp.		Total 4,4'-DDxs	92.8	0	3	0	3
San Mateo Bridge		Jacksmelt		Total 4,4'-DDxs	67.3	0	3	0	3
San Mateo Bridge		Jacksmelt		Total 4,4'-DDxs	24.3	0	3	0	3
San Mateo Bridge		Perch spp.		Total 4,4'-DDxs	50.3	0	3	0	3
San Mateo Bridge		Perch spp.		Total 4,4'-DDxs	54.1	0	3	0	3
Hunters Point East		Jacksmelt		Total 4,4'-DDxs	36.5	0	3	0	3
Hunters Point East		Jacksmelt		Total 4,4'-DDxs	38.5	0	3	0	3
Hunters Point East		Perch spp.		Total 4,4'-DDxs	38.5	0	3	0	3
Hunters Point East		Perch spp.		Total 4,4'-DDxs	62.2	0	3	0	3
Hunters Point North		Jacksmelt		Total 4,4'-DDxs	47.6	0	3	0	3
Hunters Point North		Jacksmelt		Total 4,4'-DDxs	30.7	0	3	0	3
Hunters Point North		Perch spp.		Total 4,4'-DDxs	91.9	0	3	0	3
Hunters Point North		Perch spp.		Total 4,4'-DDxs	64.4	0	3	0	3
Hunters Point South		Jacksmelt		Total 4,4'-DDxs	51.5	0	3	0	3
Hunters Point South		Jacksmelt		Total 4,4'-DDxs	71.7	0	3	0	3
Hunters Point South		Perch spp.		Total 4,4'-DDxs	60.5	0	3	0	3
Hunters Point South		Perch spp.		Total 4,4'-DDxs	33.8	0	3	0	3
Various		Black surfperch		Total 4,4'-DDxs	17.4	0	3	0	3
Various		Walleye surfperch		Total 4,4'-DDxs	48.0	0	3	0	3
Bay Farm		Jacksmelt		Total PCBs	144.5	7	15	0	22
Bay Farm		Jacksmelt		Total PCBs	224.8	7	15	0	22
Bay Farm		Perch spp.		Total PCBs	202.4	7	15	0	22
Bay Farm		Perch spp.		Total PCBs	266.6	8	14	0	22
San Francisco Pier 7		Jacksmelt		Total PCBs	173.9	7	15	0	22
San Francisco Pier 7		Jacksmelt		Total PCBs	163.3	6	16	0	22
San Francisco Pier 7		Perch spp.		Total PCBs	87.3	8	14	0	22
San Francisco Pier 7		Perch spp.		Total PCBs	245.8	7	15	0	22
San Mateo Bridge		Jacksmelt		Total PCBs	345.9	7	15	0	22
San Mateo Bridge		Jacksmelt		Total PCBs	155.4	7	15	0	22
San Mateo Bridge		Perch spp.		Total PCBs	343.2	0	14	8	14
San Mateo Bridge		Perch spp.		Total PCBs	365.9	0	15	7	15
Hunters Point East		Jacksmelt		Total PCBs	465.9	7	15	0	22
Hunters Point East		Jacksmelt		Total PCBs	374.4	7	15	0	22
Hunters Point East		Perch spp.		Total PCBs	281.3	7	15	0	22
Hunters Point East		Perch spp.		Total PCBs	431.3	7	15	0	22
Hunters Point North		Jacksmelt		Total PCBs	309.1	6	16	0	22
Hunters Point North		Jacksmelt		Total PCBs	245.1	6	16	0	22
Hunters Point North		Perch spp.		Total PCBs	798.6	0	15	7	15

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
Hunters Point North		Perch spp.		Total PCBs	422.9	0	16	6	16
Hunters Point South		Jacksmelt		Total PCBs	955.1	7	15	0	22
Hunters Point South		Jacksmelt		Total PCBs	776.2	7	15	0	22
Hunters Point South		Perch spp.		Total PCBs	574.5	6	16	0	22
Hunters Point South		Perch spp.		Total PCBs	258.5	7	15	0	22
Various		Black surfperch		Total PCBs	217.7	7	15	0	22
Various		Walleye surfperch		Total PCBs	503.8	7	15	0	22
Bay Farm		Jacksmelt		Total DDxs	20.4	3	3	0	6
Bay Farm		Jacksmelt		Total DDxs	41.4	3	3	0	6
Bay Farm		Perch spp.		Total DDxs	23.7	3	3	0	6
Bay Farm		Perch spp.		Total DDxs	32.1	3	3	0	6
San Francisco Pier 7		Jacksmelt		Total DDxs	69.9	3	3	0	6
San Francisco Pier 7		Jacksmelt		Total DDxs	104.0	3	3	0	6
San Francisco Pier 7		Perch spp.		Total DDxs	41.8	3	3	0	6
San Francisco Pier 7		Perch spp.		Total DDxs	92.8	3	3	0	6
San Mateo Bridge		Jacksmelt		Total DDxs	67.3	3	3	0	6
San Mateo Bridge		Jacksmelt		Total DDxs	24.3	3	3	0	6
San Mateo Bridge		Perch spp.		Total DDxs	50.3	0	3	3	3
San Mateo Bridge		Perch spp.		Total DDxs	54.1	0	3	3	3
Hunters Point East		Jacksmelt		Total DDxs	36.5	3	3	0	6
Hunters Point East		Jacksmelt		Total DDxs	38.5	3	3	0	6
Hunters Point East		Perch spp.		Total DDxs	38.5	3	3	0	6
Hunters Point East		Perch spp.		Total DDxs	62.2	3	3	0	6
Hunters Point North		Jacksmelt		Total DDxs	47.6	3	3	0	6
Hunters Point North		Jacksmelt		Total DDxs	30.7	3	3	0	6
Hunters Point North		Perch spp.		Total DDxs	91.9	0	3	3	3
Hunters Point North		Perch spp.		Total DDxs	64.4	0	3	3	3
Hunters Point South		Jacksmelt		Total DDxs	51.5	3	3	0	6
Hunters Point South		Jacksmelt		Total DDxs	71.7	3	3	0	6
Hunters Point South		Perch spp.		Total DDxs	60.5	3	3	0	6
Hunters Point South		Perch spp.		Total DDxs	33.8	3	3	0	6
Various		Black surfperch		Total DDxs	17.4	3	3	0	6
Various		Walleye surfperch		Total DDxs	48.0	3	3	0	6
Bay Farm		Jacksmelt		Total PAH HIGH	1.1	6	4	0	10
Bay Farm		Jacksmelt		Total PAH HIGH	0.0	10	0	0	10
Bay Farm		Perch spp.		Total PAH HIGH	3.4	7	3	0	10
Bay Farm		Perch spp.		Total PAH HIGH	4.1	8	2	0	10
San Francisco Pier 7		Jacksmelt		Total PAH HIGH	0.7	8	2	0	10
San Francisco Pier 7		Jacksmelt		Total PAH HIGH	0.5	8	2	0	10
San Francisco Pier 7		Perch spp.		Total PAH HIGH	20.7	6	4	0	10
San Francisco Pier 7		Perch spp.		Total PAH HIGH	15.3	5	5	0	10
San Mateo Bridge		Jacksmelt		Total PAH HIGH	3.0	5	5	0	10
San Mateo Bridge		Jacksmelt		Total PAH HIGH	1.0	6	4	0	10
San Mateo Bridge		Perch spp.		Total PAH HIGH	4.1	5	5	0	10
San Mateo Bridge		Perch spp.		Total PAH HIGH	4.7	4	6	0	10
Hunters Point East		Jacksmelt		Total PAH HIGH	6.8	4	6	0	10
Hunters Point East		Jacksmelt		Total PAH HIGH	3.0	5	5	0	10
Hunters Point East		Perch spp.		Total PAH HIGH	20.4	2	8	0	10
Hunters Point East		Perch spp.		Total PAH HIGH	14.5	3	7	0	10
Hunters Point North		Jacksmelt		Total PAH HIGH	0.4	8	2	0	10
Hunters Point North		Jacksmelt		Total PAH HIGH	0.4	8	2	0	10
Hunters Point North		Perch spp.		Total PAH HIGH	12.7	6	4	0	10
Hunters Point North		Perch spp.		Total PAH HIGH	19.7	3	7	0	10
Hunters Point South		Jacksmelt		Total PAH HIGH	3.2	4	6	0	10
Hunters Point South		Jacksmelt		Total PAH HIGH	0.2	9	1	0	10
Hunters Point South		Perch spp.		Total PAH HIGH	7.6	5	5	0	10
Hunters Point South		Perch spp.		Total PAH HIGH	3.1	6	4	0	10
Various		Black surfperch		Total PAH HIGH	3.7	8	2	0	10
Various		Walleye surfperch		Total PAH HIGH	29.9	3	7	0	10
Bay Farm		Jacksmelt		Total PAH LOW	0.7	5	2	0	7
Bay Farm		Jacksmelt		Total PAH LOW	0.8	5	2	0	7
Bay Farm		Perch spp.		Total PAH LOW	7.4	3	4	0	7
Bay Farm		Perch spp.		Total PAH LOW	9.3	3	4	0	7
San Francisco Pier 7		Jacksmelt		Total PAH LOW	4.6	3	4	0	7

Table C-37. Calculated Total Concentrations of DDT, PCBs, and PAHs in Tissue Samples

Area	Station	Sample Type	Replicate	Parameter	Total Concentration (ug/kg dry wt)	# Non-Detects	# Detects	# Rejected values	# Summed Analytes
San Francisco Pier 7		Jacksmelt		Total PAH LOW	1.5	4	3	0	7
San Francisco Pier 7		Perch spp.		Total PAH LOW	77.5	0	7	0	7
San Francisco Pier 7		Perch spp.		Total PAH LOW	48.9	1	6	0	7
San Mateo Bridge		Jacksmelt		Total PAH LOW	0.8	4	3	0	7
San Mateo Bridge		Jacksmelt		Total PAH LOW	0.4	5	2	0	7
San Mateo Bridge		Perch spp.		Total PAH LOW	3.9	4	3	0	7
San Mateo Bridge		Perch spp.		Total PAH LOW	1.6	4	3	0	7
Hunters Point East		Jacksmelt		Total PAH LOW	5.3	3	4	0	7
Hunters Point East		Jacksmelt		Total PAH LOW	1.1	4	3	0	7
Hunters Point East		Perch spp.		Total PAH LOW	22.7	1	6	0	7
Hunters Point East		Perch spp.		Total PAH LOW	30.1	1	6	0	7
Hunters Point North		Jacksmelt		Total PAH LOW	2.8	3	4	0	7
Hunters Point North		Jacksmelt		Total PAH LOW	1.7	4	3	0	7
Hunters Point North		Perch spp.		Total PAH LOW	50.6	2	5	0	7
Hunters Point North		Perch spp.		Total PAH LOW	45.1	1	6	0	7
Hunters Point South		Jacksmelt		Total PAH LOW	2.6	4	3	0	7
Hunters Point South		Jacksmelt		Total PAH LOW	1.0	5	2	0	7
Hunters Point South		Perch spp.		Total PAH LOW	16.1	3	4	0	7
Hunters Point South		Perch spp.		Total PAH LOW	6.6	3	4	0	7
Various		Black surfperch		Total PAH LOW	7.9	3	4	0	7
Various		Walleye surfperch		Total PAH LOW	18.8	3	4	0	7

APPENDIX D

Bioassay Data

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Table D-1. Battelle Marine Sciences Lab, *E. estuarius* 4-day Ammonia Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
E_AMMRT_B1	0	UG/L	1	10	10	05/22/1997	Batch 1
E_AMMRT_B1	0	UG/L	2	10	9	05/22/1997	Batch 1
E_AMMRT_B1	0	UG/L	3	10	10	05/22/1997	Batch 1
E_AMMRT_B1	40000	UG/L	1	10	9	05/22/1997	Batch 1
E_AMMRT_B1	40000	UG/L	2	10	10	05/22/1997	Batch 1
E_AMMRT_B1	40000	UG/L	3	10	9	05/22/1997	Batch 1
E_AMMRT_B1	80000	UG/L	1	10	10	05/22/1997	Batch 1
E_AMMRT_B1	80000	UG/L	2	10	9	05/22/1997	Batch 1
E_AMMRT_B1	80000	UG/L	3	10	10	05/22/1997	Batch 1
E_AMMRT_B1	160000	UG/L	1	10	5	05/22/1997	Batch 1
E_AMMRT_B1	160000	UG/L	2	10	4	05/22/1997	Batch 1
E_AMMRT_B1	160000	UG/L	3	10	3	05/22/1997	Batch 1
E_AMMRT_B1	320000	UG/L	1	10	0	05/22/1997	Batch 1
E_AMMRT_B1	320000	UG/L	2	10	0	05/22/1997	Batch 1
E_AMMRT_B1	320000	UG/L	3	10	0	05/22/1997	Batch 1
E_AMMRT_B2	0	UG/L	1	20	20	06/07/1997	Batch 2
E_AMMRT_B2	0	UG/L	2	20	19	06/07/1997	Batch 2
E_AMMRT_B2	0	UG/L	3	20	18	06/07/1997	Batch 2
E_AMMRT_B2	40000	UG/L	1	20	18	06/07/1997	Batch 2
E_AMMRT_B2	40000	UG/L	2	20	19	06/07/1997	Batch 2
E_AMMRT_B2	40000	UG/L	3	20	20	06/07/1997	Batch 2
E_AMMRT_B2	80000	UG/L	1	20	17	06/07/1997	Batch 2
E_AMMRT_B2	80000	UG/L	2	20	18	06/07/1997	Batch 2
E_AMMRT_B2	80000	UG/L	3	20	8	06/07/1997	Batch 2
E_AMMRT_B2	160000	UG/L	1	20	15	06/07/1997	Batch 2
E_AMMRT_B2	160000	UG/L	2	20	16	06/07/1997	Batch 2
E_AMMRT_B2	160000	UG/L	3	20	10	06/07/1997	Batch 2
E_AMMRT_B2	320000	UG/L	1	20	0	06/07/1997	Batch 2
E_AMMRT_B2	320000	UG/L	2	20	0	06/07/1997	Batch 2
E_AMMRT_B2	320000	UG/L	3	20	0	06/07/1997	Batch 2
E_AMMRT_B3	0	UG/L	1	10	10	06/14/1997	Batch 3
E_AMMRT_B3	0	UG/L	2	10	9	06/14/1997	Batch 3
E_AMMRT_B3	0	UG/L	3	10	9	06/14/1997	Batch 3
E_AMMRT_B3	40000	UG/L	1	10	7	06/14/1997	Batch 3
E_AMMRT_B3	40000	UG/L	2	10	8	06/14/1997	Batch 3
E_AMMRT_B3	40000	UG/L	3	10	9	06/14/1997	Batch 3
E_AMMRT_B3	80000	UG/L	1	10	9	06/14/1997	Batch 3
E_AMMRT_B3	80000	UG/L	2	10	7	06/14/1997	Batch 3
E_AMMRT_B3	80000	UG/L	3	10	5	06/14/1997	Batch 3
E_AMMRT_B3	160000	UG/L	1	10	5	06/14/1997	Batch 3
E_AMMRT_B3	160000	UG/L	2	10	2	06/14/1997	Batch 3
E_AMMRT_B3	160000	UG/L	3	10	5	06/14/1997	Batch 3
E_AMMRT_B3	320000	UG/L	1	10	0	06/14/1997	Batch 3
E_AMMRT_B3	320000	UG/L	2	10	0	06/14/1997	Batch 3
E_AMMRT_B3	320000	UG/L	3	10	0	06/14/1997	Batch 3
E_AMMRT_B4	0	UG/L	1	10	10	07/05/1997	Batch 4
E_AMMRT_B4	0	UG/L	2	10	10	07/05/1997	Batch 4
E_AMMRT_B4	0	UG/L	3	10	10	07/05/1997	Batch 4
E_AMMRT_B4	40000	UG/L	1	10	10	07/05/1997	Batch 4
E_AMMRT_B4	40000	UG/L	2	10	10	07/05/1997	Batch 4
E_AMMRT_B4	40000	UG/L	3	10	9	07/05/1997	Batch 4

Table D-1. Battelle Marine Sciences Lab, *E. estuarius* 4-day Ammonia Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
E_AMMRT_B4	80000	UG/L	1	10	9	07/05/1997	Batch 4
E_AMMRT_B4	80000	UG/L	2	10	10	07/05/1997	Batch 4
E_AMMRT_B4	80000	UG/L	3	10	10	07/05/1997	Batch 4
E_AMMRT_B4	160000	UG/L	1	10	5	07/05/1997	Batch 4
E_AMMRT_B4	160000	UG/L	2	10	3	07/05/1997	Batch 4
E_AMMRT_B4	160000	UG/L	3	10	7	07/05/1997	Batch 4
E_AMMRT_B4	320000	UG/L	1	10	0	07/05/1997	Batch 4
E_AMMRT_B4	320000	UG/L	2	10	0	07/05/1997	Batch 4
E_AMMRT_B4	320000	UG/L	3	10	0	07/05/1997	Batch 4

Table D-2. Battelle Marine Sciences Lab, *E. estuarius* 4-day Ammonia Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Total Ammonia (mg/L)	Recording Date	Remarks
E_AMMRT_B1	0	UG/L	1	14.5	30.8	8.3	7.8	0.4 G	05/18/1997	Ammonia below calibration range
E_AMMRT_B1	0	UG/L	2	14.5	30.8	8.2	7.8		05/18/1997	
E_AMMRT_B1	0	UG/L	3	14.5	30.8	8.2	7.8		05/18/1997	
E_AMMRT_B1	0	UG/L	1	14.5	31.2	7.1	7.7		05/19/1997	
E_AMMRT_B1	0	UG/L	2	15.0	30.7	7.3	7.3		05/20/1997	
E_AMMRT_B1	0	UG/L	3	15.1	30.7	7.7	7.6		05/21/1997	
E_AMMRT_B1	0	UG/L	1	15.0	30.8	8.2	7.6		05/22/1997	
E_AMMRT_B1	0	UG/L	2	15.1	30.6	8.3	7.7		05/22/1997	
E_AMMRT_B1	0	UG/L	3	15.0	30.6	8.4	7.7		05/22/1997	
E_AMMRT_B1	40000	UG/L	1	14.5	30.9	8.2	7.7	38	05/18/1997	
E_AMMRT_B1	40000	UG/L	2	14.5	31.1	8.2	7.7		05/18/1997	
E_AMMRT_B1	40000	UG/L	3	14.5	31.0	8.2	7.7		05/18/1997	
E_AMMRT_B1	40000	UG/L	1	14.5	31.2	7.2	7.7		05/19/1997	
E_AMMRT_B1	40000	UG/L	2	15.1	30.9	6.9	7.5		05/20/1997	
E_AMMRT_B1	40000	UG/L	3	15.1	30.9	7.7	7.7		05/21/1997	
E_AMMRT_B1	40000	UG/L	1	15.0	30.9	8.4	7.7		05/22/1997	
E_AMMRT_B1	40000	UG/L	2	15.2	30.8	8.2	7.7		05/22/1997	
E_AMMRT_B1	40000	UG/L	3	15.1	30.8	8.3	7.7		05/22/1997	
E_AMMRT_B1	80000	UG/L	1	14.5	31.2	8.2	7.7	76	05/18/1997	
E_AMMRT_B1	80000	UG/L	2	14.5	31.1	8.2	7.7		05/18/1997	
E_AMMRT_B1	80000	UG/L	3	14.6	31.2	8.2	7.7		05/18/1997	
E_AMMRT_B1	80000	UG/L	1	14.6	31.5	6.9	7.7		05/19/1997	
E_AMMRT_B1	80000	UG/L	2	14.9	31.0	6.9	7.6		05/20/1997	
E_AMMRT_B1	80000	UG/L	3	15.1	30.8	7.7	7.6		05/21/1997	
E_AMMRT_B1	80000	UG/L	1	15.0	31.1	8.3	7.7		05/22/1997	
E_AMMRT_B1	80000	UG/L	2	15.0	31.0	8.3	7.7		05/22/1997	
E_AMMRT_B1	80000	UG/L	3	15.0	31.0	8.3	7.7		05/22/1997	
E_AMMRT_B1	160000	UG/L	1	14.5	31.5	8.2	7.6	170	05/18/1997	
E_AMMRT_B1	160000	UG/L	2	14.5	31.4	8.2	7.6		05/18/1997	
E_AMMRT_B1	160000	UG/L	3	14.5	31.4	8.2	7.6		05/18/1997	
E_AMMRT_B1	160000	UG/L	1	14.5	31.7	6.9	7.6		05/19/1997	
E_AMMRT_B1	160000	UG/L	2	14.9	31.4	7.1	7.6		05/20/1997	
E_AMMRT_B1	160000	UG/L	3	15.0	31.3	7.8	7.7		05/21/1997	
E_AMMRT_B1	160000	UG/L	1	15.0	31.5	8.2	7.7		05/22/1997	
E_AMMRT_B1	160000	UG/L	2	15.2	31.3	8.2	7.7		05/22/1997	
E_AMMRT_B1	160000	UG/L	3	14.9	31.3	8.2	7.7		05/22/1997	
E_AMMRT_B1	320000	UG/L	1	14.6	32.1 T	8.1	7.5	290	05/18/1997	
E_AMMRT_B1	320000	UG/L	2	14.5	32.1 T	8.2	7.5		05/18/1997	
E_AMMRT_B1	320000	UG/L	3	14.5	32.1 T	8.2	7.5		05/18/1997	
E_AMMRT_B1	320000	UG/L	1	14.5	32.3 T	6.9	7.5		05/19/1997	
E_AMMRT_B1	320000	UG/L	2	15.0	31.9	6.9	7.5		05/20/1997	
E_AMMRT_B1	320000	UG/L	3	15.1	32.0	7.8	7.7		05/21/1997	
E_AMMRT_B1	320000	UG/L	1	15.0	31.9	8.1	7.6		05/22/1997	
E_AMMRT_B1	320000	UG/L	2	15.1	31.9	8.1	7.6		05/22/1997	
E_AMMRT_B1	320000	UG/L	3	15.1	31.8	8.1	7.6		05/22/1997	
E_AMMRT_B2	0	UG/L	1	14.6	31.0	8.4	7.7		06/03/1997	
E_AMMRT_B2	0	UG/L	2	14.6	31.0	8.4	7.7		06/03/1997	
E_AMMRT_B2	0	UG/L	3	14.6	31.0	8.4	7.7		06/03/1997	
E_AMMRT_B2	0	UG/L	1	14.5	30.8	8.2	7.5		06/04/1997	
E_AMMRT_B2	0	UG/L	2	14.3	31.0	8.4	7.8		06/05/1997	
E_AMMRT_B2	0	UG/L	3	15.0	31.4	8.2	7.6		06/06/1997	
E_AMMRT_B2	0	UG/L	1	14.6	31.2	8.4	7.7		06/07/1997	
E_AMMRT_B2	0	UG/L	2	14.7	31.1	8.3	7.7		06/07/1997	
E_AMMRT_B2	0	UG/L	3	14.6	31.2	8.3	7.7		06/07/1997	
E_AMMRT_B2	40000	UG/L	1	14.6	31.1	8.4	7.7		06/03/1997	
E_AMMRT_B2	40000	UG/L	2	14.7	31.1	8.4	7.7		06/03/1997	
E_AMMRT_B2	40000	UG/L	3	14.7	31.1	8.4	7.7		06/03/1997	
E_AMMRT_B2	40000	UG/L	1	14.5	31.0	8.1	7.6		06/04/1997	
E_AMMRT_B2	40000	UG/L	2	14.3	31.2	8.4	7.8		06/05/1997	
E_AMMRT_B2	40000	UG/L	3	15.0	31.4	8.3	7.6		06/06/1997	
E_AMMRT_B2	40000	UG/L	1	14.6	31.3	8.3	7.7		06/07/1997	
E_AMMRT_B2	40000	UG/L	2	14.6	31.4	8.3	7.7		06/07/1997	
E_AMMRT_B2	40000	UG/L	3	14.7	31.4	8.3	7.7		06/07/1997	
E_AMMRT_B2	80000	UG/L	1	14.6	31.3	8.4	7.6		06/03/1997	
E_AMMRT_B2	80000	UG/L	2	14.6	31.3	8.4	7.6		06/03/1997	
E_AMMRT_B2	80000	UG/L	3	14.7	31.3	8.4	7.6		06/03/1997	
E_AMMRT_B2	80000	UG/L	1	14.5	31.0	8.3	7.6		06/04/1997	
E_AMMRT_B2	80000	UG/L	2	14.2	31.3	8.4	7.8		06/05/1997	
E_AMMRT_B2	80000	UG/L	3	14.9	31.5	8.2	7.6		06/06/1997	
E_AMMRT_B2	80000	UG/L	1	14.5	31.4	8.3	7.7		06/07/1997	
E_AMMRT_B2	80000	UG/L	2	14.5	31.4	8.3	7.7		06/07/1997	
E_AMMRT_B2	80000	UG/L	3	14.6	31.5	8.3	7.7		06/07/1997	
E_AMMRT_B2	160000	UG/L	1	14.7	31.3	8.4	7.5		06/03/1997	
E_AMMRT_B2	160000	UG/L	2	14.7	31.3	8.4	7.5		06/03/1997	
E_AMMRT_B2	160000	UG/L	3	14.6	31.3	8.4	7.6		06/03/1997	
E_AMMRT_B2	160000	UG/L	1	14.5	31.2	8.1	7.6		06/04/1997	
E_AMMRT_B2	160000	UG/L	2	14.3	31.4	8.3	7.7		06/05/1997	
E_AMMRT_B2	160000	UG/L	3	15.0	31.6	8.2	7.6		06/06/1997	
E_AMMRT_B2	160000	UG/L	1	14.6	31.5	8.3	7.7		06/07/1997	
E_AMMRT_B2	160000	UG/L	2	14.6	31.5	8.2	7.7		06/07/1997	
E_AMMRT_B2	160000	UG/L	3	14.6	31.6	8.3	7.7		06/07/1997	

Table D-2. Battelle Marine Sciences Lab, *E. estuarius* 4-day Ammonia Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Total Ammonia (mg/L)		Recording Date	Remarks
E_AMMRT_B1	0	UG/L	1	14.5	30.8		8.3	7.8	0.4	G	05/18/1997	Ammonia below calibration range
E_AMMRT_B2	320000	UG/L	1	14.7	31.9		8.3	7.5			06/03/1997	
E_AMMRT_B2	320000	UG/L	2	14.6	31.8		8.3	7.5			06/03/1997	
E_AMMRT_B2	320000	UG/L	3	14.7	31.9		8.3	7.5			06/03/1997	
E_AMMRT_B2	320000	UG/L	1	14.5	31.7		8.2	7.6			06/04/1997	
E_AMMRT_B2	320000	UG/L	2	14.3	31.8		8.3	7.7			06/05/1997	
E_AMMRT_B2	320000	UG/L	3	14.8	32.1	T	8.1	7.5			06/06/1997	
E_AMMRT_B2	320000	UG/L	1	14.6	32.0		8.2	7.7			06/07/1997	
E_AMMRT_B2	320000	UG/L	2	14.6	32.1	T	8.1	7.6			06/07/1997	
E_AMMRT_B2	320000	UG/L	3	14.6	32.2	T	8.1	7.6			06/07/1997	
E_AMMRT_B3	0	UG/L	1	14.4	28.4		7.3	7.7			06/10/1997	
E_AMMRT_B3	0	UG/L	2	14.5	28.4		7.3	7.7			06/10/1997	
E_AMMRT_B3	0	UG/L	3	14.5	28.4		7.3	7.7			06/10/1997	
E_AMMRT_B3	0	UG/L	1	14.7	28.4		8.4	7.8			06/11/1997	
E_AMMRT_B3	0	UG/L	2	14.7	28.9		8.3	7.8			06/12/1997	
E_AMMRT_B3	0	UG/L	3	15.1	28.5		8.5	7.9			06/13/1997	
E_AMMRT_B3	0	UG/L	1	14.6	28.7		8.5	7.9			06/14/1997	
E_AMMRT_B3	0	UG/L	2	14.5	28.7		8.6	7.9			06/14/1997	
E_AMMRT_B3	0	UG/L	3	14.5	28.6		8.6	7.9			06/14/1997	
E_AMMRT_B3	40000	UG/L	1	14.4	28.5		7.2	7.7			06/10/1997	
E_AMMRT_B3	40000	UG/L	2	14.4	28.5		7.2	7.6			06/10/1997	
E_AMMRT_B3	40000	UG/L	3	14.4	28.5		7.2	7.6			06/10/1997	
E_AMMRT_B3	40000	UG/L	1	14.7	28.5		8.4	7.8			06/11/1997	
E_AMMRT_B3	40000	UG/L	2	14.6	28.6		8.4	7.7			06/12/1997	
E_AMMRT_B3	40000	UG/L	3	15.0	28.4		8.4	7.8			06/13/1997	
E_AMMRT_B3	40000	UG/L	1	14.5	28.8		8.4	7.9			06/14/1997	
E_AMMRT_B3	40000	UG/L	2	14.5	28.9		8.5	7.8			06/14/1997	
E_AMMRT_B3	40000	UG/L	3	14.5	28.8		8.6	7.8			06/14/1997	
E_AMMRT_B3	80000	UG/L	1	14.5	28.6		7.3	7.6			06/10/1997	
E_AMMRT_B3	80000	UG/L	2	14.5	28.6		7.3	7.6			06/10/1997	
E_AMMRT_B3	80000	UG/L	3	14.5	28.6		7.4	7.6			06/10/1997	
E_AMMRT_B3	80000	UG/L	1	14.7	28.6		8.4	7.8			06/11/1997	
E_AMMRT_B3	80000	UG/L	2	14.5	28.6		8.4	7.7			06/12/1997	
E_AMMRT_B3	80000	UG/L	3	15.0	28.5		8.4	7.8			06/13/1997	
E_AMMRT_B3	80000	UG/L	1	14.5	29.0		8.6	7.8			06/14/1997	
E_AMMRT_B3	80000	UG/L	2	14.5	29.0		8.6	7.9			06/14/1997	
E_AMMRT_B3	80000	UG/L	3	14.5	28.9		8.6	7.8			06/14/1997	
E_AMMRT_B3	160000	UG/L	1	14.4	28.9		7.4	7.5			06/10/1997	
E_AMMRT_B3	160000	UG/L	2	14.5	28.9		7.3	7.6			06/10/1997	
E_AMMRT_B3	160000	UG/L	3	14.5	28.9		7.3	7.6			06/10/1997	
E_AMMRT_B3	160000	UG/L	1	14.7	28.9		8.3	7.8			06/11/1997	
E_AMMRT_B3	160000	UG/L	2	14.4	28.8		8.4	7.7			06/12/1997	
E_AMMRT_B3	160000	UG/L	3	15.1	28.7		8.3	7.8			06/13/1997	
E_AMMRT_B3	160000	UG/L	1	14.5	29.3		8.5	7.8			06/14/1997	
E_AMMRT_B3	160000	UG/L	2	14.4	29.4		8.6	7.8			06/14/1997	
E_AMMRT_B3	160000	UG/L	3	14.5	29.2		8.5	7.8			06/14/1997	
E_AMMRT_B3	320000	UG/L	1	14.4	29.5		7.4	7.5			06/10/1997	
E_AMMRT_B3	320000	UG/L	2	14.5	29.5		7.4	7.5			06/10/1997	
E_AMMRT_B3	320000	UG/L	3	14.4	29.5		7.4	7.5			06/10/1997	
E_AMMRT_B3	320000	UG/L	1	14.6	29.5		8.4	7.7			06/11/1997	
E_AMMRT_B3	320000	UG/L	2	14.5	29.4		8.3	7.7			06/12/1997	
E_AMMRT_B3	320000	UG/L	3	14.9	29.3		8.4	7.7			06/13/1997	
E_AMMRT_B3	320000	UG/L	1	14.5	29.8		8.5	7.8			06/14/1997	
E_AMMRT_B3	320000	UG/L	2	14.5	29.8		8.5	7.8			06/14/1997	
E_AMMRT_B3	320000	UG/L	3	14.5	29.8		8.5	7.8			06/14/1997	
E_AMMRT_B4	0	UG/L	1	14.9	30.1		5.7	7.8			07/01/1997	
E_AMMRT_B4	0	UG/L	2	14.9	30.0		5.8	7.8			07/01/1997	
E_AMMRT_B4	0	UG/L	3	14.9	30.0		5.8	7.8			07/01/1997	
E_AMMRT_B4	0	UG/L	1	15.4	30.0		8.5	7.7			07/02/1997	
E_AMMRT_B4	0	UG/L	2	15.1	29.9		8.4	7.7			07/03/1997	
E_AMMRT_B4	0	UG/L	3	15.3	30.3		8.4	7.7			07/04/1997	
E_AMMRT_B4	0	UG/L	1	14.8	30.2		8.6	7.9			07/05/1997	
E_AMMRT_B4	0	UG/L	2	14.9	30.2		8.7	7.8			07/05/1997	
E_AMMRT_B4	0	UG/L	3	14.8	30.0		8.7	7.9			07/05/1997	
E_AMMRT_B4	40000	UG/L	1	14.9	30.1		5.8	7.8			07/01/1997	
E_AMMRT_B4	40000	UG/L	2	14.9	30.2		5.8	7.9			07/01/1997	
E_AMMRT_B4	40000	UG/L	3	14.9	30.1		5.8	7.7			07/01/1997	
E_AMMRT_B4	40000	UG/L	1	15.3	30.1		8.6	7.7			07/02/1997	
E_AMMRT_B4	40000	UG/L	2	15.1	30.2		8.5	7.7			07/03/1997	
E_AMMRT_B4	40000	UG/L	3	15.1	30.2		8.5	7.6			07/04/1997	
E_AMMRT_B4	40000	UG/L	1	14.8	30.1		8.6	7.8			07/05/1997	
E_AMMRT_B4	40000	UG/L	2	14.8	30.4		8.6	7.8			07/05/1997	
E_AMMRT_B4	40000	UG/L	3	14.9	30.2		8.6	7.8			07/05/1997	
E_AMMRT_B4	80000	UG/L	1	14.9	30.2		5.8	7.8			07/01/1997	
E_AMMRT_B4	80000	UG/L	2	14.9	30.2		5.7	7.7			07/01/1997	
E_AMMRT_B4	80000	UG/L	3	14.9	30.3		5.8	7.7			07/01/1997	
E_AMMRT_B4	80000	UG/L	1	15.3	30.3		8.6	7.7			07/02/1997	
E_AMMRT_B4	80000	UG/L	2	15.1	30.2		8.5	7.6			07/03/1997	
E_AMMRT_B4	80000	UG/L	3	15.2	30.4		8.5	7.7			07/04/1997	
E_AMMRT_B4	80000	UG/L	1	14.8	30.3		8.6	7.9			07/05/1997	
E_AMMRT_B4	80000	UG/L	2	14.9	30.2		8.7	7.8			07/05/1997	

Table D-2. Battelle Marine Sciences Lab, *E. estuarius* 4-day Ammonia Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Total Ammonia (mg/L)		Recording Date	Remarks
E_AMMRT_B1	0	UG/L	1	14.5	30.8	8.3	7.8	0.4	G	05/18/1997	Ammonia below calibration range
E_AMMRT_B4	80000	UG/L	3	14.9	30.4	8.4	7.8			07/05/1997	
E_AMMRT_B4	160000	UG/L	1	14.9	30.5	5.8	7.7			07/01/1997	
E_AMMRT_B4	160000	UG/L	2	14.9	30.6	5.7	7.7			07/01/1997	
E_AMMRT_B4	160000	UG/L	3	14.9	30.5	5.8	7.7			07/01/1997	
E_AMMRT_B4	160000	UG/L	1	15.3	30.5	8.6	7.6			07/02/1997	
E_AMMRT_B4	160000	UG/L	2	15.1	30.4	8.5	7.7			07/03/1997	
E_AMMRT_B4	160000	UG/L	3	15.2	30.8	8.5	7.6			07/04/1997	
E_AMMRT_B4	160000	UG/L	1	14.9	30.5	8.5	7.8			07/05/1997	
E_AMMRT_B4	160000	UG/L	2	14.9	30.6	8.5	7.8			07/05/1997	
E_AMMRT_B4	160000	UG/L	3	14.9	30.6	8.5	7.8			07/05/1997	
E_AMMRT_B4	320000	UG/L	1	14.9	31.2	5.7	7.8			07/01/1997	
E_AMMRT_B4	320000	UG/L	2	14.9	31.4	5.7	7.6			07/01/1997	
E_AMMRT_B4	320000	UG/L	3	14.9	31.1	5.7	7.6			07/01/1997	
E_AMMRT_B4	320000	UG/L	1	15.3	31.2	8.5	7.6			07/02/1997	
E_AMMRT_B4	320000	UG/L	2	15.1	31.3	8.4	7.6			07/03/1997	
E_AMMRT_B4	320000	UG/L	3	15.2	31.4	8.5	7.5			07/04/1997	
E_AMMRT_B4	320000	UG/L	1	14.9	31.3	8.4	7.8			07/05/1997	
E_AMMRT_B4	320000	UG/L	2	14.9	31.5	8.3	7.7			07/05/1997	
E_AMMRT_B4	320000	UG/L	3	14.9	31.2	8.4	7.7			07/05/1997	

G = estimated value.
T = out of target range.

Table D-3. Battelle Marine Sciences Lab, *E. estuarius* 4-day Cadmium Reference Toxicant Testing Results

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Stocking Density		Number Alive	Recording Date	Remarks
E_CDRT_B1	0	UG/L	1	20		20	05/22/1997	Batch 1
E_CDRT_B1	0	UG/L	2	20		18	05/22/1997	Batch 1
E_CDRT_B1	0	UG/L	3	20		20	05/22/1997	Batch 1
E_CDRT_B1	3500	UG/L	1	20		15	05/22/1997	Batch 1
E_CDRT_B1	3500	UG/L	2	20		16	05/22/1997	Batch 1
E_CDRT_B1	3500	UG/L	3	20		17	05/22/1997	Batch 1
E_CDRT_B1	7000	UG/L	1	20		13	05/22/1997	Batch 1
E_CDRT_B1	7000	UG/L	2	20		14	05/22/1997	Batch 1
E_CDRT_B1	7000	UG/L	3	20		11	05/22/1997	Batch 1
E_CDRT_B1	14000	UG/L	1	20		0	05/22/1997	Batch 1
E_CDRT_B1	14000	UG/L	2	20		2	05/22/1997	Batch 1
E_CDRT_B1	14000	UG/L	3	20		1	05/22/1997	Batch 1
E_CDRT_B1	28000	UG/L	1	20		0	05/22/1997	Batch 1
E_CDRT_B1	28000	UG/L	2	20		0	05/22/1997	Batch 1
E_CDRT_B1	28000	UG/L	3	20		0	05/22/1997	Batch 1
E_CDRT_B2	0	UG/L	1	20		19	06/07/1997	Batch 2
E_CDRT_B2	0	UG/L	2	20		19	06/07/1997	Batch 2
E_CDRT_B2	0	UG/L	3	20		18	06/07/1997	Batch 2
E_CDRT_B2	3500	UG/L	1	20		19	06/07/1997	Batch 2
E_CDRT_B2	3500	UG/L	2	20		19	06/07/1997	Batch 2
E_CDRT_B2	3500	UG/L	3	20		19	06/07/1997	Batch 2
E_CDRT_B2	7000	UG/L	1	20		13	06/07/1997	Batch 2
E_CDRT_B2	7000	UG/L	2	20		17	06/07/1997	Batch 2
E_CDRT_B2	7000	UG/L	3	20		14	06/07/1997	Batch 2
E_CDRT_B2	14000	UG/L	1	21	G	3	06/07/1997	Batch 2
E_CDRT_B2	14000	UG/L	2	20		2	06/07/1997	Batch 2
E_CDRT_B2	14000	UG/L	3	20		2	06/07/1997	Batch 2
E_CDRT_B2	28000	UG/L	1	20		0	06/07/1997	Batch 2
E_CDRT_B2	28000	UG/L	2	20		0	06/07/1997	Batch 2
E_CDRT_B2	28000	UG/L	3	20		0	06/07/1997	Batch 2
E_CDRT_B3	0	UG/L	1	20		17	06/14/1997	Batch 3
E_CDRT_B3	0	UG/L	2	20		20	06/14/1997	Batch 3
E_CDRT_B3	0	UG/L	3	20		18	06/14/1997	Batch 3
E_CDRT_B3	3500	UG/L	1	20		18	06/14/1997	Batch 3
E_CDRT_B3	3500	UG/L	2	20		17	06/14/1997	Batch 3
E_CDRT_B3	3500	UG/L	3	20		13	06/14/1997	Batch 3
E_CDRT_B3	7000	UG/L	1	20		14	06/14/1997	Batch 3
E_CDRT_B3	7000	UG/L	2	20		10	06/14/1997	Batch 3
E_CDRT_B3	7000	UG/L	3	20		11	06/14/1997	Batch 3
E_CDRT_B3	14000	UG/L	1	20		6	06/14/1997	Batch 3
E_CDRT_B3	14000	UG/L	2	20		7	06/14/1997	Batch 3
E_CDRT_B3	14000	UG/L	3	20		8	06/14/1997	Batch 3
E_CDRT_B3	28000	UG/L	1	20		0	06/14/1997	Batch 3
E_CDRT_B3	28000	UG/L	2	20		0	06/14/1997	Batch 3
E_CDRT_B3	28000	UG/L	3	20		0	06/14/1997	Batch 3
E_CDRT_B4	0	UG/L	1	20		20	07/05/1997	Batch 4
E_CDRT_B4	0	UG/L	2	20		20	07/05/1997	Batch 4
E_CDRT_B4	0	UG/L	3	20		20	07/05/1997	Batch 4
E_CDRT_B4	3500	UG/L	1	20		20	07/05/1997	Batch 4
E_CDRT_B4	3500	UG/L	2	20		19	07/05/1997	Batch 4
E_CDRT_B4	3500	UG/L	3	20		17	07/05/1997	Batch 4
E_CDRT_B4	7000	UG/L	1	20		13	07/05/1997	Batch 4
E_CDRT_B4	7000	UG/L	2	20		17	07/05/1997	Batch 4
E_CDRT_B4	7000	UG/L	3	20		15	07/05/1997	Batch 4
E_CDRT_B4	14000	UG/L	1	20		1	07/05/1997	Batch 4
E_CDRT_B4	14000	UG/L	2	20		4	07/05/1997	Batch 4
E_CDRT_B4	14000	UG/L	3	20		3	07/05/1997	Batch 4

Table D-3. Battelle Marine Sciences Lab, *E. estuarius* 4-day Cadmium Reference Toxicant Testing Results

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
E_CDRT_B1	0	UG/L	1	20	20	05/22/1997	Batch 1
E_CDRT_B4	28000	UG/L	1	20	0	07/05/1997	Batch 4
E_CDRT_B4	28000	UG/L	2	20	0	07/05/1997	Batch 4
E_CDRT_B4	28000	UG/L	3	20	0	07/05/1997	Batch 4

G = estimated value

Table D-4. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Porewater Ammonia Summary

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Total Ammonia (mg/L)		Recording Date	REMARK
AAB-158	IB-54	1	24.1	28		7.2	2.9	G	05/14/1997	Bulk Sediment
AAB-158	IB-54	6	14.5	28.3	8.2	7.4	7.6		06/10/1997	Batch 3, Day 0
AAB-160	IB-55	1	21.8	28		7.5	11		05/14/1997	Bulk Sediment
AAB-160	IB-55	6	14.7	29.4	8.1	7.5	14.4		06/03/1997	Batch 2, Day 0
AAB-159	IB-56	1	22.0	28		7.3	1.2	G	05/14/1997	Bulk Sediment
AAB-159	IB-56	6	14.5	28.3	8.2	7.4	1.7		06/10/1997	Batch 3, Day 0
AAB-129	IB-57	1	23.9	28		7.1	2.8	G	05/14/1997	Bulk Sediment
AAB-129	IB-57	6	14.5	28.5	7.9	7.3	7		06/10/1997	Batch 3, Day 0
AAB-130	IB-58	1	21.6	28		7.1	5.4	G	05/14/1997	Bulk Sediment
AAB-130	IB-58	6	14.6	28.3	8.2	7.4	11.6		06/10/1997	Batch 3, Day 0
AAB-161	IB-59	1	21.8	28		7.3	6.7	G	05/14/1997	Bulk Sediment
AAB-161	IB-59	6	14.6	28.2	8.2	7.3	8.7		06/10/1997	Batch 3, Day 0
AAB-133	PA-38	1	22.0	28		7.2	4.8	G	05/14/1997	Bulk Sediment
AAB-133	PA-38	6	14.5	30.8	7.9	7.4	4.2		05/18/1997	Batch 1, Day 0
AAB-133	PA-38	7	14.9	30.7	8.0	7.3	6.4		05/21/1997	Batch 1, Day 3
AAB-133	PA-38	8	14.7	30.6	8.0	7.1	2.5		05/28/1997	Batch 1, Day 10
AAB-128	PA-39	1	24.0	28		7.1	6	G	05/14/1997	Bulk Sediment
AAB-128	PA-39	6	14.5	30.8	7.9	7.2	6		05/18/1997	Batch 1, Day 0
AAB-128	PA-39	7	15.2	30.8	8.1	7.2	4.4		05/21/1997	Batch 1, Day 3
AAB-128	PA-39	8	14.5	30.6	8.0	7.1	2.3		05/28/1997	Batch 1, Day 10
AAB-131	PA-40 subsurface	1	21.9	28		7.2	6.4	G	05/14/1997	Bulk Sediment
AAB-131	PA-40 subsurface	6	14.6	28.2	8.2	7.4	9.4	G	06/10/1997	Batch 3, Day 0
AAB-132	PA-40	1	22.2	28		7.2	4.2	G	05/14/1997	Bulk Sediment
AAB-132	PA-40	6	14.3	30.8	7.8	7.2	3.4		05/18/1997	Batch 1, Day 0
AAB-132	PA-40	7	14.9	30.7	8.1	7.1	3.1		05/21/1997	Batch 1, Day 3
AAB-132	PA-40	8	14.3	30.7	8.2	7.1	1.7		05/28/1997	Batch 1, Day 10
AAB-092	PA-41	1	21.4	28		7.5	6.9	G	05/14/1997	Bulk Sediment
AAB-092	PA-41	6	14.4	30.9	7.9	7.6	6.2		05/18/1997	Batch 1, Day 0
AAB-092	PA-41	7	15.0	30.7	8.1	7.3	5		05/21/1997	Batch 1, Day 3
AAB-092	PA-41	8	14.4	30.6	8.1	7.2	3.7		05/28/1997	Batch 1, Day 10
AAB-093	PA-41 subsurface	1	21.9	28		7.5	7.8	G	05/14/1997	Bulk Sediment
AAB-093	PA-41 subsurface	6	14.5	28.3	8.2	7.4	9.3	G	06/10/1997	Batch 3, Day 0
AAB-086	PA-42	1	23.8	28		7.5	8.8	G	05/14/1997	Bulk Sediment
AAB-086	PA-42	6	14.5	30.9	7.8	7.5	10		05/18/1997	Batch 1, Day 0
AAB-086	PA-42	7	15.0	30.7	8.2	7.2	9.1		05/21/1997	Batch 1, Day 3
AAB-086	PA-42	8	14.6	30.7	7.9	7.2	5.9		05/28/1997	Batch 1, Day 10
AAB-087	PA-43	1	24.2	28		7.5	8.2	G	05/14/1997	Bulk Sediment
AAB-087	PA-43	6	14.5	30.9	7.9	7.6	8.7		05/18/1997	Batch 1, Day 0
AAB-087	PA-43	7	14.7	30.8	8.2	7.4	6.3		05/21/1997	Batch 1, Day 3
AAB-087	PA-43	8	14.6	30.7	8.1	7.3	3.5		05/28/1997	Batch 1, Day 10
AAB-091	PA-44	1	21.9	28		7.7	8	G	05/14/1997	Bulk Sediment
AAB-091	PA-44	6	14.6	30.8	7.8	7.6	8.7		05/18/1997	Batch 1, Day 0
AAB-091	PA-44	7	14.9	30.8	8.2	7.4	8		05/21/1997	Batch 1, Day 3
AAB-091	PA-44	8	14.6	31	8.0	7.4	5.9		05/28/1997	Batch 1, Day 10
AAB-126	PA-45	1	23.9	28		7.5	6.3	G	05/14/1997	Bulk Sediment
AAB-126	PA-45	6	14.5	31	7.8	7.6	5.9		05/18/1997	Batch 1, Day 0
AAB-126	PA-45	7	15.2	30.8	8.2	7.4	5.6		05/21/1997	Batch 1, Day 3
AAB-126	PA-45	8	14.5	30.6	8.1	7.3	4.2		05/28/1997	Batch 1, Day 10
AAB-127	PA-46	1	24.1	28		7.5	8.9	G	05/14/1997	Bulk Sediment
AAB-127	PA-46	6	14.5	30.8	8.0	7.6	12.2	G	05/18/1997	Batch 1, Day 0
AAB-127	PA-46	7	15.1	30.8	8.2	7.4	7.9		05/21/1997	Batch 1, Day 3
AAB-127	PA-46	8	14.5	30.7	7.9	7.3	5.8		05/28/1997	Batch 1, Day 10
AAB-089	PA-47	1	22.1	28		7.6	9	G	05/14/1997	Bulk Sediment
AAB-089	PA-47	6	14.5	30.9	7.9	7.6	7.4		05/18/1997	Batch 1, Day 0
AAB-089	PA-47	7	15.0	30.8	8.0	7.4	5.9		05/21/1997	Batch 1, Day 3
AAB-089	PA-47	8	14.6	30.7	8.1	7.3	4.6		05/28/1997	Batch 1, Day 10
AAB-088	PA-48	1	24.1	28		7.5	11.1		05/14/1997	Bulk Sediment
AAB-088	PA-48	6	14.4	30.9	7.8	7.6	11.6	G	05/18/1997	Batch 1, Day 0
AAB-088	PA-48	7	14.8	30.7	8.2	7.4	10.7	G	05/21/1997	Batch 1, Day 3
AAB-088	PA-48	8	14.4	30.7	8.1	7.2	6.2		05/28/1997	Batch 1, Day 10
AAB-083	PA-49	1	23.5	28		7.4	8.3	G	05/14/1997	Bulk Sediment
AAB-083	PA-49	6	14.5	30.8	7.8	7.6	10.4	G	05/18/1997	Batch 1, Day 0
AAB-083	PA-49	7	14.8	30.7	8.2	7.4	12.5	G	05/21/1997	Batch 1, Day 3
AAB-083	PA-49	8	14.4	30.7	8.2	7.2	3.5		05/28/1997	Batch 1, Day 10
AAB-094	PA-50	1	21.8	28		7.7	5.6	G	05/14/1997	Bulk Sediment
AAB-094	PA-50	6	14.5	30.9	7.9	7.6	6.1		05/18/1997	Batch 1, Day 0
AAB-094	PA-50	7	14.8	30.7	8.2	7.4	5		05/21/1997	Batch 1, Day 3
AAB-094	PA-50	8	14.5	30.8	8.2	7.3	3		05/28/1997	Batch 1, Day 10
AAB-085	PA-51	1	23.9	28		7.3	13.4		05/14/1997	Bulk Sediment
AAB-085	PA-51	6	14.6	31	7.7	7.5	12.7	G	05/18/1997	Batch 1, Day 0

Table D-4. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Porewater Ammonia Summary

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Total Ammonia (mg/L)		Recording Date	REMARK
AAB-085	PA-51	7	14.9	30.8	8.2	7.3	10.7	G	05/21/1997	Batch 1, Day 3
AAB-085	PA-51	8	14.5	30.6	8.1	7.1	5.8		05/28/1997	Batch 1, Day 10
AAB-084	PA-52	1	23.9	28		7.3	10		05/14/1997	Bulk Sediment
AAB-084	PA-52	6	14.5	30.8	7.9	7.4	9.4		05/18/1997	Batch 1, Day 0
AAB-084	PA-52	7	14.9	30.7	8.1	7.2	6		05/21/1997	Batch 1, Day 3
AAB-084	PA-52	8	14.5	30.6	8.1	7.2	3.2		05/28/1997	Batch 1, Day 10
AAB-090	PA-53	1	22.1	28		7.5	8.1	G	05/14/1997	Bulk Sediment
AAB-090	PA-53	6	14.6	31	7.9	7.5	7.6		05/18/1997	Batch 1, Day 0
AAB-090	PA-53	7	14.9	30.8	8.1	7.3	7.3		05/21/1997	Batch 1, Day 3
AAB-090	PA-53	8	14.5	30.6	8.1	7.2	8.6		05/28/1997	Batch 1, Day 10
AAB-107	EW-30	1	22.0	28		7.8	19		05/25/1997	Bulk Sediment
AAB-107	EW-30	6	14.8	29.8	7.8	7.8	11.6		06/03/1997	Batch 2, Day 0
AAB-104	EW-31	1	24.0	29		7.8	6.8	G	05/22/1997	Bulk Sediment
AAB-104	EW-31	6	14.6	28.6	8.1	7.8	19.2		06/10/1997	Batch 3, Day 0
AAB-095	EW-32	1	24.2	28		7.6	13		05/22/1997	Bulk Sediment
AAB-095	EW-32	6	14.7	29.7	8.1	7.5	14.1		06/03/1997	Batch 2, Day 0
AAB-124	EW-33	1	24.4	29		7.7	26.2		05/25/1997	Bulk Sediment
AAB-124	EW-33	6	14.7	29.8	7.9	7.6	42.4		06/03/1997	Batch 2, Day 0
AAB-108	EW-34	1	22.0	28		7.7	31		05/25/1997	Bulk Sediment
AAB-108	EW-34	6	14.4	29.7	7.6	7.4	33.1		06/03/1997	Batch 2, Day 0
AAB-097	EW-35	1	24.3	28		7.3	8.1	G	05/22/1997	Bulk Sediment
AAB-097	EW-35	6	14.6	28.5	8.1	7.4	10.7		06/10/1997	Batch 3, Day 0
AAB-105	EW-36	1	21.6	29		7.3	19		05/25/1997	Bulk Sediment
AAB-105	EW-36	6	14.7	29.8	8.0	7.6	16.9		06/03/1997	Batch 2, Day 0
AAB-142	EW-37	1	24.4	28		7.5	8.8	G	05/22/1997	Bulk Sediment
AAB-142	EW-37	6	14.6	29.6	8.1	7.6	9.8	G	06/03/1997	Batch 2, Day 0
AAB-125	OR-24	1	24.4	29		7.6	9.2	G	05/25/1997	Bulk Sediment
AAB-125	OR-24	6	14.5	29.9	8.1	7.5	20.8		06/03/1997	Batch 2, Day 0
AAB-103	OR-25	1	24.2	29		7.2	2.4	G	05/22/1997	Bulk Sediment
AAB-103	OR-25	6	14.7	28.5	8.1	7.5	9.2		06/10/1997	Batch 3, Day 0
AAB-116	OR-26	1	23.1	28		7.6	16		05/25/1997	Bulk Sediment
AAB-116	OR-26	6	14.7	29.6	8.2	7.5	6.2		06/03/1997	Batch 2, Day 0
AAB-117	OR-27	1	24.0	29		7.4	1.2	G	05/25/1997	Bulk Sediment
AAB-117	OR-27	6	14.7	28.3	8.1	7.5	3.3		06/10/1997	Batch 3, Day 0
AAB-096	OR-28	1	23.9	28		7.2	3	G	05/22/1997	Bulk Sediment
AAB-096	OR-28	6	14.8	28.4	8.0	7.4	7.5		06/10/1997	Batch 3, Day 0
AAB-118	OR-29	1	24.1	29		7.5	10		05/25/1997	Bulk Sediment
AAB-118	OR-29	6	14.7	29.8	7.9	7.3	37.3		06/03/1997	Batch 2, Day 0
AAB-148	SB-01	1	24.5	28		7.4	3	G	05/25/1997	Bulk Sediment
AAB-148	SB-01	6	14.8	30.4	5.9	7.5	20.1		07/01/1997	Batch 4, Day 0
AAB-148	SB-01	8	15.0	30	6.6	7.2	6.5		07/11/1997	Batch 4, Day 10
AAB-143	SB-02	1	24.5	29		7.4	2.9	G	05/25/1997	Bulk Sediment
AAB-143	SB-02	6	14.9	30.7	5.8	7.5	15.4		07/01/1997	Batch 4, Day 0
AAB-143	SB-02	8	15.0	29	6.4	7.3	11.1		07/11/1997	Batch 4, Day 10
AAB-122	SB-03	1	24.2	28		7.3	1.1	G	05/25/1997	Bulk Sediment
AAB-122	SB-03	6	14.6	28.4	8.1	7.5	10.2	G	06/10/1997	Batch 3, Day 0
AAB-121	SB-04	1	24.4	29		7.5	6.2	G	05/25/1997	Bulk Sediment
AAB-121	SB-04	6	14.8	30.4	6.0	7.8	15.2		07/01/1997	Batch 4, Day 0
AAB-121	SB-04	8	15.0	30	6.7	7.5	6.7		07/11/1997	Batch 4, Day 10
AAB-141	SB-05	1	24.3	28		7.5	2.9	G	05/22/1997	Bulk Sediment
AAB-141	SB-05	6	14.5	28.2	8.2	7.6	6		06/10/1997	Batch 3, Day 0
AAB-120	SB-06	1	24.1	28		7.4	2.3	G	05/25/1997	Bulk Sediment
AAB-120	SB-06	6	14.6	28.5	8.0	7.4	8.2		06/10/1997	Batch 3, Day 0
AAB-119	SB-07	1	24.3	29		7.5	4.7	G	05/25/1997	Bulk Sediment
AAB-119	SB-07	6	14.8	30.7	5.9	7.5	13.5		07/01/1997	Batch 4, Day 0
AAB-119	SB-07	8	15.0	29	6.9	7.5	8.7		07/11/1997	Batch 4, Day 10
AAB-115	SB-08	1	22.8	29		7.4	44		05/25/1997	Bulk Sediment
AAB-115	SB-08	6	14.6	29.8	8.0	7.5	5		06/03/1997	Batch 2, Day 0
AAB-145	SB-09	1	24.2	28		7.6	6	G	05/22/1997	Bulk Sediment
AAB-145	SB-09	6	15.0	28.3	8.1	7.6	13.7		06/10/1997	Batch 3, Day 0
AAB-144	SB-10	1	24.4	29		7.5	6.1	G	05/22/1997	Bulk Sediment
AAB-144	SB-10	6	14.5	28.4	8.2	7.6	13.5		06/10/1997	Batch 3, Day 0
AAB-139	SB-11	1	24.3	29		7.5	12		05/22/1997	Bulk Sediment
AAB-139	SB-11	6	14.5	29.8	8.1	7.5	13.6		06/03/1997	Batch 2, Day 0
AAB-154	SB-12	1	24.4	28		7.5	4.8	G	05/22/1997	Bulk Sediment
AAB-154	SB-12	6	14.6	28.4	8.0	7.5	8.8		06/10/1997	Batch 3, Day 0
AAB-113	SB-13	1	22.5	29		7.4	17		05/25/1997	Bulk Sediment
AAB-113	SB-13	6	14.5	29.8	7.4	7.4	9.8	G	06/03/1997	Batch 2, Day 0
AAB-138	SB-14	1	23.9	29		7.3	8.7	G	05/22/1997	Bulk Sediment
AAB-138	SB-14	6	14.4	29.4	8.1	7.5	7.2		06/03/1997	Batch 2, Day 0

Table D-4. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Porewater Ammonia Summary

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Total Ammonia (mg/L)		Recording Date	REMARK
AAB-114	SB-15	1	22.6	28		7.4	6.5	G	05/25/1997	Bulk Sediment
AAB-114	SB-15	6	14.6	28.8	8.1	7.5	6.9		06/10/1997	Batch 3, Day 0
AAB-112	SB-16	1	22.2	29		7.7	23		05/25/1997	Bulk Sediment
AAB-112	SB-16	6	14.6	29.8	8.2	7.5	27.9		06/03/1997	Batch 2, Day 0
AAB-146	SB-17	1	24.3	28		7.5	12		05/22/1997	Bulk Sediment
AAB-146	SB-17	6	14.5	29.8	8.0	7.5	15.7		06/03/1997	Batch 2, Day 0
AAB-100	SB-18	1	24.0	30		7.7	7.8	G	05/22/1997	Bulk Sediment
AAB-100	SB-18	6	14.5	29	8.1	7.8	20.8		06/10/1997	Batch 3, Day 0
AAB-101	SB-19	1	24.0	28		7.6	5.4	G	05/22/1997	Bulk Sediment
AAB-101	SB-19	6	15.0	28.3	8.1	7.7	19.8		06/10/1997	Batch 3, Day 0
AAB-109	SB-20	1	22.1	29		7.4	17		05/25/1997	Bulk Sediment
AAB-109	SB-20	6	14.8	29.4	8.2	7.5	16.2		06/03/1997	Batch 2, Day 0
AAB-110	SB-20 subsurface	1	21.9	28		7.5	7	G	05/25/1997	Bulk Sediment
AAB-110	SB-20 subsurface	6	14.5	28.2	8.2	7.5	4.4		06/10/1997	Batch 3, Day 0
AAB-102	SB-21	1	24.1	30		7.7	25		05/22/1997	Bulk Sediment
AAB-102	SB-21	6	14.6	29.7	8.1	7.5	30.2		06/03/1997	Batch 2, Day 0
AAB-111	SB-22	1	22.3	28		7.6	15		05/25/1997	Bulk Sediment
AAB-111	SB-22	6	14.5	29.9	8.0	7.5	16.8		06/03/1997	Batch 2, Day 0
AAB-099	SB-23	1	24.2	30		7.6	25		05/22/1997	Bulk Sediment
AAB-099	SB-23	6	14.4	29.8	8.2	7.5	34.9		06/03/1997	Batch 2, Day 0
AAB-157	AB-67	1	23.6	28		7.7	5.7	G	05/14/1997	Bulk Sediment
AAB-157	AB-67	6	14.5	30.8	7.8	7.8	6.5		05/18/1997	Batch 1, Day 0
AAB-157	AB-67	7	14.8	30.6	8.2	7.6	6.3		05/21/1997	Batch 1, Day 3
AAB-157	AB-67	8	14.5	30.6	8.1	7.4	7.4		05/28/1997	Batch 1, Day 10
AAB-098	AL-64	1	24.2	30		7.6	2.8	G	05/22/1997	Bulk Sediment
AAB-098	AL-64	6	14.7	28.5	8.1	7.9	8.4		06/10/1997	Batch 3, Day 0
AAB-156	BF-66	1	24.0	28		7.5	6.6	G	05/14/1997	Bulk Sediment
AAB-156	BF-66	6	14.4	30.9	7.8	7.7	9.5		05/18/1997	Batch 1, Day 0
AAB-156	BF-66	7	14.9	30.5	8.1	7.5	5.8		05/21/1997	Batch 1, Day 3
AAB-156	BF-66	8	14.4	30.5	8.2	7.4	3.5		05/28/1997	Batch 1, Day 10
AAB-162	PC-63	1	21.8	27		7.6	3.1	G	05/14/1997	Bulk Sediment
AAB-162	PC-63	6	14.5	31	7.6	7.7	2.8		05/18/1997	Batch 1, Day 0
AAB-162	PC-63	7	15.0	30.5	8.4	7.5	1.7		05/21/1997	Batch 1, Day 3
AAB-162	PC-63	8	14.4	30.5	8.3	7.5	1.4		05/28/1997	Batch 1, Day 10
AAB-165	RR-65	1	20.3	29		7.7	7	G	05/14/1997	Bulk Sediment
AAB-165	RR-65	6	14.5	31	7.4	7.9	4.2		05/18/1997	Batch 1, Day 0
AAB-165	RR-65	7	15.0	30.9	8.2	7.6	3.6		05/21/1997	Batch 1, Day 3
AAB-165	RR-65	8	14.5	30.8	8.1	7.6	3.2		05/28/1997	Batch 1, Day 10
EOHCON	*E. estuarius Control*	6	14.5	30.8	8.0	7.7	0.1	G	05/18/1997	Batch 1, Day 0
EOHCON	*E. estuarius Control*	7	14.8	30.9	8.3	7.6	0.4	G	05/21/1997	Batch 1, Day 3
EOHCON	*E. estuarius Control*	8	14.5	30.9	8.2	7.6	0.5		05/28/1997	Batch 1, Day 10
EOHCON	*E. estuarius Control*	6	14.4	29.5	8.4	7.6	0.3	G	06/03/1997	Batch 2, Day 0
EOHCON	*E. estuarius Control*	6	14.7	28.3	8.3	7.7	1.2		06/10/1997	Batch 3, Day 0
EOHCON	*E. estuarius Control*	6	14.8	30.1	5.9	7.7	1.3		07/01/1997	Batch 4, Day 0
EOHCON	*E. estuarius Control*	8	15.0	28	6.7	7.8	4.3		07/11/1997	Batch 4, Day 10

G = estimated value, ammonia measurement below calibration range.

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density		Number Alive	Recording Date	Remarks
AAB-158	IB-54	1	20		16	06/20/1997	Batch 3
AAB-158	IB-54	2	20		18	06/20/1997	Batch 3
AAB-158	IB-54	3	20		16	06/20/1997	Batch 3
AAB-158	IB-54	4	20		15	06/20/1997	Batch 3
AAB-158	IB-54	5	20		16	06/20/1997	Batch 3
AAB-160	IB-55	1	20		19	06/13/1997	Batch 2
AAB-160	IB-55	2	20		19	06/13/1997	Batch 2
AAB-160	IB-55	3	20		17	06/13/1997	Batch 2
AAB-160	IB-55	4	20		18	06/13/1997	Batch 2
AAB-160	IB-55	5	20		20	06/13/1997	Batch 2
AAB-159	IB-56	1	20		17	06/20/1997	Batch 3
AAB-159	IB-56	2	20		15	06/20/1997	Batch 3
AAB-159	IB-56	3	20		18	06/20/1997	Batch 3
AAB-159	IB-56	4	20		16	06/20/1997	Batch 3
AAB-159	IB-56	5	20		16	06/20/1997	Batch 3
AAB-129	IB-57	1	20		15	06/20/1997	Batch 3
AAB-129	IB-57	2	20		14	06/20/1997	Batch 3
AAB-129	IB-57	3	20		18	06/20/1997	Batch 3
AAB-129	IB-57	4	20		13	06/20/1997	Batch 3
AAB-129	IB-57	5	20		16	06/20/1997	Batch 3
AAB-130	IB-58	1	20		15	06/20/1997	Batch 3
AAB-130	IB-58	2	20		15	06/20/1997	Batch 3
AAB-130	IB-58	3	40	G	34	06/20/1997	Batch 3
AAB-130	IB-58	4	20		16	06/20/1997	Batch 3
AAB-130	IB-58	5	20		14	06/20/1997	Batch 3
AAB-161	IB-59	1	20		18	06/20/1997	Batch 3
AAB-161	IB-59	2	20		16	06/20/1997	Batch 3
AAB-161	IB-59	3	20		13	06/20/1997	Batch 3
AAB-161	IB-59	4	20		16	06/20/1997	Batch 3
AAB-161	IB-59	5	20		13	06/20/1997	Batch 3
AAB-133	PA-38	1	20		18	05/28/1997	Batch 1
AAB-133	PA-38	2	20		20	05/28/1997	Batch 1
AAB-133	PA-38	3	20		18	05/28/1997	Batch 1
AAB-133	PA-38	4	20		18	05/28/1997	Batch 1
AAB-133	PA-38	5	20		16	05/28/1997	Batch 1
AAB-128	PA-39	1	20		18	05/28/1997	Batch 1
AAB-128	PA-39	2	20		16	05/28/1997	Batch 1
AAB-128	PA-39	3	20		16	05/28/1997	Batch 1
AAB-128	PA-39	4	20		20	05/28/1997	Batch 1
AAB-128	PA-39	5	20		16	05/28/1997	Batch 1
AAB-131	PA-40 subsurface	1	20		18	06/20/1997	Batch 3
AAB-131	PA-40 subsurface	2	20		12	06/20/1997	Batch 3
AAB-131	PA-40 subsurface	3	20		17	06/20/1997	Batch 3
AAB-131	PA-40 subsurface	4	20		15	06/20/1997	Batch 3
AAB-131	PA-40 subsurface	5	20		18	06/20/1997	Batch 3
AAB-132	PA-40	1	20		16	05/28/1997	Batch 1
AAB-132	PA-40	2	20		17	05/28/1997	Batch 1
AAB-132	PA-40	3	20		16	05/28/1997	Batch 1

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
AAB-132	PA-40	4	20	19	05/28/1997	Batch 1
AAB-132	PA-40	5	20	18	05/28/1997	Batch 1
AAB-092	PA-41	1	20	15	05/28/1997	Batch 1
AAB-092	PA-41	2	20	15	05/28/1997	Batch 1
AAB-092	PA-41	3	20	16	05/28/1997	Batch 1
AAB-092	PA-41	4	20	13	05/28/1997	Batch 1
AAB-092	PA-41	5	20	16	05/28/1997	Batch 1
AAB-093	PA-41 subsurface	1	20	11	06/20/1997	Batch 3
AAB-093	PA-41 subsurface	2	20	17	06/20/1997	Batch 3
AAB-093	PA-41 subsurface	3	20	13	06/20/1997	Batch 3
AAB-093	PA-41 subsurface	4	20	13	06/20/1997	Batch 3
AAB-093	PA-41 subsurface	5	20	17	06/20/1997	Batch 3
AAB-086	PA-42	1	20	14	05/28/1997	Batch 1
AAB-086	PA-42	2	20	19	05/28/1997	Batch 1
AAB-086	PA-42	3	20	18	05/28/1997	Batch 1
AAB-086	PA-42	4	20	19	05/28/1997	Batch 1
AAB-086	PA-42	5	20	11	05/28/1997	Batch 1
AAB-087	PA-43	1	20	18	05/28/1997	Batch 1
AAB-087	PA-43	2	20	18	05/28/1997	Batch 1
AAB-087	PA-43	3	20	18	05/28/1997	Batch 1
AAB-087	PA-43	4	20	17	05/28/1997	Batch 1
AAB-087	PA-43	5	20	14	05/28/1997	Batch 1
AAB-091	PA-44	1	20	18	05/28/1997	Batch 1
AAB-091	PA-44	2	20	18	05/28/1997	Batch 1
AAB-091	PA-44	3	20	13	05/28/1997	Batch 1
AAB-091	PA-44	4	20	15	05/28/1997	Batch 1
AAB-091	PA-44	5	20	20	05/28/1997	Batch 1
AAB-126	PA-45	1	20	18	05/28/1997	Batch 1
AAB-126	PA-45	2	20	19	05/28/1997	Batch 1
AAB-126	PA-45	3	20	19	05/28/1997	Batch 1
AAB-126	PA-45	4	20	20	05/28/1997	Batch 1
AAB-126	PA-45	5	20	18	05/28/1997	Batch 1
AAB-127	PA-46	1	20	17	05/28/1997	Batch 1
AAB-127	PA-46	2	20	17	05/28/1997	Batch 1
AAB-127	PA-46	3	20	18	05/28/1997	Batch 1
AAB-127	PA-46	4	20	17	05/28/1997	Batch 1
AAB-127	PA-46	5	20	19	05/28/1997	Batch 1
AAB-089	PA-47	1	20	20	05/28/1997	Batch 1
AAB-089	PA-47	2	20	18	05/28/1997	Batch 1
AAB-089	PA-47	3	20	17	05/28/1997	Batch 1
AAB-089	PA-47	4	20	16	05/28/1997	Batch 1
AAB-089	PA-47	5	20	18	05/28/1997	Batch 1
AAB-088	PA-48	1	20	20	05/28/1997	Batch 1
AAB-088	PA-48	2	20	19	05/28/1997	Batch 1
AAB-088	PA-48	3	20	18	05/28/1997	Batch 1
AAB-088	PA-48	4	20	19	05/28/1997	Batch 1
AAB-088	PA-48	5	20	19	05/28/1997	Batch 1
AAB-083	PA-49	1	20	17	05/28/1997	Batch 1

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
AAB-083	PA-49	2	20	17	05/28/1997	Batch 1
AAB-083	PA-49	3	20	15	05/28/1997	Batch 1
AAB-083	PA-49	4	20	17	05/28/1997	Batch 1
AAB-083	PA-49	5	20	17	05/28/1997	Batch 1
AAB-094	PA-50	1	20	16	05/28/1997	Batch 1
AAB-094	PA-50	2	20	16	05/28/1997	Batch 1
AAB-094	PA-50	3	20	18	05/28/1997	Batch 1
AAB-094	PA-50	4	20	14	05/28/1997	Batch 1
AAB-094	PA-50	5	20	18	05/28/1997	Batch 1
AAB-085	PA-51	1	20	17	05/28/1997	Batch 1
AAB-085	PA-51	2	20	19	05/28/1997	Batch 1
AAB-085	PA-51	3	20	19	05/28/1997	Batch 1
AAB-085	PA-51	4	20	20	05/28/1997	Batch 1
AAB-085	PA-51	5	20	19	05/28/1997	Batch 1
AAB-084	PA-52	1	20	16	05/28/1997	Batch 1
AAB-084	PA-52	2	20	20	05/28/1997	Batch 1
AAB-084	PA-52	3	20	17	05/28/1997	Batch 1
AAB-084	PA-52	4	20	20	05/28/1997	Batch 1
AAB-084	PA-52	5	20	19	05/28/1997	Batch 1
AAB-090	PA-53	1	20	17	05/28/1997	Batch 1
AAB-090	PA-53	2	20	18	05/28/1997	Batch 1
AAB-090	PA-53	3	20	20	05/28/1997	Batch 1
AAB-090	PA-53	4	20	19	05/28/1997	Batch 1
AAB-090	PA-53	5	20	15	05/28/1997	Batch 1
AAB-107	EW-30	1	20	20	06/13/1997	Batch 2
AAB-107	EW-30	2	20	20	06/13/1997	Batch 2
AAB-107	EW-30	3	20	18	06/13/1997	Batch 2
AAB-107	EW-30	4	20	19	06/13/1997	Batch 2
AAB-107	EW-30	5	20	20	06/13/1997	Batch 2
AAB-104	EW-31	1	20	18	06/20/1997	Batch 3
AAB-104	EW-31	2	20	19	06/20/1997	Batch 3
AAB-104	EW-31	3	20	18	06/20/1997	Batch 3
AAB-104	EW-31	4	20	20	06/20/1997	Batch 3
AAB-104	EW-31	5	20	18	06/20/1997	Batch 3
AAB-095	EW-32	1	20	19	06/13/1997	Batch 2
AAB-095	EW-32	2	20	19	06/13/1997	Batch 2
AAB-095	EW-32	3	20	15	06/13/1997	Batch 2
AAB-095	EW-32	4	20	19	06/13/1997	Batch 2
AAB-095	EW-32	5	20	17	06/13/1997	Batch 2
AAB-124	EW-33	1	20	20	06/13/1997	Batch 2
AAB-124	EW-33	2	20	19	06/13/1997	Batch 2
AAB-124	EW-33	3	20	20	06/13/1997	Batch 2
AAB-124	EW-33	4	20	20	06/13/1997	Batch 2
AAB-124	EW-33	5	20	19	06/13/1997	Batch 2
AAB-108	EW-34	1	20	20	06/13/1997	Batch 2
AAB-108	EW-34	2	20	19	06/13/1997	Batch 2
AAB-108	EW-34	3	20	19	06/13/1997	Batch 2
AAB-108	EW-34	4	20	19	06/13/1997	Batch 2

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
AAB-108	EW-34	5	20	20	06/13/1997	Batch 2
AAB-097	EW-35	1	20	14	06/20/1997	Batch 3
AAB-097	EW-35	2	20	15	06/20/1997	Batch 3
AAB-097	EW-35	3	20	18	06/20/1997	Batch 3
AAB-097	EW-35	4	20	15	06/20/1997	Batch 3
AAB-097	EW-35	5	20	16	06/20/1997	Batch 3
AAB-105	EW-36	1	20	19	06/13/1997	Batch 2
AAB-105	EW-36	2	20	19	06/13/1997	Batch 2
AAB-105	EW-36	3	20	18	06/13/1997	Batch 2
AAB-105	EW-36	4	20	19	06/13/1997	Batch 2
AAB-105	EW-36	5	20	20	06/13/1997	Batch 2
AAB-142	EW-37	1	20	18	06/13/1997	Batch 2
AAB-142	EW-37	2	20	17	06/13/1997	Batch 2
AAB-142	EW-37	3	20	17	06/13/1997	Batch 2
AAB-142	EW-37	4	20	16	06/13/1997	Batch 2
AAB-142	EW-37	5	20	18	06/13/1997	Batch 2
AAB-125	OR-24	1	20	20	06/13/1997	Batch 2
AAB-125	OR-24	2	20	18	06/13/1997	Batch 2
AAB-125	OR-24	3	20	18	06/13/1997	Batch 2
AAB-125	OR-24	4	20	19	06/13/1997	Batch 2
AAB-125	OR-24	5	20	17	06/13/1997	Batch 2
AAB-103	OR-25	1	20	13	06/20/1997	Batch 3
AAB-103	OR-25	2	20	20	06/20/1997	Batch 3
AAB-103	OR-25	3	20	17	06/20/1997	Batch 3
AAB-103	OR-25	4	20	16	06/20/1997	Batch 3
AAB-103	OR-25	5	20	17	06/20/1997	Batch 3
AAB-116	OR-26	1	20	14	06/13/1997	Batch 2
AAB-116	OR-26	2	20	18	06/13/1997	Batch 2
AAB-116	OR-26	3	20	18	06/13/1997	Batch 2
AAB-116	OR-26	4	20	20	06/13/1997	Batch 2
AAB-116	OR-26	5	20	18	06/13/1997	Batch 2
AAB-117	OR-27	1	20	19	06/20/1997	Batch 3
AAB-117	OR-27	2	20	16	06/20/1997	Batch 3
AAB-117	OR-27	3	20	14	06/20/1997	Batch 3
AAB-117	OR-27	4	20	17	06/20/1997	Batch 3
AAB-117	OR-27	5	20	18	06/20/1997	Batch 3
AAB-096	OR-28	1	20	16	06/20/1997	Batch 3
AAB-096	OR-28	2	20	18	06/20/1997	Batch 3
AAB-096	OR-28	3	20	14	06/20/1997	Batch 3
AAB-096	OR-28	4	20	14	06/20/1997	Batch 3
AAB-096	OR-28	5	20	18	06/20/1997	Batch 3
AAB-118	OR-29	1	20	15	06/13/1997	Batch 2
AAB-118	OR-29	2	20	17	06/13/1997	Batch 2
AAB-118	OR-29	3	20	18	06/13/1997	Batch 2
AAB-118	OR-29	4	20	17	06/13/1997	Batch 2
AAB-118	OR-29	5	20	19	06/13/1997	Batch 2
AAB-148	SB-01	1	20	19	07/11/1997	Batch 4
AAB-148	SB-01	2	20	20	07/11/1997	Batch 4

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive		Recording Date	Remarks
AAB-148	SB-01	3	20	19		07/11/1997	Batch 4
AAB-148	SB-01	4	20	18		07/11/1997	Batch 4
AAB-148	SB-01	5	20	18		07/11/1997	Batch 4
AAB-143	SB-02	1	20	18		07/11/1997	Batch 4
AAB-143	SB-02	2	20	15		07/11/1997	Batch 4
AAB-143	SB-02	3	20	19		07/11/1997	Batch 4
AAB-143	SB-02	4	20	19		07/11/1997	Batch 4
AAB-143	SB-02	5	20	19		07/11/1997	Batch 4
AAB-122	SB-03	1	20	15		06/20/1997	Batch 3
AAB-122	SB-03	2	20	15		06/20/1997	Batch 3
AAB-122	SB-03	3	20	18		06/20/1997	Batch 3
AAB-122	SB-03	4	20	16		06/20/1997	Batch 3
AAB-122	SB-03	5	20	18		06/20/1997	Batch 3
AAB-121	SB-04	1	20	14		07/11/1997	Batch 4
AAB-121	SB-04	2	20	19		07/11/1997	Batch 4
AAB-121	SB-04	3	20	19		07/11/1997	Batch 4
AAB-121	SB-04	4	20	20		07/11/1997	Batch 4
AAB-121	SB-04	5	20	19		07/11/1997	Batch 4
AAB-141	SB-05	1	20	17		06/20/1997	Batch 3
AAB-141	SB-05	2	20	16		06/20/1997	Batch 3
AAB-141	SB-05	3	20	17		06/20/1997	Batch 3
AAB-141	SB-05	4	20	13		06/20/1997	Batch 3
AAB-141	SB-05	5	20	14		06/20/1997	Batch 3
AAB-120	SB-06	1	20	16		06/20/1997	Batch 3
AAB-120	SB-06	2	20	18		06/20/1997	Batch 3
AAB-120	SB-06	3	20	17		06/20/1997	Batch 3
AAB-120	SB-06	4	20	15		06/20/1997	Batch 3
AAB-120	SB-06	5	20	16		06/20/1997	Batch 3
AAB-119	SB-07	1	20	19		07/11/1997	Batch 4
AAB-119	SB-07	2	20	18		07/11/1997	Batch 4
AAB-119	SB-07	3	20	16		07/11/1997	Batch 4
AAB-119	SB-07	4	20	17		07/11/1997	Batch 4
AAB-119	SB-07	5	20	19		07/11/1997	Batch 4
AAB-115	SB-08	1	20	19		06/13/1997	Batch 2
AAB-115	SB-08	2	20	19		06/13/1997	Batch 2
AAB-115	SB-08	3	20	19		06/13/1997	Batch 2
AAB-115	SB-08	4	20	18		06/13/1997	Batch 2
AAB-115	SB-08	5	20	0	F	06/13/1997	Batch 2
AAB-145	SB-09	1	20	19		06/20/1997	Batch 3
AAB-145	SB-09	2	20	10		06/20/1997	Batch 3
AAB-145	SB-09	3	20	17		06/20/1997	Batch 3
AAB-145	SB-09	4	20	17		06/20/1997	Batch 3
AAB-145	SB-09	5	20	16		06/20/1997	Batch 3
AAB-144	SB-10	1	20	14		06/20/1997	Batch 3
AAB-144	SB-10	2	20	19		06/20/1997	Batch 3
AAB-144	SB-10	3	20	15		06/20/1997	Batch 3
AAB-144	SB-10	4	20	19		06/20/1997	Batch 3
AAB-144	SB-10	5	20	16		06/20/1997	Batch 3

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density		Number Alive	Recording Date	Remarks
AAB-139	SB-11	1	20		14	06/13/1997	Batch 2
AAB-139	SB-11	2	20		20	06/13/1997	Batch 2
AAB-139	SB-11	3	20		16	06/13/1997	Batch 2
AAB-139	SB-11	4	20		17	06/13/1997	Batch 2
AAB-139	SB-11	5	20		20	06/13/1997	Batch 2
AAB-154	SB-12	1	20		16	06/20/1997	Batch 3
AAB-154	SB-12	2	20		18	06/20/1997	Batch 3
AAB-154	SB-12	3	20		17	06/20/1997	Batch 3
AAB-154	SB-12	4	20		18	06/20/1997	Batch 3
AAB-154	SB-12	5	20		15	06/20/1997	Batch 3
AAB-113	SB-13	1	40	G	32	06/13/1997	Batch 2
AAB-113	SB-13	2	20		20	06/13/1997	Batch 2
AAB-113	SB-13	3	20		17	06/13/1997	Batch 2
AAB-113	SB-13	4	20		17	06/13/1997	Batch 2
AAB-113	SB-13	5	20		19	06/13/1997	Batch 2
AAB-138	SB-14	1	20		19	06/13/1997	Batch 2
AAB-138	SB-14	2	20		19	06/13/1997	Batch 2
AAB-138	SB-14	3	20		19	06/13/1997	Batch 2
AAB-138	SB-14	4	20		19	06/13/1997	Batch 2
AAB-138	SB-14	5	20		17	06/13/1997	Batch 2
AAB-114	SB-15	1	20		16	06/20/1997	Batch 3
AAB-114	SB-15	2	20		18	06/20/1997	Batch 3
AAB-114	SB-15	3	20		19	06/20/1997	Batch 3
AAB-114	SB-15	4	20		18	06/20/1997	Batch 3
AAB-114	SB-15	5	20		18	06/20/1997	Batch 3
AAB-112	SB-16	1	20		20	06/13/1997	Batch 2
AAB-112	SB-16	2	20		17	06/13/1997	Batch 2
AAB-112	SB-16	3	20		18	06/13/1997	Batch 2
AAB-112	SB-16	4	20		19	06/13/1997	Batch 2
AAB-112	SB-16	5	20		17	06/13/1997	Batch 2
AAB-146	SB-17	1	20		17	06/13/1997	Batch 2
AAB-146	SB-17	2	20		18	06/13/1997	Batch 2
AAB-146	SB-17	3	20		16	06/13/1997	Batch 2
AAB-146	SB-17	4	20		19	06/13/1997	Batch 2
AAB-146	SB-17	5	20		17	06/13/1997	Batch 2
AAB-100	SB-18	1	20		20	06/20/1997	Batch 3
AAB-100	SB-18	2	20		17	06/20/1997	Batch 3
AAB-100	SB-18	3	20		19	06/20/1997	Batch 3
AAB-100	SB-18	4	20		19	06/20/1997	Batch 3
AAB-100	SB-18	5	20		20	06/20/1997	Batch 3
AAB-101	SB-19	1	20		15	06/20/1997	Batch 3
AAB-101	SB-19	2	20		19	06/20/1997	Batch 3
AAB-101	SB-19	3	20		0	06/20/1997	Batch 3
AAB-101	SB-19	4	20		18	06/20/1997	Batch 3
AAB-101	SB-19	5	20		18	06/20/1997	Batch 3
AAB-109	SB-20	1	20		17	06/13/1997	Batch 2
AAB-109	SB-20	2	20		19	06/13/1997	Batch 2
AAB-109	SB-20	3	20		19	06/13/1997	Batch 2

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive		Recording Date	Remarks
AAB-109	SB-20	4	20	18		06/13/1997	Batch 2
AAB-109	SB-20	5	20	16		06/13/1997	Batch 2
AAB-110	SB-20 subsurface	1	20	17		06/20/1997	Batch 3
AAB-110	SB-20 subsurface	2	20	17		06/20/1997	Batch 3
AAB-110	SB-20 subsurface	3	20	0	F	06/20/1997	Batch 3
AAB-110	SB-20 subsurface	4	20	18		06/20/1997	Batch 3
AAB-110	SB-20 subsurface	5	20	16		06/20/1997	Batch 3
AAB-102	SB-21	1	20	19		06/13/1997	Batch 2
AAB-102	SB-21	2	20	19		06/13/1997	Batch 2
AAB-102	SB-21	3	20	20		06/13/1997	Batch 2
AAB-102	SB-21	4	20	19		06/13/1997	Batch 2
AAB-102	SB-21	5	20	20		06/13/1997	Batch 2
AAB-111	SB-22	1	20	20		06/13/1997	Batch 2
AAB-111	SB-22	2	20	15		06/13/1997	Batch 2
AAB-111	SB-22	3	20	18		06/13/1997	Batch 2
AAB-111	SB-22	4	20	1		06/13/1997	Batch 2
AAB-111	SB-22	5	20	19		06/13/1997	Batch 2
AAB-099	SB-23	1	20	18		06/13/1997	Batch 2
AAB-099	SB-23	2	20	20		06/13/1997	Batch 2
AAB-099	SB-23	3	20	20		06/13/1997	Batch 2
AAB-099	SB-23	4	20	19		06/13/1997	Batch 2
AAB-099	SB-23	5	20	19		06/13/1997	Batch 2
AAB-157	AB-67	1	20	13		05/28/1997	Batch 1
AAB-157	AB-67	2	20	15		05/28/1997	Batch 1
AAB-157	AB-67	3	20	15		05/28/1997	Batch 1
AAB-157	AB-67	4	20	16		05/28/1997	Batch 1
AAB-157	AB-67	5	20	11		05/28/1997	Batch 1
AAB-098	AL-64	1	20	20		06/20/1997	Batch 3
AAB-098	AL-64	2	20	13		06/20/1997	Batch 3
AAB-098	AL-64	3	20	20		06/20/1997	Batch 3
AAB-098	AL-64	4	20	19		06/20/1997	Batch 3
AAB-098	AL-64	5	20	20		06/20/1997	Batch 3
AAB-156	BF-66	1	20	17		05/28/1997	Batch 1
AAB-156	BF-66	2	20	10		05/28/1997	Batch 1
AAB-156	BF-66	3	20	14		05/28/1997	Batch 1
AAB-156	BF-66	4	20	14		05/28/1997	Batch 1
AAB-156	BF-66	5	20	13		05/28/1997	Batch 1
AAB-162	PC-63	1	20	18		05/28/1997	Batch 1
AAB-162	PC-63	2	20	18		05/28/1997	Batch 1
AAB-162	PC-63	3	20	19		05/28/1997	Batch 1
AAB-162	PC-63	4	20	17		05/28/1997	Batch 1
AAB-162	PC-63	5	20	18		05/28/1997	Batch 1
AAB-165	RR-65	1	20	20		05/28/1997	Batch 1
AAB-165	RR-65	2	20	19		05/28/1997	Batch 1
AAB-165	RR-65	3	20	20		05/28/1997	Batch 1
AAB-165	RR-65	4	20	18		05/28/1997	Batch 1
AAB-165	RR-65	5	20	18		05/28/1997	Batch 1
EOHCONTROL	E. estuarius Control	1	20	20		05/28/1997	Batch 1

Table D-5. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
EOHCONTROL	E. estuarius Control	1	20	19	06/13/1997	Batch 2
EOHCONTROL	E. estuarius Control	1	20	19	06/20/1997	Batch 3
EOHCONTROL	E. estuarius Control	1	20	20	07/11/1997	Batch 4
EOHCONTROL	E. estuarius Control	2	20	20	05/28/1997	Batch 1
EOHCONTROL	E. estuarius Control	2	20	18	06/13/1997	Batch 2
EOHCONTROL	E. estuarius Control	2	20	19	06/20/1997	Batch 3
EOHCONTROL	E. estuarius Control	2	20	18	07/11/1997	Batch 4
EOHCONTROL	E. estuarius Control	3	20	20	05/28/1997	Batch 1
EOHCONTROL	E. estuarius Control	3	20	18	06/13/1997	Batch 2
EOHCONTROL	E. estuarius Control	3	20	19	06/20/1997	Batch 3
EOHCONTROL	E. estuarius Control	3	20	19	07/11/1997	Batch 4
EOHCONTROL	E. estuarius Control	4	20	20	05/28/1997	Batch 1
EOHCONTROL	E. estuarius Control	4	20	20	06/13/1997	Batch 2
EOHCONTROL	E. estuarius Control	4	20	20	06/20/1997	Batch 3
EOHCONTROL	E. estuarius Control	4	20	20	07/11/1997	Batch 4
EOHCONTROL	E. estuarius Control	5	20	20	05/28/1997	Batch 1
EOHCONTROL	E. estuarius Control	5	20	20	06/13/1997	Batch 2
EOHCONTROL	E. estuarius Control	5	20	17	06/20/1997	Batch 3
EOHCONTROL	E. estuarius Control	5	20	18	07/11/1997	Batch 4

G = estimated value.
F = 1 nereid polycheate present.

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-083	PA-49	1	14.5	30.8	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-083	PA-49	2	14.4	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-083	PA-49	3	14.4	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-083	PA-49	4	14.4	31.0	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-083	PA-49	5	14.5	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-083	PA-49	1	14.5	31.0	8.0	7.6	05/19/1997	Batch 1, Day 1
AAB-083	PA-49	2	14.8	30.7	7.6	7.4	05/20/1997	Batch 1, Day 2
AAB-083	PA-49	3	14.8	30.7	8.2	7.6	05/21/1997	Batch 1, Day 3
AAB-083	PA-49	4	15.0	30.7	8.0	7.6	05/22/1997	Batch 1, Day 4
AAB-083	PA-49	5	15.1	30.5	7.9	7.6	05/23/1997	Batch 1, Day 5
AAB-083	PA-49	1	14.7	30.8	8.2	7.6	05/24/1997	Batch 1, Day 6
AAB-083	PA-49	2	15.2	30.7	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-083	PA-49	3	15.0	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-083	PA-49	4	14.8	31.2	8.0	7.8	05/27/1997	Batch 1, Day 9
AAB-083	PA-49	1	14.4	30.7	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-083	PA-49	2	14.7	30.6	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-083	PA-49	3	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-083	PA-49	4	14.4	30.7	8.3	7.8	05/28/1997	Batch 1, Day 10
AAB-083	PA-49	5	14.6	30.5	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-084	PA-52	1	14.5	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-084	PA-52	2	14.5	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-084	PA-52	3	14.5	30.8	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-084	PA-52	4	14.5	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-084	PA-52	5	14.4	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-084	PA-52	1	14.5	31.0	7.8	7.7	05/19/1997	Batch 1, Day 1
AAB-084	PA-52	2	14.9	30.6	8.2	7.4	05/20/1997	Batch 1, Day 2
AAB-084	PA-52	3	14.9	30.7	8.1	7.7	05/21/1997	Batch 1, Day 3
AAB-084	PA-52	4	15.0	30.5	8.0	7.5	05/22/1997	Batch 1, Day 4
AAB-084	PA-52	5	15.1	30.6	8.2	7.7	05/23/1997	Batch 1, Day 5
AAB-084	PA-52	1	14.7	30.8	8.3	7.7	05/24/1997	Batch 1, Day 6
AAB-084	PA-52	2	15.2	30.7	8.3	7.6	05/25/1997	Batch 1, Day 7
AAB-084	PA-52	3	14.9	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-084	PA-52	4	14.7	30.9	8.0	7.7	05/27/1997	Batch 1, Day 9
AAB-084	PA-52	1	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-084	PA-52	2	14.5	30.6	8.0	7.6	05/28/1997	Batch 1, Day 10
AAB-084	PA-52	3	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-084	PA-52	4	14.5	30.5	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-084	PA-52	5	14.5	30.6	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-085	PA-51	1	14.6	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-085	PA-51	2	14.5	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-085	PA-51	3	14.5	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-085	PA-51	4	14.8	30.9	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-085	PA-51	5	14.5	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-085	PA-51	1	14.6	30.9	8.1	7.6	05/19/1997	Batch 1, Day 1
AAB-085	PA-51	2	14.9	30.7	7.8	7.3	05/20/1997	Batch 1, Day 2
AAB-085	PA-51	3	14.9	30.8	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-085	PA-51	4	15.5	30.6	7.8	7.6	05/22/1997	Batch 1, Day 4
AAB-085	PA-51	5	15.1	30.7	8.0	7.6	05/23/1997	Batch 1, Day 5
AAB-085	PA-51	1	14.8	30.8	8.1	7.6	05/24/1997	Batch 1, Day 6
AAB-085	PA-51	2	15.1	30.7	8.1	7.6	05/25/1997	Batch 1, Day 7
AAB-085	PA-51	3	15.0	30.0	7.9	8.2	05/26/1997	Batch 1, Day 8
AAB-085	PA-51	4	14.9	30.7	7.9	7.7	05/27/1997	Batch 1, Day 9
AAB-085	PA-51	1	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-085	PA-51	2	14.5	30.7	8.0	7.6	05/28/1997	Batch 1, Day 10
AAB-085	PA-51	3	14.5	30.8	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-085	PA-51	4	14.8	30.6	8.0	7.7	05/28/1997	Batch 1, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-085	PA-51	5	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-086	PA-42	1	14.5	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-086	PA-42	2	14.6	30.9	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-086	PA-42	3	14.6	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-086	PA-42	4	14.5	30.8	8.0	7.7	05/18/1997	Batch 1, Day 0
AAB-086	PA-42	5	14.6	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-086	PA-42	1	14.6	30.9	7.7	7.6	05/19/1997	Batch 1, Day 1
AAB-086	PA-42	2	14.8	30.8	8.0	7.4	05/20/1997	Batch 1, Day 2
AAB-086	PA-42	3	15.0	30.7	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-086	PA-42	4	15.0	30.4	8.0	7.6	05/22/1997	Batch 1, Day 4
AAB-086	PA-42	5	15.1	30.6	7.9	7.6	05/23/1997	Batch 1, Day 5
AAB-086	PA-42	1	14.9	30.8	8.2	7.6	05/24/1997	Batch 1, Day 6
AAB-086	PA-42	2	15.1	30.6	8.3	7.6	05/25/1997	Batch 1, Day 7
AAB-086	PA-42	3	15.1	30.0	7.8	8.1	05/26/1997	Batch 1, Day 8
AAB-086	PA-42	4	14.6	30.9	8.0	7.7	05/27/1997	Batch 1, Day 9
AAB-086	PA-42	1	14.6	30.7	7.9	7.6	05/28/1997	Batch 1, Day 10
AAB-086	PA-42	2	14.5	30.7	8.0	7.6	05/28/1997	Batch 1, Day 10
AAB-086	PA-42	3	14.6	30.6	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-086	PA-42	4	14.4	30.5	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-086	PA-42	5	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-087	PA-43	1	14.5	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-087	PA-43	2	14.5	31.0	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-087	PA-43	3	14.4	31.1	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-087	PA-43	4	14.6	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-087	PA-43	5	14.5	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-087	PA-43	1	14.5	31.0	7.6	7.7	05/19/1997	Batch 1, Day 1
AAB-087	PA-43	2	14.8	30.7	6.0	7.6	05/20/1997	Batch 1, Day 2
AAB-087	PA-43	3	14.7	30.8	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-087	PA-43	4	15.2	30.7	7.9	7.6	05/22/1997	Batch 1, Day 4
AAB-087	PA-43	5	15.1	30.7	8.0	7.6	05/23/1997	Batch 1, Day 5
AAB-087	PA-43	1	14.8	30.9	8.3	7.7	05/24/1997	Batch 1, Day 6
AAB-087	PA-43	2	15.1	30.9	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-087	PA-43	3	14.9	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-087	PA-43	4	14.8	30.9	8.0	7.7	05/27/1997	Batch 1, Day 9
AAB-087	PA-43	1	14.6	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-087	PA-43	2	14.5	30.7	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-087	PA-43	3	14.5	30.9	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-087	PA-43	4	14.6	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-087	PA-43	5	14.6	30.6	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-088	PA-48	1	14.4	30.9	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-088	PA-48	2	14.4	30.9	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-088	PA-48	3	14.4	31.0	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-088	PA-48	4	14.3	31.0	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-088	PA-48	5	14.5	30.8	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-088	PA-48	1	14.4	31.0	8.2	7.6	05/19/1997	Batch 1, Day 1
AAB-088	PA-48	2	14.8	30.7	8.3	7.5	05/20/1997	Batch 1, Day 2
AAB-088	PA-48	3	14.8	30.7	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-088	PA-48	4	14.9	30.5	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-088	PA-48	5	15.2	30.6	8.0	7.6	05/23/1997	Batch 1, Day 5
AAB-088	PA-48	1	14.6	30.8	8.3	7.6	05/24/1997	Batch 1, Day 6
AAB-088	PA-48	2	15.0	30.8	8.2	7.7	05/25/1997	Batch 1, Day 7
AAB-088	PA-48	3	14.9	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-088	PA-48	4	14.6	31.0	8.0	7.7	05/27/1997	Batch 1, Day 9
AAB-088	PA-48	1	14.4	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-088	PA-48	2	14.4	30.8	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-088	PA-48	3	14.5	30.6	8.2	7.7	05/28/1997	Batch 1, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-088	PA-48	4	14.4	30.8	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-088	PA-48	5	14.4	30.7	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-089	PA-47	1	14.5	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-089	PA-47	2	14.4	30.9	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-089	PA-47	3	14.5	31.0	7.6	7.7	05/18/1997	Batch 1, Day 0
AAB-089	PA-47	4	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-089	PA-47	5	14.5	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-089	PA-47	1	14.5	30.9	8.0	7.7	05/19/1997	Batch 1, Day 1
AAB-089	PA-47	2	14.8	30.7	8.4	7.3	05/20/1997	Batch 1, Day 2
AAB-089	PA-47	3	15.0	30.8	8.0	7.7	05/21/1997	Batch 1, Day 3
AAB-089	PA-47	4	14.9	30.6	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-089	PA-47	5	15.3	30.6	8.1	7.6	05/23/1997	Batch 1, Day 5
AAB-089	PA-47	1	14.8	30.9	8.3	7.7	05/24/1997	Batch 1, Day 6
AAB-089	PA-47	2	15.1	30.7	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-089	PA-47	3	14.9	30.0	8.0	8.1	05/26/1997	Batch 1, Day 8
AAB-089	PA-47	4	14.5	31.0	8.0	7.8	05/27/1997	Batch 1, Day 9
AAB-089	PA-47	1	14.6	30.7	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-089	PA-47	2	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-089	PA-47	3	14.5	30.8	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-089	PA-47	4	14.5	30.7	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-089	PA-47	5	14.6	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-090	PA-53	1	14.6	31.0	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-090	PA-53	2	14.6	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-090	PA-53	3	14.5	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-090	PA-53	4	14.4	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-090	PA-53	5	14.5	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-090	PA-53	1	14.6	31.1	8.2	7.6	05/19/1997	Batch 1, Day 1
AAB-090	PA-53	2	14.8	30.7	6.1	7.6	05/20/1997	Batch 1, Day 2
AAB-090	PA-53	3	14.9	30.8	8.1	7.7	05/21/1997	Batch 1, Day 3
AAB-090	PA-53	4	14.9	30.6	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-090	PA-53	5	15.2	30.6	7.9	7.5	05/23/1997	Batch 1, Day 5
AAB-090	PA-53	1	14.7	30.8	8.0	7.6	05/24/1997	Batch 1, Day 6
AAB-090	PA-53	2	15.1	30.8	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-090	PA-53	3	15.0	30.0	7.8	8.1	05/26/1997	Batch 1, Day 8
AAB-090	PA-53	4	14.6	30.7	8.2	7.8	05/27/1997	Batch 1, Day 9
AAB-090	PA-53	1	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-090	PA-53	2	14.6	30.6	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-090	PA-53	3	14.5	30.7	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-090	PA-53	4	14.5	30.5	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-090	PA-53	5	14.6	30.7	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-091	PA-44	1	14.6	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-091	PA-44	2	14.5	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-091	PA-44	3	14.5	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-091	PA-44	4	14.5	31.0	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-091	PA-44	5	14.5	31.1	7.6	7.7	05/18/1997	Batch 1, Day 0
AAB-091	PA-44	1	14.6	31.0	7.8	7.6	05/19/1997	Batch 1, Day 1
AAB-091	PA-44	2	14.8	30.7	7.5	7.6	05/20/1997	Batch 1, Day 2
AAB-091	PA-44	3	14.9	30.8	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-091	PA-44	4	14.9	30.6	8.0	7.6	05/22/1997	Batch 1, Day 4
AAB-091	PA-44	5	15.1	30.6	7.9	7.6	05/23/1997	Batch 1, Day 5
AAB-091	PA-44	1	14.8	30.9	8.3	7.6	05/24/1997	Batch 1, Day 6
AAB-091	PA-44	2	15.1	30.8	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-091	PA-44	3	15.0	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-091	PA-44	4	14.6	30.9	8.0	7.7	05/27/1997	Batch 1, Day 9
AAB-091	PA-44	1	14.6	31.0	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-091	PA-44	2	14.5	30.7	8.1	7.8	05/28/1997	Batch 1, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-091	PA-44	3	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-091	PA-44	4	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-091	PA-44	5	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-092	PA-41	1	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-092	PA-41	2	14.5	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-092	PA-41	3	14.5	30.9	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-092	PA-41	4	14.4	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-092	PA-41	5	14.4	30.9	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-092	PA-41	1	14.4	30.9	7.5	7.6	05/19/1997	Batch 1, Day 1
AAB-092	PA-41	2	14.9	30.7	8.1	7.5	05/20/1997	Batch 1, Day 2
AAB-092	PA-41	3	15.0	30.7	8.1	7.7	05/21/1997	Batch 1, Day 3
AAB-092	PA-41	4	14.9	30.5	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-092	PA-41	5	15.1	30.5	7.9	7.6	05/23/1997	Batch 1, Day 5
AAB-092	PA-41	1	14.6	30.8	8.3	7.6	05/24/1997	Batch 1, Day 6
AAB-092	PA-41	2	15.2	30.8	8.3	7.7	05/25/1997	Batch 1, Day 7
AAB-092	PA-41	3	14.9	30.0	8.0	8.1	05/26/1997	Batch 1, Day 8
AAB-092	PA-41	4	14.6	30.9	8.0	7.8	05/27/1997	Batch 1, Day 9
AAB-092	PA-41	1	14.4	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-092	PA-41	2	14.5	30.8	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-092	PA-41	3	14.5	30.8	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-092	PA-41	4	14.5	30.6	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-092	PA-41	5	14.4	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-094	PA-50	1	14.5	30.9	7.9	7.8	05/18/1997	Batch 1, Day 0
AAB-094	PA-50	2	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-094	PA-50	3	14.4	30.9	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-094	PA-50	4	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-094	PA-50	5	14.6	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-094	PA-50	1	14.5	31.1	7.6	7.7	05/19/1997	Batch 1, Day 1
AAB-094	PA-50	2	14.7	30.7	6.6	7.5	05/20/1997	Batch 1, Day 2
AAB-094	PA-50	3	14.8	30.7	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-094	PA-50	4	14.8	30.7	8.2	7.7	05/22/1997	Batch 1, Day 4
AAB-094	PA-50	5	15.1	30.7	7.9	7.6	05/23/1997	Batch 1, Day 5
AAB-094	PA-50	1	14.7	30.9	8.4	7.7	05/24/1997	Batch 1, Day 6
AAB-094	PA-50	2	15.0	30.9	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-094	PA-50	3	15.0	30.0	7.8	8.1	05/26/1997	Batch 1, Day 8
AAB-094	PA-50	4	14.6	31.2	8.1	7.8	05/27/1997	Batch 1, Day 9
AAB-094	PA-50	1	14.5	30.8	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-094	PA-50	2	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-094	PA-50	3	14.4	30.7	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-094	PA-50	4	14.4	30.8	8.3	7.8	05/28/1997	Batch 1, Day 10
AAB-094	PA-50	5	14.6	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-126	PA-45	1	14.5	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-126	PA-45	2	14.5	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-126	PA-45	3	14.6	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-126	PA-45	4	14.3	31.0	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-126	PA-45	5	14.4	31.0	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-126	PA-45	1	14.4	30.9	7.6	7.6	05/19/1997	Batch 1, Day 1
AAB-126	PA-45	2	14.8	30.7	7.1	7.6	05/20/1997	Batch 1, Day 2
AAB-126	PA-45	3	15.2	30.8	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-126	PA-45	4	14.8	30.6	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-126	PA-45	5	15.0	30.7	8.2	7.6	05/23/1997	Batch 1, Day 5
AAB-126	PA-45	1	14.7	30.8	8.2	7.6	05/24/1997	Batch 1, Day 6
AAB-126	PA-45	2	15.1	30.8	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-126	PA-45	3	15.3	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-126	PA-45	4	14.5	31.1	8.1	7.7	05/27/1997	Batch 1, Day 9
AAB-126	PA-45	1	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-126	PA-45	2	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-126	PA-45	3	14.7	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-126	PA-45	4	14.4	30.8	8.3	7.7	05/28/1997	Batch 1, Day 10
AAB-126	PA-45	5	14.3	30.8	8.3	7.8	05/28/1997	Batch 1, Day 10
AAB-127	PA-46	1	14.5	30.8	8.0	7.7	05/18/1997	Batch 1, Day 0
AAB-127	PA-46	2	14.5	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-127	PA-46	3	14.6	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-127	PA-46	4	14.5	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-127	PA-46	5	14.7	30.9	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-127	PA-46	1	14.5	30.9	7.6	7.6	05/19/1997	Batch 1, Day 1
AAB-127	PA-46	2	14.8	30.7	7.7	7.5	05/20/1997	Batch 1, Day 2
AAB-127	PA-46	3	15.1	30.8	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-127	PA-46	4	15.0	30.5	7.8	7.5	05/22/1997	Batch 1, Day 4
AAB-127	PA-46	5	15.4	30.6	7.8	7.5	05/23/1997	Batch 1, Day 5
AAB-127	PA-46	1	14.7	30.8	8.2	7.6	05/24/1997	Batch 1, Day 6
AAB-127	PA-46	2	15.1	30.8	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-127	PA-46	3	15.1	30.0	7.3	8.2	05/26/1997	Batch 1, Day 8
AAB-127	PA-46	4	14.6	30.9	7.9	7.7	05/27/1997	Batch 1, Day 9
AAB-127	PA-46	1	14.5	30.7	7.9	7.7	05/28/1997	Batch 1, Day 10
AAB-127	PA-46	2	14.5	30.8	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-127	PA-46	3	14.6	30.7	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-127	PA-46	4	14.5	30.6	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-127	PA-46	5	14.8	30.6	7.9	7.7	05/28/1997	Batch 1, Day 10
AAB-128	PA-39	1	14.5	30.8	7.9	7.6	05/18/1997	Batch 1, Day 0
AAB-128	PA-39	2	14.5	31.0	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-128	PA-39	3	14.6	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-128	PA-39	4	14.5	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-128	PA-39	5	14.5	30.9	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-128	PA-39	1	14.5	30.9	7.5	7.6	05/19/1997	Batch 1, Day 1
AAB-128	PA-39	2	14.8	30.7	6.7	7.5	05/20/1997	Batch 1, Day 2
AAB-128	PA-39	3	15.2	30.8	8.1	7.7	05/21/1997	Batch 1, Day 3
AAB-128	PA-39	4	15.0	30.6	8.0	7.5	05/22/1997	Batch 1, Day 4
AAB-128	PA-39	5	15.3	30.7	8.0	7.5	05/23/1997	Batch 1, Day 5
AAB-128	PA-39	1	14.7	30.8	8.2	7.6	05/24/1997	Batch 1, Day 6
AAB-128	PA-39	2	15.0	30.9	8.3	7.7	05/25/1997	Batch 1, Day 7
AAB-128	PA-39	3	15.1	30.0	7.8	8.1	05/26/1997	Batch 1, Day 8
AAB-128	PA-39	4	14.6	30.7	8.1	7.7	05/27/1997	Batch 1, Day 9
AAB-128	PA-39	1	14.5	30.6	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-128	PA-39	2	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-128	PA-39	3	14.6	30.9	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-128	PA-39	4	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-128	PA-39	5	14.4	30.5	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-132	PA-40	1	14.3	30.8	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-132	PA-40	2	14.6	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-132	PA-40	3	14.4	30.9	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-132	PA-40	4	14.4	30.9	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-132	PA-40	5	14.3	30.9	7.8	7.6	05/18/1997	Batch 1, Day 0
AAB-132	PA-40	1	14.3	31.0	8.0	7.6	05/19/1997	Batch 1, Day 1
AAB-132	PA-40	2	14.9	30.8	7.9	7.4	05/20/1997	Batch 1, Day 2
AAB-132	PA-40	3	14.9	30.7	8.1	7.7	05/21/1997	Batch 1, Day 3
AAB-132	PA-40	4	14.8	30.5	8.2	7.6	05/22/1997	Batch 1, Day 4
AAB-132	PA-40	5	14.9	30.5	8.1	7.5	05/23/1997	Batch 1, Day 5
AAB-132	PA-40	1	14.6	30.8	7.9	7.6	05/24/1997	Batch 1, Day 6
AAB-132	PA-40	2	15.1	30.8	8.3	7.7	05/25/1997	Batch 1, Day 7
AAB-132	PA-40	3	14.9	30.0	8.0	8.1	05/26/1997	Batch 1, Day 8
AAB-132	PA-40	4	14.5	30.9	8.1	7.7	05/27/1997	Batch 1, Day 9

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-132	PA-40	1	14.3	30.7	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-132	PA-40	2	14.5	30.8	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-132	PA-40	3	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-132	PA-40	4	14.3	30.7	8.3	7.7	05/28/1997	Batch 1, Day 10
AAB-132	PA-40	5	14.4	30.7	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-133	PA-38	1	14.5	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-133	PA-38	2	14.4	30.9	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-133	PA-38	3	14.5	30.9	7.6	7.6	05/18/1997	Batch 1, Day 0
AAB-133	PA-38	4	14.4	31.0	7.7	7.6	05/18/1997	Batch 1, Day 0
AAB-133	PA-38	5	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-133	PA-38	1	14.6	30.9	7.4	7.6	05/19/1997	Batch 1, Day 1
AAB-133	PA-38	2	14.7	30.8	8.3	7.3	05/20/1997	Batch 1, Day 2
AAB-133	PA-38	3	14.9	30.7	8.0	7.6	05/21/1997	Batch 1, Day 3
AAB-133	PA-38	4	14.9	30.6	8.0	7.6	05/22/1997	Batch 1, Day 4
AAB-133	PA-38	5	15.0	30.6	8.0	7.6	05/23/1997	Batch 1, Day 5
AAB-133	PA-38	1	14.8	30.8	8.2	7.6	05/24/1997	Batch 1, Day 6
AAB-133	PA-38	2	15.0	30.7	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-133	PA-38	3	14.9	28.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-133	PA-38	4	14.6	30.9	8.0	7.7	05/27/1997	Batch 1, Day 9
AAB-133	PA-38	1	14.7	30.6	8.0	7.8	05/28/1997	Batch 1, Day 10
AAB-133	PA-38	2	14.4	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-133	PA-38	3	14.5	30.6	7.9	7.7	05/28/1997	Batch 1, Day 10
AAB-133	PA-38	4	14.4	30.7	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-133	PA-38	5	14.4	30.7	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-156	BF-66	1	14.4	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-156	BF-66	2	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-156	BF-66	3	14.5	30.7	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-156	BF-66	4	14.4	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-156	BF-66	5	14.4	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-156	BF-66	1	14.4	30.8	8.1	7.6	05/19/1997	Batch 1, Day 1
AAB-156	BF-66	2	14.7	30.5	6.5	7.5	05/20/1997	Batch 1, Day 2
AAB-156	BF-66	3	14.9	30.5	8.1	7.7	05/21/1997	Batch 1, Day 3
AAB-156	BF-66	4	14.9	30.4	8.2	7.7	05/22/1997	Batch 1, Day 4
AAB-156	BF-66	5	15.1	30.4	8.2	7.6	05/23/1997	Batch 1, Day 5
AAB-156	BF-66	1	14.6	30.5	8.3	7.7	05/24/1997	Batch 1, Day 6
AAB-156	BF-66	2	14.9	30.4	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-156	BF-66	3	14.9	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-156	BF-66	4	14.6	30.7	8.0	7.8	05/27/1997	Batch 1, Day 9
AAB-156	BF-66	1	14.4	30.5	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-156	BF-66	2	14.4	30.3	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-156	BF-66	3	14.4	30.4	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-156	BF-66	4	14.5	30.4	8.1	7.8	05/28/1997	Batch 1, Day 10
AAB-156	BF-66	5	14.4	30.5	8.2	7.8	05/28/1997	Batch 1, Day 10
AAB-157	AB-67	1	14.5	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-157	AB-67	2	14.4	30.8	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-157	AB-67	3	14.4	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-157	AB-67	4	14.4	31.0	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-157	AB-67	5	14.4	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-157	AB-67	1	14.4	30.9	7.9	7.7	05/19/1997	Batch 1, Day 1
AAB-157	AB-67	2	14.8	30.5	6.1	7.6	05/20/1997	Batch 1, Day 2
AAB-157	AB-67	3	14.8	30.6	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-157	AB-67	4	14.8	30.6	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-157	AB-67	5	15.0	30.5	8.0	7.5	05/23/1997	Batch 1, Day 5
AAB-157	AB-67	1	14.7	30.7	8.3	7.6	05/24/1997	Batch 1, Day 6
AAB-157	AB-67	2	15.0	30.8	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-157	AB-67	3	15.0	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-157	AB-67	4	14.6	30.8	8.1	7.7	05/27/1997	Batch 1, Day 9
AAB-157	AB-67	1	14.5	30.6	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-157	AB-67	2	14.5	30.5	8.0	7.7	05/28/1997	Batch 1, Day 10
AAB-157	AB-67	3	14.5	30.5	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-157	AB-67	4	14.5	30.5	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-157	AB-67	5	14.4	30.6	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-162	PC-63	1	14.5	31.0	7.6	7.6	05/18/1997	Batch 1, Day 0
AAB-162	PC-63	2	14.4	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-162	PC-63	3	14.6	30.8	8.1	7.7	05/18/1997	Batch 1, Day 0
AAB-162	PC-63	4	14.5	30.8	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-162	PC-63	5	14.5	30.8	7.6	7.6	05/18/1997	Batch 1, Day 0
AAB-162	PC-63	1	14.6	30.9	7.8	7.5	05/19/1997	Batch 1, Day 1
AAB-162	PC-63	2	14.7	30.5	8.1	7.2	05/20/1997	Batch 1, Day 2
AAB-162	PC-63	3	15.0	30.5	8.4	7.7	05/21/1997	Batch 1, Day 3
AAB-162	PC-63	4	15.0	30.4	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-162	PC-63	5	15.3	30.3	8.1	7.6	05/23/1997	Batch 1, Day 5
AAB-162	PC-63	1	15.0	30.7	6.1	7.4	05/24/1997	Batch 1, Day 6
AAB-162	PC-63	2	14.9	30.4	8.5	7.7	05/25/1997	Batch 1, Day 7
AAB-162	PC-63	3	15.2	28.0	7.7	8.1	05/26/1997	Batch 1, Day 8
AAB-162	PC-63	4	14.7	30.5	8.1	7.7	05/27/1997	Batch 1, Day 9
AAB-162	PC-63	1	14.4	30.5	8.3	7.8	05/28/1997	Batch 1, Day 10
AAB-162	PC-63	2	14.4	30.4	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-162	PC-63	3	14.4	30.3	8.3	7.7	05/28/1997	Batch 1, Day 10
AAB-162	PC-63	4	14.5	30.3	8.2	7.7	05/28/1997	Batch 1, Day 10
AAB-162	PC-63	5	14.5	30.4	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-165	RR-65	1	14.5	31.0	7.4	7.7	05/18/1997	Batch 1, Day 0
AAB-165	RR-65	2	14.5	31.0	8.0	7.7	05/18/1997	Batch 1, Day 0
AAB-165	RR-65	3	14.5	30.9	7.9	7.7	05/18/1997	Batch 1, Day 0
AAB-165	RR-65	4	14.5	30.9	7.8	7.7	05/18/1997	Batch 1, Day 0
AAB-165	RR-65	5	14.5	31.0	7.7	7.7	05/18/1997	Batch 1, Day 0
AAB-165	RR-65	1	14.5	31.1	7.6	7.6	05/19/1997	Batch 1, Day 1
AAB-165	RR-65	2	14.8	30.8	6.4	7.6	05/20/1997	Batch 1, Day 2
AAB-165	RR-65	3	15.0	30.9	8.2	7.7	05/21/1997	Batch 1, Day 3
AAB-165	RR-65	4	15.0	30.7	8.1	7.6	05/22/1997	Batch 1, Day 4
AAB-165	RR-65	5	15.3	30.5	8.0	7.5	05/23/1997	Batch 1, Day 5
AAB-165	RR-65	1	14.7	30.9	8.3	7.7	05/24/1997	Batch 1, Day 6
AAB-165	RR-65	2	15.0	30.9	8.4	7.7	05/25/1997	Batch 1, Day 7
AAB-165	RR-65	3	15.2	30.0	7.9	8.1	05/26/1997	Batch 1, Day 8
AAB-165	RR-65	4	14.7	31.0	8.1	7.7	05/27/1997	Batch 1, Day 9
AAB-165	RR-65	1	14.5	30.8	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-165	RR-65	2	14.5	30.8	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-165	RR-65	3	14.5	30.9	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-165	RR-65	4	14.5	30.7	8.1	7.7	05/28/1997	Batch 1, Day 10
AAB-165	RR-65	5	14.6	30.7	7.9	7.7	05/28/1997	Batch 1, Day 10
AAB-095	EW-32	1	14.7	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-095	EW-32	2	14.8	29.7	8.0	7.5	06/03/1997	Batch 2, Day 0
AAB-095	EW-32	3	14.5	29.7	8.0	7.5	06/03/1997	Batch 2, Day 0
AAB-095	EW-32	4	14.7	29.7	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-095	EW-32	5	14.7	29.6	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-095	EW-32	1	14.7	29.5	8.3	7.6	06/04/1997	Batch 2, Day 1
AAB-095	EW-32	2	14.9	29.6	8.0	7.7	06/05/1997	Batch 2, Day 2
AAB-095	EW-32	3	15.3	29.9	7.9	7.6	06/06/1997	Batch 2, Day 3
AAB-095	EW-32	4	15.3	29.9	8.0	7.8	06/07/1997	Batch 2, Day 4
AAB-095	EW-32	5	14.9	29.9	8.0	7.9	06/08/1997	Batch 2, Day 5
AAB-095	EW-32	1	14.7	29.6	8.3	7.7	06/09/1997	Batch 2, Day 6
AAB-095	EW-32	2	15.3	29.7	7.2	7.7	06/10/1997	Batch 2, Day 7

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-095	EW-32	3	14.9	29.8	7.8	7.9	06/11/1997	Batch 2, Day 8
AAB-095	EW-32	4	14.6	29.7	7.9	7.8	06/12/1997	Batch 2, Day 9
AAB-095	EW-32	1	14.9	29.8	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-095	EW-32	2	15.0	29.5	7.7	8.0	06/13/1997	Batch 2, Day 10
AAB-095	EW-32	3	14.8	29.8	7.8	8.0	06/13/1997	Batch 2, Day 10
AAB-095	EW-32	4	14.8	29.8	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-095	EW-32	5	14.8	29.7	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-099	SB-23	1	14.4	29.8	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-099	SB-23	2	14.4	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-099	SB-23	3	14.8	29.7	7.9	7.6	06/03/1997	Batch 2, Day 0
AAB-099	SB-23	4	14.5	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-099	SB-23	5	14.7	29.7	7.9	7.6	06/03/1997	Batch 2, Day 0
AAB-099	SB-23	1	14.5	29.7	8.1	7.6	06/04/1997	Batch 2, Day 1
AAB-099	SB-23	2	14.4	29.7	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-099	SB-23	3	15.5	30.1	7.9	7.6	06/06/1997	Batch 2, Day 3
AAB-099	SB-23	4	15.5	30.1	7.8	7.7	06/07/1997	Batch 2, Day 4
AAB-099	SB-23	5	14.9	30.1	7.9	7.9	06/08/1997	Batch 2, Day 5
AAB-099	SB-23	1	14.5	29.7	8.3	7.6	06/09/1997	Batch 2, Day 6
AAB-099	SB-23	2	14.8	29.8	7.3	7.6	06/10/1997	Batch 2, Day 7
AAB-099	SB-23	3	14.8	30.0	7.7	7.8	06/11/1997	Batch 2, Day 8
AAB-099	SB-23	4	14.7	29.9	7.8	7.7	06/12/1997	Batch 2, Day 9
AAB-099	SB-23	1	14.6	29.7	8.0	7.8	06/13/1997	Batch 2, Day 10
AAB-099	SB-23	2	14.6	29.7	7.8	7.8	06/13/1997	Batch 2, Day 10
AAB-099	SB-23	3	14.9	30.0	7.5	7.8	06/13/1997	Batch 2, Day 10
AAB-099	SB-23	4	14.6	29.9	7.7	7.9	06/13/1997	Batch 2, Day 10
AAB-099	SB-23	5	14.8	29.9	7.8	7.9	06/13/1997	Batch 2, Day 10
AAB-102	SB-21	1	14.6	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-102	SB-21	2	14.4	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-102	SB-21	3	14.5	29.7	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-102	SB-21	4	14.4	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-102	SB-21	5	14.6	29.7	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-102	SB-21	1	14.6	29.6	8.1	7.6	06/04/1997	Batch 2, Day 1
AAB-102	SB-21	2	14.4	29.7	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-102	SB-21	3	15.5	30.1	8.1	7.6	06/06/1997	Batch 2, Day 3
AAB-102	SB-21	4	15.4	30.0	8.1	7.7	06/07/1997	Batch 2, Day 4
AAB-102	SB-21	5	14.6	30.0	8.1	7.9	06/08/1997	Batch 2, Day 5
AAB-102	SB-21	1	14.7	29.6	8.3	7.7	06/09/1997	Batch 2, Day 6
AAB-102	SB-21	2	14.9	29.7	7.3	7.6	06/10/1997	Batch 2, Day 7
AAB-102	SB-21	3	14.9	29.9	7.8	7.7	06/11/1997	Batch 2, Day 8
AAB-102	SB-21	4	14.6	29.8	7.8	7.6	06/12/1997	Batch 2, Day 9
AAB-102	SB-21	1	14.7	29.8	7.9	7.8	06/13/1997	Batch 2, Day 10
AAB-102	SB-21	2	14.6	29.6	7.8	7.8	06/13/1997	Batch 2, Day 10
AAB-102	SB-21	3	14.8	29.7	7.8	7.7	06/13/1997	Batch 2, Day 10
AAB-102	SB-21	4	14.6	29.8	7.7	7.7	06/13/1997	Batch 2, Day 10
AAB-102	SB-21	5	14.6	29.9	8.0	7.9	06/13/1997	Batch 2, Day 10
AAB-105	EW-36	1	14.7	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-105	EW-36	2	14.5	29.9	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-105	EW-36	3	14.5	29.9	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-105	EW-36	4	14.4	29.8	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-105	EW-36	5	14.6	29.8	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-105	EW-36	1	14.8	29.7	8.0	7.6	06/04/1997	Batch 2, Day 1
AAB-105	EW-36	2	14.5	29.7	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-105	EW-36	3	15.3	30.1	8.0	7.7	06/06/1997	Batch 2, Day 3
AAB-105	EW-36	4	15.3	30.0	8.0	7.8	06/07/1997	Batch 2, Day 4
AAB-105	EW-36	5	14.8	30.1	8.1	7.9	06/08/1997	Batch 2, Day 5
AAB-105	EW-36	1	14.8	29.9	8.0	7.7	06/09/1997	Batch 2, Day 6

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-105	EW-36	2	14.9	29.8	7.4	7.7	06/10/1997	Batch 2, Day 7
AAB-105	EW-36	3	14.9	29.9	8.0	8.0	06/11/1997	Batch 2, Day 8
AAB-105	EW-36	4	14.6	29.8	7.9	7.9	06/12/1997	Batch 2, Day 9
AAB-105	EW-36	1	14.8	30.0	7.4	8.0	06/13/1997	Batch 2, Day 10
AAB-105	EW-36	2	14.7	29.7	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-105	EW-36	3	14.7	29.8	7.8	8.2	06/13/1997	Batch 2, Day 10
AAB-105	EW-36	4	14.6	29.8	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-105	EW-36	5	14.7	29.9	7.8	8.2	06/13/1997	Batch 2, Day 10
AAB-107	EW-30	1	14.8	29.8	7.8	7.6	06/03/1997	Batch 2, Day 0
AAB-107	EW-30	2	14.6	29.8	7.8	7.6	06/03/1997	Batch 2, Day 0
AAB-107	EW-30	3	14.7	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-107	EW-30	4	14.4	29.8	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-107	EW-30	5	14.5	29.8	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-107	EW-30	1	14.7	29.7	8.2	7.7	06/04/1997	Batch 2, Day 1
AAB-107	EW-30	2	14.5	29.8	8.3	7.8	06/05/1997	Batch 2, Day 2
AAB-107	EW-30	3	15.3	30.1	8.1	7.6	06/06/1997	Batch 2, Day 3
AAB-107	EW-30	4	15.4	30.1	8.1	7.8	06/07/1997	Batch 2, Day 4
AAB-107	EW-30	5	14.7	30.1	8.1	7.9	06/08/1997	Batch 2, Day 5
AAB-107	EW-30	1	14.7	29.8	8.3	7.8	06/09/1997	Batch 2, Day 6
AAB-107	EW-30	2	14.9	29.8	7.3	7.7	06/10/1997	Batch 2, Day 7
AAB-107	EW-30	3	14.8	29.9	8.0	7.9	06/11/1997	Batch 2, Day 8
AAB-107	EW-30	4	14.7	29.8	7.9	7.8	06/12/1997	Batch 2, Day 9
AAB-107	EW-30	1	14.9	30.0	7.8	8.2	06/13/1997	Batch 2, Day 10
AAB-107	EW-30	2	14.8	29.8	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-107	EW-30	3	14.8	29.8	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-107	EW-30	4	14.7	29.8	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-107	EW-30	5	14.6	29.9	8.0	8.0	06/13/1997	Batch 2, Day 10
AAB-108	EW-34	1	14.4	29.7	7.6	7.4	06/03/1997	Batch 2, Day 0
AAB-108	EW-34	2	14.6	29.7	7.4	7.4	06/03/1997	Batch 2, Day 0
AAB-108	EW-34	3	14.7	29.6	7.3	7.4	06/03/1997	Batch 2, Day 0
AAB-108	EW-34	4	14.7	29.7	7.0	7.4	06/03/1997	Batch 2, Day 0
AAB-108	EW-34	5	14.7	29.8	5.6	7.4	06/03/1997	Batch 2, Day 0
AAB-108	EW-34	1	14.6	29.7	7.9	7.6	06/04/1997	Batch 2, Day 1
AAB-108	EW-34	2	14.4	29.7	8.0	7.7	06/05/1997	Batch 2, Day 2
AAB-108	EW-34	3	15.3	29.9	7.7	7.6	06/06/1997	Batch 2, Day 3
AAB-108	EW-34	4	15.3	29.9	7.7	7.7	06/07/1997	Batch 2, Day 4
AAB-108	EW-34	5	14.9	30.0	7.6	7.8	06/08/1997	Batch 2, Day 5
AAB-108	EW-34	1	14.6	29.7	8.3	7.8	06/09/1997	Batch 2, Day 6
AAB-108	EW-34	2	14.8	29.8	7.3	7.7	06/10/1997	Batch 2, Day 7
AAB-108	EW-34	3	14.8	29.9	7.9	7.9	06/11/1997	Batch 2, Day 8
AAB-108	EW-34	4	14.6	29.7	7.8	7.8	06/12/1997	Batch 2, Day 9
AAB-108	EW-34	1	14.6	29.7	8.0	8.1	06/13/1997	Batch 2, Day 10
AAB-108	EW-34	2	14.7	29.7	8.0	8.1	06/13/1997	Batch 2, Day 10
AAB-108	EW-34	3	14.8	29.8	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-108	EW-34	4	14.9	29.8	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-108	EW-34	5	14.8	29.9	7.3	7.9	06/13/1997	Batch 2, Day 10
AAB-109	SB-20	1	14.8	29.4	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-109	SB-20	2	14.8	29.4	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-109	SB-20	3	14.7	29.4	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-109	SB-20	4	14.8	29.4	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-109	SB-20	5	14.7	29.4	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-109	SB-20	1	15.2	29.5	7.5	7.5	06/04/1997	Batch 2, Day 1
AAB-109	SB-20	2	14.5	29.4	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-109	SB-20	3	15.3	29.8	8.1	7.7	06/06/1997	Batch 2, Day 3
AAB-109	SB-20	4	15.4	29.7	7.9	7.7	06/07/1997	Batch 2, Day 4
AAB-109	SB-20	5	14.8	29.7	8.0	7.9	06/08/1997	Batch 2, Day 5

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-109	SB-20	1	15.1	29.4	8.1	7.6	06/09/1997	Batch 2, Day 6
AAB-109	SB-20	2	14.9	29.5	7.3	7.7	06/10/1997	Batch 2, Day 7
AAB-109	SB-20	3	14.9	29.6	7.9	8.0	06/11/1997	Batch 2, Day 8
AAB-109	SB-20	4	14.7	29.4	7.8	7.8	06/12/1997	Batch 2, Day 9
AAB-109	SB-20	1	15.1	29.5	7.5	7.9	06/13/1997	Batch 2, Day 10
AAB-109	SB-20	2	14.8	29.5	7.8	7.9	06/13/1997	Batch 2, Day 10
AAB-109	SB-20	3	14.8	29.6	7.8	8.0	06/13/1997	Batch 2, Day 10
AAB-109	SB-20	4	14.9	29.6	7.8	8.0	06/13/1997	Batch 2, Day 10
AAB-109	SB-20	5	14.8	29.7	7.8	8.0	06/13/1997	Batch 2, Day 10
AAB-111	SB-22	1	14.5	29.9	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-111	SB-22	2	14.5	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-111	SB-22	3	14.4	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-111	SB-22	4	14.4	29.8	8.3	7.7	06/03/1997	Batch 2, Day 0
AAB-111	SB-22	5	14.5	29.9	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-111	SB-22	1	14.7	29.9	7.9	7.6	06/04/1997	Batch 2, Day 1
AAB-111	SB-22	2	14.6	29.7	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-111	SB-22	3	15.3	30.1	7.8	7.6	06/06/1997	Batch 2, Day 3
AAB-111	SB-22	4	15.2	30.1	8.1	7.8	06/07/1997	Batch 2, Day 4
AAB-111	SB-22	5	14.8	30.1	8.0	7.8	06/08/1997	Batch 2, Day 5
AAB-111	SB-22	1	14.6	29.8	8.2	7.7	06/09/1997	Batch 2, Day 6
AAB-111	SB-22	2	15.0	29.9	7.4	7.7	06/10/1997	Batch 2, Day 7
AAB-111	SB-22	3	14.8	30.0	7.8	7.7	06/11/1997	Batch 2, Day 8
AAB-111	SB-22	4	14.6	30.0	8.1	7.8	06/12/1997	Batch 2, Day 9
AAB-111	SB-22	1	14.7	29.8	8.0	7.9	06/13/1997	Batch 2, Day 10
AAB-111	SB-22	2	14.7	29.7	8.0	7.9	06/13/1997	Batch 2, Day 10
AAB-111	SB-22	3	14.6	29.8	7.8	7.8	06/13/1997	Batch 2, Day 10
AAB-111	SB-22	4	14.5	29.9	8.1	7.9	06/13/1997	Batch 2, Day 10
AAB-111	SB-22	5	14.7	29.8	7.7	7.9	06/13/1997	Batch 2, Day 10
AAB-112	SB-16	1	14.6	29.8	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-112	SB-16	2	14.7	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-112	SB-16	3	14.7	29.6	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-112	SB-16	4	14.5	29.5	8.1	7.7	06/03/1997	Batch 2, Day 0
AAB-112	SB-16	5	14.8	29.4	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-112	SB-16	1	14.8	29.6	7.9	7.6	06/04/1997	Batch 2, Day 1
AAB-112	SB-16	2	14.5	29.7	8.2	7.7	06/05/1997	Batch 2, Day 2
AAB-112	SB-16	3	15.2	29.9	7.8	7.6	06/06/1997	Batch 2, Day 3
AAB-112	SB-16	4	15.4	29.8	8.1	7.9	06/07/1997	Batch 2, Day 4
AAB-112	SB-16	5	15.2	29.8	7.8	7.8	06/08/1997	Batch 2, Day 5
AAB-112	SB-16	1	14.8	29.7	8.3	7.7	06/09/1997	Batch 2, Day 6
AAB-112	SB-16	2	14.9	29.8	7.2	7.6	06/10/1997	Batch 2, Day 7
AAB-112	SB-16	3	14.8	29.9	7.8	7.8	06/11/1997	Batch 2, Day 8
AAB-112	SB-16	4	14.7	29.7	7.9	7.7	06/12/1997	Batch 2, Day 9
AAB-112	SB-16	1	14.7	29.6	7.8	7.8	06/13/1997	Batch 2, Day 10
AAB-112	SB-16	2	15.0	29.8	7.8	7.8	06/13/1997	Batch 2, Day 10
AAB-112	SB-16	3	14.8	29.8	7.7	7.8	06/13/1997	Batch 2, Day 10
AAB-112	SB-16	4	14.7	29.5	8.0	7.8	06/13/1997	Batch 2, Day 10
AAB-112	SB-16	5	15.0	29.5	8.0	7.9	06/13/1997	Batch 2, Day 10
AAB-113	SB-13	1	14.5	29.8	7.4	7.6	06/03/1997	Batch 2, Day 0
AAB-113	SB-13	2	14.6	29.6	7.9	7.6	06/03/1997	Batch 2, Day 0
AAB-113	SB-13	3	14.6	29.6	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-113	SB-13	4	14.5	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-113	SB-13	5	14.6	29.6	7.8	7.5	06/03/1997	Batch 2, Day 0
AAB-113	SB-13	1	14.7	29.7	8.0	7.6	06/04/1997	Batch 2, Day 1
AAB-113	SB-13	2	14.4	29.6	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-113	SB-13	3	15.2	29.9	8.1	7.7	06/06/1997	Batch 2, Day 3
AAB-113	SB-13	4	15.5	30.0	8.0	7.8	06/07/1997	Batch 2, Day 4

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-113	SB-13	5	14.9	29.9	7.9	7.8	06/08/1997	Batch 2, Day 5
AAB-113	SB-13	1	14.7	29.7	8.3	7.7	06/09/1997	Batch 2, Day 6
AAB-113	SB-13	2	14.8	29.7	7.2	7.7	06/10/1997	Batch 2, Day 7
AAB-113	SB-13	3	14.8	29.8	8.0	8.0	06/11/1997	Batch 2, Day 8
AAB-113	SB-13	4	14.6	29.7	7.9	7.8	06/12/1997	Batch 2, Day 9
AAB-113	SB-13	1	14.7	29.7	7.6	7.9	06/13/1997	Batch 2, Day 10
AAB-113	SB-13	2	14.7	29.6	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-113	SB-13	3	14.8	29.7	8.1	8.0	06/13/1997	Batch 2, Day 10
AAB-113	SB-13	4	14.8	29.8	7.8	7.9	06/13/1997	Batch 2, Day 10
AAB-113	SB-13	5	14.8	29.7	7.5	7.8	06/13/1997	Batch 2, Day 10
AAB-115	SB-08	1	14.6	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-115	SB-08	2	14.5	29.9	7.9	7.6	06/03/1997	Batch 2, Day 0
AAB-115	SB-08	3	14.7	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-115	SB-08	4	14.8	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-115	SB-08	5	14.7	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-115	SB-08	1	14.7	29.7	8.0	7.6	06/04/1997	Batch 2, Day 1
AAB-115	SB-08	2	14.5	29.8	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-115	SB-08	3	15.5	30.0	8.0	7.7	06/06/1997	Batch 2, Day 3
AAB-115	SB-08	4	15.5	30.0	7.9	7.8	06/07/1997	Batch 2, Day 4
AAB-115	SB-08	5	14.7	30.0	8.0	7.9	06/08/1997	Batch 2, Day 5
AAB-115	SB-08	1	14.7	29.8	8.1	7.7	06/09/1997	Batch 2, Day 6
AAB-115	SB-08	2	14.9	29.9	7.2	7.7	06/10/1997	Batch 2, Day 7
AAB-115	SB-08	3	15.2	29.9	7.8	8.0	06/11/1997	Batch 2, Day 8
AAB-115	SB-08	4	14.7	29.8	7.9	8.0	06/12/1997	Batch 2, Day 9
AAB-115	SB-08	1	14.8	29.9	7.5	7.9	06/13/1997	Batch 2, Day 10
AAB-115	SB-08	2	14.7	29.7	7.9	8.2	06/13/1997	Batch 2, Day 10
AAB-115	SB-08	3	15.1	29.8	7.6	8.0	06/13/1997	Batch 2, Day 10
AAB-115	SB-08	4	14.9	30.0	7.8	8.2	06/13/1997	Batch 2, Day 10
AAB-115	SB-08	5	14.9	29.9	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-116	OR-26	1	14.7	29.6	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-116	OR-26	2	14.5	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-116	OR-26	3	14.6	29.6	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-116	OR-26	4	14.4	29.6	8.3	7.7	06/03/1997	Batch 2, Day 0
AAB-116	OR-26	5	14.6	29.6	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-116	OR-26	1	14.8	29.6	8.1	7.7	06/04/1997	Batch 2, Day 1
AAB-116	OR-26	2	14.6	29.7	8.0	7.7	06/05/1997	Batch 2, Day 2
AAB-116	OR-26	3	15.5	30.1	8.1	7.6	06/06/1997	Batch 2, Day 3
AAB-116	OR-26	4	15.3	29.9	8.2	7.8	06/07/1997	Batch 2, Day 4
AAB-116	OR-26	5	14.7	29.9	8.1	7.9	06/08/1997	Batch 2, Day 5
AAB-116	OR-26	1	14.8	29.6	8.3	7.7	06/09/1997	Batch 2, Day 6
AAB-116	OR-26	2	14.9	29.8	7.3	7.6	06/10/1997	Batch 2, Day 7
AAB-116	OR-26	3	15.0	29.8	8.0	7.8	06/11/1997	Batch 2, Day 8
AAB-116	OR-26	4	14.6	29.6	8.0	7.7	06/12/1997	Batch 2, Day 9
AAB-116	OR-26	1	14.9	29.7	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-116	OR-26	2	14.8	29.6	8.0	7.9	06/13/1997	Batch 2, Day 10
AAB-116	OR-26	3	14.9	29.7	8.0	7.9	06/13/1997	Batch 2, Day 10
AAB-116	OR-26	4	14.6	29.6	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-116	OR-26	5	14.7	29.8	7.8	7.9	06/13/1997	Batch 2, Day 10
AAB-118	OR-29	1	14.7	29.8	7.9	7.5	06/03/1997	Batch 2, Day 0
AAB-118	OR-29	2	14.6	29.9	7.4	7.5	06/03/1997	Batch 2, Day 0
AAB-118	OR-29	3	14.5	29.9	7.3	7.4	06/03/1997	Batch 2, Day 0
AAB-118	OR-29	4	14.5	29.9	7.2	7.5	06/03/1997	Batch 2, Day 0
AAB-118	OR-29	5	14.6	29.8	7.5	7.5	06/03/1997	Batch 2, Day 0
AAB-118	OR-29	1	14.6	29.8	8.1	7.6	06/04/1997	Batch 2, Day 1
AAB-118	OR-29	2	14.5	29.8	7.9	7.6	06/05/1997	Batch 2, Day 2
AAB-118	OR-29	3	15.4	30.0	7.8	7.6	06/06/1997	Batch 2, Day 3

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-118	OR-29	4	15.4	30.1	7.6	7.7	06/07/1997	Batch 2, Day 4
AAB-118	OR-29	5	14.9	30.1	8.0	7.9	06/08/1997	Batch 2, Day 5
AAB-118	OR-29	1	14.7	29.7	8.3	7.8	06/09/1997	Batch 2, Day 6
AAB-118	OR-29	2	14.9	29.9	7.4	7.7	06/10/1997	Batch 2, Day 7
AAB-118	OR-29	3	14.9	29.9	7.9	7.9	06/11/1997	Batch 2, Day 8
AAB-118	OR-29	4	14.7	29.9	7.8	7.9	06/12/1997	Batch 2, Day 9
AAB-118	OR-29	1	14.9	29.8	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-118	OR-29	2	14.8	29.8	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-118	OR-29	3	14.8	29.9	7.5	8.1	06/13/1997	Batch 2, Day 10
AAB-118	OR-29	4	14.7	29.8	7.7	8.0	06/13/1997	Batch 2, Day 10
AAB-118	OR-29	5	14.8	29.8	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-124	EW-33	1	14.7	29.8	7.9	7.6	06/03/1997	Batch 2, Day 0
AAB-124	EW-33	2	14.6	29.8	7.7	7.5	06/03/1997	Batch 2, Day 0
AAB-124	EW-33	3	14.6	29.8	8.0	7.5	06/03/1997	Batch 2, Day 0
AAB-124	EW-33	4	14.5	29.7	7.5	7.4	06/03/1997	Batch 2, Day 0
AAB-124	EW-33	5	14.7	29.7	7.4	7.4	06/03/1997	Batch 2, Day 0
AAB-124	EW-33	1	14.8	29.7	8.2	7.7	06/04/1997	Batch 2, Day 1
AAB-124	EW-33	2	14.4	29.7	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-124	EW-33	3	15.2	30.1	8.0	7.7	06/06/1997	Batch 2, Day 3
AAB-124	EW-33	4	15.5	30.1	7.9	7.7	06/07/1997	Batch 2, Day 4
AAB-124	EW-33	5	14.9	29.9	7.9	7.9	06/08/1997	Batch 2, Day 5
AAB-124	EW-33	1	14.8	29.8	8.4	7.9	06/09/1997	Batch 2, Day 6
AAB-124	EW-33	2	14.8	29.8	7.3	7.7	06/10/1997	Batch 2, Day 7
AAB-124	EW-33	3	14.8	30.0	8.1	8.0	06/11/1997	Batch 2, Day 8
AAB-124	EW-33	4	14.7	29.9	7.9	7.9	06/12/1997	Batch 2, Day 9
AAB-124	EW-33	1	14.9	29.9	7.9	8.2	06/13/1997	Batch 2, Day 10
AAB-124	EW-33	2	14.8	29.8	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-124	EW-33	3	14.7	29.9	8.0	8.1	06/13/1997	Batch 2, Day 10
AAB-124	EW-33	4	14.7	29.7	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-124	EW-33	5	14.8	29.8	7.8	8.0	06/13/1997	Batch 2, Day 10
AAB-125	OR-24	1	14.5	29.9	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-125	OR-24	2	14.6	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-125	OR-24	3	14.6	29.8	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-125	OR-24	4	14.5	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-125	OR-24	5	14.4	29.8	8.3	7.6	06/03/1997	Batch 2, Day 0
AAB-125	OR-24	1	14.7	29.8	8.0	7.6	06/04/1997	Batch 2, Day 1
AAB-125	OR-24	2	14.5	29.7	7.9	7.7	06/05/1997	Batch 2, Day 2
AAB-125	OR-24	3	15.2	30.0	8.1	7.7	06/06/1997	Batch 2, Day 3
AAB-125	OR-24	4	15.7	30.2	7.8	7.7	06/07/1997	Batch 2, Day 4
AAB-125	OR-24	5	14.7	30.1	8.1	7.8	06/08/1997	Batch 2, Day 5
AAB-125	OR-24	1	14.7	29.9	7.9	7.6	06/09/1997	Batch 2, Day 6
AAB-125	OR-24	2	14.9	29.8	7.3	7.6	06/10/1997	Batch 2, Day 7
AAB-125	OR-24	3	14.7	30.0	8.0	7.9	06/11/1997	Batch 2, Day 8
AAB-125	OR-24	4	14.8	29.9	7.7	7.7	06/12/1997	Batch 2, Day 9
AAB-125	OR-24	1	14.8	29.9	7.4	7.8	06/13/1997	Batch 2, Day 10
AAB-125	OR-24	2	14.8	29.8	7.7	7.9	06/13/1997	Batch 2, Day 10
AAB-125	OR-24	3	14.8	30.0	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-125	OR-24	4	14.9	29.9	7.4	7.8	06/13/1997	Batch 2, Day 10
AAB-125	OR-24	5	14.6	29.8	7.8	7.9	06/13/1997	Batch 2, Day 10
AAB-138	SB-14	1	14.4	29.4	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-138	SB-14	2	14.7	29.3	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-138	SB-14	3	14.5	29.5	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-138	SB-14	4	14.6	29.3	8.3	7.7	06/03/1997	Batch 2, Day 0
AAB-138	SB-14	5	14.7	29.4	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-138	SB-14	1	14.6	29.4	8.2	7.7	06/04/1997	Batch 2, Day 1
AAB-138	SB-14	2	14.5	29.3	8.1	7.8	06/05/1997	Batch 2, Day 2

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-138	SB-14	3	15.3	29.6	8.0	7.6	06/06/1997	Batch 2, Day 3
AAB-138	SB-14	4	15.4	29.6	8.2	7.9	06/07/1997	Batch 2, Day 4
AAB-138	SB-14	5	14.7	29.6	8.1	7.9	06/08/1997	Batch 2, Day 5
AAB-138	SB-14	1	14.6	29.4	8.3	7.8	06/09/1997	Batch 2, Day 6
AAB-138	SB-14	2	14.9	29.4	7.3	7.8	06/10/1997	Batch 2, Day 7
AAB-138	SB-14	3	14.9	29.5	7.9	8.0	06/11/1997	Batch 2, Day 8
AAB-138	SB-14	4	14.7	29.6	8.1	8.0	06/12/1997	Batch 2, Day 9
AAB-138	SB-14	1	14.6	29.4	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-138	SB-14	2	14.9	29.3	8.0	8.1	06/13/1997	Batch 2, Day 10
AAB-138	SB-14	3	14.7	29.4	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-138	SB-14	4	14.8	29.5	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-138	SB-14	5	14.8	29.6	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-139	SB-11	1	14.5	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-139	SB-11	2	14.6	29.9	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-139	SB-11	3	14.6	29.8	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-139	SB-11	4	14.7	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-139	SB-11	5	14.8	29.8	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-139	SB-11	1	15.0	29.8	7.8	7.5	06/04/1997	Batch 2, Day 1
AAB-139	SB-11	2	14.6	29.7	8.0	7.7	06/05/1997	Batch 2, Day 2
AAB-139	SB-11	3	15.2	30.1	8.1	7.7	06/06/1997	Batch 2, Day 3
AAB-139	SB-11	4	15.6	30.1	8.1	7.8	06/07/1997	Batch 2, Day 4
AAB-139	SB-11	5	15.0	30.1	7.9	7.9	06/08/1997	Batch 2, Day 5
AAB-139	SB-11	1	14.7	29.7	8.3	7.7	06/09/1997	Batch 2, Day 6
AAB-139	SB-11	2	14.9	29.9	7.1	7.7	06/10/1997	Batch 2, Day 7
AAB-139	SB-11	3	14.7	30.0	8.0	8.0	06/11/1997	Batch 2, Day 8
AAB-139	SB-11	4	14.8	29.8	8.0	8.0	06/12/1997	Batch 2, Day 9
AAB-139	SB-11	1	14.7	29.6	7.8	8.0	06/13/1997	Batch 2, Day 10
AAB-139	SB-11	2	14.7	29.8	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-139	SB-11	3	14.6	29.9	8.0	8.1	06/13/1997	Batch 2, Day 10
AAB-139	SB-11	4	14.9	29.8	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-139	SB-11	5	15.0	29.8	7.9	8.1	06/13/1997	Batch 2, Day 10
AAB-142	EW-37	1	14.6	29.6	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-142	EW-37	2	14.7	29.7	7.9	7.6	06/03/1997	Batch 2, Day 0
AAB-142	EW-37	3	14.7	29.7	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-142	EW-37	4	14.7	29.6	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-142	EW-37	5	14.3	29.8	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-142	EW-37	1	14.7	29.6	8.2	7.7	06/04/1997	Batch 2, Day 1
AAB-142	EW-37	2	14.8	29.7	8.0	7.7	06/05/1997	Batch 2, Day 2
AAB-142	EW-37	3	15.5	30.0	8.0	7.6	06/06/1997	Batch 2, Day 3
AAB-142	EW-37	4	15.3	29.9	7.9	7.7	06/07/1997	Batch 2, Day 4
AAB-142	EW-37	5	14.7	30.0	8.3	7.9	06/08/1997	Batch 2, Day 5
AAB-142	EW-37	1	14.7	29.5	8.4	7.7	06/09/1997	Batch 2, Day 6
AAB-142	EW-37	2	15.2	29.8	7.2	7.7	06/10/1997	Batch 2, Day 7
AAB-142	EW-37	3	15.0	29.8	7.8	7.8	06/11/1997	Batch 2, Day 8
AAB-142	EW-37	4	14.6	29.7	7.9	7.8	06/12/1997	Batch 2, Day 9
AAB-142	EW-37	1	14.8	29.7	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-142	EW-37	2	15.0	29.6	7.6	8.0	06/13/1997	Batch 2, Day 10
AAB-142	EW-37	3	15.0	29.7	7.7	8.0	06/13/1997	Batch 2, Day 10
AAB-142	EW-37	4	14.9	29.7	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-142	EW-37	5	14.6	29.7	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-146	SB-17	1	14.5	29.8	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-146	SB-17	2	14.5	29.7	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-146	SB-17	3	14.7	29.6	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-146	SB-17	4	14.7	29.6	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-146	SB-17	5	14.8	29.6	8.1	7.6	06/03/1997	Batch 2, Day 0
AAB-146	SB-17	1	14.7	29.7	7.8	7.5	06/04/1997	Batch 2, Day 1

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-146	SB-17	2	14.4	29.6	8.3	7.7	06/05/1997	Batch 2, Day 2
AAB-146	SB-17	3	15.3	29.9	8.0	7.6	06/06/1997	Batch 2, Day 3
AAB-146	SB-17	4	15.3	29.9	8.0	7.7	06/07/1997	Batch 2, Day 4
AAB-146	SB-17	5	15.1	30.0	7.9	7.9	06/08/1997	Batch 2, Day 5
AAB-146	SB-17	1	14.6	29.6	7.8	7.6	06/09/1997	Batch 2, Day 6
AAB-146	SB-17	2	14.9	29.7	7.3	7.7	06/10/1997	Batch 2, Day 7
AAB-146	SB-17	3	14.9	29.8	7.9	7.9	06/11/1997	Batch 2, Day 8
AAB-146	SB-17	4	14.7	29.7	7.9	7.8	06/12/1997	Batch 2, Day 9
AAB-146	SB-17	1	14.6	29.7	7.1	7.8	06/13/1997	Batch 2, Day 10
AAB-146	SB-17	2	14.6	29.6	7.9	8.0	06/13/1997	Batch 2, Day 10
AAB-146	SB-17	3	14.8	29.7	7.9	7.9	06/13/1997	Batch 2, Day 10
AAB-146	SB-17	4	14.8	29.7	7.7	7.9	06/13/1997	Batch 2, Day 10
AAB-146	SB-17	5	15.0	29.7	7.7	8.0	06/13/1997	Batch 2, Day 10
AAB-160	IB-55	1	14.7	29.4	8.1	7.5	06/03/1997	Batch 2, Day 0
AAB-160	IB-55	2	14.4	29.4	8.1	7.5	06/03/1997	Batch 2, Day 0
AAB-160	IB-55	3	14.7	29.3	8.0	7.6	06/03/1997	Batch 2, Day 0
AAB-160	IB-55	4	14.7	29.3	8.2	7.7	06/03/1997	Batch 2, Day 0
AAB-160	IB-55	5	14.6	29.3	8.2	7.6	06/03/1997	Batch 2, Day 0
AAB-160	IB-55	1	14.9	29.4	7.9	7.6	06/04/1997	Batch 2, Day 1
AAB-160	IB-55	2	14.4	29.3	8.1	7.7	06/05/1997	Batch 2, Day 2
AAB-160	IB-55	3	15.8	29.6	7.6	7.6	06/06/1997	Batch 2, Day 3
AAB-160	IB-55	4	15.4	29.6	8.1	7.9	06/07/1997	Batch 2, Day 4
AAB-160	IB-55	5	14.6	29.6	8.1	7.9	06/08/1997	Batch 2, Day 5
AAB-160	IB-55	1	15.0	29.4	8.2	7.7	06/09/1997	Batch 2, Day 6
AAB-160	IB-55	2	14.8	29.5	7.1	7.6	06/10/1997	Batch 2, Day 7
AAB-160	IB-55	3	15.0	29.5	7.7	7.9	06/11/1997	Batch 2, Day 8
AAB-160	IB-55	4	14.7	29.4	7.9	8.0	06/12/1997	Batch 2, Day 9
AAB-160	IB-55	1	15.1	29.4	7.6	8.1	06/13/1997	Batch 2, Day 10
AAB-160	IB-55	2	14.6	29.3	7.8	7.9	06/13/1997	Batch 2, Day 10
AAB-160	IB-55	3	14.9	29.4	7.6	8.1	06/13/1997	Batch 2, Day 10
AAB-160	IB-55	4	14.8	29.5	7.8	8.2	06/13/1997	Batch 2, Day 10
AAB-160	IB-55	5	14.7	29.4	7.8	8.1	06/13/1997	Batch 2, Day 10
AAB-093	\-41 subsurfa	1	14.5	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-093	\-41 subsurfa	2	14.8	28.2	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-093	\-41 subsurfa	3	14.5	28.4	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-093	\-41 subsurfa	4	14.5	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-093	\-41 subsurfa	5	14.6	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-093	\-41 subsurfa	1	14.8	28.3	8.2	7.7	06/11/1997	Batch 3, Day 1
AAB-093	\-41 subsurfa	2	14.8	28.2	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-093	\-41 subsurfa	3	15.2	28.3	8.2	7.8	06/13/1997	Batch 3, Day 3
AAB-093	\-41 subsurfa	4	14.5	28.6	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-093	\-41 subsurfa	5	14.9	28.7	8.2	7.8	06/15/1997	Batch 3, Day 5
AAB-093	\-41 subsurfa	1	15.2	29.1	7.8	7.6	06/16/1997	Batch 3, Day 6
AAB-093	\-41 subsurfa	2	15.1	28.3	8.3	7.6	06/17/1997	Batch 3, Day 7
AAB-093	\-41 subsurfa	3	15.1	28.3	8.1	7.7	06/18/1997	Batch 3, Day 8
AAB-093	\-41 subsurfa	4	15.2	28.8	8.0	7.6	06/19/1997	Batch 3, Day 9
AAB-093	\-41 subsurfa	1	15.2	28.7	6.6	7.7	06/20/1997	Batch 3, Day 10
AAB-093	\-41 subsurfa	2	15.4	28.7	6.9	7.8	06/20/1997	Batch 3, Day 10
AAB-093	\-41 subsurfa	3	15.2	28.7	7.4	7.7	06/20/1997	Batch 3, Day 10
AAB-093	\-41 subsurfa	4	15.0	28.8	7.4	7.7	06/20/1997	Batch 3, Day 10
AAB-093	\-41 subsurfa	5	15.2	28.8	6.7	7.7	06/20/1997	Batch 3, Day 10
AAB-096	OR-28	1	14.8	28.4	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-096	OR-28	2	14.5	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-096	OR-28	3	14.5	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-096	OR-28	4	14.7	28.2	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-096	OR-28	5	14.6	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-096	OR-28	1	14.8	28.3	8.1	7.7	06/11/1997	Batch 3, Day 1
AAB-096	OR-28	2	14.5	28.3	8.1	7.7	06/12/1997	Batch 3, Day 2
AAB-096	OR-28	3	15.2	28.2	8.0	7.8	06/13/1997	Batch 3, Day 3
AAB-096	OR-28	4	14.8	28.6	8.2	7.8	06/14/1997	Batch 3, Day 4
AAB-096	OR-28	5	14.8	28.7	8.3	7.8	06/15/1997	Batch 3, Day 5
AAB-096	OR-28	1	15.5	29.0	7.8	7.7	06/16/1997	Batch 3, Day 6
AAB-096	OR-28	2	15.1	28.5	8.3	7.7	06/17/1997	Batch 3, Day 7
AAB-096	OR-28	3	14.9	28.3	8.1	7.7	06/18/1997	Batch 3, Day 8
AAB-096	OR-28	4	15.7	28.7	7.8	7.8	06/19/1997	Batch 3, Day 9
AAB-096	OR-28	1	15.1	28.5	7.6	7.8	06/20/1997	Batch 3, Day 10
AAB-096	OR-28	2	15.1	29.0	7.5	7.9	06/20/1997	Batch 3, Day 10
AAB-096	OR-28	3	15.1	28.7	7.4	7.9	06/20/1997	Batch 3, Day 10
AAB-096	OR-28	4	15.2	28.8	7.0	7.9	06/20/1997	Batch 3, Day 10
AAB-096	OR-28	5	15.1	28.6	6.4	7.9	06/20/1997	Batch 3, Day 10
AAB-097	EW-35	1	14.6	28.5	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-097	EW-35	2	14.4	28.2	8.0	7.4	06/10/1997	Batch 3, Day 0
AAB-097	EW-35	3	14.8	28.7	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-097	EW-35	4	14.5	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-097	EW-35	5	14.6	28.4	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-097	EW-35	1	14.7	28.4	8.1	7.8	06/11/1997	Batch 3, Day 1
AAB-097	EW-35	2	14.5	28.3	8.0	7.6	06/12/1997	Batch 3, Day 2
AAB-097	EW-35	3	15.4	28.4	8.0	7.8	06/13/1997	Batch 3, Day 3
AAB-097	EW-35	4	14.7	28.8	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-097	EW-35	5	14.8	28.7	8.2	7.9	06/15/1997	Batch 3, Day 5
AAB-097	EW-35	1	15.4	29.3	7.9	7.7	06/16/1997	Batch 3, Day 6
AAB-097	EW-35	2	14.8	28.4	8.3	7.6	06/17/1997	Batch 3, Day 7
AAB-097	EW-35	3	15.0	28.4	7.8	7.7	06/18/1997	Batch 3, Day 8
AAB-097	EW-35	4	15.4	28.9	8.0	7.7	06/19/1997	Batch 3, Day 9
AAB-097	EW-35	1	15.1	29.0	7.4	7.8	06/20/1997	Batch 3, Day 10
AAB-097	EW-35	2	14.9	28.6	8.0	7.7	06/20/1997	Batch 3, Day 10
AAB-097	EW-35	3	15.4	28.6	7.3	7.8	06/20/1997	Batch 3, Day 10
AAB-097	EW-35	4	15.1	28.6	8.2	7.8	06/20/1997	Batch 3, Day 10
AAB-097	EW-35	5	15.1	28.8	6.3	7.9	06/20/1997	Batch 3, Day 10
AAB-098	AL-64	1	14.7	28.5	8.1	7.6	06/10/1997	Batch 3, Day 0
AAB-098	AL-64	2	14.8	28.3	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-098	AL-64	3	14.5	28.4	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-098	AL-64	4	14.8	28.4	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-098	AL-64	5	14.5	28.3	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-098	AL-64	1	14.8	28.4	8.2	7.8	06/11/1997	Batch 3, Day 1
AAB-098	AL-64	2	14.8	28.4	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-098	AL-64	3	15.0	28.4	8.3	7.8	06/13/1997	Batch 3, Day 3
AAB-098	AL-64	4	14.7	28.7	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-098	AL-64	5	15.0	28.8	8.3	7.9	06/15/1997	Batch 3, Day 5
AAB-098	AL-64	1	15.8	29.1	7.9	7.7	06/16/1997	Batch 3, Day 6
AAB-098	AL-64	2	15.3	28.5	8.3	7.7	06/17/1997	Batch 3, Day 7
AAB-098	AL-64	3	14.9	28.5	8.3	7.7	06/18/1997	Batch 3, Day 8
AAB-098	AL-64	4	15.6	28.7	7.9	7.7	06/19/1997	Batch 3, Day 9
AAB-098	AL-64	1	15.3	29.0	7.4	7.7	06/20/1997	Batch 3, Day 10
AAB-098	AL-64	2	15.6	28.8	6.9	7.8	06/20/1997	Batch 3, Day 10
AAB-098	AL-64	3	15.3	28.7	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-098	AL-64	4	15.3	28.6	7.4	7.7	06/20/1997	Batch 3, Day 10
AAB-098	AL-64	5	15.2	28.7	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-100	SB-18	1	14.5	29.0	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-100	SB-18	2	14.6	28.6	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-100	SB-18	3	14.4	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-100	SB-18	4	14.4	29.1	8.1	7.5	06/10/1997	Batch 3, Day 0

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-100	SB-18	5	15.0	29.1	7.9	7.5	06/10/1997	Batch 3, Day 0
AAB-100	SB-18	1	14.7	29.0	8.0	7.7	06/11/1997	Batch 3, Day 1
AAB-100	SB-18	2	14.6	28.8	8.0	7.7	06/12/1997	Batch 3, Day 2
AAB-100	SB-18	3	14.9	28.4	8.2	7.8	06/13/1997	Batch 3, Day 3
AAB-100	SB-18	4	14.6	29.3	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-100	SB-18	5	15.0	29.4	8.2	7.9	06/15/1997	Batch 3, Day 5
AAB-100	SB-18	1	15.1	29.6	8.0	7.7	06/16/1997	Batch 3, Day 6
AAB-100	SB-18	2	15.1	28.7	8.2	7.7	06/17/1997	Batch 3, Day 7
AAB-100	SB-18	3	14.7	28.5	8.1	7.7	06/18/1997	Batch 3, Day 8
AAB-100	SB-18	4	15.1	29.4	7.9	7.7	06/19/1997	Batch 3, Day 9
AAB-100	SB-18	1	15.0	29.6	7.6	7.8	06/20/1997	Batch 3, Day 10
AAB-100	SB-18	2	15.0	29.1	7.5	7.8	06/20/1997	Batch 3, Day 10
AAB-100	SB-18	3	14.8	28.9	8.1	7.8	06/20/1997	Batch 3, Day 10
AAB-100	SB-18	4	15.0	29.5	7.5	7.8	06/20/1997	Batch 3, Day 10
AAB-100	SB-18	5	15.2	29.4	7.3	7.9	06/20/1997	Batch 3, Day 10
AAB-101	SB-19	1	15.0	28.3	8.1	7.6	06/10/1997	Batch 3, Day 0
AAB-101	SB-19	2	14.4	28.4	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-101	SB-19	3	14.6	28.3	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-101	SB-19	4	14.6	28.5	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-101	SB-19	5	14.8	28.4	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-101	SB-19	1	15.0	28.5	7.8	7.6	06/11/1997	Batch 3, Day 1
AAB-101	SB-19	2	14.5	28.9	8.1	7.6	06/12/1997	Batch 3, Day 2
AAB-101	SB-19	3	15.1	28.5	8.0	7.7	06/13/1997	Batch 3, Day 3
AAB-101	SB-19	4	14.5	29.0	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-101	SB-19	5	15.1	29.0	8.2	7.8	06/15/1997	Batch 3, Day 5
AAB-101	SB-19	1	15.9	29.5	7.6	7.6	06/16/1997	Batch 3, Day 6
AAB-101	SB-19	2	14.8	29.0	8.4	7.6	06/17/1997	Batch 3, Day 7
AAB-101	SB-19	3	14.9	28.8	8.1	7.6	06/18/1997	Batch 3, Day 8
AAB-101	SB-19	4	15.1	29.2	7.9	7.7	06/19/1997	Batch 3, Day 9
AAB-101	SB-19	1	15.5	29.1	7.3	7.7	06/20/1997	Batch 3, Day 10
AAB-101	SB-19	2	14.9	29.4	7.9	7.7	06/20/1997	Batch 3, Day 10
AAB-101	SB-19	3	15.1	29.3	7.7	7.7	06/20/1997	Batch 3, Day 10
AAB-101	SB-19	4	15.1	29.2	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-101	SB-19	5	15.3	28.6	7.2	8.2	06/20/1997	Batch 3, Day 10
AAB-103	OR-25	1	14.7	28.5	8.1	7.4	06/10/1997	Batch 3, Day 0
AAB-103	OR-25	2	14.5	28.5	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-103	OR-25	3	14.5	28.4	8.2	7.4	06/10/1997	Batch 3, Day 0
AAB-103	OR-25	4	14.7	28.5	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-103	OR-25	5	14.4	28.4	8.3	7.5	06/10/1997	Batch 3, Day 0
AAB-103	OR-25	1	14.9	28.5	8.0	7.7	06/11/1997	Batch 3, Day 1
AAB-103	OR-25	2	14.6	28.5	8.2	7.8	06/12/1997	Batch 3, Day 2
AAB-103	OR-25	3	15.2	28.4	8.2	7.8	06/13/1997	Batch 3, Day 3
AAB-103	OR-25	4	14.6	28.7	8.2	7.7	06/14/1997	Batch 3, Day 4
AAB-103	OR-25	5	15.1	28.8	8.3	7.8	06/15/1997	Batch 3, Day 5
AAB-103	OR-25	1	15.5	29.2	7.8	7.8	06/16/1997	Batch 3, Day 6
AAB-103	OR-25	2	14.9	28.5	8.3	7.8	06/17/1997	Batch 3, Day 7
AAB-103	OR-25	3	14.7	28.7	7.8	7.7	06/18/1997	Batch 3, Day 8
AAB-103	OR-25	4	15.3	28.8	7.8	7.8	06/19/1997	Batch 3, Day 9
AAB-103	OR-25	1	15.3	29.1	7.1	8.1	06/20/1997	Batch 3, Day 10
AAB-103	OR-25	2	15.2	28.8	6.4	8.1	06/20/1997	Batch 3, Day 10
AAB-103	OR-25	3	14.7	28.9	8.3	7.8	06/20/1997	Batch 3, Day 10
AAB-103	OR-25	4	15.1	29.0	7.3	7.9	06/20/1997	Batch 3, Day 10
AAB-103	OR-25	5	15.0	29.1	8.2	7.8	06/20/1997	Batch 3, Day 10
AAB-104	EW-31	1	14.6	28.6	8.1	7.4	06/10/1997	Batch 3, Day 0
AAB-104	EW-31	2	14.5	28.8	8.2	7.4	06/10/1997	Batch 3, Day 0
AAB-104	EW-31	3	14.5	28.6	7.7	7.5	06/10/1997	Batch 3, Day 0

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)		Recording Date	Remarks
AAB-104	EW-31	4	14.7	28.9	7.8	7.4		06/10/1997	Batch 3, Day 0
AAB-104	EW-31	5	14.7	28.6	8.1	7.4		06/10/1997	Batch 3, Day 0
AAB-104	EW-31	1	14.8	28.6	8.1	7.7		06/11/1997	Batch 3, Day 1
AAB-104	EW-31	2	14.6	28.7	8.1	7.7		06/12/1997	Batch 3, Day 2
AAB-104	EW-31	3	15.0	28.5	8.2	7.8		06/13/1997	Batch 3, Day 3
AAB-104	EW-31	4	14.8	29.0	8.1	7.7		06/14/1997	Batch 3, Day 4
AAB-104	EW-31	5	15.0	29.0	8.3	7.9		06/15/1997	Batch 3, Day 5
AAB-104	EW-31	1	15.5	29.2	7.8	7.7		06/16/1997	Batch 3, Day 6
AAB-104	EW-31	2	14.9	28.9	8.4	7.7		06/17/1997	Batch 3, Day 7
AAB-104	EW-31	3	14.9	28.7	8.2	7.8		06/18/1997	Batch 3, Day 8
AAB-104	EW-31	4	15.5	29.1	7.7	7.7		06/19/1997	Batch 3, Day 9
AAB-104	EW-31	1	15.3	29.0	7.0	7.9		06/20/1997	Batch 3, Day 10
AAB-104	EW-31	2	15.1	29.2	7.0	7.9		06/20/1997	Batch 3, Day 10
AAB-104	EW-31	3	15.3	28.8	6.4	7.9		06/20/1997	Batch 3, Day 10
AAB-104	EW-31	4	15.2	29.1	7.2	7.7		06/20/1997	Batch 3, Day 10
AAB-104	EW-31	5	15.2	28.9	6.8	7.9		06/20/1997	Batch 3, Day 10
AAB-110	3-20 subsurfa	1	14.5	28.2	8.2	7.6		06/10/1997	Batch 3, Day 0
AAB-110	3-20 subsurfa	2	14.5	28.2	8.3	7.5		06/10/1997	Batch 3, Day 0
AAB-110	3-20 subsurfa	3	14.6	28.3	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-110	3-20 subsurfa	4	14.5	28.2	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-110	3-20 subsurfa	5	14.7	28.3	8.3	7.5		06/10/1997	Batch 3, Day 0
AAB-110	3-20 subsurfa	1	14.8	28.3	8.3	7.8		06/11/1997	Batch 3, Day 1
AAB-110	3-20 subsurfa	2	14.6	28.2	8.1	7.7		06/12/1997	Batch 3, Day 2
AAB-110	3-20 subsurfa	3	15.1	28.2	8.2	7.7		06/13/1997	Batch 3, Day 3
AAB-110	3-20 subsurfa	4	14.5	28.6	8.4	7.8		06/14/1997	Batch 3, Day 4
AAB-110	3-20 subsurfa	5	15.1	28.6	8.2	7.8		06/15/1997	Batch 3, Day 5
AAB-110	3-20 subsurfa	1	15.4	29.1	7.7	7.5		06/16/1997	Batch 3, Day 6
AAB-110	3-20 subsurfa	2	15.1	28.5	8.2	7.6		06/17/1997	Batch 3, Day 7
AAB-110	3-20 subsurfa	3	14.9	28.3	7.9	7.6		06/18/1997	Batch 3, Day 8
AAB-110	3-20 subsurfa	4	15.1	28.7	8.0	7.7		06/19/1997	Batch 3, Day 9
AAB-110	3-20 subsurfa	1	15.3	28.6	6.4	7.8		06/20/1997	Batch 3, Day 10
AAB-110	3-20 subsurfa	2	15.3	28.6	6.5	7.7		06/20/1997	Batch 3, Day 10
AAB-110	3-20 subsurfa	3	15.1	28.5	6.6	7.7		06/20/1997	Batch 3, Day 10
AAB-110	3-20 subsurfa	4	15.1	28.6	6.4	7.8		06/20/1997	Batch 3, Day 10
AAB-110	3-20 subsurfa	5	15.2	28.6	7.2	7.8		06/20/1997	Batch 3, Day 10
AAB-114	SB-15	1	14.6	28.8	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-114	SB-15	2	14.7	28.5	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-114	SB-15	3	14.6	28.5	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-114	SB-15	4	14.6	28.6	7.8	7.5		06/10/1997	Batch 3, Day 0
AAB-114	SB-15	5	14.8	28.6	8.0	7.5		06/10/1997	Batch 3, Day 0
AAB-114	SB-15	1	14.8	28.7	7.9	7.7		06/11/1997	Batch 3, Day 1
AAB-114	SB-15	2	14.6	28.5	8.0	7.6		06/12/1997	Batch 3, Day 2
AAB-114	SB-15	3	15.1	28.4	7.9	7.8		06/13/1997	Batch 3, Day 3
AAB-114	SB-15	4	14.6	28.9	8.4	7.9		06/14/1997	Batch 3, Day 4
AAB-114	SB-15	5	15.3	28.8	8.1	8.0		06/15/1997	Batch 3, Day 5
AAB-114	SB-15	1	15.5	29.5	7.8	7.8		06/16/1997	Batch 3, Day 6
AAB-114	SB-15	2	14.9	28.6	8.3	8.0		06/17/1997	Batch 3, Day 7
AAB-114	SB-15	3	15.0	28.5	7.9	8.0		06/18/1997	Batch 3, Day 8
AAB-114	SB-15	4	15.5	29.0	7.8	8.2		06/19/1997	Batch 3, Day 9
AAB-114	SB-15	1	15.1	29.3	7.3	8.1		06/20/1997	Batch 3, Day 10
AAB-114	SB-15	2	15.3	28.9	6.7	8.4	T	06/20/1997	Batch 3, Day 10
AAB-114	SB-15	3	15.1	28.9	7.4	8.2		06/20/1997	Batch 3, Day 10
AAB-114	SB-15	4	15.3	29.0	6.4	8.4	T	06/20/1997	Batch 3, Day 10
AAB-114	SB-15	5	15.3	28.9	7.2	8.3		06/20/1997	Batch 3, Day 10
AAB-117	OR-27	1	14.7	28.3	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-117	OR-27	2	14.8	28.3	7.9	7.4		06/10/1997	Batch 3, Day 0

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)		Recording Date	Remarks
AAB-117	OR-27	3	14.6	28.3	8.2	7.7		06/10/1997	Batch 3, Day 0
AAB-117	OR-27	4	14.4	28.3	8.2	7.5		06/10/1997	Batch 3, Day 0
AAB-117	OR-27	5	14.8	28.4	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-117	OR-27	1	14.8	28.3	8.1	7.7		06/11/1997	Batch 3, Day 1
AAB-117	OR-27	2	14.9	28.3	8.1	7.6		06/12/1997	Batch 3, Day 2
AAB-117	OR-27	3	15.2	28.3	8.3	7.8		06/13/1997	Batch 3, Day 3
AAB-117	OR-27	4	14.5	28.6	8.4	7.8		06/14/1997	Batch 3, Day 4
AAB-117	OR-27	5	15.0	28.6	8.1	7.8		06/15/1997	Batch 3, Day 5
AAB-117	OR-27	1	15.2	29.1	7.8	7.7		06/16/1997	Batch 3, Day 6
AAB-117	OR-27	2	15.1	28.5	8.2	7.8		06/17/1997	Batch 3, Day 7
AAB-117	OR-27	3	14.9	28.4	8.1	7.9		06/18/1997	Batch 3, Day 8
AAB-117	OR-27	4	15.1	28.7	7.9	8.0		06/19/1997	Batch 3, Day 9
AAB-117	OR-27	1	15.1	28.6	6.5	8.1		06/20/1997	Batch 3, Day 10
AAB-117	OR-27	2	15.3	28.7	7.3	7.7		06/20/1997	Batch 3, Day 10
AAB-117	OR-27	3	15.3	28.6	6.4	8.2		06/20/1997	Batch 3, Day 10
AAB-117	OR-27	4	14.9	29.0	7.7	8.1		06/20/1997	Batch 3, Day 10
AAB-117	OR-27	5	15.2	28.6	7.3	8.1		06/20/1997	Batch 3, Day 10
AAB-120	SB-06	1	14.6	28.5	8.0	7.5		06/10/1997	Batch 3, Day 0
AAB-120	SB-06	2	14.6	28.3	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-120	SB-06	3	14.5	28.4	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-120	SB-06	4	14.6	28.3	8.0	7.5		06/10/1997	Batch 3, Day 0
AAB-120	SB-06	5	14.4	28.3	8.2	7.5		06/10/1997	Batch 3, Day 0
AAB-120	SB-06	1	14.7	28.4	8.1	7.7		06/11/1997	Batch 3, Day 1
AAB-120	SB-06	2	14.7	28.3	8.0	7.7		06/12/1997	Batch 3, Day 2
AAB-120	SB-06	3	15.1	28.4	8.1	7.9		06/13/1997	Batch 3, Day 3
AAB-120	SB-06	4	14.5	28.6	8.4	7.9		06/14/1997	Batch 3, Day 4
AAB-120	SB-06	5	15.3	28.8	8.3	7.9		06/15/1997	Batch 3, Day 5
AAB-120	SB-06	1	15.1	29.4	7.8	7.8		06/16/1997	Batch 3, Day 6
AAB-120	SB-06	2	15.0	28.6	8.2	7.9		06/17/1997	Batch 3, Day 7
AAB-120	SB-06	3	14.9	28.6	8.0	8.1		06/18/1997	Batch 3, Day 8
AAB-120	SB-06	4	15.2	28.8	7.8	8.1		06/19/1997	Batch 3, Day 9
AAB-120	SB-06	1	15.2	28.7	6.3	8.4	T	06/20/1997	Batch 3, Day 10
AAB-120	SB-06	2	15.2	28.7	6.6	8.3		06/20/1997	Batch 3, Day 10
AAB-120	SB-06	3	14.9	28.8	8.2	8.3		06/20/1997	Batch 3, Day 10
AAB-120	SB-06	4	15.1	28.8	6.4	8.2		06/20/1997	Batch 3, Day 10
AAB-120	SB-06	5	14.8	28.8	8.3	7.8		06/20/1997	Batch 3, Day 10
AAB-122	SB-03	1	14.6	28.4	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-122	SB-03	2	14.7	28.4	8.0	7.4		06/10/1997	Batch 3, Day 0
AAB-122	SB-03	3	14.6	28.3	8.1	7.5		06/10/1997	Batch 3, Day 0
AAB-122	SB-03	4	14.8	28.3	7.8	7.4		06/10/1997	Batch 3, Day 0
AAB-122	SB-03	5	14.7	28.3	8.2	7.5		06/10/1997	Batch 3, Day 0
AAB-122	SB-03	1	14.7	28.4	8.0	7.7		06/11/1997	Batch 3, Day 1
AAB-122	SB-03	2	14.6	28.3	8.0	7.6		06/12/1997	Batch 3, Day 2
AAB-122	SB-03	3	15.1	28.3	8.2	7.8		06/13/1997	Batch 3, Day 3
AAB-122	SB-03	4	14.7	28.6	8.2	7.9		06/14/1997	Batch 3, Day 4
AAB-122	SB-03	5	15.1	28.6	8.2	7.9		06/15/1997	Batch 3, Day 5
AAB-122	SB-03	1	15.1	29.2	7.7	8.0		06/16/1997	Batch 3, Day 6
AAB-122	SB-03	2	14.8	28.4	8.1	8.1		06/17/1997	Batch 3, Day 7
AAB-122	SB-03	3	14.9	28.2	7.7	8.1		06/18/1997	Batch 3, Day 8
AAB-122	SB-03	4	15.4	28.7	7.5	8.4	T	06/19/1997	Batch 3, Day 9
AAB-122	SB-03	1	15.2	28.9	6.4	8.4	T	06/20/1997	Batch 3, Day 10
AAB-122	SB-03	2	15.1	28.6	6.4	8.5	T	06/20/1997	Batch 3, Day 10
AAB-122	SB-03	3	15.0	28.6	6.4	8.3		06/20/1997	Batch 3, Day 10
AAB-122	SB-03	4	15.1	28.6	7.3	8.5	T	06/20/1997	Batch 3, Day 10
AAB-122	SB-03	5	15.4	28.7	6.6	8.2		06/20/1997	Batch 3, Day 10
AAB-129	IB-57	1	14.5	28.5	7.9	7.6		06/10/1997	Batch 3, Day 0

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-129	IB-57	2	14.6	28.7	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-129	IB-57	3	14.6	29.2	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-129	IB-57	4	14.8	28.7	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-129	IB-57	5	14.6	28.9	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-129	IB-57	1	14.7	28.5	8.3	7.8	06/11/1997	Batch 3, Day 1
AAB-129	IB-57	2	14.6	28.6	8.0	7.6	06/12/1997	Batch 3, Day 2
AAB-129	IB-57	3	15.1	29.0	8.2	7.7	06/13/1997	Batch 3, Day 3
AAB-129	IB-57	4	14.6	28.9	8.3	7.7	06/14/1997	Batch 3, Day 4
AAB-129	IB-57	5	15.1	29.1	8.2	7.8	06/15/1997	Batch 3, Day 5
AAB-129	IB-57	1	15.4	29.4	7.7	7.6	06/16/1997	Batch 3, Day 6
AAB-129	IB-57	2	15.1	28.7	8.3	7.6	06/17/1997	Batch 3, Day 7
AAB-129	IB-57	3	14.8	29.2	8.1	7.6	06/18/1997	Batch 3, Day 8
AAB-129	IB-57	4	15.4	28.9	7.9	7.7	06/19/1997	Batch 3, Day 9
AAB-129	IB-57	1	15.3	28.9	6.4	7.9	06/20/1997	Batch 3, Day 10
AAB-129	IB-57	2	15.2	29.0	7.4	7.6	06/20/1997	Batch 3, Day 10
AAB-129	IB-57	3	15.0	29.3	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-129	IB-57	4	15.1	28.9	7.4	7.8	06/20/1997	Batch 3, Day 10
AAB-129	IB-57	5	15.5	29.2	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-130	IB-58	1	14.6	28.3	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-130	IB-58	2	14.5	28.3	8.1	7.6	06/10/1997	Batch 3, Day 0
AAB-130	IB-58	3	14.7	28.3	8.0	7.4	06/10/1997	Batch 3, Day 0
AAB-130	IB-58	4	14.5	28.2	8.3	7.5	06/10/1997	Batch 3, Day 0
AAB-130	IB-58	5	14.8	28.2	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-130	IB-58	1	14.7	28.3	8.1	7.7	06/11/1997	Batch 3, Day 1
AAB-130	IB-58	2	14.6	28.4	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-130	IB-58	3	15.2	28.2	8.0	7.6	06/13/1997	Batch 3, Day 3
AAB-130	IB-58	4	14.6	28.5	8.2	7.7	06/14/1997	Batch 3, Day 4
AAB-130	IB-58	5	15.2	28.6	8.1	7.8	06/15/1997	Batch 3, Day 5
AAB-130	IB-58	1	15.3	29.1	7.8	7.5	06/16/1997	Batch 3, Day 6
AAB-130	IB-58	2	15.0	28.5	8.3	7.6	06/17/1997	Batch 3, Day 7
AAB-130	IB-58	3	15.0	28.4	8.1	7.5	06/18/1997	Batch 3, Day 8
AAB-130	IB-58	4	15.2	28.7	7.7	7.6	06/19/1997	Batch 3, Day 9
AAB-130	IB-58	1	15.3	28.6	6.3	7.7	06/20/1997	Batch 3, Day 10
AAB-130	IB-58	2	15.3	28.7	6.4	7.9	06/20/1997	Batch 3, Day 10
AAB-130	IB-58	3	15.3	28.7	7.3	7.7	06/20/1997	Batch 3, Day 10
AAB-130	IB-58	4	15.0	28.8	8.2	7.7	06/20/1997	Batch 3, Day 10
AAB-130	IB-58	5	15.3	29.1	7.3	7.8	06/20/1997	Batch 3, Day 10
AAB-131	\-40 subsurfa	1	14.6	28.2	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-131	\-40 subsurfa	2	14.6	28.2	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-131	\-40 subsurfa	3	14.5	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-131	\-40 subsurfa	4	14.5	28.3	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-131	\-40 subsurfa	5	14.6	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-131	\-40 subsurfa	1	14.9	28.3	8.1	7.7	06/11/1997	Batch 3, Day 1
AAB-131	\-40 subsurfa	2	14.5	28.4	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-131	\-40 subsurfa	3	15.1	28.2	8.1	7.7	06/13/1997	Batch 3, Day 3
AAB-131	\-40 subsurfa	4	14.7	28.6	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-131	\-40 subsurfa	5	14.9	28.8	8.2	7.8	06/15/1997	Batch 3, Day 5
AAB-131	\-40 subsurfa	1	15.6	29.1	7.6	7.5	06/16/1997	Batch 3, Day 6
AAB-131	\-40 subsurfa	2	14.8	28.5	8.3	7.5	06/17/1997	Batch 3, Day 7
AAB-131	\-40 subsurfa	3	15.0	28.3	8.1	7.6	06/18/1997	Batch 3, Day 8
AAB-131	\-40 subsurfa	4	15.6	28.7	7.8	7.7	06/19/1997	Batch 3, Day 9
AAB-131	\-40 subsurfa	1	15.2	28.8	6.9	7.7	06/20/1997	Batch 3, Day 10
AAB-131	\-40 subsurfa	2	15.1	28.8	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-131	\-40 subsurfa	3	15.1	28.8	7.6	7.7	06/20/1997	Batch 3, Day 10
AAB-131	\-40 subsurfa	4	15.5	28.6	6.4	7.8	06/20/1997	Batch 3, Day 10
AAB-131	\-40 subsurfa	5	15.1	28.7	6.5	7.8	06/20/1997	Batch 3, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-141	SB-05	1	14.5	28.2	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-141	SB-05	2	14.4	28.2	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-141	SB-05	3	14.8	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-141	SB-05	4	14.5	28.2	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-141	SB-05	5	14.6	28.2	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-141	SB-05	1	14.7	28.3	8.2	7.8	06/11/1997	Batch 3, Day 1
AAB-141	SB-05	2	14.5	28.4	8.1	7.7	06/12/1997	Batch 3, Day 2
AAB-141	SB-05	3	15.2	28.3	8.1	7.8	06/13/1997	Batch 3, Day 3
AAB-141	SB-05	4	14.5	28.5	8.5	7.9	06/14/1997	Batch 3, Day 4
AAB-141	SB-05	5	14.7	28.6	8.3	7.9	06/15/1997	Batch 3, Day 5
AAB-141	SB-05	1	15.3	29.2	7.7	7.7	06/16/1997	Batch 3, Day 6
AAB-141	SB-05	2	14.8	28.4	8.4	7.8	06/17/1997	Batch 3, Day 7
AAB-141	SB-05	3	15.0	28.3	8.0	7.9	06/18/1997	Batch 3, Day 8
AAB-141	SB-05	4	15.4	28.7	7.8	8.0	06/19/1997	Batch 3, Day 9
AAB-141	SB-05	1	15.3	28.9	6.5	8.1	06/20/1997	Batch 3, Day 10
AAB-141	SB-05	2	14.9	28.7	8.3	8.1	06/20/1997	Batch 3, Day 10
AAB-141	SB-05	3	15.2	28.4	7.3	8.1	06/20/1997	Batch 3, Day 10
AAB-141	SB-05	4	15.2	28.6	6.4	8.2	06/20/1997	Batch 3, Day 10
AAB-141	SB-05	5	15.0	28.7	6.5	8.1	06/20/1997	Batch 3, Day 10
AAB-144	SB-10	1	14.5	28.4	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-144	SB-10	2	14.5	28.4	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-144	SB-10	3	14.7	28.6	7.3	7.6	06/10/1997	Batch 3, Day 0
AAB-144	SB-10	4	14.5	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-144	SB-10	5	14.6	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-144	SB-10	1	14.7	28.5	8.2	7.8	06/11/1997	Batch 3, Day 1
AAB-144	SB-10	2	14.6	28.5	8.0	7.6	06/12/1997	Batch 3, Day 2
AAB-144	SB-10	3	15.0	28.3	8.3	7.8	06/13/1997	Batch 3, Day 3
AAB-144	SB-10	4	14.6	28.6	8.3	7.8	06/14/1997	Batch 3, Day 4
AAB-144	SB-10	5	14.8	28.7	8.1	7.8	06/15/1997	Batch 3, Day 5
AAB-144	SB-10	1	15.4	29.4	7.7	7.6	06/16/1997	Batch 3, Day 6
AAB-144	SB-10	2	15.1	28.5	8.2	7.7	06/17/1997	Batch 3, Day 7
AAB-144	SB-10	3	14.9	28.4	8.2	7.8	06/18/1997	Batch 3, Day 8
AAB-144	SB-10	4	15.2	28.7	7.9	7.8	06/19/1997	Batch 3, Day 9
AAB-144	SB-10	1	15.4	28.8	6.4	8.0	06/20/1997	Batch 3, Day 10
AAB-144	SB-10	2	15.1	29.0	7.3	7.9	06/20/1997	Batch 3, Day 10
AAB-144	SB-10	3	15.3	28.7	6.4	8.1	06/20/1997	Batch 3, Day 10
AAB-144	SB-10	4	14.9	28.7	8.2	7.9	06/20/1997	Batch 3, Day 10
AAB-144	SB-10	5	15.1	28.9	6.4	7.9	06/20/1997	Batch 3, Day 10
AAB-145	SB-09	1	15.0	28.3	8.1	7.6	06/10/1997	Batch 3, Day 0
AAB-145	SB-09	2	14.6	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-145	SB-09	3	14.5	28.4	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-145	SB-09	4	14.7	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-145	SB-09	5	14.6	28.4	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-145	SB-09	1	15.3	28.4	8.1	7.7	06/11/1997	Batch 3, Day 1
AAB-145	SB-09	2	14.6	28.4	8.1	7.7	06/12/1997	Batch 3, Day 2
AAB-145	SB-09	3	15.1	28.6	8.3	7.8	06/13/1997	Batch 3, Day 3
AAB-145	SB-09	4	14.8	28.6	8.3	7.8	06/14/1997	Batch 3, Day 4
AAB-145	SB-09	5	14.9	28.9	8.2	7.8	06/15/1997	Batch 3, Day 5
AAB-145	SB-09	1	16.1	29.2	7.6	7.6	06/16/1997	Batch 3, Day 6
AAB-145	SB-09	2	15.0	28.6	8.3	7.7	06/17/1997	Batch 3, Day 7
AAB-145	SB-09	3	14.9	28.5	8.0	7.7	06/18/1997	Batch 3, Day 8
AAB-145	SB-09	4	15.7	28.7	8.0	7.7	06/19/1997	Batch 3, Day 9
AAB-145	SB-09	1	15.5	28.9	6.9	7.8	06/20/1997	Batch 3, Day 10
AAB-145	SB-09	2	15.3	28.8	6.9	8.0	06/20/1997	Batch 3, Day 10
AAB-145	SB-09	3	15.0	28.7	6.8	8.0	06/20/1997	Batch 3, Day 10
AAB-145	SB-09	4	15.3	28.7	7.2	7.8	06/20/1997	Batch 3, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-145	SB-09	5	15.0	28.9	7.3	7.9	06/20/1997	Batch 3, Day 10
AAB-154	SB-12	1	14.6	28.4	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-154	SB-12	2	14.5	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-154	SB-12	3	14.4	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-154	SB-12	4	14.4	28.2	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-154	SB-12	5	14.6	28.2	8.0	7.5	06/10/1997	Batch 3, Day 0
AAB-154	SB-12	1	14.8	28.2	8.0	7.7	06/11/1997	Batch 3, Day 1
AAB-154	SB-12	2	14.5	28.3	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-154	SB-12	3	15.0	28.2	8.0	7.8	06/13/1997	Batch 3, Day 3
AAB-154	SB-12	4	14.5	28.5	8.3	7.8	06/14/1997	Batch 3, Day 4
AAB-154	SB-12	5	15.0	28.3	8.2	7.9	06/15/1997	Batch 3, Day 5
AAB-154	SB-12	1	15.7	29.0	7.8	7.8	06/16/1997	Batch 3, Day 6
AAB-154	SB-12	2	14.8	28.4	8.3	7.8	06/17/1997	Batch 3, Day 7
AAB-154	SB-12	3	14.8	28.3	8.0	7.9	06/18/1997	Batch 3, Day 8
AAB-154	SB-12	4	15.1	28.7	7.8	7.8	06/19/1997	Batch 3, Day 9
AAB-154	SB-12	1	15.2	28.5	7.2	8.1	06/20/1997	Batch 3, Day 10
AAB-154	SB-12	2	15.2	28.7	6.4	8.1	06/20/1997	Batch 3, Day 10
AAB-154	SB-12	3	14.9	28.8	7.6	8.1	06/20/1997	Batch 3, Day 10
AAB-154	SB-12	4	14.8	28.6	7.5	7.9	06/20/1997	Batch 3, Day 10
AAB-154	SB-12	5	15.2	28.7	7.3	8.0	06/20/1997	Batch 3, Day 10
AAB-158	IB-54	1	14.5	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-158	IB-54	2	14.7	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-158	IB-54	3	14.4	28.2	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-158	IB-54	4	14.4	28.3	8.3	7.6	06/10/1997	Batch 3, Day 0
AAB-158	IB-54	5	14.3	28.2	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-158	IB-54	1	14.7	28.3	8.2	7.7	06/11/1997	Batch 3, Day 1
AAB-158	IB-54	2	14.8	28.2	8.0	7.6	06/12/1997	Batch 3, Day 2
AAB-158	IB-54	3	15.0	28.2	8.1	7.8	06/13/1997	Batch 3, Day 3
AAB-158	IB-54	4	14.7	28.6	8.2	7.8	06/14/1997	Batch 3, Day 4
AAB-158	IB-54	5	14.7	28.6	8.4	7.9	06/15/1997	Batch 3, Day 5
AAB-158	IB-54	1	15.2	29.0	8.1	7.7	06/16/1997	Batch 3, Day 6
AAB-158	IB-54	2	15.1	28.3	8.1	7.7	06/17/1997	Batch 3, Day 7
AAB-158	IB-54	3	14.8	28.4	8.1	7.8	06/18/1997	Batch 3, Day 8
AAB-158	IB-54	4	15.3	28.8	7.6	7.7	06/19/1997	Batch 3, Day 9
AAB-158	IB-54	1	14.9	28.9	7.6	7.9	06/20/1997	Batch 3, Day 10
AAB-158	IB-54	2	15.5	28.9	7.1	8.0	06/20/1997	Batch 3, Day 10
AAB-158	IB-54	3	14.9	28.7	7.6	8.1	06/20/1997	Batch 3, Day 10
AAB-158	IB-54	4	15.0	28.8	7.7	7.8	06/20/1997	Batch 3, Day 10
AAB-158	IB-54	5	14.8	29.1	8.2	8.0	06/20/1997	Batch 3, Day 10
AAB-159	IB-56	1	14.5	28.3	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-159	IB-56	2	14.6	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-159	IB-56	3	14.7	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-159	IB-56	4	14.7	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-159	IB-56	5	14.4	28.3	8.1	7.5	06/10/1997	Batch 3, Day 0
AAB-159	IB-56	1	14.8	28.3	8.3	7.8	06/11/1997	Batch 3, Day 1
AAB-159	IB-56	2	14.5	28.3	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-159	IB-56	3	15.2	28.3	8.2	7.8	06/13/1997	Batch 3, Day 3
AAB-159	IB-56	4	14.8	28.6	8.4	7.8	06/14/1997	Batch 3, Day 4
AAB-159	IB-56	5	14.9	28.7	8.2	7.8	06/15/1997	Batch 3, Day 5
AAB-159	IB-56	1	15.4	29.1	7.7	7.5	06/16/1997	Batch 3, Day 6
AAB-159	IB-56	2	14.8	28.5	8.4	7.6	06/17/1997	Batch 3, Day 7
AAB-159	IB-56	3	15.0	28.4	8.1	7.6	06/18/1997	Batch 3, Day 8
AAB-159	IB-56	4	15.6	28.8	7.9	7.6	06/19/1997	Batch 3, Day 9
AAB-159	IB-56	1	15.4	28.6	6.5	7.8	06/20/1997	Batch 3, Day 10
AAB-159	IB-56	2	15.1	28.8	6.6	7.8	06/20/1997	Batch 3, Day 10
AAB-159	IB-56	3	15.2	28.6	6.5	7.8	06/20/1997	Batch 3, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-159	IB-56	4	15.3	28.7	7.1	8.0	06/20/1997	Batch 3, Day 10
AAB-159	IB-56	5	15.2	28.9	7.9	7.7	06/20/1997	Batch 3, Day 10
AAB-161	IB-59	1	14.6	28.2	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-161	IB-59	2	14.6	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-161	IB-59	3	14.6	28.3	8.2	7.5	06/10/1997	Batch 3, Day 0
AAB-161	IB-59	4	14.7	28.2	8.1	7.4	06/10/1997	Batch 3, Day 0
AAB-161	IB-59	5	14.5	28.2	8.2	7.6	06/10/1997	Batch 3, Day 0
AAB-161	IB-59	1	14.8	28.2	8.2	7.7	06/11/1997	Batch 3, Day 1
AAB-161	IB-59	2	14.5	28.4	8.2	7.7	06/12/1997	Batch 3, Day 2
AAB-161	IB-59	3	15.2	28.2	8.1	7.7	06/13/1997	Batch 3, Day 3
AAB-161	IB-59	4	14.8	28.5	8.2	7.8	06/14/1997	Batch 3, Day 4
AAB-161	IB-59	5	14.9	28.5	8.2	7.9	06/15/1997	Batch 3, Day 5
AAB-161	IB-59	1	15.6	29.0	7.9	7.6	06/16/1997	Batch 3, Day 6
AAB-161	IB-59	2	14.8	28.6	8.3	7.8	06/17/1997	Batch 3, Day 7
AAB-161	IB-59	3	15.0	28.3	8.0	7.6	06/18/1997	Batch 3, Day 8
AAB-161	IB-59	4	15.7	28.6	7.7	7.9	06/19/1997	Batch 3, Day 9
AAB-161	IB-59	1	15.3	28.8	7.4	7.7	06/20/1997	Batch 3, Day 10
AAB-161	IB-59	2	15.1	28.8	6.5	8.0	06/20/1997	Batch 3, Day 10
AAB-161	IB-59	3	15.2	28.7	7.5	7.7	06/20/1997	Batch 3, Day 10
AAB-161	IB-59	4	15.3	28.6	7.0	8.0	06/20/1997	Batch 3, Day 10
AAB-161	IB-59	5	15.4	28.6	6.3	8.1	06/20/1997	Batch 3, Day 10
AAB-119	SB-07	1	14.8	30.7	5.9	7.7	07/01/1997	Batch 4, Day 0
AAB-119	SB-07	2	14.8	30.4	5.8	7.7	07/01/1997	Batch 4, Day 0
AAB-119	SB-07	3	14.8	30.5	5.8	7.8	07/01/1997	Batch 4, Day 0
AAB-119	SB-07	4	14.8	30.6	5.8	7.8	07/01/1997	Batch 4, Day 0
AAB-119	SB-07	5	14.9	30.5	5.8	7.7	07/01/1997	Batch 4, Day 0
AAB-119	SB-07	1	15.1	30.6	8.3	7.7	07/02/1997	Batch 4, Day 1
AAB-119	SB-07	2	14.9	30.1	8.3	7.6	07/03/1997	Batch 4, Day 2
AAB-119	SB-07	3	14.6	30.7	8.0	7.7	07/04/1997	Batch 4, Day 3
AAB-119	SB-07	4	14.8	30.5	8.6	7.9	07/05/1997	Batch 4, Day 4
AAB-119	SB-07	5	15.5	30.4	8.4	7.8	07/06/1997	Batch 4, Day 5
AAB-119	SB-07	1	15.0	30.9	8.6	7.6	07/07/1997	Batch 4, Day 6
AAB-119	SB-07	2	14.7	30.5	8.6	7.9	07/08/1997	Batch 4, Day 7
AAB-119	SB-07	3	14.9	30.6	8.2	7.8	07/09/1997	Batch 4, Day 8
AAB-119	SB-07	4	15.7	30.2	8.2	7.6	07/10/1997	Batch 4, Day 9
AAB-119	SB-07	1	15.0	30.0	6.9	7.7	07/11/1997	Batch 4, Day 10
AAB-119	SB-07	2	15.0	30.3	6.7	7.6	07/11/1997	Batch 4, Day 10
AAB-119	SB-07	3	15.0	30.3	6.5	7.7	07/11/1997	Batch 4, Day 10
AAB-119	SB-07	4	14.9	30.3	6.5	7.7	07/11/1997	Batch 4, Day 10
AAB-119	SB-07	5	15.1	30.4	6.4	7.6	07/11/1997	Batch 4, Day 10
AAB-121	SB-04	1	14.8	30.4	6.0	7.7	07/01/1997	Batch 4, Day 0
AAB-121	SB-04	2	14.8	30.5	5.8	7.8	07/01/1997	Batch 4, Day 0
AAB-121	SB-04	3	14.8	30.7	6.0	7.8	07/01/1997	Batch 4, Day 0
AAB-121	SB-04	4	14.8	30.7	5.9	7.8	07/01/1997	Batch 4, Day 0
AAB-121	SB-04	5	14.9	30.5	5.8	7.9	07/01/1997	Batch 4, Day 0
AAB-121	SB-04	1	15.2	30.4	8.3	7.7	07/02/1997	Batch 4, Day 1
AAB-121	SB-04	2	14.9	30.1	8.3	7.6	07/03/1997	Batch 4, Day 2
AAB-121	SB-04	3	14.6	30.9	7.9	7.7	07/04/1997	Batch 4, Day 3
AAB-121	SB-04	4	14.8	30.7	8.5	7.9	07/05/1997	Batch 4, Day 4
AAB-121	SB-04	5	15.6	30.4	8.3	8.0	07/06/1997	Batch 4, Day 5
AAB-121	SB-04	1	15.1	30.5	8.7	7.6	07/07/1997	Batch 4, Day 6
AAB-121	SB-04	2	14.9	30.6	8.5	7.9	07/08/1997	Batch 4, Day 7
AAB-121	SB-04	3	15.0	30.7	8.1	7.8	07/09/1997	Batch 4, Day 8
AAB-121	SB-04	4	15.9	30.3	8.2	7.7	07/10/1997	Batch 4, Day 9
AAB-121	SB-04	1	15.0	30.3	6.7	7.7	07/11/1997	Batch 4, Day 10
AAB-121	SB-04	2	15.0	30.4	6.2	7.7	07/11/1997	Batch 4, Day 10

Table D-6. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-121	SB-04	3	15.0	30.4	6.6	7.7	07/11/1997	Batch 4, Day 10
AAB-121	SB-04	4	15.0	30.4	6.6	7.8	07/11/1997	Batch 4, Day 10
AAB-121	SB-04	5	15.0	30.4	6.6	8.0	07/11/1997	Batch 4, Day 10
AAB-143	SB-02	1	14.9	30.7	5.8	7.7	07/01/1997	Batch 4, Day 0
AAB-143	SB-02	2	14.8	30.7	5.8	7.8	07/01/1997	Batch 4, Day 0
AAB-143	SB-02	3	14.8	30.5	6.0	7.8	07/01/1997	Batch 4, Day 0
AAB-143	SB-02	4	14.8	30.5	5.8	7.7	07/01/1997	Batch 4, Day 0
AAB-143	SB-02	5	14.8	30.4	6.2	7.7	07/01/1997	Batch 4, Day 0
AAB-143	SB-02	1	15.1	30.6	8.3	7.6	07/02/1997	Batch 4, Day 1
AAB-143	SB-02	2	14.9	30.4	8.4	7.6	07/03/1997	Batch 4, Day 2
AAB-143	SB-02	3	14.6	30.7	8.0	7.8	07/04/1997	Batch 4, Day 3
AAB-143	SB-02	4	14.8	30.4	8.5	7.9	07/05/1997	Batch 4, Day 4
AAB-143	SB-02	5	15.4	30.3	7.9	7.9	07/06/1997	Batch 4, Day 5
AAB-143	SB-02	1	15.1	31.1	8.6	7.6	07/07/1997	Batch 4, Day 6
AAB-143	SB-02	2	14.8	30.9	8.7	8.2	07/08/1997	Batch 4, Day 7
AAB-143	SB-02	3	14.9	30.8	8.3	8.1	07/09/1997	Batch 4, Day 8
AAB-143	SB-02	4	15.8	30.0	8.3	7.9	07/10/1997	Batch 4, Day 9
AAB-143	SB-02	1	15.0	30.5	6.4	8.0	07/11/1997	Batch 4, Day 10
AAB-143	SB-02	2	14.9	30.5	6.4	8.1	07/11/1997	Batch 4, Day 10
AAB-143	SB-02	3	15.0	30.4	6.6	8.2	07/11/1997	Batch 4, Day 10
AAB-143	SB-02	4	15.0	30.2	6.7	8.0	07/11/1997	Batch 4, Day 10
AAB-143	SB-02	5	15.0	30.4	7.9	7.9	07/11/1997	Batch 4, Day 10
AAB-148	SB-01	1	14.8	30.4	5.9	7.7	07/01/1997	Batch 4, Day 0
AAB-148	SB-01	2	14.8	30.4	6.2	7.9	07/01/1997	Batch 4, Day 0
AAB-148	SB-01	3	14.8	30.5	5.9	7.8	07/01/1997	Batch 4, Day 0
AAB-148	SB-01	4	14.8	30.4	6.2	7.9	07/01/1997	Batch 4, Day 0
AAB-148	SB-01	5	14.8	30.5	6.1	7.8	07/01/1997	Batch 4, Day 0
AAB-148	SB-01	1	15.1	30.3	8.2	7.6	07/02/1997	Batch 4, Day 1
AAB-148	SB-01	2	14.9	30.2	8.4	7.7	07/03/1997	Batch 4, Day 2
AAB-148	SB-01	3	14.6	30.4	8.1	7.8	07/04/1997	Batch 4, Day 3
AAB-148	SB-01	4	14.8	30.5	8.5	8.0	07/05/1997	Batch 4, Day 4
AAB-148	SB-01	5	15.3	30.3	8.2	8.0	07/06/1997	Batch 4, Day 5
AAB-148	SB-01	1	15.0	30.6	8.8	7.7	07/07/1997	Batch 4, Day 6
AAB-148	SB-01	2	14.8	30.7	8.6	8.2	07/08/1997	Batch 4, Day 7
AAB-148	SB-01	3	14.9	30.6	8.2	8.1	07/09/1997	Batch 4, Day 8
AAB-148	SB-01	4	15.8	30.2	8.4	8.0	07/10/1997	Batch 4, Day 9
AAB-148	SB-01	1	15.0	30.4	6.6	7.7	07/11/1997	Batch 4, Day 10
AAB-148	SB-01	2	14.9	30.3	8.2	8.0	07/11/1997	Batch 4, Day 10
AAB-148	SB-01	3	15.0	30.4	6.7	8.0	07/11/1997	Batch 4, Day 10
AAB-148	SB-01	4	14.9	30.2	7.1	8.1	07/11/1997	Batch 4, Day 10
AAB-148	SB-01	5	14.9	30.3	6.8	8.1	07/11/1997	Batch 4, Day 10
EOHCON	stuarius Con	6	14.5	30.8	8.0	7.7	05/18/1997	Batch 1, Day 0
EOHCON	stuarius Con	7	14.8	30.9	8.3	7.6	05/21/1997	Batch 1, Day 3
EOHCON	stuarius Con	8	14.5	30.9	8.2	7.6	05/28/1997	Batch 1, Day 10
EOHCON	stuarius Con	6	14.4	29.5	8.4	7.6	06/03/1997	Batch 2, Day 0
EOHCON	stuarius Con	6	14.7	28.3	8.3	7.7	06/10/1997	Batch 3, Day 0
EOHCON	stuarius Con	6	14.8	30.1	5.9	7.7	07/01/1997	Batch 4, Day 0
EOHCON	stuarius Con	8	15.0	28.0	6.7	7.8	07/11/1997	Batch 4, Day 10

G = estimated value, ammonia measurement below calibration range.

Table D-7. Battelle Marine Sciences Lab, *E. estuarius* 4-day Cadmium Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
E_CDRT_B1	0	UG/L	1	14.5	30.8	8.2	7.8	05/18/1997	
E_CDRT_B1	0	UG/L	2	14.6	30.9	8.1	7.8	05/18/1997	
E_CDRT_B1	0	UG/L	3	14.6	30.9	8.1	7.8	05/18/1997	
E_CDRT_B1	0	UG/L	1	14.5	31.0	7.4	7.7	05/19/1997	
E_CDRT_B1	0	UG/L	2	14.8	30.8	7.2	7.4	05/20/1997	
E_CDRT_B1	0	UG/L	3	14.9	30.8	7.9	7.7	05/21/1997	
E_CDRT_B1	0	UG/L	1	15.0	30.7	8.3	7.6	05/22/1997	
E_CDRT_B1	0	UG/L	2	15.0	30.6	8.3	7.7	05/22/1997	
E_CDRT_B1	0	UG/L	3	14.9	30.7	8.3	7.7	05/22/1997	
E_CDRT_B1	3500	UG/L	1	14.6	31.0	8.1	7.8	05/18/1997	
E_CDRT_B1	3500	UG/L	2	14.5	31.0	8.1	7.8	05/18/1997	
E_CDRT_B1	3500	UG/L	3	14.6	31.0	8.1	7.8	05/18/1997	
E_CDRT_B1	3500	UG/L	1	14.6	31.2	7.5	7.7	05/19/1997	
E_CDRT_B1	3500	UG/L	2	14.8	30.8	7.1	7.4	05/20/1997	
E_CDRT_B1	3500	UG/L	3	15.2	30.8	7.6	7.7	05/21/1997	
E_CDRT_B1	3500	UG/L	1	15.0	30.8	8.2	7.7	05/22/1997	
E_CDRT_B1	3500	UG/L	2	15.0	30.8	8.3	7.7	05/22/1997	
E_CDRT_B1	3500	UG/L	3	15.1	30.8	8.3	7.7	05/22/1997	
E_CDRT_B1	7000	UG/L	1	14.5	31.0	8.1	7.8	05/18/1997	
E_CDRT_B1	7000	UG/L	2	14.6	30.9	8.2	7.8	05/18/1997	
E_CDRT_B1	7000	UG/L	3	14.5	30.9	8.2	7.8	05/18/1997	
E_CDRT_B1	7000	UG/L	1	14.5	31.2	7.3	7.7	05/19/1997	
E_CDRT_B1	7000	UG/L	2	14.9	30.8	7.4	7.4	05/20/1997	
E_CDRT_B1	7000	UG/L	3	15.0	30.8	7.5	7.6	05/21/1997	
E_CDRT_B1	7000	UG/L	1	15.0	30.8	8.3	7.7	05/22/1997	
E_CDRT_B1	7000	UG/L	2	15.0	30.8	8.3	7.7	05/22/1997	
E_CDRT_B1	7000	UG/L	3	14.9	30.7	8.3	7.7	05/22/1997	
E_CDRT_B1	14000	UG/L	1	14.6	30.9	8.2	7.8	05/18/1997	
E_CDRT_B1	14000	UG/L	2	14.5	30.9	8.1	7.8	05/18/1997	
E_CDRT_B1	14000	UG/L	3	14.6	31.0	8.1	7.8	05/18/1997	
E_CDRT_B1	14000	UG/L	1	14.5	31.2	7.1	7.7	05/19/1997	
E_CDRT_B1	14000	UG/L	2	14.8	30.8	7.0	7.5	05/20/1997	
E_CDRT_B1	14000	UG/L	3	15.0	30.8	7.6	7.7	05/21/1997	
E_CDRT_B1	14000	UG/L	1	15.0	30.8	8.2	7.7	05/22/1997	
E_CDRT_B1	14000	UG/L	2	14.9	30.8	8.2	7.7	05/22/1997	
E_CDRT_B1	14000	UG/L	3	15.0	30.8	8.2	7.7	05/22/1997	
E_CDRT_B1	28000	UG/L	1	14.6	31.0	8.1	7.8	05/18/1997	
E_CDRT_B1	28000	UG/L	2	14.6	30.8	8.2	7.8	05/18/1997	
E_CDRT_B1	28000	UG/L	3	14.6	30.8	8.2	7.8	05/18/1997	
E_CDRT_B1	28000	UG/L	1	14.5	31.2	7.3	7.7	05/19/1997	
E_CDRT_B1	28000	UG/L	2	15.0	30.7	6.5	7.4	05/20/1997	
E_CDRT_B1	28000	UG/L	3	15.0	30.7	7.7	7.7	05/21/1997	
E_CDRT_B1	28000	UG/L	1	15.0	30.7	8.3	7.7	05/22/1997	
E_CDRT_B1	28000	UG/L	2	15.0	30.7	8.3	7.7	05/22/1997	
E_CDRT_B1	28000	UG/L	3	15.0	30.7	8.3	7.7	05/22/1997	
E_CDRT_B2	0	UG/L	1	14.6	31.0	8.4	7.7	06/03/1997	
E_CDRT_B2	0	UG/L	2	14.8	31.0	8.4	7.7	06/03/1997	
E_CDRT_B2	0	UG/L	3	14.7	31.0	8.3	7.7	06/03/1997	
E_CDRT_B2	0	UG/L	1	14.7	31.0	8.4	7.7	06/04/1997	
E_CDRT_B2	0	UG/L	2	14.6	31.0	8.3	7.8	06/05/1997	
E_CDRT_B2	0	UG/L	3	15.6	31.4	8.2	7.6	06/06/1997	
E_CDRT_B2	0	UG/L	1	14.9	31.2	8.4	7.7	06/07/1997	
E_CDRT_B2	0	UG/L	2	15.0	31.3	8.4	7.8	06/07/1997	
E_CDRT_B2	0	UG/L	3	14.9	31.3	8.3	7.7	06/07/1997	
E_CDRT_B2	3500	UG/L	1	14.7	31.0	8.4	7.7	06/03/1997	
E_CDRT_B2	3500	UG/L	2	14.8	31.0	8.3	7.7	06/03/1997	
E_CDRT_B2	3500	UG/L	3	14.8	31.0	8.3	7.7	06/03/1997	
E_CDRT_B2	3500	UG/L	1	14.7	30.9	8.4	7.6	06/04/1997	
E_CDRT_B2	3500	UG/L	2	14.5	31.0	8.3	7.7	06/05/1997	
E_CDRT_B2	3500	UG/L	3	15.3	31.3	8.2	7.6	06/06/1997	
E_CDRT_B2	3500	UG/L	1	14.9	31.4	8.3	7.7	06/07/1997	

Table D-7. Battelle Marine Sciences Lab, *E. estuarius* 4-day Cadmium Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
E_CDRT_B2	3500	UG/L	2	14.9	31.3	8.3	7.7	06/07/1997	
E_CDRT_B2	3500	UG/L	3	15.0	31.4	8.3	7.8	06/07/1997	
E_CDRT_B2	7000	UG/L	1	14.8	31.0	8.3	7.7	06/03/1997	
E_CDRT_B2	7000	UG/L	2	14.7	31.0	8.4	7.7	06/03/1997	
E_CDRT_B2	7000	UG/L	3	14.7	31.0	8.4	7.7	06/03/1997	
E_CDRT_B2	7000	UG/L	1	14.9	30.9	8.3	7.7	06/04/1997	
E_CDRT_B2	7000	UG/L	2	14.4	31.0	8.4	7.8	06/05/1997	
E_CDRT_B2	7000	UG/L	3	15.2	31.2	8.2	7.6	06/06/1997	
E_CDRT_B2	7000	UG/L	1	15.0	31.3	8.3	7.8	06/07/1997	
E_CDRT_B2	7000	UG/L	2	14.9	31.4	8.3	7.7	06/07/1997	
E_CDRT_B2	7000	UG/L	3	14.9	31.4	8.3	7.7	06/07/1997	
E_CDRT_B2	14000	UG/L	1	14.7	30.9	8.4	7.7	06/03/1997	
E_CDRT_B2	14000	UG/L	2	14.8	30.9	8.4	7.7	06/03/1997	
E_CDRT_B2	14000	UG/L	3	14.8	30.9	8.4	7.7	06/03/1997	
E_CDRT_B2	14000	UG/L	1	14.8	30.8	8.4	7.6	06/04/1997	
E_CDRT_B2	14000	UG/L	2	14.5	30.9	8.4	7.8	06/05/1997	
E_CDRT_B2	14000	UG/L	3	15.2	31.2	8.2	7.6	06/06/1997	
E_CDRT_B2	14000	UG/L	1	14.8	31.3	8.3	7.7	06/07/1997	
E_CDRT_B2	14000	UG/L	2	14.9	31.3	8.3	7.7	06/07/1997	
E_CDRT_B2	14000	UG/L	3	14.9	31.4	8.3	7.7	06/07/1997	
E_CDRT_B2	28000	UG/L	1	14.8	30.9	8.4	7.7	06/03/1997	
E_CDRT_B2	28000	UG/L	2	14.7	30.9	8.4	7.7	06/03/1997	
E_CDRT_B2	28000	UG/L	3	14.7	30.9	8.3	7.7	06/03/1997	
E_CDRT_B2	28000	UG/L	1	14.8	30.9	8.3	7.7	06/04/1997	
E_CDRT_B2	28000	UG/L	2	14.4	30.9	8.4	7.8	06/05/1997	
E_CDRT_B2	28000	UG/L	3	15.1	31.3	8.2	7.6	06/06/1997	
E_CDRT_B2	28000	UG/L	1	14.9	31.3	8.2	7.7	06/07/1997	
E_CDRT_B2	28000	UG/L	2	14.8	31.2	8.3	7.8	06/07/1997	
E_CDRT_B2	28000	UG/L	3	14.8	31.4	8.1	7.7	06/07/1997	
E_CDRT_B3	0	UG/L	1	14.5	28.3	7.6	7.7	06/10/1997	
E_CDRT_B3	0	UG/L	2	14.6	28.2	7.5	7.7	06/10/1997	
E_CDRT_B3	0	UG/L	3	14.5	28.2	7.4	7.7	06/10/1997	
E_CDRT_B3	0	UG/L	1	14.8	28.3	8.4	7.8	06/11/1997	
E_CDRT_B3	0	UG/L	2	14.6	28.0	8.1	7.7	06/12/1997	
E_CDRT_B3	0	UG/L	3	15.0	28.3	8.5	7.9	06/13/1997	
E_CDRT_B3	0	UG/L	1	14.6	28.6	8.4	7.8	06/14/1997	
E_CDRT_B3	0	UG/L	2	14.6	28.4	8.6	7.8	06/14/1997	
E_CDRT_B3	0	UG/L	3	14.5	28.6	8.6	7.9	06/14/1997	
E_CDRT_B3	3500	UG/L	1	14.5	28.2	7.4	7.7	06/10/1997	
E_CDRT_B3	3500	UG/L	2	14.5	28.2	7.5	7.7	06/10/1997	
E_CDRT_B3	3500	UG/L	3	14.5	28.2	7.4	7.7	06/10/1997	
E_CDRT_B3	3500	UG/L	1	14.7	28.3	8.4	7.8	06/11/1997	
E_CDRT_B3	3500	UG/L	2	14.6	27.9	T 8.3	7.7	06/12/1997	
E_CDRT_B3	3500	UG/L	3	15.1	28.4	8.4	7.8	06/13/1997	
E_CDRT_B3	3500	UG/L	1	14.5	28.5	8.6	7.9	06/14/1997	
E_CDRT_B3	3500	UG/L	2	14.7	28.4	8.5	7.8	06/14/1997	
E_CDRT_B3	3500	UG/L	3	14.5	28.5	8.6	7.8	06/14/1997	
E_CDRT_B3	7000	UG/L	1	14.5	28.3	7.5	7.7	06/10/1997	
E_CDRT_B3	7000	UG/L	2	14.5	28.2	7.5	7.7	06/10/1997	
E_CDRT_B3	7000	UG/L	3	14.5	28.2	7.4	7.7	06/10/1997	
E_CDRT_B3	7000	UG/L	1	14.7	28.2	8.4	7.8	06/11/1997	
E_CDRT_B3	7000	UG/L	2	14.5	28.0	8.0	7.7	06/12/1997	
E_CDRT_B3	7000	UG/L	3	14.9	28.4	8.4	7.8	06/13/1997	
E_CDRT_B3	7000	UG/L	1	14.5	28.5	8.6	7.8	06/14/1997	
E_CDRT_B3	7000	UG/L	2	14.5	28.4	8.6	7.8	06/14/1997	
E_CDRT_B3	7000	UG/L	3	14.5	28.6	8.6	7.8	06/14/1997	
E_CDRT_B3	14000	UG/L	1	14.5	28.2	7.3	7.7	06/10/1997	
E_CDRT_B3	14000	UG/L	2	14.5	28.2	7.3	7.7	06/10/1997	
E_CDRT_B3	14000	UG/L	3	14.6	28.2	7.3	7.7	06/10/1997	
E_CDRT_B3	14000	UG/L	1	14.7	28.2	8.4	7.8	06/11/1997	
E_CDRT_B3	14000	UG/L	2	14.5	28.0	8.2	7.7	06/12/1997	

Table D-7. Battelle Marine Sciences Lab, *E. estuarius* 4-day Cadmium Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
E_CDRT_B3	14000	UG/L	3	15.1	28.4	8.3	7.8	06/13/1997	
E_CDRT_B3	14000	UG/L	1	14.4	28.5	8.6	7.8	06/14/1997	
E_CDRT_B3	14000	UG/L	2	14.5	28.3	8.6	7.8	06/14/1997	
E_CDRT_B3	14000	UG/L	3	14.5	28.6	8.6	7.8	06/14/1997	
E_CDRT_B3	28000	UG/L	1	14.5	28.2	7.3	7.7	06/10/1997	
E_CDRT_B3	28000	UG/L	2	14.4	28.2	7.3	7.7	06/10/1997	
E_CDRT_B3	28000	UG/L	3	14.5	28.2	7.4	7.7	06/10/1997	
E_CDRT_B3	28000	UG/L	1	14.7	28.2	8.6	7.8	06/11/1997	
E_CDRT_B3	28000	UG/L	2	14.4	28.0	8.3	7.7	06/12/1997	
E_CDRT_B3	28000	UG/L	3	15.0	28.3	8.4	7.8	06/13/1997	
E_CDRT_B3	28000	UG/L	1	14.5	28.6	8.5	7.8	06/14/1997	
E_CDRT_B3	28000	UG/L	2	14.4	28.4	8.6	7.9	06/14/1997	
E_CDRT_B3	28000	UG/L	3	14.4	28.5	8.6	7.8	06/14/1997	
E_CDRT_B4	0	UG/L	1	14.9	30.2	5.9	7.8	07/01/1997	
E_CDRT_B4	0	UG/L	2	14.9	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	0	UG/L	3	14.9	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	0	UG/L	1	15.3	30.2	8.5	7.7	07/02/1997	
E_CDRT_B4	0	UG/L	2	15.0	30.0	8.6	7.6	07/03/1997	
E_CDRT_B4	0	UG/L	3	15.4	30.4	8.4	7.7	07/04/1997	
E_CDRT_B4	0	UG/L	1	14.9	30.2	8.3	7.8	07/05/1997	
E_CDRT_B4	0	UG/L	2	14.9	30.0	8.5	7.9	07/05/1997	
E_CDRT_B4	0	UG/L	3	14.9	30.0	8.5	7.9	07/05/1997	
E_CDRT_B4	3500	UG/L	1	14.8	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	3500	UG/L	2	14.9	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	3500	UG/L	3	14.9	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	3500	UG/L	1	15.2	30.1	8.6	7.7	07/02/1997	
E_CDRT_B4	3500	UG/L	2	15.1	29.8	8.6	7.7	07/03/1997	
E_CDRT_B4	3500	UG/L	3	15.3	30.2	8.5	7.7	07/04/1997	
E_CDRT_B4	3500	UG/L	1	14.9	30.1	8.5	7.9	07/05/1997	
E_CDRT_B4	3500	UG/L	2	14.9	30.1	8.5	7.9	07/05/1997	
E_CDRT_B4	3500	UG/L	3	14.9	30.0	8.5	7.9	07/05/1997	
E_CDRT_B4	7000	UG/L	1	14.8	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	7000	UG/L	2	14.9	30.0	5.9	7.8	07/01/1997	
E_CDRT_B4	7000	UG/L	3	14.9	30.0	5.9	7.9	07/01/1997	
E_CDRT_B4	7000	UG/L	1	15.3	30.0	8.5	7.7	07/02/1997	
E_CDRT_B4	7000	UG/L	2	15.1	29.9	8.6	7.7	07/03/1997	
E_CDRT_B4	7000	UG/L	3	15.3	30.2	8.5	7.7	07/04/1997	
E_CDRT_B4	7000	UG/L	1	14.9	30.0	8.5	7.9	07/05/1997	
E_CDRT_B4	7000	UG/L	2	14.9	30.0	8.4	7.9	07/05/1997	
E_CDRT_B4	7000	UG/L	3	14.9	30.0	8.4	7.9	07/05/1997	
E_CDRT_B4	14000	UG/L	1	14.9	29.9	5.9	7.8	07/01/1997	
E_CDRT_B4	14000	UG/L	2	14.9	29.9	5.8	7.9	07/01/1997	
E_CDRT_B4	14000	UG/L	3	14.9	29.9	5.8	7.8	07/01/1997	
E_CDRT_B4	14000	UG/L	1	15.3	30.0	8.6	7.7	07/02/1997	
E_CDRT_B4	14000	UG/L	2	15.0	29.9	8.5	7.7	07/03/1997	
E_CDRT_B4	14000	UG/L	3	15.3	30.2	8.5	7.7	07/04/1997	
E_CDRT_B4	14000	UG/L	1	14.9	30.0	8.3	7.9	07/05/1997	
E_CDRT_B4	14000	UG/L	2	14.9	30.0	8.4	7.9	07/05/1997	
E_CDRT_B4	14000	UG/L	3	15.0	30.0	8.4	7.8	07/05/1997	
E_CDRT_B4	28000	UG/L	1	14.9	30.0	5.8	7.9	07/01/1997	
E_CDRT_B4	28000	UG/L	2	14.9	29.9	5.8	7.9	07/01/1997	
E_CDRT_B4	28000	UG/L	3	14.9	29.9	5.9	7.8	07/01/1997	
E_CDRT_B4	28000	UG/L	1	15.3	30.1	8.5	7.7	07/02/1997	
E_CDRT_B4	28000	UG/L	2	15.1	29.9	8.5	7.7	07/03/1997	
E_CDRT_B4	28000	UG/L	3	15.2	30.0	8.6	7.7	07/04/1997	
E_CDRT_B4	28000	UG/L	1	14.9	30.3	8.4	7.9	07/05/1997	
E_CDRT_B4	28000	UG/L	2	14.9	30.0	8.4	7.9	07/05/1997	
E_CDRT_B4	28000	UG/L	3	15.0	30.0	8.4	7.9	07/05/1997	

T = out of target range.

Table D-8. Pacific Ecorisk Lab, *S. purpuratus* 3-day Ammonia Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/03/1997	0	UG/L	1	174	91	F	91	9	F	05/31/1997	
5/03/1997	0	UG/L	2	174	84	F	84	16	F	05/31/1997	
5/03/1997	0	UG/L	3	174	81	F	81	19	F	05/31/1997	
5/03/1997	0	UG/L	4	174	88	F	88	12	F	05/31/1997	
5/03/1997	625	UG/L	1	174	90	F	90	10	F	05/31/1997	
5/03/1997	625	UG/L	2	174	94	F	94	6	F	05/31/1997	
5/03/1997	625	UG/L	3	174	91	F	91	9	F	05/31/1997	
5/03/1997	625	UG/L	4	174	90	F	90	10	F	05/31/1997	
5/03/1997	1250	UG/L	1	174	94	F	94	6	F	05/31/1997	
5/03/1997	1250	UG/L	2	174	88	F	88	12	F	05/31/1997	
5/03/1997	1250	UG/L	3	174	96	F	96	4	F	05/31/1997	
5/03/1997	1250	UG/L	4	174	91	F	91	9	F	05/31/1997	
5/03/1997	2500	UG/L	1	174	69	F	69	31	F	05/31/1997	
5/03/1997	2500	UG/L	2	174	56	F	56	44	F	05/31/1997	
5/03/1997	2500	UG/L	3	174	77	F	77	23	F	05/31/1997	
5/03/1997	2500	UG/L	4	174	70	F	70	30	F	05/31/1997	
5/03/1997	5000	UG/L	1	174	18	F	18	82	F	05/31/1997	
5/03/1997	5000	UG/L	2	174	9	F	9	91	F	05/31/1997	
5/03/1997	5000	UG/L	3	174	23	F	23	77	F	05/31/1997	
5/03/1997	5000	UG/L	4	174	11	F	11	89	F	05/31/1997	
5/03/1997	10000	UG/L	1	174	0	F	0	100	F	05/31/1997	
5/03/1997	10000	UG/L	2	174	0	F	0	100	F	05/31/1997	
5/03/1997	10000	UG/L	3	174	0	F	0	100	F	05/31/1997	
5/03/1997	10000	UG/L	4	174	0	F	0	100	F	05/31/1997	
5/07/1997	0	UG/L	1	143	91	F	91	9	F	05/31/1997	
5/07/1997	0	UG/L	2	143	93	F	93	7	F	05/31/1997	
5/07/1997	0	UG/L	3	143	93	F	93	7	F	05/31/1997	
5/07/1997	0	UG/L	4	143	99	F	99	1	F	05/31/1997	
5/07/1997	625	UG/L	1	143	90	F	100	0	F	05/31/1997	
5/07/1997	625	UG/L	2	143	96	F	96	4	F	05/31/1997	
5/07/1997	625	UG/L	3	143	97	F	97	3	F	05/31/1997	
5/07/1997	625	UG/L	4	143	91	F	91	9	F	05/31/1997	
5/07/1997	1250	UG/L	1	143	96	F	96	4	F	05/31/1997	
5/07/1997	1250	UG/L	2	143	90	F	100	0	F	05/31/1997	
5/07/1997	1250	UG/L	3	143	92	F	92	8	F	05/31/1997	
5/07/1997	1250	UG/L	4	143	87	F	87	13	F	05/31/1997	
5/07/1997	2500	UG/L	1	143	59	F	59	41	F	05/31/1997	
5/07/1997	2500	UG/L	2	143	46	F	46	54	F	05/31/1997	
5/07/1997	2500	UG/L	3	143	77	F	77	23	F	05/31/1997	
5/07/1997	2500	UG/L	4	143	56	F	56	44	F	05/31/1997	
5/07/1997	5000	UG/L	1	143	17	F	17	83	F	05/31/1997	
5/07/1997	5000	UG/L	2	143	10	F	10	90	F	05/31/1997	
5/07/1997	5000	UG/L	3	143	29	F	29	71	F	05/31/1997	
5/07/1997	5000	UG/L	4	143	26	F	26	74	F	05/31/1997	
5/07/1997	10000	UG/L	1	143	2	F	2	98	F	05/31/1997	
5/07/1997	10000	UG/L	2	143	0	F	0	100	F	05/31/1997	
5/07/1997	10000	UG/L	3	143	0	F	0	100	F	05/31/1997	
5/07/1997	10000	UG/L	4	143	0	F	0	100	F	05/31/1997	
5/10/1997	0	UG/L	1	151	99	F	99	1	F	05/31/1997	
5/10/1997	0	UG/L	2	151	96	F	96	4	F	05/31/1997	
5/10/1997	0	UG/L	3	151	99	F	99	1	F	05/31/1997	
5/10/1997	0	UG/L	4	151	97	F	97	3	F	05/31/1997	
5/10/1997	625	UG/L	1	151	98	F	98	2	F	05/31/1997	
5/10/1997	625	UG/L	2	151	92	F	92	8	F	05/31/1997	
5/10/1997	625	UG/L	3	151	96	F	96	4	F	05/31/1997	
5/10/1997	625	UG/L	4	151	90	F	90	10	F	05/31/1997	

Table D-8. Pacific Ecorisk Lab, *S. purpuratus* 3-day Ammonia Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/10/1997	1250	UG/L	1	151	99	F	99	1	F	05/31/1997	
5/10/1997	1250	UG/L	2	151	92	F	92	8	F	05/31/1997	
5/10/1997	1250	UG/L	3	151	96	F	96	4	F	05/31/1997	
5/10/1997	1250	UG/L	4	151	89	F	89	11	F	05/31/1997	
5/10/1997	2500	UG/L	1	151	54	F	54	46	F	05/31/1997	
5/10/1997	2500	UG/L	2	151	31	F	31	69	F	05/31/1997	
5/10/1997	2500	UG/L	3	151	29	F	29	71	F	05/31/1997	
5/10/1997	2500	UG/L	4	151	48	F	48	52	F	05/31/1997	
5/10/1997	5000	UG/L	1	151	26	F	26	74	F	05/31/1997	
5/10/1997	5000	UG/L	2	151	9	F	9	91	F	05/31/1997	
5/10/1997	5000	UG/L	3	151	12	F	12	88	F	05/31/1997	
5/10/1997	5000	UG/L	4	151	4	F	4	96	F	05/31/1997	
5/10/1997	10000	UG/L	1	151	0	F	0	100	F	05/31/1997	
5/10/1997	10000	UG/L	2	151	0	F	0	100	F	05/31/1997	
5/10/1997	10000	UG/L	3	151	0	F	0	100	F	05/31/1997	
5/10/1997	10000	UG/L	4	151	0	F	0	100	F	05/31/1997	
5/17/1997	0	UG/L	1	110	91	F	91	9	F	05/31/1997	
5/17/1997	0	UG/L	2	110	94	F	94	6	F	05/31/1997	
5/17/1997	0	UG/L	3	110	94	F	94	6	F	05/31/1997	
5/17/1997	0	UG/L	4	110	89	F	89	11	F	05/31/1997	
5/17/1997	625	UG/L	1	110	96	F	96	4	F	05/31/1997	
5/17/1997	625	UG/L	2	110	90	F	100	0	F	05/31/1997	
5/17/1997	625	UG/L	3	110	86	F	86	14	F	05/31/1997	
5/17/1997	625	UG/L	4	110	89	F	89	11	F	05/31/1997	
5/17/1997	1250	UG/L	1	110	86	F	86	14	F	05/31/1997	
5/17/1997	1250	UG/L	2	110	89	F	89	11	F	05/31/1997	
5/17/1997	1250	UG/L	3	110	87	F	87	13	F	05/31/1997	
5/17/1997	1250	UG/L	4	110	92	F	92	8	F	05/31/1997	
5/17/1997	2500	UG/L	1	110	77	F	77	23	F	05/31/1997	
5/17/1997	2500	UG/L	2	110	80	F	80	20	F	05/31/1997	
5/17/1997	2500	UG/L	3	110	61	F	61	39	F	05/31/1997	
5/17/1997	2500	UG/L	4	110	72	F	72	28	F	05/31/1997	
5/17/1997	5000	UG/L	1	110	41	F	41	59	F	05/31/1997	
5/17/1997	5000	UG/L	2	110	16	F	16	84	F	05/31/1997	
5/17/1997	5000	UG/L	3	110	21	F	21	79	F	05/31/1997	
5/17/1997	5000	UG/L	4	110	17	F	17	83	F	05/31/1997	
5/17/1997	10000	UG/L	1	110	0	F	0	100	F	05/31/1997	
5/17/1997	10000	UG/L	2	110	0	F	0	100	F	05/31/1997	
5/17/1997	10000	UG/L	3	110	0	F	0	100	F	05/31/1997	
5/17/1997	10000	UG/L	4	110	0	F	0	100	F	05/31/1997	
5/21/1997	0	UG/L	1	180	99	F	99	1	F	05/31/1997	
5/21/1997	0	UG/L	2	180	99	F	99	1	F	05/31/1997	
5/21/1997	0	UG/L	3	180	97	F	97	3	F	05/31/1997	
5/21/1997	0	UG/L	4	180	96	F	96	4	F	05/31/1997	
5/21/1997	625	UG/L	1	180	96	F	96	4	F	05/31/1997	
5/21/1997	625	UG/L	2	180	96	F	96	4	F	05/31/1997	
5/21/1997	625	UG/L	3	180	92	F	92	8	F	05/31/1997	
5/21/1997	625	UG/L	4	180	99	F	99	1	F	05/31/1997	
5/21/1997	1250	UG/L	1	180	93	F	93	7	F	05/31/1997	
5/21/1997	1250	UG/L	2	180	94	F	94	6	F	05/31/1997	
5/21/1997	1250	UG/L	3	180	91	F	91	9	F	05/31/1997	
5/21/1997	1250	UG/L	4	180	96	F	96	4	F	05/31/1997	

Table D-8. Pacific Ecorisk Lab, *S. purpuratus* 3-day Ammonia Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/21/1997	2500	UG/L	1	180	50	F	50	50	F	05/31/1997	
5/21/1997	2500	UG/L	2	180	44	F	55	36	F	05/31/1997	
5/21/1997	2500	UG/L	3	180	66	F	66	33	F	05/31/1997	
5/21/1997	2500	UG/L	4	180	61	F	61	39	F	05/31/1997	
5/21/1997	5000	UG/L	1	180	27	F	27	73	F	05/31/1997	
5/21/1997	5000	UG/L	2	180	7	F	7	93	F	05/31/1997	
5/21/1997	5000	UG/L	3	180	11	F	11	89	F	05/31/1997	
5/21/1997	5000	UG/L	4	180	18	F	18	82	F	05/31/1997	
5/21/1997	10000	UG/L	1	180	0	F	0	100	F	05/31/1997	
5/21/1997	10000	UG/L	2	180	0	F	0	100	F	05/31/1997	
5/21/1997	10000	UG/L	3	180	0	F	0	100	F	05/31/1997	
5/21/1997	10000	UG/L	4	180	0	F	0	100	F	05/31/1997	
5/23/1997	0	UG/L	1	141	95	F	95	5	F	05/31/1997	
5/23/1997	0	UG/L	2	141	94	F	94	6	F	05/31/1997	
5/23/1997	0	UG/L	3	141	99	F	99	1	F	05/31/1997	
5/23/1997	0	UG/L	4	141	98	F	98	2	F	05/31/1997	
5/23/1997	625	UG/L	1	141	94	F	94	6	F	05/31/1997	
5/23/1997	625	UG/L	2	141	91	F	91	9	F	05/31/1997	
5/23/1997	625	UG/L	3	141	92	F	92	8	F	05/31/1997	
5/23/1997	625	UG/L	4	141	92	F	92	8	F	05/31/1997	
5/23/1997	1250	UG/L	1	141	94	F	94	6	F	05/31/1997	
5/23/1997	1250	UG/L	2	141	94	F	94	6	F	05/31/1997	
5/23/1997	1250	UG/L	3	141	95	F	95	5	F	05/31/1997	
5/23/1997	1250	UG/L	4	141	91	F	91	9	F	05/31/1997	
5/23/1997	2500	UG/L	1	141	79	F	79	21	F	05/31/1997	
5/23/1997	2500	UG/L	2	141	41	F	41	59	F	05/31/1997	
5/23/1997	2500	UG/L	3	141	66	F	66	34	F	05/31/1997	
5/23/1997	2500	UG/L	4	141	48	F	48	52	F	05/31/1997	
5/23/1997	5000	UG/L	1	141	19	F	19	81	F	05/31/1997	
5/23/1997	5000	UG/L	2	141	11	F	11	89	F	05/31/1997	
5/23/1997	5000	UG/L	3	141	22	F	22	78	F	05/31/1997	
5/23/1997	5000	UG/L	4	141	13	F	13	87	F	05/31/1997	
5/23/1997	10000	UG/L	1	141	0	F	0	100	F	05/31/1997	
5/23/1997	10000	UG/L	2	141	0	F	0	100	F	05/31/1997	
5/23/1997	10000	UG/L	3	141	0	F	0	100	F	05/31/1997	
5/23/1997	10000	UG/L	4	141	0	F	0	100	F	05/31/1997	

F = first 100 larvae in subsample counted.

Table D-9. Pacific Ecorisk Lab, *S. purpuratus* 3-day Ammonia Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AMMREFTOX 05/04/01	0	UG/L	15.0	33.2		9.0	7.8	05/03/1997	Initial WQ
AMMREFTOX 05/04/01	0	UG/L	14.8	33.6		7.1	7.9	05/06/1997	Termination WQ
AMMREFTOX 05/04/01	625	UG/L	15.0	33.4		9.2	7.8	05/03/1997	Initial WQ
AMMREFTOX 05/04/01	625	UG/L	14.8	33.6		7.1	7.9	05/06/1997	Termination WQ
AMMREFTOX 05/04/01	1250	UG/L	15.0	33.2		9.0	7.8	05/03/1997	Initial WQ
AMMREFTOX 05/04/01	1250	UG/L	14.8	33.7		7.0	7.9	05/06/1997	Termination WQ
AMMREFTOX 05/04/01	2500	UG/L	15.0	33.2		9.1	7.8	05/03/1997	Initial WQ
AMMREFTOX 05/04/01	2500	UG/L	14.8	33.4		6.9	7.9	05/06/1997	Termination WQ
AMMREFTOX 05/04/01	5000	UG/L	15.0	33.3		9.0	7.8	05/03/1997	Initial WQ
AMMREFTOX 05/04/01	5000	UG/L	14.8	33.7		6.9	7.9	05/06/1997	Termination WQ
AMMREFTOX 05/04/01	10000	UG/L	15.0	33.2		9.0	7.7	05/03/1997	Initial WQ
AMMREFTOX 05/04/01	10000	UG/L	14.8	33.7		7.0	7.9	05/06/1997	Termination WQ
AMMREFTOX 05/08/01	0	UG/L	15.1	33.3		8.9	7.7	05/07/1997	Initial WQ
AMMREFTOX 05/08/01	0	UG/L	15.6	33.9		7.5	7.9	05/10/1997	Termination WQ
AMMREFTOX 05/08/01	625	UG/L	15.1	33.7		8.9	7.7	05/07/1997	Initial WQ
AMMREFTOX 05/08/01	625	UG/L	15.6	33.8		7.6	7.9	05/10/1997	Termination WQ
AMMREFTOX 05/08/01	1250	UG/L	15.1	33.5		9.0	7.7	05/07/1997	Initial WQ
AMMREFTOX 05/08/01	1250	UG/L	15.6	33.9		7.7	7.9	05/10/1997	Termination WQ
AMMREFTOX 05/08/01	2500	UG/L	15.1	33.6		9.0	7.7	05/07/1997	Initial WQ
AMMREFTOX 05/08/01	2500	UG/L	15.6	34.1	T	7.7	7.9	05/10/1997	Termination WQ
AMMREFTOX 05/08/01	5000	UG/L	15.1	33.5		9.1	7.7	05/07/1997	Initial WQ
AMMREFTOX 05/08/01	5000	UG/L	15.6	33.9		7.6	7.9	05/10/1997	Termination WQ
AMMREFTOX 05/08/01	10000	UG/L	15.1	33.5		9.1	7.7	05/07/1997	Initial WQ
AMMREFTOX 05/08/01	10000	UG/L	15.6	34.0		7.7	7.9	05/10/1997	Termination WQ
AMMREFTOX 05/11/01	0	UG/L	15.1	33.2		9.1	7.8	05/10/1997	Initial WQ
AMMREFTOX 05/11/01	0	UG/L	14.2	33.9		7.4	7.9	05/13/1997	Termination WQ
AMMREFTOX 05/11/01	625	UG/L	15.1	33.8		9.5	7.8	05/10/1997	Initial WQ
AMMREFTOX 05/11/01	625	UG/L	14.2	33.7		7.5	7.9	05/13/1997	Termination WQ
AMMREFTOX 05/11/01	1250	UG/L	15.1	33.9		9.4	7.8	05/10/1997	Initial WQ
AMMREFTOX 05/11/01	1250	UG/L	14.2	33.9		7.7	7.9	05/13/1997	Termination WQ
AMMREFTOX 05/11/01	2500	UG/L	15.1	33.7		9.1	7.8	05/10/1997	Initial WQ
AMMREFTOX 05/11/01	2500	UG/L	14.2	34.0		7.6	7.9	05/13/1997	Termination WQ
AMMREFTOX 05/11/01	5000	UG/L	15.1	33.7		9.1	7.8	05/10/1997	Initial WQ
AMMREFTOX 05/11/01	5000	UG/L	14.2	34.0		7.6	7.9	05/13/1997	Termination WQ
AMMREFTOX 05/11/01	10000	UG/L	15.1	33.7		9.1	7.8	05/10/1997	Initial WQ
AMMREFTOX 05/11/01	10000	UG/L	14.2	33.9		7.7	7.9	05/13/1997	Termination WQ
AMMREFTOX 05/18/01	0	UG/L	14.7	33.9		7.9	7.8	05/17/1997	Initial WQ
AMMREFTOX 05/18/01	0	UG/L	14.6	33.5		7.0	7.9	05/20/1997	Termination WQ
AMMREFTOX 05/18/01	625	UG/L	14.7	33.8		7.9	7.8	05/17/1997	Initial WQ
AMMREFTOX 05/18/01	625	UG/L	14.6	33.5		7.0	8.0	05/20/1997	Termination WQ
AMMREFTOX 05/18/01	1250	UG/L	14.7	33.9		7.8	7.8	05/17/1997	Initial WQ
AMMREFTOX 05/18/01	1250	UG/L	14.6	33.9		7.0	8.0	05/20/1997	Termination WQ
AMMREFTOX 05/18/01	2500	UG/L	14.7	34.0		7.7	7.8	05/17/1997	Initial WQ
AMMREFTOX 05/18/01	2500	UG/L	14.6	34.2	T	7.0	8.0	05/20/1997	Termination WQ
AMMREFTOX 05/18/01	5000	UG/L	14.7	34.0		7.7	7.8	05/17/1997	Initial WQ
AMMREFTOX 05/18/01	5000	UG/L	14.6	34.1	T	6.9	8.0	05/20/1997	Termination WQ
AMMREFTOX 05/18/01	10000	UG/L	14.7	34.1	T	7.7	7.8	05/17/1997	Initial WQ
AMMREFTOX 05/18/01	10000	UG/L	14.6	34.2	T	6.9	8.0	05/20/1997	Termination WQ
AMMREFTOX 05/22/01	0	UG/L	15.4	33.9		8.5	7.7	05/21/1997	Initial WQ
AMMREFTOX 05/22/01	0	UG/L	14.8	34.1	T	7.0	7.9	05/24/1997	Termination WQ
AMMREFTOX 05/22/01	625	UG/L	15.4	33.9		8.6	7.7	05/21/1997	Initial WQ
AMMREFTOX 05/22/01	625	UG/L	14.8	34.1	T	7.1	7.9	05/24/1997	Termination WQ
AMMREFTOX 05/22/01	1250	UG/L	15.4	33.9		8.6	7.7	05/21/1997	Initial WQ
AMMREFTOX 05/22/01	1250	UG/L	14.8	34.2	T	7.0	7.9	05/24/1997	Termination WQ
AMMREFTOX 05/22/01	2500	UG/L	15.4	33.8		8.4	7.7	05/21/1997	Initial WQ
AMMREFTOX 05/22/01	2500	UG/L	14.8	34.0		7.1	7.9	05/24/1997	Termination WQ
AMMREFTOX 05/22/01	5000	UG/L	15.4	33.9		8.6	7.7	05/21/1997	Initial WQ
AMMREFTOX 05/22/01	5000	UG/L	14.8	34.2	T	7.2	7.9	05/24/1997	Termination WQ
AMMREFTOX 05/22/01	10000	UG/L	15.4	33.9		8.6	7.7	05/21/1997	Initial WQ
AMMREFTOX 05/22/01	10000	UG/L	14.8	34.0		7.0	7.9	05/24/1997	Termination WQ
AMMREFTOX 05/24/01	0	UG/L	15.1	33.6		7.9	7.8	05/23/1997	Initial WQ
AMMREFTOX 05/24/01	0	UG/L	14.9	34.0		7.1	7.9	05/26/1997	Termination WQ
AMMREFTOX 05/24/01	625	UG/L	15.1	33.7		7.9	7.8	05/23/1997	Initial WQ
AMMREFTOX 05/24/01	625	UG/L	14.9	33.9		7.1	7.9	05/26/1997	Termination WQ
AMMREFTOX 05/24/01	1250	UG/L	15.1	33.7		7.8	7.8	05/23/1997	Initial WQ
AMMREFTOX 05/24/01	1250	UG/L	14.9	34.1	T	7.2	7.9	05/26/1997	Termination WQ
AMMREFTOX 05/24/01	2500	UG/L	15.1	33.6		7.8	7.8	05/23/1997	Initial WQ
AMMREFTOX 05/24/01	2500	UG/L	14.9	33.8		7.4	8.0	05/26/1997	Termination WQ
AMMREFTOX 05/24/01	5000	UG/L	15.1	33.5		7.9	7.8	05/23/1997	Initial WQ
AMMREFTOX 05/24/01	5000	UG/L	14.9	33.9		7.6	8.0	05/26/1997	Termination WQ
AMMREFTOX 05/24/01	10000	UG/L	15.1	33.6		7.9	7.8	05/23/1997	Initial WQ
AMMREFTOX 05/24/01	10000	UG/L	14.9	34.0		7.4	8.0	05/26/1997	Termination WQ

T = out of target range.

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Table D-10. Pacific Ecorisk Lab, *S. purpuratus* 3-day Cadmium Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/21/1997	0	NG/L	1	141	96	F	96	4	F	06/05/1997	
5/21/1997	0	NG/L	2	141	97	F	97	3	F	06/05/1997	
5/21/1997	0	NG/L	3	141	99	F	99	1	F	06/05/1997	
5/21/1997	0	NG/L	4	141	98	F	98	2	F	06/05/1997	
5/21/1997	62500	NG/L	1	141	96	F	96	4	F	06/05/1997	
5/21/1997	62500	NG/L	2	141	95	F	95	5	F	06/05/1997	
5/21/1997	62500	NG/L	3	141	96	F	96	4	F	06/05/1997	
5/21/1997	62500	NG/L	4	141	99	F	99	1	F	06/05/1997	
5/21/1997	125000	NG/L	1	141	79	F	79	21	F	06/05/1997	
5/21/1997	125000	NG/L	2	141	79	F	79	21	F	06/05/1997	
5/21/1997	125000	NG/L	3	141	84	F	84	16	F	06/05/1997	
5/21/1997	125000	NG/L	4	141	80	F	80	20	F	06/05/1997	
5/21/1997	250000	NG/L	1	141	26	F	26	74	F	06/05/1997	
5/21/1997	250000	NG/L	2	141	29	F	29	71	F	06/05/1997	
5/21/1997	250000	NG/L	3	141	33	F	33	67	F	06/05/1997	
5/21/1997	250000	NG/L	4	141	34	F	34	66	F	06/05/1997	
5/21/1997	500000	NG/L	1	141	10	F	10	90	F	06/05/1997	
5/21/1997	500000	NG/L	2	141	6	F	6	94	F	06/05/1997	
5/21/1997	500000	NG/L	3	141	4	F	4	96	F	06/05/1997	
5/21/1997	500000	NG/L	4	141	5	F	5	95	F	06/05/1997	
5/21/1997	1000000	NG/L	1	141	1	F	1	99	F	06/05/1997	
5/21/1997	1000000	NG/L	2	141	0	F	0	100	F	06/05/1997	
5/21/1997	1000000	NG/L	3	141	1	F	1	99	F	06/05/1997	
5/21/1997	1000000	NG/L	4	141	0	F	0	100	F	06/05/1997	
5/23/1997	0	NG/L	1	141	89	F	89	11	F	06/11/1997	
5/23/1997	0	NG/L	2	141	87	F	87	13	F	06/11/1997	
5/23/1997	0	NG/L	3	141	83	F	83	17	F	06/11/1997	
5/23/1997	0	NG/L	4	141	27	F	27	73	F	06/11/1997	
5/23/1997	62500	NG/L	1	141	86	F	86	14	F	06/11/1997	
5/23/1997	62500	NG/L	2	141	89	F	89	11	F	06/11/1997	
5/23/1997	62500	NG/L	3	141	89	F	89	11	F	06/11/1997	
5/23/1997	62500	NG/L	4	141	90	F	90	10	F	06/11/1997	
5/23/1997	125000	NG/L	1	141	58	F	58	42	F	06/11/1997	
5/23/1997	125000	NG/L	2	141	49	F	49	51	F	06/11/1997	
5/23/1997	125000	NG/L	3	141	60	F	60	40	F	06/11/1997	
5/23/1997	125000	NG/L	4	141	57	F	57	43	F	06/11/1997	
5/23/1997	250000	NG/L	1	141	40	F	40	60	F	06/11/1997	
5/23/1997	250000	NG/L	2	141	29	F	29	71	F	06/11/1997	
5/23/1997	250000	NG/L	3	141	47	F	47	53	F	06/11/1997	
5/23/1997	250000	NG/L	4	141	0	F	0	100	F	06/11/1997	
5/23/1997	500000	NG/L	1	141	15	F	15	85	F	06/11/1997	
5/23/1997	500000	NG/L	2	141	7	F	7	93	F	06/11/1997	
5/23/1997	500000	NG/L	3	141	2	F	2	98	F	06/11/1997	
5/23/1997	500000	NG/L	4	141	17	F	17	83	F	06/11/1997	
5/23/1997	1000000	NG/L	1	141	0	F	0	100	F	06/11/1997	
5/23/1997	1000000	NG/L	2	141	0	F	0	100	F	06/11/1997	
5/23/1997	1000000	NG/L	3	141	0	F	0	100	F	06/11/1997	
5/23/1997	1000000	NG/L	4	141	0	F	0	100	F	06/11/1997	

F = first 100 larvae in subsample counted.

Table D-11. Pacific Ecorisk Lab, *S. purpuratus* 3-day Cadmium Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
CDCLREFTOX 05/22/0	0	NG/L	15.4	33.8		8.5	7.7	05/21/1997	Initial WQ
CDCLREFTOX 05/22/0	0	NG/L	14.8	34		6.9	7.9	05/24/1997	Termination WQ
CDCLREFTOX 05/22/0	62500	NG/L	15.4	33.7		8.4	7.7	05/21/1997	Initial WQ
CDCLREFTOX 05/22/0	62500	NG/L	14.8	34.2	T	6.9	7.9	05/24/1997	Termination WQ
CDCLREFTOX 05/22/0	125000	NG/L	15.4	33.8		8.2	7.7	05/21/1997	Initial WQ
CDCLREFTOX 05/22/0	125000	NG/L	14.8	34.3	T	6.9	7.9	05/24/1997	Termination WQ
CDCLREFTOX 05/22/0	250000	NG/L	15.4	33.9		8.2	7.7	05/21/1997	Initial WQ
CDCLREFTOX 05/22/0	250000	NG/L	14.8	34.2	T	7	7.9	05/24/1997	Termination WQ
CDCLREFTOX 05/22/0	500000	NG/L	15.4	33.9		8.2	7.7	05/21/1997	Initial WQ
CDCLREFTOX 05/22/0	500000	NG/L	14.8	34.1	T	7	7.9	05/24/1997	Termination WQ
CDCLREFTOX 05/22/0	1000000	NG/L	15.4	33.8		8.4	7.7	05/21/1997	Initial WQ
CDCLREFTOX 05/22/0	1000000	NG/L	14.8	34.4	T	7.1	7.9	05/24/1997	Termination WQ
CDCLREFTOX 05/24/0	0	NG/L	15.1	33.6		7.9	7.8	05/23/1997	Initial WQ
CDCLREFTOX 05/24/0	0	NG/L	14.9	34.2	T	7.6	7.9	05/26/1997	Termination WQ
CDCLREFTOX 05/24/0	62500	NG/L	15.1	33.5		8	7.8	05/23/1997	Initial WQ
CDCLREFTOX 05/24/0	62500	NG/L	14.9	34		7.7	7.9	05/26/1997	Termination WQ
CDCLREFTOX 05/24/0	125000	NG/L	15.1	33.4		8.1	7.8	05/23/1997	Initial WQ
CDCLREFTOX 05/24/0	125000	NG/L	14.9	33.9		7.5	7.9	05/26/1997	Termination WQ
CDCLREFTOX 05/24/0	250000	NG/L	15.1	33.6		8.1	7.8	05/23/1997	Initial WQ
CDCLREFTOX 05/24/0	250000	NG/L	14.9	33.8		7.5	7.9	05/26/1997	Termination WQ
CDCLREFTOX 05/24/0	500000	NG/L	15.1	33.6		8.1	7.8	05/23/1997	Initial WQ
CDCLREFTOX 05/24/0	500000	NG/L	14.9	34		7.4	7.9	05/26/1997	Termination WQ
CDCLREFTOX 05/24/0	1000000	NG/L	15.1	33.6		8.2	7.8	05/23/1997	Initial WQ
CDCLREFTOX 05/24/0	1000000	NG/L	14.9	34		7.4	7.9	05/26/1997	Termination WQ

T = out of target range.

Table D-12. Pacific Ecorisk Lab, *S. purpuratus* 3-day Copper Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/03/1997	0	NG/L	1	174	89	F	89	11	F	06/05/1997	
5/03/1997	0	NG/L	2	174	79	F	79	21	F	06/05/1997	
5/03/1997	0	NG/L	3	174	86	F	86	14	F	06/05/1997	
5/03/1997	0	NG/L	4	174	92	F	92	8	F	06/05/1997	
5/03/1997	2500	NG/L	1	174	99	F	99	1	F	06/05/1997	
5/03/1997	2500	NG/L	2	174	98	F	98	2	F	06/05/1997	
5/03/1997	2500	NG/L	3	174	99	F	99	1	F	06/05/1997	
5/03/1997	2500	NG/L	4	174	99	F	99	1	F	06/05/1997	
5/03/1997	5000	NG/L	1	174	94	F	94	6	F	06/05/1997	
5/03/1997	5000	NG/L	2	174	87	F	87	13	F	06/05/1997	
5/03/1997	5000	NG/L	3	174	93	F	93	7	F	06/05/1997	
5/03/1997	5000	NG/L	4	174	93	F	93	7	F	06/05/1997	
5/03/1997	10000	NG/L	1	174	86	F	86	14	F	06/05/1997	
5/03/1997	10000	NG/L	2	174	84	F	84	16	F	06/05/1997	
5/03/1997	10000	NG/L	3	174	87	F	87	13	F	06/05/1997	
5/03/1997	10000	NG/L	4	174	83	F	83	17	F	06/05/1997	
5/03/1997	15000	NG/L	1	174	60	F	60	40	F	06/05/1997	
5/03/1997	15000	NG/L	2	174	70	F	70	30	F	06/05/1997	
5/03/1997	15000	NG/L	3	174	64	F	64	36	F	06/05/1997	
5/03/1997	15000	NG/L	4	174	56	F	56	44	F	06/05/1997	
5/03/1997	20000	NG/L	1	174	14	F	14	86	F	06/05/1997	
5/03/1997	20000	NG/L	2	174	22	F	22	78	F	06/05/1997	
5/03/1997	20000	NG/L	3	174	22	F	22	78	F	06/05/1997	
5/03/1997	20000	NG/L	4	174	18	F	18	82	F	06/05/1997	
5/03/1997	40000	NG/L	1	174	0	F	0	100	F	06/05/1997	
5/03/1997	40000	NG/L	2	174	0	F	0	100	F	06/05/1997	
5/03/1997	40000	NG/L	3	174	0	F	0	100	F	06/05/1997	
5/03/1997	40000	NG/L	4	174	0	F	0	100	F	06/05/1997	
5/07/1997	0	NG/L	1	143	95	F	95	5	F	06/05/1997	
5/07/1997	0	NG/L	2	143	98	F	98	2	F	06/05/1997	
5/07/1997	0	NG/L	3	143	98	F	98	2	F	06/05/1997	
5/07/1997	0	NG/L	4	143	96	F	96	4	F	06/05/1997	
5/07/1997	2500	NG/L	1	143	97	F	97	3	F	06/05/1997	
5/07/1997	2500	NG/L	2	143	96	F	96	4	F	06/05/1997	
5/07/1997	2500	NG/L	3	143	95	F	95	5	F	06/05/1997	
5/07/1997	2500	NG/L	4	143	100	F	100	0	F	06/05/1997	
5/07/1997	5000	NG/L	1	143	95	F	95	5	F	06/05/1997	
5/07/1997	5000	NG/L	2	143	98	F	98	2	F	06/05/1997	
5/07/1997	5000	NG/L	3	143	93	F	93	7	F	06/05/1997	
5/07/1997	5000	NG/L	4	143	93	F	93	7	F	06/05/1997	
5/07/1997	10000	NG/L	1	143	93	F	93	7	F	06/05/1997	
5/07/1997	10000	NG/L	2	143	92	F	92	8	F	06/05/1997	
5/07/1997	10000	NG/L	3	143	94	F	94	6	F	06/05/1997	
5/07/1997	10000	NG/L	4	143	100	F	100	0	F	06/05/1997	
5/07/1997	15000	NG/L	1	143	87	F	87	13	F	06/05/1997	
5/07/1997	15000	NG/L	2	143	90	F	90	10	F	06/05/1997	
5/07/1997	15000	NG/L	3	143	90	F	90	10	F	06/05/1997	
5/07/1997	15000	NG/L	4	143	82	F	82	18	F	06/05/1997	
5/07/1997	20000	NG/L	1	143	56	F	56	44	F	06/05/1997	
5/07/1997	20000	NG/L	2	143	45	F	45	55	F	06/05/1997	
5/07/1997	20000	NG/L	3	143	31	F	31	69	F	06/05/1997	
5/07/1997	20000	NG/L	4	143	39	F	39	61	F	06/05/1997	
5/07/1997	40000	NG/L	1	143	0	F	0	100	F	06/05/1997	
5/07/1997	40000	NG/L	2	143	0	F	0	100	F	06/05/1997	
5/07/1997	40000	NG/L	3	143	0	F	0	100	F	06/05/1997	
5/07/1997	40000	NG/L	4	143	0	F	0	100	F	06/05/1997	
5/10/1997	0	NG/L	1	151	89	F	89	11	F	06/01/1997	
5/10/1997	0	NG/L	2	151	95	F	95	5	F	06/01/1997	
5/10/1997	0	NG/L	3	151	95	F	95	5	F	06/01/1997	
5/10/1997	0	NG/L	4	151	85	F	85	15	F	06/01/1997	
5/10/1997	2500	NG/L	1	151	94	F	94	6	F	06/01/1997	

Table D-12. Pacific Ecorisk Lab, *S. purpuratus* 3-day Copper Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/10/1997	2500	NG/L	2	151	92	F	92	8	F	06/01/1997	
5/10/1997	2500	NG/L	3	151	90	F	90	10	F	06/01/1997	
5/10/1997	2500	NG/L	4	151	90	F	90	10	F	06/01/1997	
5/10/1997	5000	NG/L	1	151	95	F	95	5	F	06/01/1997	
5/10/1997	5000	NG/L	2	151	94	F	94	6	F	06/01/1997	
5/10/1997	5000	NG/L	3	151	90	F	90	10	F	06/01/1997	
5/10/1997	5000	NG/L	4	151	85	F	85	15	F	06/01/1997	
5/10/1997	10000	NG/L	1	151	87	F	87	13	F	06/01/1997	
5/10/1997	10000	NG/L	2	151	93	F	93	7	F	06/01/1997	
5/10/1997	10000	NG/L	3	151	87	F	87	13	F	06/01/1997	
5/10/1997	10000	NG/L	4	151	97	F	97	3	F	06/01/1997	
5/10/1997	15000	NG/L	1	151	79	F	79	21	F	06/01/1997	
5/10/1997	15000	NG/L	2	151	78	F	78	22	F	06/01/1997	
5/10/1997	15000	NG/L	3	151	64	F	64	36	F	06/01/1997	
5/10/1997	15000	NG/L	4	151	63	F	63	37	F	06/01/1997	
5/10/1997	20000	NG/L	1	151	12	F	12	88	F	06/01/1997	
5/10/1997	20000	NG/L	2	151	10	F	10	90	F	06/01/1997	
5/10/1997	20000	NG/L	3	151	20	F	20	80	F	06/01/1997	
5/10/1997	20000	NG/L	4	151	11	F	11	89	F	06/01/1997	
5/10/1997	40000	NG/L	1	151	0	F	0	100	F	06/01/1997	
5/10/1997	40000	NG/L	2	151	0	F	0	100	F	06/01/1997	
5/10/1997	40000	NG/L	3	151	0	F	0	100	F	06/01/1997	
5/10/1997	40000	NG/L	4	151	0	F	0	100	F	06/01/1997	
5/17/1997	0	NG/L	1	110	94	F	94	6	F	06/05/1997	
5/17/1997	0	NG/L	2	110	93	F	93	7	F	06/05/1997	
5/17/1997	0	NG/L	3	110	87	F	87	13	F	06/05/1997	
5/17/1997	0	NG/L	4	110	89	F	89	11	F	06/05/1997	
5/17/1997	2500	NG/L	1	110	94	F	94	6	F	06/05/1997	
5/17/1997	2500	NG/L	2	110	88	F	88	12	F	06/05/1997	
5/17/1997	2500	NG/L	3	110	88	F	88	12	F	06/05/1997	
5/17/1997	2500	NG/L	4	110	88	F	88	12	F	06/05/1997	
5/17/1997	5000	NG/L	1	110	96	F	96	4	F	06/05/1997	
5/17/1997	5000	NG/L	2	110	84	F	84	16	F	06/05/1997	
5/17/1997	5000	NG/L	3	110	95	F	95	5	F	06/05/1997	
5/17/1997	5000	NG/L	4	110	86	F	86	14	F	06/05/1997	
5/17/1997	10000	NG/L	1	110	87	F	87	13	F	06/05/1997	
5/17/1997	10000	NG/L	2	110	92	F	92	8	F	06/05/1997	
5/17/1997	10000	NG/L	3	110	84	F	84	16	F	06/05/1997	
5/17/1997	10000	NG/L	4	110	81	F	81	19	F	06/05/1997	
5/17/1997	15000	NG/L	1	110	66	F	66	34	F	06/05/1997	
5/17/1997	15000	NG/L	2	110	83	F	83	17	F	06/05/1997	
5/17/1997	15000	NG/L	3	110	56	F	56	44	F	06/05/1997	
5/17/1997	15000	NG/L	4	110	73	F	73	27	F	06/05/1997	
5/17/1997	20000	NG/L	1	110	71	F	71	29	F	06/05/1997	
5/17/1997	20000	NG/L	2	110	43	F	43	57	F	06/05/1997	
5/17/1997	20000	NG/L	3	110	55	F	55	45	F	06/05/1997	
5/17/1997	20000	NG/L	4	110	37	F	37	63	F	06/05/1997	
5/17/1997	40000	NG/L	1	110	0	F	0	100	F	06/05/1997	
5/17/1997	40000	NG/L	2	110	0	F	0	100	F	06/05/1997	
5/17/1997	40000	NG/L	3	110	0	F	0	100	F	06/05/1997	
5/17/1997	40000	NG/L	4	110	0	F	0	100	F	06/05/1997	
5/21/1997	0	NG/L	1	180	98	F	98	2	F	05/31/1997	
5/21/1997	0	NG/L	2	180	99	F	99	1	F	05/31/1997	
5/21/1997	0	NG/L	3	180	96	F	96	4	F	05/31/1997	
5/21/1997	0	NG/L	4	180	96	F	96	4	F	05/31/1997	
5/21/1997	2500	NG/L	1	180	95	F	95	5	F	05/31/1997	
5/21/1997	2500	NG/L	2	180	94	F	94	6	F	05/31/1997	
5/21/1997	2500	NG/L	3	180	91	F	91	9	F	05/31/1997	
5/21/1997	2500	NG/L	4	180	96	F	96	4	F	05/31/1997	
5/21/1997	5000	NG/L	1	180	96	F	96	4	F	05/31/1997	
5/21/1997	5000	NG/L	2	180	92	F	92	8	F	05/31/1997	

Table D-12. Pacific Ecorisk Lab, *S. purpuratus* 3-day Copper Reference Toxicant Testing Results

Sample Identifier	Ammonia Concentration	Concentration Units	Replicate	Stocking Density	Number Alive		Percent Normal	Number Abnormal		Recording Date	Remarks
5/21/1997	5000	NG/L	3	180	85	F	85	15	F	05/31/1997	
5/21/1997	5000	NG/L	4	180	92	F	92	8	F	05/31/1997	
5/21/1997	10000	NG/L	1	180	94	F	94	6	F	05/31/1997	
5/21/1997	10000	NG/L	2	180	90	F	90	10	F	05/31/1997	
5/21/1997	10000	NG/L	3	180	91	F	91	9	F	05/31/1997	
5/21/1997	10000	NG/L	4	180	81	F	81	19	F	05/31/1997	
5/21/1997	15000	NG/L	1	180	88	F	88	12	F	05/31/1997	
5/21/1997	15000	NG/L	2	180	78	F	78	22	F	05/31/1997	
5/21/1997	15000	NG/L	3	180	62	F	62	38	F	05/31/1997	
5/21/1997	15000	NG/L	4	180	73	F	73	27	F	05/31/1997	
5/21/1997	20000	NG/L	1	180	9	F	9	91	F	05/31/1997	
5/21/1997	20000	NG/L	2	180	12	F	12	88	F	05/31/1997	
5/21/1997	20000	NG/L	3	180	24	F	24	76	F	05/31/1997	
5/21/1997	20000	NG/L	4	180	14	F	14	86	F	05/31/1997	
5/21/1997	40000	NG/L	1	180	0	F	0	100	F	05/31/1997	
5/21/1997	40000	NG/L	2	180	0	F	0	100	F	05/31/1997	
5/21/1997	40000	NG/L	3	180	0	F	0	100	F	05/31/1997	
5/21/1997	40000	NG/L	4	180	0	F	0	100	F	05/31/1997	
5/23/1997	0	NG/L	1	141	96	F	96	4	F	06/05/1997	
5/23/1997	0	NG/L	2	141	97	F	97	3	F	06/05/1997	
5/23/1997	0	NG/L	3	141	99	F	99	1	F	06/05/1997	
5/23/1997	0	NG/L	4	141	98	F	98	2	F	06/05/1997	
5/23/1997	2500	NG/L	1	141	98	F	98	2	F	06/05/1997	
5/23/1997	2500	NG/L	2	141	91	F	91	9	F	06/05/1997	
5/23/1997	2500	NG/L	3	141	84	F	84	16	F	06/05/1997	
5/23/1997	2500	NG/L	4	141	90	F	90	10	F	06/05/1997	
5/23/1997	5000	NG/L	1	141	96	F	96	4	F	06/05/1997	
5/23/1997	5000	NG/L	2	141	91	F	91	9	F	06/05/1997	
5/23/1997	5000	NG/L	3	141	93	F	93	7	F	06/05/1997	
5/23/1997	5000	NG/L	4	141	90	F	90	10	F	06/05/1997	
5/23/1997	10000	NG/L	1	141	88	F	88	12	F	06/05/1997	
5/23/1997	10000	NG/L	2	141	87	F	87	13	F	06/05/1997	
5/23/1997	10000	NG/L	3	141	77	F	77	23	F	06/05/1997	
5/23/1997	10000	NG/L	4	141	86	F	86	14	F	06/05/1997	
5/23/1997	15000	NG/L	1	141	69	F	69	31	F	06/05/1997	
5/23/1997	15000	NG/L	2	141	81	F	81	19	F	06/05/1997	
5/23/1997	15000	NG/L	3	141	77	F	77	23	F	06/05/1997	
5/23/1997	15000	NG/L	4	141	70	F	70	30	F	06/05/1997	
5/23/1997	20000	NG/L	1	141	15	F	15	85	F	06/05/1997	
5/23/1997	20000	NG/L	2	141	11	F	11	89	F	06/05/1997	
5/23/1997	20000	NG/L	3	141	27	F	27	73	F	06/05/1997	
5/23/1997	20000	NG/L	4	141	24	F	24	76	F	06/05/1997	
5/23/1997	40000	NG/L	1	141	0	F	0	100	F	06/05/1997	
5/23/1997	40000	NG/L	2	141	0	F	0	100	F	06/05/1997	
5/23/1997	40000	NG/L	3	141	0	F	0	100	F	06/05/1997	
5/23/1997	40000	NG/L	4	141	0	F	0	100	F	06/05/1997	

F = first 100 larvae in subsample counted.

Table D-13. Pacific Ecorisk Lab, *S. purpuratus* 3-day Copper Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
CUREFTOX 05/04/01	0	NG/L	15.0	33.2		9.1	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	0	NG/L	14.8	33.7		6.9	7.7	05/06/1997	Termination WQ
CUREFTOX 05/04/01	2500	NG/L	15.0	33.5		9.1	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	2500	NG/L	14.8	34.2	T	6.9	7.8	05/06/1997	Termination WQ
CUREFTOX 05/04/01	5000	NG/L	15.0	33.5		9.1	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	5000	NG/L	14.8	34.3	T	7.0	7.8	05/06/1997	Termination WQ
CUREFTOX 05/04/01	10000	NG/L	15.0	33.0		9.0	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	10000	NG/L	14.8	34.1	T	6.9	7.8	05/06/1997	Termination WQ
CUREFTOX 05/04/01	15000	NG/L	15.0	33.0		9.0	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	15000	NG/L	14.8	34.0		7.1	7.8	05/06/1997	Termination WQ
CUREFTOX 05/04/01	20000	NG/L	15.0	33.5		9.0	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	20000	NG/L	14.8	34.0		7.0	7.8	05/06/1997	Termination WQ
CUREFTOX 05/04/01	40000	NG/L	15.0	33.2		9.0	7.8	05/03/1997	Initial WQ
CUREFTOX 05/04/01	40000	NG/L	14.8	34.1	T	7.1	7.8	05/06/1997	Termination WQ
CUREFTOX 05/08/01	0	NG/L	15.1	33.1		8.9	7.6	05/07/1997	Initial WQ
CUREFTOX 05/08/01	0	NG/L	15.6	33.1		7.2	8.0	05/10/1997	Termination WQ
CUREFTOX 05/08/01	2500	NG/L	15.1	33.4		8.9	7.6	05/07/1997	Initial WQ
CUREFTOX 05/08/01	2500	NG/L	15.6	33.1		7.1	8.0	05/10/1997	Termination WQ
CUREFTOX 05/08/01	5000	NG/L	15.1	33.4		8.8	7.6	05/07/1997	Initial WQ
CUREFTOX 05/08/01	5000	NG/L	15.6	33.1		7.1	8.0	05/10/1997	Termination WQ
CUREFTOX 05/08/01	10000	NG/L	15.1	33.5		8.6	7.6	05/07/1997	Initial WQ
CUREFTOX 05/08/01	10000	NG/L	15.6	33.1		7.0	7.9	05/10/1997	Termination WQ
CUREFTOX 05/08/01	15000	NG/L	15.1	33.4		8.5	7.6	05/07/1997	Initial WQ
CUREFTOX 05/08/01	15000	NG/L	15.6	33.4		6.9	7.9	05/10/1997	Termination WQ
CUREFTOX 05/08/01	20000	NG/L	15.1	33.4		8.5	7.6	05/07/1997	Initial WQ
CUREFTOX 05/08/01	20000	NG/L	15.6	33.7		6.9	8.0	05/10/1997	Termination WQ
CUREFTOX 05/08/01	40000	NG/L	15.1	33.4		8.5	7.7	05/07/1997	Initial WQ
CUREFTOX 05/08/01	40000	NG/L	15.6	33.6		7.0	7.9	05/10/1997	Termination WQ
CUREFTOX 05/11/01	0	NG/L	15.1	33.1		9.4	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	0	NG/L	14.2	33.0		7.4	7.8	05/13/1997	Termination WQ
CUREFTOX 05/11/01	2500	NG/L	15.1	34.0		9.5	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	2500	NG/L	14.2	33.8		7.4	7.8	05/13/1997	Termination WQ
CUREFTOX 05/11/01	5000	NG/L	15.1	34.0		9.4	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	5000	NG/L	14.2	33.8		7.5	7.8	05/13/1997	Termination WQ
CUREFTOX 05/11/01	10000	NG/L	15.1	34.0		9.4	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	10000	NG/L	14.2	33.9		7.5	7.8	05/13/1997	Termination WQ
CUREFTOX 05/11/01	15000	NG/L	15.1	34.0		9.1	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	15000	NG/L	14.2	34.0		7.4	7.8	05/13/1997	Termination WQ
CUREFTOX 05/11/01	20000	NG/L	15.1	34.0		9.0	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	20000	NG/L	14.2	34.0		7.4	7.8	05/13/1997	Termination WQ
CUREFTOX 05/11/01	40000	NG/L	15.1	33.9		9.0	7.8	05/10/1997	Initial WQ
CUREFTOX 05/11/01	40000	NG/L	14.2	34.0		7.4	7.8	05/13/1997	Termination WQ
CUREFTOX 05/18/01	0	NG/L	14.7	33.7		8.3	7.7	05/17/1997	Initial WQ
CUREFTOX 05/18/01	0	NG/L	14.6	33.4		6.9	7.8	05/20/1997	Termination WQ
CUREFTOX 05/18/01	2500	NG/L	14.7	34.0		8.1	7.7	05/17/1997	Initial WQ
CUREFTOX 05/18/01	2500	NG/L	14.6	34.1	T	7.0	7.8	05/20/1997	Termination WQ
CUREFTOX 05/18/01	5000	NG/L	14.7	34.0		7.9	7.7	05/17/1997	Initial WQ
CUREFTOX 05/18/01	5000	NG/L	14.6	34.2	T	7.0	7.8	05/20/1997	Termination WQ
CUREFTOX 05/18/01	10000	NG/L	14.7	34.1	T	7.7	7.8	05/17/1997	Initial WQ
CUREFTOX 05/18/01	10000	NG/L	14.6	34.3	T	7.0	7.8	05/20/1997	Termination WQ
CUREFTOX 05/18/01	15000	NG/L	14.7	34.1	T	7.7	7.8	05/17/1997	Initial WQ
CUREFTOX 05/18/01	15000	NG/L	14.6	34.3	T	7.0	7.8	05/20/1997	Termination WQ
CUREFTOX 05/18/01	20000	NG/L	14.7	34.0		7.7	7.8	05/17/1997	Initial WQ
CUREFTOX 05/18/01	20000	NG/L	14.6	34.2	T	6.7	7.8	05/20/1997	Termination WQ
CUREFTOX 05/18/01	40000	NG/L	14.7	34.0		7.8	7.8	05/17/1997	Initial WQ
CUREFTOX 05/18/01	40000	NG/L	14.6	34.3	T	6.6	7.7	05/20/1997	Termination WQ
CUREFTOX 05/22/01	0	NG/L	15.4	33.9		8.5	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	0	NG/L	14.8	34.8	T	6.9	7.8	05/24/1997	Termination WQ
CUREFTOX 05/22/01	2500	NG/L	15.4	34.1	T	8.5	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	2500	NG/L	14.8	33.7		6.9	7.8	05/24/1997	Termination WQ
CUREFTOX 05/22/01	5000	NG/L	15.4	34.2	T	8.5	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	5000	NG/L	14.8	34.1	T	6.9	7.9	05/24/1997	Termination WQ
CUREFTOX 05/22/01	10000	NG/L	15.4	34.1	T	8.4	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	10000	NG/L	14.8	34.2	T	6.9	7.9	05/24/1997	Termination WQ

Table D-13. Pacific Ecorisk Lab, *S. purpuratus* 3-day Copper Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Ammonia Concentration	Concentration Units	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
CUREFTOX 05/22/01	15000	NG/L	15.4	34.1	T	8.2	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	15000	NG/L	14.8	34.2	T	6.8	7.9	05/24/1997	Termination WQ
CUREFTOX 05/22/01	20000	NG/L	15.4	34.1	T	8.2	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	20000	NG/L	14.8	34.2	T	6.8	7.9	05/24/1997	Termination WQ
CUREFTOX 05/22/01	40000	NG/L	15.4	33.7		8.2	7.7	05/21/1997	Initial WQ
CUREFTOX 05/22/01	40000	NG/L	14.8	34.3	T	6.8	7.9	05/24/1997	Termination WQ
CUREFTOX 05/24/01	0	NG/L	15.1	33.4		8.0	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	0	NG/L	14.9	33.9		7.4	7.9	05/26/1997	Termination WQ
CUREFTOX 05/24/01	2500	NG/L	15.1	33.5		8.1	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	2500	NG/L	14.9	33.8		7.4	7.9	05/26/1997	Termination WQ
CUREFTOX 05/24/01	5000	NG/L	15.1	33.6		7.9	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	5000	NG/L	14.9	33.9		7.2	7.9	05/26/1997	Termination WQ
CUREFTOX 05/24/01	10000	NG/L	15.1	33.6		7.9	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	10000	NG/L	14.9	33.7		7.3	7.9	05/26/1997	Termination WQ
CUREFTOX 05/24/01	15000	NG/L	15.1	33.4		7.9	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	15000	NG/L	14.9	34.0		7.4	7.9	05/26/1997	Termination WQ
CUREFTOX 05/24/01	20000	NG/L	15.1	33.6		7.9	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	20000	NG/L	14.9	33.9		7.7	7.9	05/26/1997	Termination WQ
CUREFTOX 05/24/01	40000	NG/L	15.1	33.7		7.9	7.8	05/23/1997	Initial WQ
CUREFTOX 05/24/01	40000	NG/L	14.9	34.0		7.7	7.9	05/26/1997	Termination WQ

Table D-14. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Ammonia

Sample Identifier	Sediment Treatment	Temperature (° C)		Salinity (ppt)		Dissolved Oxygen (mg/L)		pH (units)		Total Ammonia (mg/L)	Unionized Ammonia (mg/L)	Recording Date	Remarks
AAB-071	SB-1	15.4	H	33.1	H	7.2	H	7.6	H	0	0	05/21/1997	
AAB-071	SB-1	14.9	H	33.2	H	7.2	H	7.3	H	0	0	05/24/1997	
AAB-072	SB-2	15.7	H	33.7	H	7.2	H	7.5	H	0	0	05/21/1997	
AAB-072	SB-2	15.0	H	33.1	H	7.1	H	7.3	H	0.07	0	05/24/1997	
AAB-073	SB-3	15.5	H	33.6	H	7.1	H	7.5	H	0	0	05/21/1997	
AAB-073	SB-3	14.9	H	33.2	H	6.7	H	7.4	H	0	0	05/24/1997	
AAB-074	SB-4	15.5	H	33.7	H	7.5	H	7.6	H	0	0	05/21/1997	
AAB-074	SB-4	15.0	H	33.1	H	7.2	H	7.4	H	0.08	0	05/24/1997	
AAB-052	SB-5	15.1	H	32.8	H	7.1	H	7.6	H	0	0	05/17/1997	
AAB-052	SB-5	14.7	H	33.0	H	4.0	H	7.3	H	0	0	05/20/1997	
AAB-061	SB-6	15.4	H	33.0	H	7.4	H	7.6	H	0	0	05/21/1997	
AAB-061	SB-6	14.8	H	32.8	H	7.2	H	7.3	H	0	0	05/24/1997	
AAB-060	SB-7	15.4	H	33.1	H	7.4	H	7.6	H	0	0	05/21/1997	
AAB-060	SB-7	14.9	H	33.1	H	7.2	H	7.4	H	1.7	0.01	05/24/1997	
AAB-056	SB-8	15.6	H	33.1	H	7.4	H	7.7	H	0	0	05/21/1997	
AAB-056	SB-8	15.1	H	33.1	H	7.2	H	7.4	H	1.49	0.01	05/24/1997	
AAB-055	SB-9	15.4	H	33.0	H	7.3	H	7.6	H	0	0	05/21/1997	
AAB-055	SB-9	15.0	H	33.5	H	7.3	H	7.4	H	0.7	0	05/24/1997	
AAB-054	SB-10	15.4	H	33.1	H	7.4	H	7.7	H	0	0	05/21/1997	
AAB-054	SB-10	14.9	H	33.0	H	7.3	H	7.2	H	0.17	0	05/24/1997	
AAB-050	SB-11	15.5	H	33.0	H	7.1	H	7.6	H	0	0	05/17/1997	
AAB-050	SB-11	14.7	H	33.1	H	7.3	H	7.3	H	0	0	05/20/1997	
AAB-051	SB-12	15.4	H	32.9	H	7.1	H	7.6	H	0	0	05/17/1997	
AAB-051	SB-12	14.7	H	33.0	H	7.3	H	7.2	H	0	0	05/20/1997	
AAB-075	SB-13	15.7	H	33.6	H	7.1	H	7.5	H	0	0	05/21/1997	
AAB-075	SB-13	15.0	H	33.2	H	7.0	H	7.3	H	0	0	05/24/1997	
AAB-049	SB-14	15.5	H	33.0	H	7.2	H	7.6	H	0	0	05/17/1997	
AAB-049	SB-14	14.7	H	33.2	H	4.1	H	7.2	H	0	0	05/20/1997	
AAB-076	SB-15	15.9	H	33.5	H	7.3	H	7.5	H	0	0	05/21/1997	
AAB-076	SB-15	15.1	H	33.0	H	7.4	H	7.3	H	0	0	05/24/1997	
AAB-025	SB-16	15.2	H	33.2	H	7.2	H	7.7	H	0	0	05/17/1997	
AAB-025	SB-16	14.7	H	33.3	H	4.1	H	7.4	H	2.25	0.01	05/20/1997	
AAB-059	SB-17	15.7	H	33.3	H	7.3	H	7.7	H	0.07	0	05/21/1997	
AAB-059	SB-17	15.1	H	33.3	H	6.7	H	7.5	H	3.6	0.02	05/24/1997	
AAB-042	SB-18	15.4	H	33.8	H	7.5	H	7.7	H	0	0	05/17/1997	
AAB-042	SB-18	14.8	H	33.4	H	4.7	H	7.4	H	0	0	05/20/1997	
AAB-077	SB-19	15.0	H	33.6	H	7.3	H	7.7	H	0	0	05/23/1997	
AAB-077	SB-19	14.1	H	32.8	H	5.7	H	7.7	H	0	0	05/26/1997	
AAB-053	SB-20	15.3	H	33.4	H	7.3	H	7.6	H	0	0	05/17/1997	
AAB-053	SB-20	14.8	H	33.0	H	4.3	H	7.3	H	0	0	05/20/1997	
AAB-024	SB-21	15.5	H	33.4	H	7.5	H	7.7	H	0	0	05/17/1997	
AAB-024	SB-21	14.8	H	33.3	H	4.3	H	7.3	H	1.14	0	05/20/1997	
AAB-026	SB-22	15.5	H	33.2	H	7.1	H	7.7	H	0	0	05/17/1997	
AAB-026	SB-22	14.8	H	33.2	H	4.2	H	7.3	H	1.81	0.01	05/20/1997	
AAB-043	SB-23	15.2	H	33.4	H	7.4	H	7.7	H	0	0	05/17/1997	
AAB-043	SB-23	14.7	H	33.1	H	4.6	H	7.3	H	0.83	0	05/20/1997	
AAB-065	OR-24	15.1	H	32.9	H	7.1	H	7.7	H	0.69	0.01	05/23/1997	
AAB-065	OR-24	15.4	H	32.1	H	4.6	H	7.5	H	2.61	0.01	05/26/1997	
AAB-057	OR-25	15.4	H	33.2	H	7.3	H	7.6	H	0	0	05/21/1997	
AAB-057	OR-25	14.9	H	33.3	H	7.3	H	7.2	H	0	0	05/24/1997	
AAB-066	OR-26	15.1	H	33.2	H	7.2	H	7.6	H	0	0	05/23/1997	
AAB-066	OR-26	14.4	H	32.3	H	5.2	H	7.5	H	0.6	0	05/26/1997	
AAB-067	OR-27	14.9	H	33.3	H	7.0	H	7.6	H	0	0	05/23/1997	
AAB-067	OR-27	14.2	H	32.6	H	5.6	H	7.6	H	0	0	05/26/1997	
AAB-023	OR-28	15.1	H	33.0	H	7.2	H	7.7	H	0	0	05/17/1997	
AAB-023	OR-28	14.8	H	33.0	H	5.2	H	7.5	H	0	0	05/20/1997	
AAB-068	OR-29	15.0	H	33.0	H	7.1	H	7.6	H	0	0	05/23/1997	
AAB-068	OR-29	14.5	H	32.5	H	4.7	H	7.4	H	1.65	0.01	05/26/1997	
AAB-064	EW-30	15.3	H	33.4	H	7.4	H	7.7	H	0	0	05/21/1997	
AAB-064	EW-30	14.8	H	33.3	H	7.3	H	7.5	H	0.92	0.01	05/24/1997	

Table D-14. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Ammonia

Sample Identifier	Sediment Treatment	Temperature (° C)		Salinity (ppt)		Dissolved Oxygen (mg/L)		pH (units)		Total Ammonia (mg/L)	Unionized Ammonia (mg/L)	Recording Date	Remarks
AAB-058	EW-31	15.3	H	33.2	H	7.3	H	7.7	H	0	0	05/21/1997	
AAB-058	EW-31	14.8	H	33.2	H	7.2	H	7.5	H	0.23	0	05/24/1997	
AAB-022	EW-32	15.2	H	32.8	H	7.1	H	7.6	H	0.55	0	05/17/1997	
AAB-022	EW-32	14.7	H	33.1	H	7.2	H	7.2	H	3.07	0.01	05/20/1997	
AAB-063	EW-33	15.6	H	33.4	H	7.2	H	7.6	H	0.27	0	05/21/1997	
AAB-063	EW-33	14.9	H	33.6	H	7.0	H	7.3	H	4.9	0.02	05/24/1997	
AAB-036	EW-34	15.9	H	32.7	H	4.5	H	7.5	H	0.2	0	05/10/1997	
AAB-036	EW-34	14.9	H	32.8	H	4.7	H	7.4	H	2.83	0.01	05/13/1997	
AAB-037	EW-35	16.0	H	32.8	H	4.1	H	7.5	H	0	0	05/10/1997	
AAB-037	EW-35	14.9	H	33.0	H	5.4	H	7.5	H	0.75	0	05/13/1997	
AAB-062	EW-36	15.3	H	33.1	H	7.4	H	7.7	H	0	0	05/21/1997	
AAB-062	EW-36	14.9	H	33.1	H	7.4	H	7.5	H	0.5	0	05/24/1997	
AAB-038	EW-37	15.9	H	33.5	H	5.2	H	7.5	H	0	0	05/10/1997	
AAB-038	EW-37	15.0	H	33.4	H	5.4	H	7.5	H	0.67	0	05/13/1997	
AAB-048	PA-38	16.0	H	33.3	H	5.1	H	7.4	H	0	0	05/10/1997	
AAB-048	PA-38	14.8	H	33.0	H	5.5	H	7.4	H	0	0	05/13/1997	
AAB-046	PA-39	16.0	H	33.3	H	5.8	H	7.6	H	0	0	05/10/1997	
AAB-046	PA-39	14.8	H	33.5	H	6.5	H	7.7	H	0	0	05/13/1997	
AAB-047	PA-40	15.9	H	32.9	H	4.3	H	7.5	H	0	0	05/10/1997	
AAB-047	PA-40	14.9	H	32.8	H	5.1	H	7.3	H	0	0	05/13/1997	
AAB-021	PA-41	15.9	H	33.0	H	3.8	H	7.6	H	0	0	05/10/1997	
AAB-021	PA-41	14.7	H	33.0	H	4.1	H	7.4	H	3.52	0.01	05/13/1997	
AAB-015	PA-42	15.9	H	32.7	H	5.1	H	7.5	H	0	0	05/07/1997	
AAB-015	PA-42	15.8	H	33.0	H	2.4	H	7.4	H	3.81	0.02	05/10/1997	
AAB-016	PA-43	16.0	H	33.3	H	3.7	H	7.5	H	0.51	0	05/10/1997	
AAB-016	PA-43	14.8	H	33.2	H	5.1	H	7.4	H	3.52	0.02	05/13/1997	
AAB-020	PA-44	15.9	H	32.9	H	4.0	H	7.5	H	0	0	05/10/1997	
AAB-020	PA-44	14.9	H	32.8	H	4.3	H	7.3	H	1	0	05/13/1997	
AAB-044	PA-45	15.5	H	33.0	H	5.6	H	7.5	H	0	0	05/07/1997	
AAB-044	PA-45	15.8	H	32.9	H	4.0	H	7.5	H	0.51	0	05/10/1997	
AAB-045	PA-46	15.7	H	32.7	H	5.2	H	7.5	H	0	0	05/07/1997	
AAB-045	PA-46	15.7	H	32.8	H	2.8	H	7.5	H	1.7	0.01	05/10/1997	
AAB-018	PA-47	16.0	H	33.1	H	4.4	H	7.6	H	0.04	0	05/10/1997	
AAB-018	PA-47	14.8	H	33.0	H	5.2	H	7.4	H	1.81	0.01	05/13/1997	
AAB-017	PA-48	15.9	H	33.2	H	3.9	H	7.5	H	0.41	0	05/10/1997	
AAB-017	PA-48	14.8	H	33.2	H	4.9	H	7.4	H	2.59	0.01	05/13/1997	
AAB-012	PA-49	15.6	H	32.7	H	4.9	H	7.4	H	0.29	0	05/07/1997	
AAB-012	PA-49	15.8	H	32.6	H	3.9	H	7.5	H	2.62	0.01	05/10/1997	
AAB-011	PA-50	15.6	H	32.5	H	4.5	H	7.4	H	0.5	0	05/07/1997	
AAB-011	PA-50	15.7	H	32.6	H	2.4	H	7.4	H	4.78	0.02	05/10/1997	
AAB-014	PA-51	15.9	H	32.8	H	4.9	H	7.4	H	0.55	0	05/07/1997	
AAB-014	PA-51	15.7	H	32.9	H	2.7	H	7.5	H	4.58	0.03	05/10/1997	
AAB-013	PA-52	15.6	H	32.8	H	4.8	H	7.4	H	0.92	0.01	05/07/1997	
AAB-013	PA-52	15.7	H	32.8	H	2.6	H	7.5	H	5.29	0.03	05/10/1997	
AAB-019	PA-53	16.0	H	32.7	H	3.6	H	7.5	H	0.16	0	05/10/1997	
AAB-019	PA-53	14.8	H	32.6	H	4.1	H	7.4	H	2.94	0.01	05/13/1997	
AAB-027	IB-54	15.8	H	32.7	H	5.0	H	7.6	H	0	0	05/03/1997	
AAB-027	IB-54	15.9	H	32.9	H	5.4	H	7.4	H	0	0	05/06/1997	
AAB-028	IB-55	15.8	H	33.1	H	5.3	H	7.6	H	0	0	05/03/1997	
AAB-028	IB-55	15.8	H	33.1	H	5.4	H	7.5	H	0.09	0	05/06/1997	
AAB-029	IB-56	15.9	H	32.6	H	4.7	H	7.5	H	0	0	05/03/1997	
AAB-029	IB-56	15.7	H	32.7	H	5.6	H	7.5	H	0	0	05/06/1997	
AAB-030	IB-57	15.8	H	32.6	H	5.3	H	7.5	H	0	0	05/03/1997	
AAB-030	IB-57	15.6	H	33.0	H	6.7	H	7.6	H	0	0	05/06/1997	
AAB-033	IB-58	15.5	H	32.9	H	5.7	H	7.4	H	0	0	05/07/1997	
AAB-033	IB-58	15.7	H	33.0	H	4.1	H	7.4	H	0	0	05/10/1997	
AAB-034	IB-59	15.6	H	33.0	H	6.3	H	7.5	H	0	0	05/07/1997	
AAB-034	IB-59	15.9	H	33.0	H	5.8	H	7.8	H	0	0	05/10/1997	
AAB-031	PC-63	15.8	H	32.3	H	5.1	H	7.7	H	0	0	05/03/1997	
AAB-031	PC-63	15.9	H	32.3	H	4.7	H	7.4	H	0	0	05/06/1997	

Table D-14. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Ammonia

Sample Identifier	Sediment Treatment	Temperature (° C)		Salinity (ppt)		Dissolved Oxygen (mg/L)		pH (units)		Total Ammonia (mg/L)	Unionized Ammonia (mg/L)	Recording Date	Remarks
AAB-041	AL-64	15.3	H	33.7	H	7.2	H	7.8	H	0	0	05/17/1997	
AAB-041	AL-64	14.8	H	33.9	H	6.0	H	7.6	H	0	0	05/20/1997	
AAB-032	RR-65	15.7	H	33.1	H	6.3	H	7.6	H	0	0	05/03/1997	
AAB-032	RR-65	15.6	H	33.1	H	5.6	H	7.7	H	0	0	05/06/1997	
AAB-039	BF-66	15.9	H	32.7	H	5.8	H	7.5	H	0	0	05/07/1997	
AAB-039	BF-66	15.9	H	32.4	H	3.6	H	7.6	H	2.04	0.02	05/10/1997	
AAB-040	AB-67	15.9	H	32.7	H	5.7	H	7.6	H	0	0	05/07/1997	
AAB-040	AB-67	15.8	H	32.5	H	3.7	H	7.6	H	0.49	0	05/10/1997	
5/4 control	Batch 1 control	15.3	H	33.3	H	7.5	H	7.7	H	0	0	05/03/1997	
5/4 control	Batch 1 control	15.5	H	33.5	H	6.4	H	7.3	H	0	0	05/06/1997	
5/8 control	Batch 2 control	15.4	H	33.1	H	7.9	H	7.6	H	0	0	05/07/1997	
5/8 control	Batch 2 control	15.6	H	33.5	H	6.9	H	7.9	H	0	0	05/10/1997	
5/11 control	Batch 3 control	15.9	H	33.6	H	7.4	H	7.8	H	0	0	05/10/1997	
5/11 control	Batch 3 control	14.7	H	33.8	H	7.1	H	7.8	H	0	0	05/13/1997	
5/18 control	Batch 4 control	15.4	H	33.8	H	7.3	H	7.8	H	0	0	05/17/1997	
5/18 control	Batch 4 control	14.7	H	33.9	H	6.6	H	7.7	H	0	0	05/20/1997	
5/22 control	Batch 5 control	15.3	H	33.6	H	7.4	H	7.7	H	0	0	05/21/1997	
5/22 control	Batch 5 control	14.7	H	34.0	H	6.4	H	7.7	H	0	0	05/24/1997	
5/24 control	Batch 6 control	14.8	H	33.6	H	7.4	H	7.8	H	0	0	05/23/1997	
5/24 control	Batch 6 control	14.0	H	33.3	H	7.1	H	7.9	H	0	0	05/26/1997	

H = composite sample from all replicates

Table D-15. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive		Percent Survival		Number Normal		Percent Normal		Number Abnormal		Recording Date	Remarks
AAB-071	SB-1	1	180	166		92		132		79.5		34		05/29/1997	
AAB-071	SB-1	2	180	134		74.2		102		76.1		32		05/29/1997	
AAB-071	SB-1	3	180	149		82.5		107		71.8		42		05/29/1997	
AAB-071	SB-1	4	180	115		63.7		44		38.3		71		05/29/1997	
AAB-071	SB-1	5	180	158		87.5		147		93		11		05/29/1997	
AAB-072	SB-2	1	180	54	F	29.9	F	54		100		0		05/29/1997	hole in Nitex
AAB-072	SB-2	2	180	103		57.1		81		78.6		22		05/29/1997	
AAB-072	SB-2	3	180	144		79.8		142		98.6		2		05/29/1997	
AAB-072	SB-2	4	180	167		92.5		162		97		5		05/29/1997	
AAB-072	SB-2	5	180	89	F	49.3	F	89		100		0		05/29/1997	hole in Nitex
AAB-073	SB-3	1	180	152		84.2		130		85.5		22		05/29/1997	
AAB-073	SB-3	2	180	134		74.2		96		71.6		38		05/29/1997	
AAB-073	SB-3	3	180	133		73.7		95		71.4		38		05/29/1997	
AAB-073	SB-3	4	180	149		82.5		132		88.6		17		05/29/1997	
AAB-073	SB-3	5	180	152		84.2		130		85.5		22		05/29/1997	
AAB-074	SB-4	1	180	147		81.4		142		96.6		5		05/29/1997	
AAB-074	SB-4	2	180	149		82.5		147		98.7		2		05/29/1997	
AAB-074	SB-4	3	180	162		89.8		160		98.8		2		05/29/1997	
AAB-074	SB-4	4	180	167		92.5		165		98.8		2		05/29/1997	
AAB-074	SB-4	5	180	159		88.1		159		100		0		05/29/1997	
AAB-052	SB-5	1	110	73		66.4		58		79.5		15		05/26/1997	
AAB-052	SB-5	2	110	75		68.2		50		66.7		25		05/26/1997	
AAB-052	SB-5	3	110		F		F		F		F		F	05/26/1997	replicate spilled
AAB-052	SB-5	4	110	83		75.5		60		72.3		23		05/26/1997	
AAB-052	SB-5	5	110	97		88.2		66		68		31		05/26/1997	
AAB-061	SB-6	1	180	148		82		132		89.2		16		05/29/1997	
AAB-061	SB-6	2	180	123		68.1		72		58.5		51		05/29/1997	
AAB-061	SB-6	3	180	133		73.7		54		40.6		79		05/29/1997	
AAB-061	SB-6	4	180	184		101.9		115		62.5		69		05/29/1997	
AAB-061	SB-6	5	180	125		69.3		33		26.4		92		05/29/1997	
AAB-060	SB-7	1	180	153		84.8		148		96.7		5		05/29/1997	
AAB-060	SB-7	2	180	180		99.7		174		96.7		6		05/29/1997	
AAB-060	SB-7	3	180	166		92		154		92.8		12		05/29/1997	
AAB-060	SB-7	4	180	154		85.3		142		92.2		12		05/29/1997	
AAB-060	SB-7	5	180	125		69.3		125		100		0		05/29/1997	
AAB-056	SB-8	1	180	135		74.8		58		43		77		05/29/1997	
AAB-056	SB-8	2	180	111		61.5		48		43.2		63		05/29/1997	
AAB-056	SB-8	3	180	146		80.9		72		49.3		74		05/29/1997	
AAB-056	SB-8	4	180	137		75.9		119		86.9		18		05/29/1997	
AAB-056	SB-8	5	180	157		87		144		91.7		13		05/29/1997	
AAB-055	SB-9	1	180	161		89.2		154		95.7		7		05/29/1997	
AAB-055	SB-9	2	180	53	F	29.4	F	37	F	69.8	F	16	F	05/29/1997	hole in Nitex
AAB-055	SB-9	3	180	161		89.2		155		96.3		6		05/29/1997	
AAB-055	SB-9	4	180	168		93.1		160		95.2		8		05/29/1997	
AAB-055	SB-9	5	180	207		114.7		202		97.6		5		05/29/1997	
AAB-054	SB-10	1	180	160		88.6		140		87.5		20		05/29/1997	
AAB-054	SB-10	2	180	156		86.4		132		84.6		24		05/29/1997	
AAB-054	SB-10	3	180	174		96.4		168		96.6		6		05/29/1997	
AAB-054	SB-10	4	180	167		92.5		112		67.1		55		05/29/1997	
AAB-054	SB-10	5	180	131		72.6		123		93.9		8		05/29/1997	
AAB-050	SB-11	1	110	107		97.3		96		89.7		11		05/26/1997	
AAB-050	SB-11	2	110	91		82.7		73		80.2		18		05/26/1997	
AAB-050	SB-11	3	110	105		95.5		90		85.7		15		05/26/1997	
AAB-050	SB-11	4	110	79		71.8		53		67.1		26		05/26/1997	
AAB-050	SB-11	5	110	95		86.4		66		69.5		29		05/26/1997	
AAB-051	SB-12	1	110	91		82.7		30		33		61		05/26/1997	
AAB-051	SB-12	2	110	82		74.5		10		12.2		72		05/26/1997	
AAB-051	SB-12	3	110	72		65.5		18		25		54		05/26/1997	
AAB-051	SB-12	4	110	86		78.2		26		30.2		60		05/26/1997	
AAB-051	SB-12	5	110	72		65.5		18		25		54		05/26/1997	
AAB-075	SB-13	1	180	139		77		135		97.1		4		05/29/1997	
AAB-075	SB-13	2	180	151		83.7		142		94		9		05/29/1997	
AAB-075	SB-13	3	180	127		70.4		125		98.4		2		05/29/1997	
AAB-075	SB-13	4	180	100		55.4		82		82		18		05/29/1997	
AAB-075	SB-13	5	180	184		101.9		178		96.7		6		05/29/1997	
AAB-049	SB-14	1	110	72		65.5		21		29.2		51		05/26/1997	
AAB-049	SB-14	2	110	97		88.2		57		58.8		40		05/26/1997	

Table D-15. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Percent Survival	Number Normal	Percent Normal	Number Abnormal	Recording Date	Remarks
AAB-049	SB-14	3	110	97	88.2	39	40.2	58	05/26/1997	
AAB-049	SB-14	4	110	78	70.9	50	64.1	28	05/26/1997	
AAB-049	SB-14	5	110	73	66.4	61	83.6	12	05/26/1997	
AAB-076	SB-15	1	180	151	83.7	142	94	9	05/29/1997	
AAB-076	SB-15	2	180	152	84.2	142	93.4	10	05/29/1997	
AAB-076	SB-15	3	180	171	94.7	168	98.2	3	05/29/1997	
AAB-076	SB-15	4	180	136	75.3	128	94.1	8	05/29/1997	
AAB-076	SB-15	5	180	162	89.8	140	86.4	22	05/29/1997	
AAB-025	SB-16	1	110	80	72.7	56	70	24	05/26/1997	
AAB-025	SB-16	2	110	93	84.5	77	82.8	16	05/26/1997	
AAB-025	SB-16	3	110	87	79.1	76	87.4	11	05/26/1997	
AAB-025	SB-16	4	110	125	113.6	100	80	25	05/26/1997	
AAB-025	SB-16	5	110	91	82.7	67	73.6	24	05/26/1997	
AAB-059	SB-17	1	180	192	106.4	184	95.8	8	05/29/1997	
AAB-059	SB-17	2	180	120	66.5	110	91.7	10	05/29/1997	
AAB-059	SB-17	3	180	179	99.2	174	97.2	5	05/29/1997	
AAB-059	SB-17	4	180	166	92	130	78.3	36	05/29/1997	
AAB-059	SB-17	5	180	132	73.1	110	83.3	22	05/29/1997	
AAB-042	SB-18	1	110	90	81.8	77	85.6	13	05/26/1997	
AAB-042	SB-18	2	110	94	85.5	86	91.5	8	05/26/1997	
AAB-042	SB-18	3	110	102	92.7	94	92.2	8	05/26/1997	
AAB-042	SB-18	4	110	90	81.8	66	73.3	24	05/26/1997	
AAB-042	SB-18	5	110	79	71.8	74	93.7	5	05/26/1997	debris obscured visibility
AAB-077	SB-19	1	141	100	70.9	80	80	20	05/31/1997	
AAB-077	SB-19	2	141	112	79.4	96	85.7	16	05/31/1997	
AAB-077	SB-19	3	141	102	72.3	79	77.5	23	05/31/1997	
AAB-077	SB-19	4	141	162	114.9	102	63	60	05/31/1997	
AAB-077	SB-19	5	141	154	109.2	105	68.2	49	05/31/1997	
AAB-053	SB-20	1	110	76	69.1	62	81.6	14	05/26/1997	
AAB-053	SB-20	2	110	94	85.5	84	89.4	10	05/26/1997	
AAB-053	SB-20	3	110	106	96.4	100	94.3	6	05/26/1997	
AAB-053	SB-20	4	110	92	83.6	86	93.5	6	05/26/1997	
AAB-053	SB-20	5	110	98	89.1	80	81.6	18	05/26/1997	
AAB-024	SB-21	1	110	90	81.8	80	88.9	10	05/26/1997	
AAB-024	SB-21	2	110	99	90	96	97	3	05/26/1997	
AAB-024	SB-21	3	110	112	101.8	106	94.6	6	05/26/1997	
AAB-024	SB-21	4	110	90	81.8	84	93.3	6	05/26/1997	
AAB-024	SB-21	5	110	91	82.7	81	89	10	05/26/1997	
AAB-026	SB-22	1	110	92	83.6	86	93.5	6	05/26/1997	hole in Nitex
AAB-026	SB-22	2	110	120	109.1	114	95	6	05/26/1997	
AAB-026	SB-22	3	110	116	105.5	95	81.9	21	05/26/1997	
AAB-026	SB-22	4	110	78	70.9	67	85.9	11	05/26/1997	
AAB-026	SB-22	5	110	95	86.4	88	92.6	7	05/26/1997	
AAB-043	SB-23	1	110	81	73.6	55	67.9	26	05/26/1997	
AAB-043	SB-23	2	110	93	84.5	88	94.6	5	05/26/1997	
AAB-043	SB-23	3	110	85	77.3	66	77.6	19	05/26/1997	
AAB-043	SB-23	4	110	109	99.1	102	93.6	7	05/26/1997	
AAB-043	SB-23	5	110	90	81.8	85	94.4	5	05/26/1997	
AAB-065	OR-24	1	141	96	68.1	74	77.1	22	05/31/1997	
AAB-065	OR-24	2	141	99	70.2	96	97	3	05/31/1997	
AAB-065	OR-24	3	141	83	58.9	33	39.8	50	05/31/1997	
AAB-065	OR-24	4	141	105	74.5	91	86.7	14	05/31/1997	
AAB-065	OR-24	5	141	109	77.3	91	83.5	18	05/31/1997	
AAB-057	OR-25	1	180	112	62	0	0	112	05/29/1997	
AAB-057	OR-25	2	180	106	58.7	0	0	106	05/29/1997	
AAB-057	OR-25	3	180	146	80.9	32	21.9	114	05/29/1997	
AAB-057	OR-25	4	180	84	46.5	0	0	84	05/29/1997	
AAB-057	OR-25	5	180	82	45.4	17	20.7	65	05/29/1997	
AAB-066	OR-26	1	141	100	70.9	74	74	26	05/31/1997	
AAB-066	OR-26	2	141	100	70.9	60	60	40	05/31/1997	
AAB-066	OR-26	3	141	129	91.5	129	100	0	05/31/1997	
AAB-066	OR-26	4	141	93	66	44	47.3	49	05/31/1997	
AAB-066	OR-26	5	141	114	80.9	78	68.4	36	05/31/1997	
AAB-067	OR-27	1	141	120	85.1	106	88.3	14	05/31/1997	
AAB-067	OR-27	2	141	96	68.1	66	68.8	30	05/31/1997	
AAB-067	OR-27	3	141	90	63.8	6	6.7	84	05/31/1997	
AAB-067	OR-27	4	141	131	92.9	89	67.9	42	05/31/1997	
AAB-067	OR-27	5	141	126	89.4	70	55.6	56	05/31/1997	

Table D-15. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Percent Survival	Number Normal	Percent Normal	Number Abnormal	Recording Date	Remarks
AAB-023	OR-28	1	110	80	72.7	44	55	36	05/26/1997	
AAB-023	OR-28	2	110	70	63.6	59	84.3	11	05/26/1997	
AAB-023	OR-28	3	110	81	73.6	70	86.4	11	05/26/1997	
AAB-023	OR-28	4	110	90	81.8	79	87.8	11	05/26/1997	
AAB-023	OR-28	5	110	79	71.8	57	72.2	22	05/26/1997	
AAB-068	OR-29	1	141	76	53.9	28	36.8	48	05/31/1997	
AAB-068	OR-29	2	141	116	82.3	106	91.4	10	05/31/1997	
AAB-068	OR-29	3	141	106	75.2	86	81.1	20	05/31/1997	
AAB-068	OR-29	4	141	124	87.9	118	95.2	6	05/31/1997	
AAB-068	OR-29	5	141	99	70.2	55	55.6	44	05/31/1997	
AAB-064	EW-30	1	180	145	80.3	135	93.1	10	05/29/1997	
AAB-064	EW-30	2	180	156	86.4	129	82.7	27	05/29/1997	
AAB-064	EW-30	3	180	127	70.4	114	89.8	13	05/29/1997	
AAB-064	EW-30	4	180	152	84.2	121	79.6	31	05/29/1997	
AAB-064	EW-30	5	180	138	76.5	114	82.6	24	05/29/1997	
AAB-058	EW-31	1	180	140	77.6	126	90	14	05/29/1997	
AAB-058	EW-31	2	180	122	67.6	118	96.7	4	05/29/1997	
AAB-058	EW-31	3	180	122	67.6	91	74.6	31	05/29/1997	
AAB-058	EW-31	4	180	103	57.1	77	74.8	26	05/29/1997	
AAB-058	EW-31	5	180	111	61.5	93	83.8	18	05/29/1997	
AAB-022	EW-32	1	110	101	91.8	88	87.1	13	05/26/1997	
AAB-022	EW-32	2	110	91	82.7	81	89	10	05/26/1997	
AAB-022	EW-32	3	110	108	98.2	42	38.9	66	05/26/1997	
AAB-022	EW-32	4	110	59	53.6	13	22	46	05/26/1997	
AAB-022	EW-32	5	110	64	58.2	15	23.4	49	05/26/1997	
AAB-063	EW-33	1	180	100	55.4	40	40	60	05/29/1997	
AAB-063	EW-33	2	180	102	56.5	21	20.6	81	05/29/1997	
AAB-063	EW-33	3	180	127	70.4	65	51.2	62	05/29/1997	
AAB-063	EW-33	4	180	97	53.7	60	61.9	37	05/29/1997	
AAB-063	EW-33	5	180	127	70.4	118	92.9	9	05/29/1997	
AAB-036	EW-34	1	151	112	74	110	98.2	2	05/23/1997	
AAB-036	EW-34	2	151	114	75.4	108	94.7	6	05/23/1997	
AAB-036	EW-34	3	151	120	79.3	108	90	12	05/23/1997	
AAB-036	EW-34	4	151	143	94.5	135	94.4	8	05/23/1997	
AAB-036	EW-34	5	151	114	75.4	108	94.7	6	05/23/1997	
AAB-037	EW-35	1	151	90	59.5	87	96.7	3	05/23/1997	
AAB-037	EW-35	2	151	122	80.7	117	95.9	5	05/23/1997	
AAB-037	EW-35	3	151	111	73.4	106	95.5	5	05/23/1997	
AAB-037	EW-35	4	151	161	106.4	153	95	8	05/23/1997	
AAB-037	EW-35	5	151	137	90.6	132	96.4	5	05/23/1997	
AAB-062	EW-36	1	180	122	67.6	120	98.4	2	05/29/1997	debris obscured visibility
AAB-062	EW-36	2	180	143	79.2	140	97.9	3	05/29/1997	
AAB-062	EW-36	3	180	163	90.3	153	93.9	10	05/29/1997	
AAB-062	EW-36	4	180	117	64.8	96	82.1	21	05/29/1997	
AAB-062	EW-36	5	180	177	98.1	121	68.4	56	05/29/1997	
AAB-038	EW-37	1	151	159	105.1	128	80.5	31	05/23/1997	
AAB-038	EW-37	2	151	137	90.6	120	87.6	17	05/23/1997	
AAB-038	EW-37	3	151	178	117.7	168	94.4	10	05/23/1997	
AAB-038	EW-37	4	151	120	79.3	117	97.5	3	05/23/1997	
AAB-038	EW-37	5	151	184	121.7	170	92.4	14	05/23/1997	
AAB-048	PA-38	1	151	160	105.8	141	88.1	19	05/23/1997	
AAB-048	PA-38	2	151	146	96.5	130	89	16	05/23/1997	
AAB-048	PA-38	3	151	184	121.6	148	80.4	36	05/23/1997	
AAB-048	PA-38	4	151	123	81.3	120	97.6	3	05/23/1997	
AAB-048	PA-38	5	151	168	111.1	146	86.9	22	05/23/1997	
AAB-046	PA-39	1	151	112	74	110	98.2	2	05/23/1997	
AAB-046	PA-39	2	151	162	107.1	158	97.5	4	05/23/1997	
AAB-046	PA-39	3	151	161	106.4	158	98.1	3	05/23/1997	
AAB-046	PA-39	4	151	162	107.1	150	92.6	12	05/23/1997	
AAB-046	PA-39	5	151	196	129.6	183	93.4	13	05/23/1997	
AAB-047	PA-40	1	151	152	100.5	150	98.7	2	05/23/1997	
AAB-047	PA-40	2	151	157	103.8	157	100	0	05/23/1997	
AAB-047	PA-40	3	151	127	84.7	125	98.4	2	05/23/1997	
AAB-047	PA-40	4	151	122	80.7	117	95.9	5	05/23/1997	
AAB-047	PA-40	5	151	152	100.5	145	95.4	7	05/23/1997	
AAB-021	PA-41	1	151	121	80	118	97.5	3	05/23/1997	
AAB-021	PA-41	2	151	133	87.9	120	90.2	13	05/23/1997	
AAB-021	PA-41	3	151	120	79.3	111	92.5	9	05/23/1997	

Table D-15. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Percent Survival	Number Normal	Percent Normal	Number Abnormal	Recording Date	Remarks
AAB-021	PA-41	4	151	116	76.7	105	90.5	11	05/23/1997	
AAB-021	PA-41	5	151	104	68.8	99	95.2	5	05/23/1997	
AAB-015	PA-42	1	143	109	76.5	79	72.5	30	05/21/1997	
AAB-015	PA-42	2	143	77	54 F	33 F	42.9 F	44 F	05/21/1997	Low D.O.
AAB-015	PA-42	3	143	98	68.8 F	0 F	0 F	98 F	05/21/1997	Low D.O.
AAB-015	PA-42	4	143	65	45.6 F	0 F	0 F	65 F	05/21/1997	Low D.O.
AAB-015	PA-42	5	143	71	49.8 F	10 F	14.1 F	61 F	05/21/1997	Low D.O.
AAB-016	PA-43	1	151	99	65.4	84	84.8	15	05/23/1997	
AAB-016	PA-43	2	151	155	102.5	153	98.7	2	05/23/1997	
AAB-016	PA-43	3	151	157	103.8	154	98.1	3	05/23/1997	
AAB-016	PA-43	4	151	164	108.4	162	98.8	2	05/23/1997	
AAB-016	PA-43	5	151	123	81.3	120	97.6	3	05/23/1997	
AAB-020	PA-44	1	151	115	76	114	99.1	1	05/23/1997	
AAB-020	PA-44	2	151	119	78.7	117	98.3	2	05/23/1997	
AAB-020	PA-44	3	151	128	84.6	125	97.7	3	05/23/1997	
AAB-020	PA-44	4	151	130	86	128	98.5	2	05/23/1997	
AAB-020	PA-44	5	151	125	82.6	120	96	5	05/23/1997	
AAB-044	PA-45	1	143	107	75.1	102	95.3	5	05/21/1997	
AAB-044	PA-45	2	143	121	84.9	108	89.3	13	05/21/1997	
AAB-044	PA-45	3	143	170	119.3	154	90.6	16	05/21/1997	
AAB-044	PA-45	4	143	160	112.3	135	84.4	25	05/21/1997	
AAB-044	PA-45	5	143	124	87	105	84.7	19	05/21/1997	
AAB-045	PA-46	1	143	108	75.8	106	98.1	2	05/21/1997	Low D.O.
AAB-045	PA-46	2	143	87	61	84	96.6	3	05/21/1997	Low D.O.
AAB-045	PA-46	3	143	148	103.9	145	98	3	05/21/1997	
AAB-045	PA-46	4	143	146	102.5	146	100	0	05/21/1997	Low D.O.
AAB-045	PA-46	5	143	133	93.3	114	85.7	19	05/21/1997	Low D.O.
AAB-018	PA-47	1	151	119	78.7	117	98.3	2	05/23/1997	
AAB-018	PA-47	2	151	128	84.6	118	92.2	10	05/23/1997	
AAB-018	PA-47	3	151	141	93.2	137	97.2	4	05/23/1997	
AAB-018	PA-47	4	151	144	95.2	142	98.6	2	05/23/1997	
AAB-018	PA-47	5	151	144	95.2	142	98.6	2	05/23/1997	
AAB-017	PA-48	1	151	119	78.7	116	97.5	3	05/23/1997	
AAB-017	PA-48	2	151	150	99.2	150	100	0	05/23/1997	
AAB-017	PA-48	3	151	123	81.3	112	91.1	11	05/23/1997	
AAB-017	PA-48	4	151	157	103.8	153	97.5	4	05/23/1997	
AAB-017	PA-48	5	151	104	68.8	100	96.2	4	05/23/1997	
AAB-012	PA-49	1	143	120	84.2	111	92.5	9	05/21/1997	
AAB-012	PA-49	2	143	56	39.3	2	3.6	54	05/21/1997	
AAB-012	PA-49	3	143	70	49.1	18	25.7	52	05/21/1997	
AAB-012	PA-49	4	143	84	58.9	0	0	84	05/21/1997	
AAB-012	PA-49	5	143	115	80.7	99	86.1	16	05/21/1997	
AAB-011	PA-50	1	143	74	51.9 F	2 F	2.7 F	72 F	05/21/1997	Low D.O.
AAB-011	PA-50	2	143	118	82.8 F	0 F	0 F	118 F	05/21/1997	Low D.O.
AAB-011	PA-50	3	143	120	84.2 F	5 F	4.2 F	115 F	05/21/1997	Low D.O.
AAB-011	PA-50	4	143	146	102.5 F	0 F	0 F	146 F	05/21/1997	Low D.O.
AAB-011	PA-50	5	143	52	36.5 F	0 F	0 F	52 F	05/21/1997	Low D.O.
AAB-014	PA-51	1	143	47	33 F	7 F	14.9 F	40 F	05/21/1997	Low D.O.
AAB-014	PA-51	2	143	87	61 F	36 F	41.4 F	51 F	05/21/1997	Low D.O.
AAB-014	PA-51	3	143	92	64.6	74	80.4	18	05/21/1997	
AAB-014	PA-51	4	143	85	59.6 F	2 F	2.4 F	83 F	05/21/1997	Low D.O.
AAB-014	PA-51	5	143	147	103.2	80	54.4	67	05/21/1997	
AAB-013	PA-52	1	143	F	F	F	F	F	05/21/1997	replicate spilled
AAB-013	PA-52	2	143	108	75.8	93	86.1	15	05/21/1997	Low D.O.
AAB-013	PA-52	3	143	120	84.2	104	86.7	16	05/21/1997	Low D.O.
AAB-013	PA-52	4	143	129	90.5	122	94.6	7	05/21/1997	
AAB-013	PA-52	5	143	142	99.6	134	94.4	8	05/21/1997	Low D.O.
AAB-019	PA-53	1	151	125	82.6	124	99.2	1	05/23/1997	
AAB-019	PA-53	2	151	162	107.1	159	98.1	3	05/23/1997	
AAB-019	PA-53	3	151	142	93.9	132	93	10	05/23/1997	
AAB-019	PA-53	4	151	114	75.4	108	94.7	6	05/23/1997	
AAB-019	PA-53	5	151	170	112.4	168	98.8	2	05/23/1997	
AAB-027	IB-54	1	174	106	60.8	14	13.2	92	05/09/1997	
AAB-027	IB-54	2	174	79	45.3	31	39.2	48	05/09/1997	
AAB-027	IB-54	3	174	91	52.2	63	69.2	28	05/09/1997	
AAB-027	IB-54	4	174	108	62	72	66.7	36	05/09/1997	
AAB-027	IB-54	5	174	97	55.7	40	41.2	57	05/09/1997	

Table D-15. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive		Percent Survival	Number Normal		Percent Normal	Number Abnormal		Recording Date	Remarks
AAB-028	IB-55	1	174	120	F	68.9	120	F	100	0	F	05/09/1997	2X count of 5-mL volume
AAB-028	IB-55	2	174	132	F	75.8	126	F	95.5	6	F	05/09/1997	2X count of 5-mL volume
AAB-028	IB-55	3	174	84	F	48.2	78	F	92.9	6	F	05/09/1997	2X count of 5-mL volume
AAB-028	IB-55	4	174	190	F	109	190	F	100	0	F	05/09/1997	2X count of 5-mL volume
AAB-028	IB-55	5	174	116	F	66.6	106	F	91.4	10	F	05/09/1997	2X count of 5-mL volume
AAB-029	IB-56	1	174	166	F	95.3	142	F	85.5	24	F	05/09/1997	2X count of 5-mL volume
AAB-029	IB-56	2	174	178	F	102.2	154	F	86.5	24	F	05/09/1997	2X count of 5-mL volume
AAB-029	IB-56	3	174	138	F	79.2	132	F	95.7	6	F	05/09/1997	2X count of 5-mL volume
AAB-029	IB-56	4	174	220	F	126.3	214	F	97.3	6	F	05/09/1997	2X count of 5-mL volume
AAB-029	IB-56	5	174	144	F	82.6	124	F	86.1	20	F	05/09/1997	2X count of 5-mL volume
AAB-030	IB-57	1	174	104	F	59.7	102	F	98.1	2	F	05/09/1997	2X count of 5-mL volume
AAB-030	IB-57	2	174	156	F	89.5	152	F	97.4	4	F	05/09/1997	2X count of 5-mL volume
AAB-030	IB-57	3	174	164	F	94.1	150	F	91.5	14	F	05/09/1997	2X count of 5-mL volume
AAB-030	IB-57	4	174	168	F	96.4	160	F	95.2	8	F	05/09/1997	2X count of 5-mL volume
AAB-030	IB-57	5	174	148	F	84.9	136	F	91.9	12	F	05/09/1997	2X count of 5-mL volume
AAB-033	IB-58	1	143	95		66.7	84		88.4	11		05/21/1997	
AAB-033	IB-58	2	143	86		60.4	24		27.9	62		05/21/1997	
AAB-033	IB-58	3	143	102		71.6	20		19.6	82		05/21/1997	
AAB-033	IB-58	4	143	97		68.1	11		11.3	86		05/21/1997	
AAB-033	IB-58	5	143	99		69.5	14		14.1	85		05/21/1997	
AAB-034	IB-59	1	143	92		64.6	0		0	92		05/21/1997	
AAB-034	IB-59	2	143	99		69.5	20		20.2	79		05/21/1997	
AAB-034	IB-59	3	143	120		84.2	93		77.5	27		05/21/1997	
AAB-034	IB-59	4	143	126		88.4	82		65.1	44		05/21/1997	
AAB-034	IB-59	5	143	130		91.2	49		37.7	81		05/21/1997	
AAB-031	PC-63	1	174	145		83.2	143		98.6	2		05/09/1997	
AAB-031	PC-63	2	174	148		84.9	146		98.6	2		05/09/1997	
AAB-031	PC-63	3	174	144		82.6	140		97.2	4		05/09/1997	
AAB-031	PC-63	4	174	130		74.6	125		96.2	5		05/09/1997	
AAB-031	PC-63	5	174	162		93	162		100	0		05/09/1997	
AAB-041	AL-64	1	110	84		76.4	71		84.5	13		05/26/1997	
AAB-041	AL-64	2	110	97		88.2	79		81.4	18		05/26/1997	
AAB-041	AL-64	3	110	121		110	108		89.3	13		05/26/1997	
AAB-041	AL-64	4	110	95		86.4	87		91.6	8		05/26/1997	
AAB-041	AL-64	5	110	114		103.6	99		86.8	15		05/26/1997	
AAB-032	RR-65	1	174	156	F	89.5	154	F	98.7	2	F	05/09/1997	2X count of 5-mL volume
AAB-032	RR-65	2	174	190	F	109	178	F	93.7	12	F	05/09/1997	2X count of 5-mL volume
AAB-032	RR-65	3	174	142	F	81.5	134	F	94.4	8	F	05/09/1997	2X count of 5-mL volume
AAB-032	RR-65	4	174	148	F	84.9	136	F	91.9	12	F	05/09/1997	2X count of 5-mL volume
AAB-032	RR-65	5	174	102	F	58.5	100	F	98	2	F	05/09/1997	2X count of 5-mL volume
AAB-039	BF-66	1	143	128		89.8	40		31.3	88		05/21/1997	
AAB-039	BF-66	2	143	138		96.8	71		51.4	67		05/21/1997	
AAB-039	BF-66	3	143	104		73	62		59.6	42		05/21/1997	
AAB-039	BF-66	4	143	110		77.2	78		70.9	32		05/21/1997	
AAB-039	BF-66	5	143	143		100.4	125		87.4	18		05/21/1997	
AAB-040	AB-67	1	143	116		81.4	114		98.3	2		05/21/1997	
AAB-040	AB-67	2	143	125		87.7	122		97.6	3		05/21/1997	
AAB-040	AB-67	3	143	120		84.2	112		93.3	8		05/21/1997	
AAB-040	AB-67	4	143	159		111.6	154		96.9	5		05/21/1997	
AAB-040	AB-67	5	143	116		81.4	115		99.1	1		05/21/1997	
5/4 control	atch 1 contr	1	174	172		98.7	164		95.3	8		05/09/1997	
5/4 control	atch 1 contr	2	174	169		97	162		95.9	7		05/09/1997	
5/4 control	atch 1 contr	3	174	155		89	150		96.8	5		05/09/1997	
5/4 control	atch 1 contr	4	174	152		87.2	144		94.7	8		05/09/1997	
5/4 control	atch 1 contr	5	174	162		93	157		96.9	5		05/09/1997	
5/8 control	atch 2 contr	1	143	130		91.2	120		92.3	10		05/21/1997	
5/8 control	atch 2 contr	2	143	119		83.5	107		89.9	12		05/21/1997	
5/8 control	atch 2 contr	3	143	129		90.5	117		90.7	12		05/21/1997	
5/8 control	atch 2 contr	4	143	105		73.7	99		94.3	6		05/21/1997	
5/8 control	atch 2 contr	5	143	92		64.6	90		97.8	2		05/21/1997	
5/11 control	atch 3 contr	1	151		F		F	F		F	F	05/23/1997	replicate spilled
5/11 control	atch 3 contr	2	151	138		91.2	132		95.7	6		05/23/1997	
5/11 control	atch 3 contr	3	151	101		66.8	99		98	2		05/23/1997	
5/11 control	atch 3 contr	4	151	123		81.3	120		97.6	3		05/23/1997	
5/11 control	atch 3 contr	5	151	141		93.2	135		95.7	6		05/23/1997	
5/18 control	atch 4 contr	1	110	86		78.2	75		87.2	11		05/26/1997	
5/18 control	atch 4 contr	2	110	78		70.9	72		92.3	6		05/26/1997	
5/18 control	atch 4 contr	3	110	107		97.3	94		87.9	13		05/26/1997	
5/18 control	atch 4 contr	4	110	112		101.8	98		87.5	14		05/26/1997	
5/18 control	atch 4 contr	5	110	77		70	67		87	10		05/26/1997	

Table D-15. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Percent Survival	Number Normal	Percent Normal	Number Abnormal	Recording Date	Remarks
5/22 control	atch 5 contr	1	180	129	71.5	125	96.9	4	05/29/1997	
5/22 control	atch 5 contr	2	180	138	76.4	133	96.4	5	05/29/1997	
5/22 control	atch 5 contr	3	180	222	123	218	98.2	4	05/29/1997	
5/22 control	atch 5 contr	4	180	157	87	153	97.5	4	05/29/1997	
5/22 control	atch 5 contr	5	180	162	89.8	158	97.5	4	05/29/1997	
5/24 control	atch 6 contr	1	141	123	87.2	118	95.9	5	05/31/1997	
5/24 control	atch 6 contr	2	141	106	75.2	103	97.2	3	05/31/1997	
5/24 control	atch 6 contr	3	141	117	83	110	94	7	05/31/1997	
5/24 control	atch 6 contr	4	141	103	73	101	98.1	2	05/31/1997	
5/24 control	atch 6 contr	5	141	105	74.5	102	97.1	3	05/31/1997	

F = see remarks.

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-071	1	SB-1	1	15.4	33.1	7.4	7.6	05/21/1997	Initial WQ
AAB-071	1	SB-1	2	15.4	33.0	7.1	7.7	05/21/1997	Initial WQ
AAB-071	1	SB-1	3	15.4	33.2	7.2	7.5	05/21/1997	Initial WQ
AAB-071	1	SB-1	4	15.4	33.2	7.1	7.7	05/21/1997	Initial WQ
AAB-071	1	SB-1	5	15.4	33.2	7.4	7.7	05/21/1997	Initial WQ
AAB-071	1	SB-1	1	15.1	33.5	7.2	7.4	05/24/1997	Termination WQ
AAB-071	1	SB-1	2	14.9	33.1	7.2	7.4	05/24/1997	Termination WQ
AAB-071	1	SB-1	3	14.8	32.9	6.9	7.3	05/24/1997	Termination WQ
AAB-071	1	SB-1	4	14.9	33.1	7.2	7.3	05/24/1997	Termination WQ
AAB-071	1	SB-1	5	14.9	33.2	7.4	7.4	05/24/1997	Termination WQ
AAB-072	2	SB-2	1	15.8	33.6	7.3	7.5	05/21/1997	Initial WQ
AAB-072	2	SB-2	2	15.7	33.7	7.2	7.5	05/21/1997	Initial WQ
AAB-072	2	SB-2	3	15.6	33.7	7.1	7.5	05/21/1997	Initial WQ
AAB-072	2	SB-2	4	15.6	33.5	7.2	7.6	05/21/1997	Initial WQ
AAB-072	2	SB-2	5	15.7	33.8	7.4	7.5	05/21/1997	Initial WQ
AAB-072	2	SB-2	1	15.2	33.3	7.1	7.4	05/24/1997	Termination WQ
AAB-072	2	SB-2	2	14.9	33.0	7.3	7.3	05/24/1997	Termination WQ
AAB-072	2	SB-2	3	14.9	33.0	7.2	7.3	05/24/1997	Termination WQ
AAB-072	2	SB-2	4	14.9	33.0	7.5	7.3	05/24/1997	Termination WQ
AAB-072	2	SB-2	5	14.9	33.1	6.3	7.3	05/24/1997	Termination WQ
AAB-073	3	SB-3	1	15.6	33.7	7.2	7.5	05/21/1997	Initial WQ
AAB-073	3	SB-3	2	15.4	33.7	7.2	7.5	05/21/1997	Initial WQ
AAB-073	3	SB-3	3	15.6	33.7	7.0	7.5	05/21/1997	Initial WQ
AAB-073	3	SB-3	4	15.7	33.7	7.1	7.5	05/21/1997	Initial WQ
AAB-073	3	SB-3	5	15.4	33.2	7.1	7.5	05/21/1997	Initial WQ
AAB-073	3	SB-3	1	15.0	33.7	7.2	7.3	05/24/1997	Termination WQ
AAB-073	3	SB-3	2	14.9	33.5	4.6	7.6	05/24/1997	Termination WQ
AAB-073	3	SB-3	3	14.9	33.0	7.2	7.5	05/24/1997	Termination WQ
AAB-073	3	SB-3	4	14.9	33.0	7.2	7.3	05/24/1997	Termination WQ
AAB-073	3	SB-3	5	14.9	33.0	7.4	7.3	05/24/1997	Termination WQ
AAB-074	4	SB-4	1	15.8	33.7	7.6	7.6	05/21/1997	Initial WQ
AAB-074	4	SB-4	2	15.6	33.7	7.4	7.7	05/21/1997	Initial WQ
AAB-074	4	SB-4	3	15.4	33.7	7.4	7.6	05/21/1997	Initial WQ
AAB-074	4	SB-4	4	15.3	33.6	7.5	7.7	05/21/1997	Initial WQ
AAB-074	4	SB-4	5	15.3	33.8	7.5	7.7	05/21/1997	Initial WQ
AAB-074	4	SB-4	1	15.0	33.4	7.0	7.5	05/24/1997	Termination WQ
AAB-074	4	SB-4	2	15.0	33.0	7.2	7.4	05/24/1997	Termination WQ
AAB-074	4	SB-4	3	14.9	33.0	7.3	7.4	05/24/1997	Termination WQ
AAB-074	4	SB-4	4	14.9	33.1	7.3	7.4	05/24/1997	Termination WQ
AAB-074	4	SB-4	5	15.1	32.8	7.4	7.3	05/24/1997	Termination WQ
AAB-052	5	SB-5	1	15.1	32.8	7.1	7.6	05/17/1997	Initial WQ
AAB-052	5	SB-5	2	15.1	32.8	7.0	7.6	05/17/1997	Initial WQ
AAB-052	5	SB-5	3	15.1	32.8	7.0	7.7	05/17/1997	Initial WQ
AAB-052	5	SB-5	4	15.1	32.8	7.2	7.7	05/17/1997	Initial WQ
AAB-052	5	SB-5	5	15.1	33.0	7.2	7.7	05/17/1997	Initial WQ
AAB-052	5	SB-5	1	14.8	33.1	4.0	7.2	05/20/1997	Termination WQ
AAB-052	5	SB-5	2	14.7	32.8	4.0	7.3	05/20/1997	Termination WQ
AAB-052	5	SB-5	3	14.7	33.0	4.0	7.3	05/20/1997	Termination WQ
AAB-052	5	SB-5	4	14.7	32.7	4.0	7.2	05/20/1997	Termination WQ
AAB-052	5	SB-5	5	14.7	33.2	4.0	7.3	05/20/1997	Termination WQ
AAB-061	6	SB-6	1	15.6	32.7	7.4	7.7	05/21/1997	Initial WQ
AAB-061	6	SB-6	2	15.3	32.9	7.4	7.7	05/21/1997	Initial WQ
AAB-061	6	SB-6	3	15.3	33.2	7.4	7.6	05/21/1997	Initial WQ
AAB-061	6	SB-6	4	15.3	33.2	7.4	7.6	05/21/1997	Initial WQ
AAB-061	6	SB-6	5	15.3	33.2	7.4	7.6	05/21/1997	Initial WQ
AAB-061	6	SB-6	1	14.8	32.9	7.2	7.3	05/24/1997	Termination WQ
AAB-061	6	SB-6	2	14.8	32.6	7.2	7.3	05/24/1997	Termination WQ
AAB-061	6	SB-6	3	14.9	32.8	7.4	7.4	05/24/1997	Termination WQ
AAB-061	6	SB-6	4	14.9	32.8	7.4	7.4	05/24/1997	Termination WQ
AAB-061	6	SB-6	5	14.8	32.8	6.8	7.3	05/24/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-060	7	SB-7	1	15.2	33.0	7.4	7.6	05/21/1997	Initial WQ
AAB-060	7	SB-7	2	15.7	33.2	7.4	7.6	05/21/1997	Initial WQ
AAB-060	7	SB-7	3	15.6	33.0	7.4	7.7	05/21/1997	Initial WQ
AAB-060	7	SB-7	4	15.4	32.9	7.4	7.6	05/21/1997	Initial WQ
AAB-060	7	SB-7	5	15.3	33.2	7.5	7.7	05/21/1997	Initial WQ
AAB-060	7	SB-7	1	14.9	33.1	7.1	7.4	05/24/1997	Termination WQ
AAB-060	7	SB-7	2	15.1	33.0	7.1	7.5	05/24/1997	Termination WQ
AAB-060	7	SB-7	3	14.9	32.8	7.2	7.5	05/24/1997	Termination WQ
AAB-060	7	SB-7	4	14.9	33.2	7.2	7.5	05/24/1997	Termination WQ
AAB-060	7	SB-7	5	14.9	33.2	7.2	7.5	05/24/1997	Termination WQ
AAB-056	8	SB-8	1	15.8	33.3	7.4	7.7	05/21/1997	Initial WQ
AAB-056	8	SB-8	2	15.6	33.0	7.3	7.7	05/21/1997	Initial WQ
AAB-056	8	SB-8	3	15.5	32.9	7.4	7.6	05/21/1997	Initial WQ
AAB-056	8	SB-8	4	15.6	33.0	7.5	7.7	05/21/1997	Initial WQ
AAB-056	8	SB-8	5	15.6	33.2	7.5	7.7	05/21/1997	Initial WQ
AAB-056	8	SB-8	1	15.1	33.7	7.0	7.4	05/24/1997	Termination WQ
AAB-056	8	SB-8	2	15.0	32.9	7.2	7.3	05/24/1997	Termination WQ
AAB-056	8	SB-8	3	15.1	32.8	7.4	7.3	05/24/1997	Termination WQ
AAB-056	8	SB-8	4	15.2	32.9	7.4	7.4	05/24/1997	Termination WQ
AAB-056	8	SB-8	5	15.2	33.0	7.2	7.4	05/24/1997	Termination WQ
AAB-055	9	SB-9	1	15.8	32.0	7.2	7.6	05/21/1997	Initial WQ
AAB-055	9	SB-9	2	15.3	32.9	7.2	7.6	05/21/1997	Initial WQ
AAB-055	9	SB-9	3	15.3	33.3	7.1	7.6	05/21/1997	Initial WQ
AAB-055	9	SB-9	4	15.2	33.3	7.4	7.7	05/21/1997	Initial WQ
AAB-055	9	SB-9	5	15.3	33.6	7.5	7.7	05/21/1997	Initial WQ
AAB-055	9	SB-9	1	15.2	33.8	7.2	7.5	05/24/1997	Termination WQ
AAB-055	9	SB-9	2	15.1	33.3	7.2	7.4	05/24/1997	Termination WQ
AAB-055	9	SB-9	3	14.9	33.3	7.2	7.4	05/24/1997	Termination WQ
AAB-055	9	SB-9	4	14.9	33.7	7.4	7.4	05/24/1997	Termination WQ
AAB-055	9	SB-9	5	15.1	33.5	7.4	7.5	05/24/1997	Termination WQ
AAB-054	10	SB-10	1	15.6	33.2	7.4	7.7	05/21/1997	Initial WQ
AAB-054	10	SB-10	2	15.6	33.2	7.3	7.7	05/21/1997	Initial WQ
AAB-054	10	SB-10	3	15.3	32.8	7.3	7.6	05/21/1997	Initial WQ
AAB-054	10	SB-10	4	15.3	33.1	7.3	7.7	05/21/1997	Initial WQ
AAB-054	10	SB-10	5	15.4	33.2	7.5	7.7	05/21/1997	Initial WQ
AAB-054	10	SB-10	1	15.0	33.3	7.3	7.3	05/24/1997	Termination WQ
AAB-054	10	SB-10	2	15.0	33.1	7.2	7.3	05/24/1997	Termination WQ
AAB-054	10	SB-10	3	14.9	32.8	7.3	7.3	05/24/1997	Termination WQ
AAB-054	10	SB-10	4	14.8	32.8	7.4	7.2	05/24/1997	Termination WQ
AAB-054	10	SB-10	5	14.8	33.0	7.4	7.2	05/24/1997	Termination WQ
AAB-050	11	SB-11	1	15.6	33.2	7.1	7.7	05/17/1997	Initial WQ
AAB-050	11	SB-11	2	15.7	33.0	7.1	7.7	05/17/1997	Initial WQ
AAB-050	11	SB-11	3	15.3	33.0	7.1	7.6	05/17/1997	Initial WQ
AAB-050	11	SB-11	4	15.6	33.1	7.1	7.6	05/17/1997	Initial WQ
AAB-050	11	SB-11	5	15.5	32.8	7.0	7.6	05/17/1997	Initial WQ
AAB-050	11	SB-11	1	14.7	33.2	7.3	7.5	05/20/1997	Termination WQ
AAB-050	11	SB-11	2	14.8	33.1	7.4	7.4	05/20/1997	Termination WQ
AAB-050	11	SB-11	3	14.7	32.9	7.3	7.3	05/20/1997	Termination WQ
AAB-050	11	SB-11	4	14.7	33.2	7.3	7.2	05/20/1997	Termination WQ
AAB-050	11	SB-11	5	14.7	32.9	7.3	7.2	05/20/1997	Termination WQ
AAB-051	12	SB-12	1	15.7	33.0	7.0	7.6	05/17/1997	Initial WQ
AAB-051	12	SB-12	2	15.4	32.9	7.0	7.6	05/17/1997	Initial WQ
AAB-051	12	SB-12	3	15.3	32.8	7.0	7.7	05/17/1997	Initial WQ
AAB-051	12	SB-12	4	15.3	32.8	7.1	7.6	05/17/1997	Initial WQ
AAB-051	12	SB-12	5	15.3	33.0	7.2	7.6	05/17/1997	Initial WQ
AAB-051	12	SB-12	1	14.9	33.1	7.3	7.2	05/20/1997	Termination WQ
AAB-051	12	SB-12	2	14.7	32.9	7.3	7.2	05/20/1997	Termination WQ
AAB-051	12	SB-12	3	14.7	32.9	7.3	7.2	05/20/1997	Termination WQ
AAB-051	12	SB-12	4	14.7	32.8	7.3	7.2	05/20/1997	Termination WQ
AAB-051	12	SB-12	5	14.7	33.2	7.3	7.2	05/20/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-075	13	SB-13	1	15.9	33.6	6.8	7.6	05/21/1997	Initial WQ
AAB-075	13	SB-13	2	15.6	33.5	7.0	7.5	05/21/1997	Initial WQ
AAB-075	13	SB-13	3	15.6	33.5	7.0	7.5	05/21/1997	Initial WQ
AAB-075	13	SB-13	4	15.7	33.5	7.3	7.6	05/21/1997	Initial WQ
AAB-075	13	SB-13	5	15.7	33.7	7.4	7.6	05/21/1997	Initial WQ
AAB-075	13	SB-13	1	15.2	33.7	6.0	7.4	05/24/1997	Termination WQ
AAB-075	13	SB-13	2	14.9	33.0	6.9	7.2	05/24/1997	Termination WQ
AAB-075	13	SB-13	3	14.9	33.0	7.1	7.3	05/24/1997	Termination WQ
AAB-075	13	SB-13	4	15.0	33.0	7.4	7.3	05/24/1997	Termination WQ
AAB-075	13	SB-13	5	15.0	33.1	7.4	7.3	05/24/1997	Termination WQ
AAB-049	14	SB-14	1	15.8	33.2	7.3	7.7	05/17/1997	Initial WQ
AAB-049	14	SB-14	2	15.6	32.8	7.1	7.6	05/17/1997	Initial WQ
AAB-049	14	SB-14	3	15.3	33.0	7.1	7.6	05/17/1997	Initial WQ
AAB-049	14	SB-14	4	15.4	33.0	7.2	7.6	05/17/1997	Initial WQ
AAB-049	14	SB-14	5	15.6	33.1	7.1	7.6	05/17/1997	Initial WQ
AAB-049	14	SB-14	1	14.7	33.4	4.4	7.2	05/20/1997	Termination WQ
AAB-049	14	SB-14	2	14.7	33.2	4.1	7.2	05/20/1997	Termination WQ
AAB-049	14	SB-14	3	14.6	33.2	4.0	7.2	05/20/1997	Termination WQ
AAB-049	14	SB-14	4	14.7	33.0	4.0	7.1	05/20/1997	Termination WQ
AAB-049	14	SB-14	5	14.9	33.2	4.0	7.1	05/20/1997	Termination WQ
AAB-076	15	SB-15	1	15.8	33.4	6.9	7.5	05/21/1997	Initial WQ
AAB-076	15	SB-15	2	15.8	33.5	7.4	7.6	05/21/1997	Initial WQ
AAB-076	15	SB-15	3	15.9	33.6	7.4	7.5	05/21/1997	Initial WQ
AAB-076	15	SB-15	4	15.9	33.6	7.3	7.5	05/21/1997	Initial WQ
AAB-076	15	SB-15	5	15.9	33.6	7.3	7.6	05/21/1997	Initial WQ
AAB-076	15	SB-15	1	15.0	33.2	7.4	7.3	05/24/1997	Termination WQ
AAB-076	15	SB-15	2	15.0	32.9	7.4	7.3	05/24/1997	Termination WQ
AAB-076	15	SB-15	3	15.0	33.0	7.3	7.2	05/24/1997	Termination WQ
AAB-076	15	SB-15	4	15.2	33.0	7.4	7.2	05/24/1997	Termination WQ
AAB-076	15	SB-15	5	15.2	33.1	7.4	7.2	05/24/1997	Termination WQ
AAB-025	16	SB-16	1	15.1	33.3	7.3	7.8	05/17/1997	Initial WQ
AAB-025	16	SB-16	2	15.2	33.2	7.2	7.7	05/17/1997	Initial WQ
AAB-025	16	SB-16	3	15.4	33.5	7.2	7.7	05/17/1997	Initial WQ
AAB-025	16	SB-16	4	15.1	33.0	6.9	7.7	05/17/1997	Initial WQ
AAB-025	16	SB-16	5	15.1	33.2	7.2	7.8	05/17/1997	Initial WQ
AAB-025	16	SB-16	1	14.7	33.4	4.4	7.4	05/20/1997	Termination WQ
AAB-025	16	SB-16	2	14.8	33.2	4.0	7.4	05/20/1997	Termination WQ
AAB-025	16	SB-16	3	14.8	33.4	4.0	7.3	05/20/1997	Termination WQ
AAB-025	16	SB-16	4	14.7	33.2	4.1	7.4	05/20/1997	Termination WQ
AAB-025	16	SB-16	5	14.7	33.3	4.1	7.4	05/20/1997	Termination WQ
AAB-059	17	SB-17	1	15.7	33.3	7.5	7.7	05/21/1997	Initial WQ
AAB-059	17	SB-17	2	15.9	33.3	7.3	7.6	05/21/1997	Initial WQ
AAB-059	17	SB-17	3	15.4	33.2	7.1	7.7	05/21/1997	Initial WQ
AAB-059	17	SB-17	4	15.7	33.3	7.3	7.7	05/21/1997	Initial WQ
AAB-059	17	SB-17	5	15.6	33.3	7.4	7.7	05/21/1997	Initial WQ
AAB-059	17	SB-17	1	15.2	33.6	6.9	7.5	05/24/1997	Termination WQ
AAB-059	17	SB-17	2	15.3	33.3	6.1	7.5	05/24/1997	Termination WQ
AAB-059	17	SB-17	3	14.9	33.2	7.1	7.4	05/24/1997	Termination WQ
AAB-059	17	SB-17	4	15.1	33.2	7.3	7.4	05/24/1997	Termination WQ
AAB-059	17	SB-17	5	15.2	33.3	6.2	7.5	05/24/1997	Termination WQ
AAB-042	18	SB-18	1	15.4	33.8	7.5	7.7	05/17/1997	Initial WQ
AAB-042	18	SB-18	2	15.3	33.8	7.5	7.7	05/17/1997	Initial WQ
AAB-042	18	SB-18	3	15.3	33.8	7.5	7.7	05/17/1997	Initial WQ
AAB-042	18	SB-18	4	15.4	33.8	7.5	7.7	05/17/1997	Initial WQ
AAB-042	18	SB-18	5	15.4	33.7	7.5	7.7	05/17/1997	Initial WQ
AAB-042	18	SB-18	1	14.7	32.8	5.4	7.4	05/20/1997	Termination WQ
AAB-042	18	SB-18	2	14.9	33.4	4.6	7.4	05/20/1997	Termination WQ
AAB-042	18	SB-18	3	14.7	33.6	4.2	7.4	05/20/1997	Termination WQ
AAB-042	18	SB-18	4	14.7	33.6	4.7	7.4	05/20/1997	Termination WQ
AAB-042	18	SB-18	5	14.8	33.5	4.4	7.3	05/20/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-077	19	SB-19	1	15.0	33.7	7.1	7.6	05/23/1997	Initial WQ
AAB-077	19	SB-19	2	15.1	33.5	7.2	7.8	05/23/1997	Initial WQ
AAB-077	19	SB-19	3	15.0	33.6	7.3	7.8	05/23/1997	Initial WQ
AAB-077	19	SB-19	4	15.0	33.5	7.4	7.8	05/23/1997	Initial WQ
AAB-077	19	SB-19	5	15.0	33.7	7.4	7.8	05/23/1997	Initial WQ
AAB-077	19	SB-19	1	14.0	33.1	6.3	7.7	05/26/1997	Termination WQ
AAB-077	19	SB-19	2	14.0	32.8	6.4	7.7	05/26/1997	Termination WQ
AAB-077	19	SB-19	3	13.9	32.4	5.3	7.6	05/26/1997	Termination WQ
AAB-077	19	SB-19	4	14.3	33.0	5.2	7.6	05/26/1997	Termination WQ
AAB-077	19	SB-19	5	14.5	32.9	5.4	7.7	05/26/1997	Termination WQ
AAB-053	20	SB-20	1	15.4	33.4	7.3	7.6	05/17/1997	Initial WQ
AAB-053	20	SB-20	2	15.4	33.4	6.9	7.6	05/17/1997	Initial WQ
AAB-053	20	SB-20	3	15.3	33.4	7.4	7.7	05/17/1997	Initial WQ
AAB-053	20	SB-20	4	15.2	33.4	7.4	7.6	05/17/1997	Initial WQ
AAB-053	20	SB-20	5	15.4	33.4	7.3	7.7	05/17/1997	Initial WQ
AAB-053	20	SB-20	1	14.8	33.2	4.5	7.3	05/20/1997	Termination WQ
AAB-053	20	SB-20	2	14.8	32.9	4.0	7.4	05/20/1997	Termination WQ
AAB-053	20	SB-20	3	14.7	32.9	4.2	7.3	05/20/1997	Termination WQ
AAB-053	20	SB-20	4	14.7	32.8	4.2	7.3	05/20/1997	Termination WQ
AAB-053	20	SB-20	5	14.8	33.0	4.5	7.3	05/20/1997	Termination WQ
AAB-024	21	SB-21	1	15.5	33.6	7.4	7.7	05/17/1997	Initial WQ
AAB-024	21	SB-21	2	15.5	33.1	7.5	7.7	05/17/1997	Initial WQ
AAB-024	21	SB-21	3	15.5	33.5	7.4	7.7	05/17/1997	Initial WQ
AAB-024	21	SB-21	4	15.4	33.5	7.5	7.7	05/17/1997	Initial WQ
AAB-024	21	SB-21	5	15.5	33.5	7.5	7.7	05/17/1997	Initial WQ
AAB-024	21	SB-21	1	14.9	33.6	4.9	7.3	05/20/1997	Termination WQ
AAB-024	21	SB-21	2	14.9	33.3	4.2	7.3	05/20/1997	Termination WQ
AAB-024	21	SB-21	3	14.7	33.2	4.0	7.4	05/20/1997	Termination WQ
AAB-024	21	SB-21	4	14.7	33.2	4.2	7.4	05/20/1997	Termination WQ
AAB-024	21	SB-21	5	14.8	33.4	4.0	7.3	05/20/1997	Termination WQ
AAB-026	22	SB-22	1	15.2	33.2	7.1	7.7	05/17/1997	Initial WQ
AAB-026	22	SB-22	2	15.6	33.3	7.2	7.7	05/17/1997	Initial WQ
AAB-026	22	SB-22	3	15.4	33.2	7.1	7.7	05/17/1997	Initial WQ
AAB-026	22	SB-22	4	15.6	33.3	7.1	7.6	05/17/1997	Initial WQ
AAB-026	22	SB-22	5	15.6	33.2	7.0	7.6	05/17/1997	Initial WQ
AAB-026	22	SB-22	1	14.8	33.2	4.5	7.4	05/20/1997	Termination WQ
AAB-026	22	SB-22	2	14.8	33.2	4.0	7.4	05/20/1997	Termination WQ
AAB-026	22	SB-22	3	14.9	33.0	4.5	7.3	05/20/1997	Termination WQ
AAB-026	22	SB-22	4	14.7	33.2	4.0	7.3	05/20/1997	Termination WQ
AAB-026	22	SB-22	5	14.7	33.2	4.2	7.4	05/20/1997	Termination WQ
AAB-043	23	SB-23	1	15.4	33.5	7.4	7.7	05/17/1997	Initial WQ
AAB-043	23	SB-23	2	15.2	33.4	7.3	7.7	05/17/1997	Initial WQ
AAB-043	23	SB-23	3	15.1	33.4	7.3	7.6	05/17/1997	Initial WQ
AAB-043	23	SB-23	4	15.1	33.4	7.5	7.7	05/17/1997	Initial WQ
AAB-043	23	SB-23	5	15.1	33.4	7.5	7.7	05/17/1997	Initial WQ
AAB-043	23	SB-23	1	14.9	32.9	5.7	7.4	05/20/1997	Termination WQ
AAB-043	23	SB-23	2	14.7	33.2	4.5	7.3	05/20/1997	Termination WQ
AAB-043	23	SB-23	3	14.6	33.1	4.2	7.3	05/20/1997	Termination WQ
AAB-043	23	SB-23	4	14.7	33.2	4.6	7.3	05/20/1997	Termination WQ
AAB-043	23	SB-23	5	14.6	33.0	4.0	7.4	05/20/1997	Termination WQ
AAB-065	24	OR-24	1	15.1	33.0	7.2	7.7	05/23/1997	Initial WQ
AAB-065	24	OR-24	2	15.1	33.2	7.3	7.7	05/23/1997	Initial WQ
AAB-065	24	OR-24	3	15.1	32.7	7.3	7.7	05/23/1997	Initial WQ
AAB-065	24	OR-24	4	15.0	32.9	6.7	7.6	05/23/1997	Initial WQ
AAB-065	24	OR-24	5	15.2	32.9	6.9	7.6	05/23/1997	Initial WQ
AAB-065	24	OR-24	1	15.5	32.3	5.6	7.6	05/26/1997	Termination WQ
AAB-065	24	OR-24	2	15.5	32.4	5.7	7.7	05/26/1997	Termination WQ
AAB-065	24	OR-24	3	15.5	31.4	3.6	7.5	05/26/1997	Termination WQ
AAB-065	24	OR-24	4	15.3	32.3	4.2	7.4	05/26/1997	Termination WQ
AAB-065	24	OR-24	5	15.2	32.0	4.0	7.3	05/26/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-057	25	OR-25	1	15.6	33.1	7.4	7.6	05/21/1997	Initial WQ
AAB-057	25	OR-25	2	15.3	33.2	7.2	7.6	05/21/1997	Initial WQ
AAB-057	25	OR-25	3	15.3	33.2	7.3	7.7	05/21/1997	Initial WQ
AAB-057	25	OR-25	4	15.4	33.2	7.4	7.6	05/21/1997	Initial WQ
AAB-057	25	OR-25	5	15.5	33.2	7.3	7.5	05/21/1997	Initial WQ
AAB-057	25	OR-25	1	14.7	33.5	7.0	7.2	05/24/1997	Termination WQ
AAB-057	25	OR-25	2	14.9	33.4	7.2	7.2	05/24/1997	Termination WQ
AAB-057	25	OR-25	3	14.9	33.1	7.4	7.3	05/24/1997	Termination WQ
AAB-057	25	OR-25	4	14.9	32.9	7.3	7.2	05/24/1997	Termination WQ
AAB-057	25	OR-25	5	14.9	33.5	7.4	7.3	05/24/1997	Termination WQ
AAB-066	26	OR-26	1	15.1	33.4	7.3	7.6	05/23/1997	Initial WQ
AAB-066	26	OR-26	2	14.9	33.2	7.2	7.6	05/23/1997	Initial WQ
AAB-066	26	OR-26	3	15.0	33.3	7.2	7.6	05/23/1997	Initial WQ
AAB-066	26	OR-26	4	15.2	33.2	7.2	7.6	05/23/1997	Initial WQ
AAB-066	26	OR-26	5	15.2	32.8	7.1	7.5	05/23/1997	Initial WQ
AAB-066	26	OR-26	1	14.4	32.2	5.8	7.6	05/26/1997	Termination WQ
AAB-066	26	OR-26	2	14.3	32.3	5.4	7.4	05/26/1997	Termination WQ
AAB-066	26	OR-26	3	14.5	32.4	5.5	7.6	05/26/1997	Termination WQ
AAB-066	26	OR-26	4	14.5	32.5	5.0	7.4	05/26/1997	Termination WQ
AAB-066	26	OR-26	5	14.4	32.2	4.1	7.3	05/26/1997	Termination WQ
AAB-067	27	OR-27	1	14.7	33.3	6.7	7.5	05/23/1997	Initial WQ
AAB-067	27	OR-27	2	14.9	33.3	7.2	7.6	05/23/1997	Initial WQ
AAB-067	27	OR-27	3	15.0	33.3	6.9	7.6	05/23/1997	Initial WQ
AAB-067	27	OR-27	4	15.0	33.3	7.3	7.6	05/23/1997	Initial WQ
AAB-067	27	OR-27	5	15.1	33.3	7.0	7.6	05/23/1997	Initial WQ
AAB-067	27	OR-27	1	13.9	32.3	5.6	7.5	05/26/1997	Termination WQ
AAB-067	27	OR-27	2	14.4	32.9	5.7	7.7	05/26/1997	Termination WQ
AAB-067	27	OR-27	3	14.0	32.4	5.6	7.4	05/26/1997	Termination WQ
AAB-067	27	OR-27	4	14.3	32.8	5.7	7.6	05/26/1997	Termination WQ
AAB-067	27	OR-27	5	14.3	32.8	5.6	7.6	05/26/1997	Termination WQ
AAB-023	28	OR-28	1	15.2	32.8	7.2	7.7	05/17/1997	Initial WQ
AAB-023	28	OR-28	2	15.1	33.1	7.2	7.7	05/17/1997	Initial WQ
AAB-023	28	OR-28	3	15.0	33.2	7.2	7.7	05/17/1997	Initial WQ
AAB-023	28	OR-28	4	15.1	32.8	7.3	7.8	05/17/1997	Initial WQ
AAB-023	28	OR-28	5	15.1	33.0	7.3	7.7	05/17/1997	Initial WQ
AAB-023	28	OR-28	1	14.8	33.0	5.5	7.5	05/20/1997	Termination WQ
AAB-023	28	OR-28	2	14.9	33.3	5.0	7.7	05/20/1997	Termination WQ
AAB-023	28	OR-28	3	14.7	32.9	5.0	7.6	05/20/1997	Termination WQ
AAB-023	28	OR-28	4	14.7	32.8	5.2	7.4	05/20/1997	Termination WQ
AAB-023	28	OR-28	5	14.8	32.9	5.3	7.5	05/20/1997	Termination WQ
AAB-068	29	OR-29	1	15.0	33.0	6.5	7.6	05/23/1997	Initial WQ
AAB-068	29	OR-29	2	15.1	33.1	7.1	7.6	05/23/1997	Initial WQ
AAB-068	29	OR-29	3	15.1	32.9	7.2	7.6	05/23/1997	Initial WQ
AAB-068	29	OR-29	4	15.0	33.1	7.4	7.7	05/23/1997	Initial WQ
AAB-068	29	OR-29	5	15.0	33.0	7.3	7.6	05/23/1997	Initial WQ
AAB-068	29	OR-29	1	14.8	32.7	4.6	7.4	05/26/1997	Termination WQ
AAB-068	29	OR-29	2	14.5	32.1	4.1	7.3	05/26/1997	Termination WQ
AAB-068	29	OR-29	3	14.2	32.3	4.6	7.3	05/26/1997	Termination WQ
AAB-068	29	OR-29	4	14.4	33.0	6.3	7.7	05/26/1997	Termination WQ
AAB-068	29	OR-29	5	14.8	32.4	3.8	7.4	05/26/1997	Termination WQ
AAB-064	30	EW-30	1	15.3	33.7	7.5	7.7	05/21/1997	Initial WQ
AAB-064	30	EW-30	2	15.3	33.2	7.3	7.7	05/21/1997	Initial WQ
AAB-064	30	EW-30	3	15.3	33.5	7.5	7.7	05/21/1997	Initial WQ
AAB-064	30	EW-30	4	15.3	33.3	7.4	7.7	05/21/1997	Initial WQ
AAB-064	30	EW-30	5	15.3	33.5	7.5	7.7	05/21/1997	Initial WQ
AAB-064	30	EW-30	1	14.9	33.7	7.0	7.4	05/24/1997	Termination WQ
AAB-064	30	EW-30	2	14.8	33.2	7.3	7.4	05/24/1997	Termination WQ
AAB-064	30	EW-30	3	14.8	33.2	7.3	7.6	05/24/1997	Termination WQ
AAB-064	30	EW-30	4	14.8	33.3	7.4	7.4	05/24/1997	Termination WQ
AAB-064	30	EW-30	5	14.8	33.2	7.4	7.6	05/24/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-058	31	EW-31	1	15.2	33.2		7.4	7.7	05/21/1997	Initial WQ
AAB-058	31	EW-31	2	15.3	33.2		7.3	7.7	05/21/1997	Initial WQ
AAB-058	31	EW-31	3	15.4	33.2		7.3	7.7	05/21/1997	Initial WQ
AAB-058	31	EW-31	4	15.2	33.4		7.4	7.7	05/21/1997	Initial WQ
AAB-058	31	EW-31	5	15.5	33.2		7.3	7.7	05/21/1997	Initial WQ
AAB-058	31	EW-31	1	14.7	33.5		7.4	7.4	05/24/1997	Termination WQ
AAB-058	31	EW-31	2	14.9	33.2		7.2	7.7	05/24/1997	Termination WQ
AAB-058	31	EW-31	3	14.9	33.1		7.3	7.7	05/24/1997	Termination WQ
AAB-058	31	EW-31	4	14.8	33.1		7.3	7.5	05/24/1997	Termination WQ
AAB-058	31	EW-31	5	14.9	33.1		7.0	7.4	05/24/1997	Termination WQ
AAB-022	32	EW-32	1	15.4	32.8		7.1	7.6	05/17/1997	Initial WQ
AAB-022	32	EW-32	2	15.3	32.8		7.1	7.7	05/17/1997	Initial WQ
AAB-022	32	EW-32	3	15.1	32.9		7.1	7.6	05/17/1997	Initial WQ
AAB-022	32	EW-32	4	15.1	32.6		7.0	7.6	05/17/1997	Initial WQ
AAB-022	32	EW-32	5	15.1	33.0		7.1	7.6	05/17/1997	Initial WQ
AAB-022	32	EW-32	1	14.9	33.3		7.2	7.2	05/20/1997	Termination WQ
AAB-022	32	EW-32	2	14.7	32.9		7.2	7.3	05/20/1997	Termination WQ
AAB-022	32	EW-32	3	14.7	33.1		7.2	7.3	05/20/1997	Termination WQ
AAB-022	32	EW-32	4	14.7	32.8		7.2	7.2	05/20/1997	Termination WQ
AAB-022	32	EW-32	5	14.7	33.2		7.2	7.2	05/20/1997	Termination WQ
AAB-063	33	EW-33	1	15.4	33.5		7.5	7.6	05/21/1997	Initial WQ
AAB-063	33	EW-33	2	15.7	33.5		7.2	7.6	05/21/1997	Initial WQ
AAB-063	33	EW-33	3	15.8	33.5		7.0	7.6	05/21/1997	Initial WQ
AAB-063	33	EW-33	4	15.7	33.2		7.1	7.6	05/21/1997	Initial WQ
AAB-063	33	EW-33	5	15.4	33.3		7.2	7.7	05/21/1997	Initial WQ
AAB-063	33	EW-33	1	14.9	34.1	T	6.7	7.2	05/24/1997	Termination WQ
AAB-063	33	EW-33	2	15.1	33.7		6.9	7.3	05/24/1997	Termination WQ
AAB-063	33	EW-33	3	14.9	33.7		7.1	7.3	05/24/1997	Termination WQ
AAB-063	33	EW-33	4	14.9	33.4		7.1	7.2	05/24/1997	Termination WQ
AAB-063	33	EW-33	5	14.8	33.2		7.4	7.6	05/24/1997	Termination WQ
AAB-036	34	EW-34	1	15.8	32.5		4.9	7.6	05/10/1997	Initial WQ
AAB-036	34	EW-34	2	15.9	32.6		4.3	7.5	05/10/1997	Initial WQ
AAB-036	34	EW-34	3	15.9	33.0		5.8	7.8	05/10/1997	Initial WQ
AAB-036	34	EW-34	4	15.9	32.6		4.7	7.5	05/10/1997	Initial WQ
AAB-036	34	EW-34	5	15.8	32.8		3.0	7.4	05/10/1997	Initial WQ
AAB-036	34	EW-34	1	14.9	32.8		5.3	7.4	05/13/1997	Termination WQ
AAB-036	34	EW-34	2	14.9	32.8		4.5	7.4	05/13/1997	Termination WQ
AAB-036	34	EW-34	3	14.9	32.7		5.3	7.5	05/13/1997	Termination WQ
AAB-036	34	EW-34	4	14.9	32.8		4.3	7.4	05/13/1997	Termination WQ
AAB-036	34	EW-34	5	14.9	32.8		4.3	7.4	05/13/1997	Termination WQ
AAB-037	35	EW-35	1	15.9	32.4		3.8	7.5	05/10/1997	Initial WQ
AAB-037	35	EW-35	2	16.0	32.8		4.0	7.5	05/10/1997	Initial WQ
AAB-037	35	EW-35	3	16.0	32.7		4.1	7.5	05/10/1997	Initial WQ
AAB-037	35	EW-35	4	16.0	33.1		4.5	7.6	05/10/1997	Initial WQ
AAB-037	35	EW-35	5	16.0	33.0		4.1	7.5	05/10/1997	Initial WQ
AAB-037	35	EW-35	1	14.8	33.2		5.5	7.5	05/13/1997	Termination WQ
AAB-037	35	EW-35	2	14.9	33.3		5.5	7.5	05/13/1997	Termination WQ
AAB-037	35	EW-35	3	14.9	32.8		5.3	7.5	05/13/1997	Termination WQ
AAB-037	35	EW-35	4	14.9	32.9		5.8	7.5	05/13/1997	Termination WQ
AAB-037	35	EW-35	5	14.9	32.8		4.9	7.5	05/13/1997	Termination WQ
AAB-062	36	EW-36	1	15.2	33.3		7.4	7.7	05/21/1997	Initial WQ
AAB-062	36	EW-36	2	15.2	33.0		7.4	7.7	05/21/1997	Initial WQ
AAB-062	36	EW-36	3	15.3	33.0		7.4	7.7	05/21/1997	Initial WQ
AAB-062	36	EW-36	4	15.3	33.0		7.4	7.7	05/21/1997	Initial WQ
AAB-062	36	EW-36	5	15.3	33.0		7.4	7.7	05/21/1997	Initial WQ
AAB-062	36	EW-36	1	15.0	33.4		7.2	7.5	05/24/1997	Termination WQ
AAB-062	36	EW-36	2	14.8	33.0		7.3	7.7	05/24/1997	Termination WQ
AAB-062	36	EW-36	3	15.0	33.1		7.4	7.5	05/24/1997	Termination WQ
AAB-062	36	EW-36	4	14.9	32.9		7.4	7.5	05/24/1997	Termination WQ
AAB-062	36	EW-36	5	14.9	33.0		7.5	7.5	05/24/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)		pH (units)	Recording Date	Remarks
AAB-038	37	EW-37	1	15.9	33.6		5.6		7.7	05/10/1997	Initial WQ
AAB-038	37	EW-37	2	16.0	33.2		5.6		7.5	05/10/1997	Initial WQ
AAB-038	37	EW-37	3	16.0	33.4		5.4		7.4	05/10/1997	Initial WQ
AAB-038	37	EW-37	4	15.9	33.6		4.7		7.6	05/10/1997	Initial WQ
AAB-038	37	EW-37	5	15.9	33.6		4.8		7.5	05/10/1997	Initial WQ
AAB-038	37	EW-37	1	14.9	33.7		5.9		7.6	05/13/1997	Termination WQ
AAB-038	37	EW-37	2	15.0	33.4		5.8		7.5	05/13/1997	Termination WQ
AAB-038	37	EW-37	3	15.0	33.2		4.8		7.4	05/13/1997	Termination WQ
AAB-038	37	EW-37	4	15.0	33.2		5.4		7.5	05/13/1997	Termination WQ
AAB-038	37	EW-37	5	15.1	33.5		5.3		7.5	05/13/1997	Termination WQ
AAB-048	38	PA-38	1	16.0	33.5		5.1		7.5	05/10/1997	Initial WQ
AAB-048	38	PA-38	2	16.0	33.2		5.3		7.5	05/10/1997	Initial WQ
AAB-048	38	PA-38	3	16.0	33.2		5.5		7.3	05/10/1997	Initial WQ
AAB-048	38	PA-38	4	16.0	33.2		4.3		7.4	05/10/1997	Initial WQ
AAB-048	38	PA-38	5	16.0	33.2		5.1		7.5	05/10/1997	Initial WQ
AAB-048	38	PA-38	1	14.9	33.7		5.9		7.5	05/13/1997	Termination WQ
AAB-048	38	PA-38	2	14.9	33.2		5.5		7.4	05/13/1997	Termination WQ
AAB-048	38	PA-38	3	14.9	33.2		5.7		7.3	05/13/1997	Termination WQ
AAB-048	38	PA-38	4	14.7	32.8		5.0		7.4	05/13/1997	Termination WQ
AAB-048	38	PA-38	5	14.7	32.1		5.5		7.6	05/13/1997	Termination WQ
AAB-046	39	PA-39	1	16.0	33.4		5.8		7.6	05/10/1997	Initial WQ
AAB-046	39	PA-39	2	16.0	33.2		5.8		7.6	05/10/1997	Initial WQ
AAB-046	39	PA-39	3	16.0	33.3		5.8		7.6	05/10/1997	Initial WQ
AAB-046	39	PA-39	4	16.0	33.4		5.9		7.6	05/10/1997	Initial WQ
AAB-046	39	PA-39	5	15.9	33.2		5.9		7.6	05/10/1997	Initial WQ
AAB-046	39	PA-39	1	14.9	34.1	T	6.5		7.7	05/13/1997	Termination WQ
AAB-046	39	PA-39	2	14.8	33.7		6.5		7.7	05/13/1997	Termination WQ
AAB-046	39	PA-39	3	14.7	33.2		6.5		7.6	05/13/1997	Termination WQ
AAB-046	39	PA-39	4	14.8	33.4		6.5		7.6	05/13/1997	Termination WQ
AAB-046	39	PA-39	5	14.9	33.3		6.6		7.7	05/13/1997	Termination WQ
AAB-047	40	PA-40	1	15.9	32.8		3.6		7.4	05/10/1997	Initial WQ
AAB-047	40	PA-40	2	16.0	33.1		4.2		7.5	05/10/1997	Initial WQ
AAB-047	40	PA-40	3	15.9	32.7		4.4		7.5	05/10/1997	Initial WQ
AAB-047	40	PA-40	4	15.9	32.6		4.1		7.4	05/10/1997	Initial WQ
AAB-047	40	PA-40	5	15.8	33.1		5.2		7.6	05/10/1997	Initial WQ
AAB-047	40	PA-40	1	14.9	33.1		4.3		7.3	05/13/1997	Termination WQ
AAB-047	40	PA-40	2	14.9	33.1		5.3		7.3	05/13/1997	Termination WQ
AAB-047	40	PA-40	3	14.8	32.5		4.9		7.3	05/13/1997	Termination WQ
AAB-047	40	PA-40	4	14.8	32.4		4.5		7.3	05/13/1997	Termination WQ
AAB-047	40	PA-40	5	14.9	32.9		6.4		7.5	05/13/1997	Termination WQ
AAB-021	41	PA-41	1	16.0	32.9		3.8		7.5	05/10/1997	Initial WQ
AAB-021	41	PA-41	2	16.0	32.7		3.1		7.5	05/10/1997	Initial WQ
AAB-021	41	PA-41	3	15.9	33.1		4.1		7.6	05/10/1997	Initial WQ
AAB-021	41	PA-41	4	15.9	33.0		4.3		7.6	05/10/1997	Initial WQ
AAB-021	41	PA-41	5	15.9	33.2		3.8		7.6	05/10/1997	Initial WQ
AAB-021	41	PA-41	1	14.7	33.4		4.3		7.5	05/13/1997	Termination WQ
AAB-021	41	PA-41	2	14.8	32.8		2.9		7.3	05/13/1997	Termination WQ
AAB-021	41	PA-41	3	14.7	32.4		4.1		7.3	05/13/1997	Termination WQ
AAB-021	41	PA-41	4	14.7	33.1		4.8		7.4	05/13/1997	Termination WQ
AAB-021	41	PA-41	5	14.8	33.1		4.2		7.4	05/13/1997	Termination WQ
AAB-015	42	PA-42	1	15.9	32.7		5.5		7.5	05/07/1997	Initial WQ
AAB-015	42	PA-42	2	16.0	32.6		5.0		7.5	05/07/1997	Initial WQ
AAB-015	42	PA-42	3	15.8	32.6		4.8		7.5	05/07/1997	Initial WQ
AAB-015	42	PA-42	4	15.8	32.7		5.1		7.5	05/07/1997	Initial WQ
AAB-015	42	PA-42	5	15.9	32.7		4.9		7.5	05/07/1997	Initial WQ
AAB-015	42	PA-42	1	16.0	33.0		3.9		7.5	05/10/1997	Termination WQ
AAB-015	42	PA-42	2	15.7	33.0		2.4	F	7.4	05/10/1997	Termination WQ
AAB-015	42	PA-42	3	15.7	32.7		2.2	F	7.4	05/10/1997	Termination WQ
AAB-015	42	PA-42	4	15.9	33.2		1.7	F	7.5	05/10/1997	Termination WQ
AAB-015	42	PA-42	5	15.7	33.2		1.9	F	7.4	05/10/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)		pH (units)	Recording Date	Remarks
AAB-016	43	PA-43	1	15.9	33.4	3.4		7.5	05/10/1997	Initial WQ
AAB-016	43	PA-43	2	16.0	33.2	3.7		7.5	05/10/1997	Initial WQ
AAB-016	43	PA-43	3	16.0	33.5	4.6		7.5	05/10/1997	Initial WQ
AAB-016	43	PA-43	4	16.0	33.3	3.9		7.5	05/10/1997	Initial WQ
AAB-016	43	PA-43	5	16.0	33.2	3.0		7.4	05/10/1997	Initial WQ
AAB-016	43	PA-43	1	14.8	33.3	5.5		7.5	05/13/1997	Termination WQ
AAB-016	43	PA-43	2	14.9	33.2	5.3		7.5	05/13/1997	Termination WQ
AAB-016	43	PA-43	3	14.9	33.2	5.8		7.5	05/13/1997	Termination WQ
AAB-016	43	PA-43	4	14.9	33.2	4.9		7.4	05/13/1997	Termination WQ
AAB-016	43	PA-43	5	14.7	33.2	4.2		7.3	05/13/1997	Termination WQ
AAB-020	44	PA-44	1	16.0	32.8	3.9		7.5	05/10/1997	Initial WQ
AAB-020	44	PA-44	2	15.9	33.0	4.1		7.5	05/10/1997	Initial WQ
AAB-020	44	PA-44	3	15.9	32.8	4.2		7.5	05/10/1997	Initial WQ
AAB-020	44	PA-44	4	15.9	33.1	3.9		7.5	05/10/1997	Initial WQ
AAB-020	44	PA-44	5	15.8	32.9	4.1		7.5	05/10/1997	Initial WQ
AAB-020	44	PA-44	1	14.9	32.8	4.6		7.4	05/13/1997	Termination WQ
AAB-020	44	PA-44	2	14.8	33.0	4.0		7.4	05/13/1997	Termination WQ
AAB-020	44	PA-44	3	14.9	32.7	4.2		7.3	05/13/1997	Termination WQ
AAB-020	44	PA-44	4	14.9	32.8	4.6		7.3	05/13/1997	Termination WQ
AAB-020	44	PA-44	5	14.9	32.8	4.1		7.3	05/13/1997	Termination WQ
AAB-044	45	PA-45	1	15.4	32.8	5.5		7.5	05/07/1997	Initial WQ
AAB-044	45	PA-45	2	15.6	33.2	5.8		7.5	05/07/1997	Initial WQ
AAB-044	45	PA-45	3	15.5	33.0	5.5		7.5	05/07/1997	Initial WQ
AAB-044	45	PA-45	4	15.5	32.9	5.6		7.5	05/07/1997	Initial WQ
AAB-044	45	PA-45	5	15.7	32.9	5.6		7.5	05/07/1997	Initial WQ
AAB-044	45	PA-45	1	15.8	33.2	3.9		7.6	05/10/1997	Termination WQ
AAB-044	45	PA-45	2	15.7	33.2	4.1		7.6	05/10/1997	Termination WQ
AAB-044	45	PA-45	3	15.9	32.8	4.0		7.5	05/10/1997	Termination WQ
AAB-044	45	PA-45	4	15.9	32.8	4.0		7.5	05/10/1997	Termination WQ
AAB-044	45	PA-45	5	15.9	32.6	4.1		7.5	05/10/1997	Termination WQ
AAB-045	46	PA-46	1	15.6	32.4	5.4		7.5	05/07/1997	Initial WQ
AAB-045	46	PA-46	2	15.7	32.6	5.1		7.5	05/07/1997	Initial WQ
AAB-045	46	PA-46	3	15.8	32.5	5.0		7.5	05/07/1997	Initial WQ
AAB-045	46	PA-46	4	15.8	32.8	5.2		7.5	05/07/1997	Initial WQ
AAB-045	46	PA-46	5	15.7	33.0	5.1		7.5	05/07/1997	Initial WQ
AAB-045	46	PA-46	1	15.8	32.9	2.1	F	7.5	05/10/1997	Termination WQ
AAB-045	46	PA-46	2	15.6	32.8	2.7	F	7.5	05/10/1997	Termination WQ
AAB-045	46	PA-46	3	15.6	32.5	3.1		7.5	05/10/1997	Termination WQ
AAB-045	46	PA-46	4	15.7	33.0	2.9	F	7.5	05/10/1997	Termination WQ
AAB-045	46	PA-46	5	15.7	32.9	3.0	F	7.4	05/10/1997	Termination WQ
AAB-018	47	PA-47	1	16.0	33.2	4.5		7.6	05/10/1997	Initial WQ
AAB-018	47	PA-47	2	16.0	33.1	4.7		7.6	05/10/1997	Initial WQ
AAB-018	47	PA-47	3	16.0	33.2	4.8		7.6	05/10/1997	Initial WQ
AAB-018	47	PA-47	4	16.0	33.1	4.8		7.6	05/10/1997	Initial WQ
AAB-018	47	PA-47	5	16.0	33.1	3.4		7.5	05/10/1997	Initial WQ
AAB-018	47	PA-47	1	14.7	33.3	5.5		7.4	05/13/1997	Termination WQ
AAB-018	47	PA-47	2	14.7	32.9	5.3		7.4	05/13/1997	Termination WQ
AAB-018	47	PA-47	3	14.9	32.8	5.4		7.4	05/13/1997	Termination WQ
AAB-018	47	PA-47	4	14.9	32.7	4.3		7.4	05/13/1997	Termination WQ
AAB-018	47	PA-47	5	14.7	33.2	5.3		7.4	05/13/1997	Termination WQ
AAB-017	48	PA-48	1	15.9	33.2	4.0		7.5	05/10/1997	Initial WQ
AAB-017	48	PA-48	2	16.0	33.2	3.5		7.5	05/10/1997	Initial WQ
AAB-017	48	PA-48	3	15.9	33.1	3.7		7.5	05/10/1997	Initial WQ
AAB-017	48	PA-48	4	16.0	33.3	4.1		7.5	05/10/1997	Initial WQ
AAB-017	48	PA-48	5	15.9	33.2	4.4		7.5	05/10/1997	Initial WQ
AAB-017	48	PA-48	1	14.9	33.5	4.7		7.4	05/13/1997	Termination WQ
AAB-017	48	PA-48	2	14.8	33.0	4.2		7.4	05/13/1997	Termination WQ
AAB-017	48	PA-48	3	14.7	33.2	5.2		7.4	05/13/1997	Termination WQ
AAB-017	48	PA-48	4	14.7	33.1	5.0		7.4	05/13/1997	Termination WQ
AAB-017	48	PA-48	5	14.8	33.1	5.3		7.4	05/13/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)		pH (units)	Recording Date	Remarks
AAB-012	49	PA-49	1	15.5	32.5	5.4		7.4	05/07/1997	Initial WQ
AAB-012	49	PA-49	2	15.5	33.0	4.5		7.4	05/07/1997	Initial WQ
AAB-012	49	PA-49	3	15.6	32.7	5.5		7.4	05/07/1997	Initial WQ
AAB-012	49	PA-49	4	15.6	32.8	4.6		7.4	05/07/1997	Initial WQ
AAB-012	49	PA-49	5	15.8	32.7	4.7		7.4	05/07/1997	Initial WQ
AAB-012	49	PA-49	1	15.6	32.4	3.1		7.5	05/10/1997	Termination WQ
AAB-012	49	PA-49	2	15.9	32.5	4.4		7.4	05/10/1997	Termination WQ
AAB-012	49	PA-49	3	15.9	32.5	4.5		7.4	05/10/1997	Termination WQ
AAB-012	49	PA-49	4	15.9	32.6	3.9		7.5	05/10/1997	Termination WQ
AAB-012	49	PA-49	5	15.9	32.8	3.4		7.5	05/10/1997	Termination WQ
AAB-011	50	PA-50	1	15.6	32.6	4.2		7.4	05/07/1997	Initial WQ
AAB-011	50	PA-50	2	15.6	32.5	4.6		7.4	05/07/1997	Initial WQ
AAB-011	50	PA-50	3	15.6	32.7	4.5		7.4	05/07/1997	Initial WQ
AAB-011	50	PA-50	4	15.6	32.4	4.5		7.4	05/07/1997	Initial WQ
AAB-011	50	PA-50	5	15.8	32.4	4.7		7.4	05/07/1997	Initial WQ
AAB-011	50	PA-50	1	15.9	33.0	2.2	F	7.5	05/10/1997	Termination WQ
AAB-011	50	PA-50	2	15.7	32.7	1.8	F	7.4	05/10/1997	Termination WQ
AAB-011	50	PA-50	3	15.6	32.3	2.6	F	7.4	05/10/1997	Termination WQ
AAB-011	50	PA-50	4	15.6	32.3	3.1	F	7.4	05/10/1997	Termination WQ
AAB-011	50	PA-50	5	15.6	32.7	2.1	F	7.4	05/10/1997	Termination WQ
AAB-014	51	PA-51	1	15.7	32.6	5.2		7.4	05/07/1997	Initial WQ
AAB-014	51	PA-51	2	15.9	32.7	5.0		7.4	05/07/1997	Initial WQ
AAB-014	51	PA-51	3	15.9	32.9	4.7		7.4	05/07/1997	Initial WQ
AAB-014	51	PA-51	4	15.9	33.0	5.0		7.4	05/07/1997	Initial WQ
AAB-014	51	PA-51	5	15.9	32.9	4.8		7.4	05/07/1997	Initial WQ
AAB-014	51	PA-51	1	15.8	33.2	2.8	F	7.6	05/10/1997	Termination WQ
AAB-014	51	PA-51	2	15.6	32.7	2.5	F	7.5	05/10/1997	Termination WQ
AAB-014	51	PA-51	3	15.6	32.9	3.0		7.5	05/10/1997	Termination WQ
AAB-014	51	PA-51	4	15.7	32.9	2.3	F	7.5	05/10/1997	Termination WQ
AAB-014	51	PA-51	5	15.8	32.8	3.0		7.5	05/10/1997	Termination WQ
AAB-013	52	PA-52	1	15.7	33.0	4.2		7.4	05/07/1997	Initial WQ
AAB-013	52	PA-52	2	15.6	32.3	4.6		7.4	05/07/1997	Initial WQ
AAB-013	52	PA-52	3	15.6	32.8	5.2		7.5	05/07/1997	Initial WQ
AAB-013	52	PA-52	4	15.7	32.9	5.8		7.5	05/07/1997	Initial WQ
AAB-013	52	PA-52	5	15.6	33.0	4.0		7.4	05/07/1997	Initial WQ
AAB-013	52	PA-52	1	15.6	33.3	2.1	F	7.6	05/10/1997	Termination WQ
AAB-013	52	PA-52	2	15.8	32.3	2.4	F	7.5	05/10/1997	Termination WQ
AAB-013	52	PA-52	3	15.8	32.8	2.9	F	7.4	05/10/1997	Termination WQ
AAB-013	52	PA-52	4	15.8	32.9	3.5		7.4	05/10/1997	Termination WQ
AAB-013	52	PA-52	5	15.6	32.8	2.1	F	7.5	05/10/1997	Termination WQ
AAB-019	53	PA-53	1	16.0	32.5	3.4		7.5	05/10/1997	Initial WQ
AAB-019	53	PA-53	2	16.0	32.8	4.4		7.5	05/10/1997	Initial WQ
AAB-019	53	PA-53	3	16.0	32.9	3.3		7.5	05/10/1997	Initial WQ
AAB-019	53	PA-53	4	16.0	32.7	3.0		7.5	05/10/1997	Initial WQ
AAB-019	53	PA-53	5	16.0	32.5	3.8		7.5	05/10/1997	Initial WQ
AAB-019	53	PA-53	1	14.7	32.8	4.2		7.4	05/13/1997	Termination WQ
AAB-019	53	PA-53	2	14.7	32.7	4.3		7.4	05/13/1997	Termination WQ
AAB-019	53	PA-53	3	14.8	32.8	3.9		7.3	05/13/1997	Termination WQ
AAB-019	53	PA-53	4	14.8	32.5	4.0		7.3	05/13/1997	Termination WQ
AAB-019	53	PA-53	5	14.8	32.4	4.2		7.4	05/13/1997	Termination WQ
AAB-027	54	IB-54	1	15.7	32.7	5.0		7.6	05/03/1997	Initial WQ
AAB-027	54	IB-54	2	15.8	32.8	5.1		7.6	05/03/1997	Initial WQ
AAB-027	54	IB-54	3	15.7	32.7	5.0		7.6	05/03/1997	Initial WQ
AAB-027	54	IB-54	4	15.7	32.7	5.0		7.6	05/03/1997	Initial WQ
AAB-027	54	IB-54	5	15.9	32.8	5.0		7.6	05/03/1997	Initial WQ
AAB-027	54	IB-54	1	15.8	33.4	5.4		7.4	05/06/1997	Termination WQ
AAB-027	54	IB-54	2	15.9	32.7	5.2		7.4	05/06/1997	Termination WQ
AAB-027	54	IB-54	3	15.9	32.6	4.3		7.4	05/06/1997	Termination WQ
AAB-027	54	IB-54	4	15.9	32.9	6.0		7.4	05/06/1997	Termination WQ
AAB-027	54	IB-54	5	16.0	32.9	6.2		7.5	05/06/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-028	55	IB-55	1	15.9	32.7	5.1	7.6	05/03/1997	Initial WQ
AAB-028	55	IB-55	2	15.9	32.8	5.2	7.6	05/03/1997	Initial WQ
AAB-028	55	IB-55	3	15.5	33.2	5.5	7.6	05/03/1997	Initial WQ
AAB-028	55	IB-55	4	15.8	33.7	5.5	7.6	05/03/1997	Initial WQ
AAB-028	55	IB-55	5	15.7	33.2	5.3	7.6	05/03/1997	Initial WQ
AAB-028	55	IB-55	1	15.9	33.2	4.9	7.5	05/06/1997	Termination WQ
AAB-028	55	IB-55	2	15.9	32.8	5.5	7.5	05/06/1997	Termination WQ
AAB-028	55	IB-55	3	15.6	33.2	5.2	7.5	05/06/1997	Termination WQ
AAB-028	55	IB-55	4	15.9	32.9	5.4	7.5	05/06/1997	Termination WQ
AAB-028	55	IB-55	5	15.6	33.5	6.0	7.5	05/06/1997	Termination WQ
AAB-029	56	IB-56	1	15.9	32.5	4.7	7.5	05/03/1997	Initial WQ
AAB-029	56	IB-56	2	15.9	32.5	4.8	7.5	05/03/1997	Initial WQ
AAB-029	56	IB-56	3	15.9	32.8	4.7	7.5	05/03/1997	Initial WQ
AAB-029	56	IB-56	4	15.7	32.6	4.8	7.5	05/03/1997	Initial WQ
AAB-029	56	IB-56	5	15.9	32.6	4.7	7.5	05/03/1997	Initial WQ
AAB-029	56	IB-56	1	15.4	33.0	5.2	7.5	05/06/1997	Termination WQ
AAB-029	56	IB-56	2	15.5	32.5	5.5	7.5	05/06/1997	Termination WQ
AAB-029	56	IB-56	3	15.7	32.5	5.9	7.5	05/06/1997	Termination WQ
AAB-029	56	IB-56	4	15.9	32.6	5.5	7.5	05/06/1997	Termination WQ
AAB-029	56	IB-56	5	15.9	32.7	6.0	7.5	05/06/1997	Termination WQ
AAB-030	57	IB-57	1	15.8	32.4	5.7	7.5	05/03/1997	Initial WQ
AAB-030	57	IB-57	2	15.8	32.5	4.9	7.5	05/03/1997	Initial WQ
AAB-030	57	IB-57	3	15.9	32.4	4.9	7.5	05/03/1997	Initial WQ
AAB-030	57	IB-57	4	15.9	32.8	5.4	7.5	05/03/1997	Initial WQ
AAB-030	57	IB-57	5	15.8	32.8	5.4	7.5	05/03/1997	Initial WQ
AAB-030	57	IB-57	1	15.6	33.4	6.7	7.6	05/06/1997	Termination WQ
AAB-030	57	IB-57	2	15.5	32.8	6.2	7.6	05/06/1997	Termination WQ
AAB-030	57	IB-57	3	15.7	32.9	7.4	7.6	05/06/1997	Termination WQ
AAB-030	57	IB-57	4	15.5	33.1	7.6	7.8	05/06/1997	Termination WQ
AAB-030	57	IB-57	5	15.9	32.8	5.5	7.8	05/06/1997	Termination WQ
AAB-033	58	IB-58	1	15.4	32.8	6.2	7.5	05/07/1997	Initial WQ
AAB-033	58	IB-58	2	15.4	33.0	5.2	7.4	05/07/1997	Initial WQ
AAB-033	58	IB-58	3	15.4	32.8	4.9	7.3	05/07/1997	Initial WQ
AAB-033	58	IB-58	4	15.4	32.9	6.0	7.3	05/07/1997	Initial WQ
AAB-033	58	IB-58	5	15.8	33.1	6.3	7.4	05/07/1997	Initial WQ
AAB-033	58	IB-58	1	15.6	33.2	5.3	7.6	05/10/1997	Termination WQ
AAB-033	58	IB-58	2	15.7	33.3	3.7	7.3	05/10/1997	Termination WQ
AAB-033	58	IB-58	3	16.0	32.5	3.0	7.2	05/10/1997	Termination WQ
AAB-033	58	IB-58	4	15.8	32.8	3.5	7.3	05/10/1997	Termination WQ
AAB-033	58	IB-58	5	15.6	33.2	5.2	7.8	05/10/1997	Termination WQ
AAB-034	59	IB-59	1	15.6	33.0	6.3	7.4	05/07/1997	Initial WQ
AAB-034	59	IB-59	2	15.6	32.8	5.9	7.4	05/07/1997	Initial WQ
AAB-034	59	IB-59	3	15.6	33.1	6.5	7.5	05/07/1997	Initial WQ
AAB-034	59	IB-59	4	15.6	33.0	6.3	7.5	05/07/1997	Initial WQ
AAB-034	59	IB-59	5	15.8	33.2	6.3	7.5	05/07/1997	Initial WQ
AAB-034	59	IB-59	1	15.9	33.2	4.6	7.6	05/10/1997	Termination WQ
AAB-034	59	IB-59	2	16.0	32.8	5.3	7.6	05/10/1997	Termination WQ
AAB-034	59	IB-59	3	15.6	33.0	6.3	7.9	05/10/1997	Termination WQ
AAB-034	59	IB-59	4	15.9	32.8	6.3	7.8	05/10/1997	Termination WQ
AAB-034	59	IB-59	5	16.0	33.0	6.6	8.0	05/10/1997	Termination WQ
AAB-031	63	PC-63	1	15.7	32.3	4.9	7.7	05/03/1997	Initial WQ
AAB-031	63	PC-63	2	15.9	32.3	5.0	7.7	05/03/1997	Initial WQ
AAB-031	63	PC-63	3	15.9	32.4	4.8	7.7	05/03/1997	Initial WQ
AAB-031	63	PC-63	4	15.8	32.3	5.5	7.7	05/03/1997	Initial WQ
AAB-031	63	PC-63	5	15.7	32.3	5.5	7.7	05/03/1997	Initial WQ
AAB-031	63	PC-63	1	15.9	32.4	4.6	7.4	05/06/1997	Termination WQ
AAB-031	63	PC-63	2	15.9	32.3	4.7	7.4	05/06/1997	Termination WQ
AAB-031	63	PC-63	3	15.7	32.4	4.8	7.4	05/06/1997	Termination WQ
AAB-031	63	PC-63	4	15.9	32.3	4.9	7.4	05/06/1997	Termination WQ
AAB-031	63	PC-63	5	16.0	31.9	4.4	7.4	05/06/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
AAB-041	64	AL-64	1	15.3	33.5	7.2	7.8	05/17/1997	Initial WQ
AAB-041	64	AL-64	2	15.3	33.7	7.2	7.8	05/17/1997	Initial WQ
AAB-041	64	AL-64	3	15.3	33.7	7.2	7.8	05/17/1997	Initial WQ
AAB-041	64	AL-64	4	15.2	33.7	7.2	7.8	05/17/1997	Initial WQ
AAB-041	64	AL-64	5	15.2	33.7	7.3	7.8	05/17/1997	Initial WQ
AAB-041	64	AL-64	1	14.8	33.8	6.1	7.6	05/20/1997	Termination WQ
AAB-041	64	AL-64	2	14.9	34.0	5.6	7.6	05/20/1997	Termination WQ
AAB-041	64	AL-64	3	14.8	33.9	5.9	7.6	05/20/1997	Termination WQ
AAB-041	64	AL-64	4	14.7	33.9	6.0	7.6	05/20/1997	Termination WQ
AAB-041	64	AL-64	5	14.8	33.9	6.5	7.7	05/20/1997	Termination WQ
AAB-032	65	RR-65	1	15.5	33.2	6.4	7.6	05/03/1997	Initial WQ
AAB-032	65	RR-65	2	15.6	33.1	6.2	7.6	05/03/1997	Initial WQ
AAB-032	65	RR-65	3	15.7	33.1	6.3	7.6	05/03/1997	Initial WQ
AAB-032	65	RR-65	4	15.9	33.0	6.2	7.6	05/03/1997	Initial WQ
AAB-032	65	RR-65	5	15.7	33.1	6.2	7.6	05/03/1997	Initial WQ
AAB-032	65	RR-65	1	15.6	33.2	5.7	7.7	05/06/1997	Termination WQ
AAB-032	65	RR-65	2	15.4	33.2	5.5	7.7	05/06/1997	Termination WQ
AAB-032	65	RR-65	3	15.4	33.1	5.6	7.7	05/06/1997	Termination WQ
AAB-032	65	RR-65	4	15.9	33.0	5.6	7.7	05/06/1997	Termination WQ
AAB-032	65	RR-65	5	15.9	33.2	5.7	7.7	05/06/1997	Termination WQ
AAB-039	66	BF-66	1	15.9	32.8	5.6	7.4	05/07/1997	Initial WQ
AAB-039	66	BF-66	2	15.9	32.8	5.4	7.5	05/07/1997	Initial WQ
AAB-039	66	BF-66	3	15.9	32.6	5.9	7.5	05/07/1997	Initial WQ
AAB-039	66	BF-66	4	16.0	32.6	6.1	7.6	05/07/1997	Initial WQ
AAB-039	66	BF-66	5	16.0	32.9	5.9	7.6	05/07/1997	Initial WQ
AAB-039	66	BF-66	1	16.0	32.5	3.1	7.6	05/10/1997	Termination WQ
AAB-039	66	BF-66	2	15.8	32.5	3.3	7.6	05/10/1997	Termination WQ
AAB-039	66	BF-66	3	15.8	32.4	3.1	7.5	05/10/1997	Termination WQ
AAB-039	66	BF-66	4	15.9	32.4	4.0	7.6	05/10/1997	Termination WQ
AAB-039	66	BF-66	5	16.0	32.4	4.7	7.7	05/10/1997	Termination WQ
AAB-040	67	AB-67	1	15.9	32.5	5.9	7.6	05/07/1997	Initial WQ
AAB-040	67	AB-67	2	16.0	32.5	5.7	7.7	05/07/1997	Initial WQ
AAB-040	67	AB-67	3	15.9	32.8	5.1	7.6	05/07/1997	Initial WQ
AAB-040	67	AB-67	4	15.9	32.8	5.8	7.7	05/07/1997	Initial WQ
AAB-040	67	AB-67	5	15.8	32.8	5.8	7.7	05/07/1997	Initial WQ
AAB-040	67	AB-67	1	15.6	32.7	3.6	7.6	05/10/1997	Termination WQ
AAB-040	67	AB-67	2	15.7	32.7	3.9	7.6	05/10/1997	Termination WQ
AAB-040	67	AB-67	3	15.8	32.3	3.1	7.5	05/10/1997	Termination WQ
AAB-040	67	AB-67	4	15.9	32.4	3.7	7.6	05/10/1997	Termination WQ
AAB-040	67	AB-67	5	15.8	32.4	4.4	7.6	05/10/1997	Termination WQ
5/4 control	68	Batch 1 control	1	15.2	33.2	7.4	7.6	05/03/1997	Initial WQ
5/4 control	68	Batch 1 control	2	15.2	33.3	7.4	7.6	05/03/1997	Initial WQ
5/4 control	68	Batch 1 control	3	15.3	33.3	7.5	7.7	05/03/1997	Initial WQ
5/4 control	68	Batch 1 control	4	15.3	33.3	7.5	7.7	05/03/1997	Initial WQ
5/4 control	68	Batch 1 control	5	15.3	33.3	7.5	7.7	05/03/1997	Initial WQ
5/4 control	68	Batch 1 control	1	15.4	33.4	6.4	7.1	05/06/1997	Termination WQ
5/4 control	68	Batch 1 control	2	15.5	33.5	6.4	7.2	05/06/1997	Termination WQ
5/4 control	68	Batch 1 control	3	15.4	33.6	6.4	7.3	05/06/1997	Termination WQ
5/4 control	68	Batch 1 control	4	15.5	33.6	6.4	7.4	05/06/1997	Termination WQ
5/4 control	68	Batch 1 control	5	15.5	33.5	6.5	7.4	05/06/1997	Termination WQ
5/8 control	69	Batch 2 control	1	15.3	33.4	7.7	7.6	05/07/1997	Initial WQ
5/8 control	69	Batch 2 control	2	15.4	33.1	7.7	7.6	05/07/1997	Initial WQ
5/8 control	69	Batch 2 control	3	15.4	32.8	8.0	7.6	05/07/1997	Initial WQ
5/8 control	69	Batch 2 control	4	15.4	33.2	8.1	7.6	05/07/1997	Initial WQ
5/8 control	69	Batch 2 control	5	15.4	32.9	7.9	7.6	05/07/1997	Initial WQ
5/8 control	69	Batch 2 control	1	15.4	33.1	6.8	7.9	05/10/1997	Termination WQ
5/8 control	69	Batch 2 control	2	15.5	33.4	6.9	7.9	05/10/1997	Termination WQ
5/8 control	69	Batch 2 control	3	15.6	33.5	7.0	7.9	05/10/1997	Termination WQ
5/8 control	69	Batch 2 control	4	15.8	33.7	7.0	7.9	05/10/1997	Termination WQ
5/8 control	69	Batch 2 control	5	15.7	33.9	7.0	7.9	05/10/1997	Termination WQ

Table D-16. Pacific Ecorisk Lab, *S. purpuratus* Larvae 3-day Sediment / Water Interface Testing Overlying Water Quality

Sample Identifier	sort	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)		Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
5/11 control	70	Batch 3 control	1	15.8	33.9		7.4	7.8	05/10/1997	Initial WQ
5/11 control	70	Batch 3 control	2	15.9	33.5		7.3	7.8	05/10/1997	Initial WQ
5/11 control	70	Batch 3 control	3	15.9	33.4		7.4	7.8	05/10/1997	Initial WQ
5/11 control	70	Batch 3 control	4	15.8	33.5		7.5	7.8	05/10/1997	Initial WQ
5/11 control	70	Batch 3 control	5	15.9	33.7		7.5	7.8	05/10/1997	Initial WQ
5/11 control	70	Batch 3 control	1	14.7	32.4		7.0	7.7	05/13/1997	Termination WQ
5/11 control	70	Batch 3 control	2	14.7	34.1	T	7.1	7.8	05/13/1997	Termination WQ
5/11 control	70	Batch 3 control	3	14.5	34.1	T	7.1	7.8	05/13/1997	Termination WQ
5/11 control	70	Batch 3 control	4	14.7	34.1	T	7.1	7.8	05/13/1997	Termination WQ
5/11 control	70	Batch 3 control	5	14.7	34.1	T	7.1	7.8	05/13/1997	Termination WQ
5/18 control	71	Batch 4 control	1	15.6	33.7		7.3	7.8	05/17/1997	Initial WQ
5/18 control	71	Batch 4 control	2	15.6	33.7		7.2	7.8	05/17/1997	Initial WQ
5/18 control	71	Batch 4 control	3	15.3	33.7		7.3	7.8	05/17/1997	Initial WQ
5/18 control	71	Batch 4 control	4	15.3	33.9		7.3	7.8	05/17/1997	Initial WQ
5/18 control	71	Batch 4 control	5	15.4	33.8		7.3	7.8	05/17/1997	Initial WQ
5/18 control	71	Batch 4 control	1	14.8	32.8		6.7	7.6	05/20/1997	Termination WQ
5/18 control	71	Batch 4 control	2	14.7	34.1	T	6.4	7.7	05/20/1997	Termination WQ
5/18 control	71	Batch 4 control	3	14.7	34.2	T	6.5	7.7	05/20/1997	Termination WQ
5/18 control	71	Batch 4 control	4	14.8	34.2	T	6.6	7.7	05/20/1997	Termination WQ
5/18 control	71	Batch 4 control	5	14.7	34.4	T	6.6	7.7	05/20/1997	Termination WQ
5/22 control	72	Batch 5 control	1	15.6	33.4		7.3	7.7	05/21/1997	Initial WQ
5/22 control	72	Batch 5 control	2	15.2	33.5		7.2	7.7	05/21/1997	Initial WQ
5/22 control	72	Batch 5 control	3	15.2	33.4		7.3	7.7	05/21/1997	Initial WQ
5/22 control	72	Batch 5 control	4	15.1	33.9		7.5	7.7	05/21/1997	Initial WQ
5/22 control	72	Batch 5 control	5	15.2	34.0		7.5	7.7	05/21/1997	Initial WQ
5/22 control	72	Batch 5 control	1	14.7	33.4		6.3	7.6	05/24/1997	Termination WQ
5/22 control	72	Batch 5 control	2	14.7	34.2	T	6.3	7.7	05/24/1997	Termination WQ
5/22 control	72	Batch 5 control	3	14.7	34.1	T	6.5	7.7	05/24/1997	Termination WQ
5/22 control	72	Batch 5 control	4	14.7	34.1	T	6.6	7.7	05/24/1997	Termination WQ
5/22 control	72	Batch 5 control	5	14.7	34.1	T	6.5	7.7	05/24/1997	Termination WQ
5/24 control	73	Batch 6 control	1	14.9	33.0		7.3	7.7	05/23/1997	Initial WQ
5/24 control	73	Batch 6 control	2	14.9	33.7		7.4	7.8	05/23/1997	Initial WQ
5/24 control	73	Batch 6 control	3	14.8	33.7		7.4	7.8	05/23/1997	Initial WQ
5/24 control	73	Batch 6 control	4	14.8	33.7		7.5	7.7	05/23/1997	Initial WQ
5/24 control	73	Batch 6 control	5	14.8	33.7		7.5	7.8	05/23/1997	Initial WQ
5/24 control	73	Batch 6 control	1	14.1	33.4		7.1	7.8	05/26/1997	Termination WQ
5/24 control	73	Batch 6 control	2	13.9	32.5		7.1	7.8	05/26/1997	Termination WQ
5/24 control	73	Batch 6 control	3	14.0	33.4		7.2	7.9	05/26/1997	Termination WQ
5/24 control	73	Batch 6 control	4	14.0	33.5		7.0	7.9	05/26/1997	Termination WQ
5/24 control	73	Batch 6 control	5	13.8	33.7		7.1	7.9	05/26/1997	Termination WQ

F = low DO potentially affected larvae.

Table D-17. Battelle Marine Sciences Lab, *M. nasuta* 4-day Copper Reference Toxicant Testing Results

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Stocking Density	Number Alive	Recording Date	Remarks
M_CURT	0	UG/L	1	10	10	06/11/1997	
M_CURT	310	UG/L	1	10	10	06/11/1997	
M_CURT	630	UG/L	1	10	7	06/11/1997	
M_CURT	1250	UG/L	1	10	5	06/11/1997	
M_CURT	2500	UG/L	1	10	5	06/11/1997	
M_CURT	5000	UG/L	1	10	3	06/11/1997	
M_CURT	10000	UG/L	1	10	1	06/11/1997	

Table D-18. Battelle Marine Sciences Lab, *M. nasuta* 4-day Copper Reference Toxicant Testing Overlying Water Quality

Sample Identifier	Cadmium Concentration	Concentration Units	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Recording Date	Remarks
M_CURT	0	UG/L	1	15.2	29.7	8.2	7.7	06/07/1997	Day 0
M_CURT	0	UG/L	1	14.9	30.0	8.1	7.8	06/08/1997	Day 1
M_CURT	0	UG/L	1	15.3	29.4	8.1	7.6	06/09/1997	Day 2
M_CURT	0	UG/L	1	15.0	29.6	7.1	7.4	06/10/1997	Day 3
M_CURT	0	UG/L	1	F	F	F	F	06/11/1997	Day 4
M_CURT	310	UG/L	1	15.1	29.6	8.3	7.6	06/07/1997	Day 0
M_CURT	310	UG/L	1	14.9	29.8	8.0	7.7	06/08/1997	Day 1
M_CURT	310	UG/L	1	15.3	29.5	6.0	7.3	06/09/1997	Day 2
M_CURT	310	UG/L	1	15.1	29.6	4.6	7.0	06/10/1997	Day 3
M_CURT	310	UG/L	1	15.0	29.7	8.0	7.8	06/11/1997	Day 4
M_CURT	630	UG/L	1	15.3	29.6	8.3	7.6	06/07/1997	Day 0
M_CURT	630	UG/L	1	14.9	29.8	8.2	7.8	06/08/1997	Day 1
M_CURT	630	UG/L	1	15.3	29.5	6.1	7.4	06/09/1997	Day 2
M_CURT	630	UG/L	1	15.1	29.7	5.9	7.2	06/10/1997	Day 3
M_CURT	630	UG/L	1	F	F	F	F	06/11/1997	Day 4
M_CURT	1250	UG/L	1	15.1	29.6	8.3	7.6	06/07/1997	Day 0
M_CURT	1250	UG/L	1	14.9	29.8	8.2	7.8	06/08/1997	Day 1
M_CURT	1250	UG/L	1	15.2	29.5	7.4	7.6	06/09/1997	Day 2
M_CURT	1250	UG/L	1	15.0	29.7	6.3	7.3	06/10/1997	Day 3
M_CURT	1250	UG/L	1	15.0	29.8	7.8	7.7	06/11/1997	Day 4
M_CURT	2500	UG/L	1	15.2	29.6	8.3	7.5	06/07/1997	Day 0
M_CURT	2500	UG/L	1	14.9	29.8	8.2	7.8	06/08/1997	Day 1
M_CURT	2500	UG/L	1	15.3	29.5	7.9	7.6	06/09/1997	Day 2
M_CURT	2500	UG/L	1	15.0	29.7	5.8	7.1	06/10/1997	Day 3
M_CURT	2500	UG/L	1	15.0	29.8	7.4	7.6	06/11/1997	Day 4
M_CURT	5000	UG/L	1	15.1	30.0	8.3	7.4	06/07/1997	Day 0
M_CURT	5000	UG/L	1	14.9	30.2	8.2	7.8	06/08/1997	Day 1
M_CURT	5000	UG/L	1	15.3	29.9	7.9	7.6	06/09/1997	Day 2
M_CURT	5000	UG/L	1	15.0	30.2	4.2	6.9	06/10/1997	Day 3
M_CURT	5000	UG/L	1	15.0	30.2	7.5	7.7	06/11/1997	Day 4
M_CURT	10000	UG/L	1	15.2	31.4	8.2	7.1	06/07/1997	Day 0
M_CURT	10000	UG/L	1	14.9	31.5	8.0	7.6	06/08/1997	Day 1
M_CURT	10000	UG/L	1	15.3	31.2	7.8	7.5	06/09/1997	Day 2
M_CURT	10000	UG/L	1	15.1	31.4	3.0	6.8	06/10/1997	Day 3
M_CURT	10000	UG/L	1	14.9	31.6	7.7	7.7	06/11/1997	Day 4

F = water quality measurements inadvertently missed.

Table D-19. Battelle Marine Sciences Lab, *M. nasuta* 28-day Bioaccumulation Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Depurated (Y or N)	Recording Date	Remarks
AAB-158	IB-54	1	30	28	Y	07/04/1997	
AAB-158	IB-54	2	30	26	Y	07/04/1997	
AAB-158	IB-54	3	30	27	Y	07/04/1997	
AAB-160	IB-55	1	30	30	Y	07/04/1997	
AAB-160	IB-55	2	30	28	Y	07/04/1997	
AAB-160	IB-55	3	30	27	Y	07/04/1997	
AAB-159	IB-56	1	30	28	Y	07/04/1997	
AAB-159	IB-56	2	30	24	Y	07/04/1997	
AAB-159	IB-56	3	30	17	Y	07/04/1997	
AAB-159	IB-56	4	30	25	N	07/04/1997	
AAB-129	IB-57	1	30	27	Y	07/04/1997	
AAB-129	IB-57	2	30	25	Y	07/04/1997	
AAB-129	IB-57	3	30	27	Y	07/04/1997	
AAB-130	IB-58	1	30	27	Y	07/04/1997	
AAB-130	IB-58	2	30	24	Y	07/04/1997	
AAB-130	IB-58	3	30	22	Y	07/04/1997	
AAB-161	IB-59	1	30	24	Y	07/04/1997	
AAB-161	IB-59	2	30	27	Y	07/04/1997	
AAB-161	IB-59	3	30	26	Y	07/04/1997	
AAB-133	PA-38	1	30	28	Y	07/04/1997	
AAB-133	PA-38	2	30	27	Y	07/04/1997	
AAB-133	PA-38	3	30	28	Y	07/04/1997	
AAB-128	PA-39	1	30	26	Y	07/04/1997	
AAB-128	PA-39	2	30	26	Y	07/04/1997	
AAB-128	PA-39	3	30	27	Y	07/04/1997	
AAB-132	PA-40	1	30	23	Y	07/04/1997	
AAB-132	PA-40	2	30	29	Y	07/04/1997	
AAB-132	PA-40	3	30	29	Y	07/04/1997	
AAB-092	PA-41	1	30	26	Y	07/04/1997	
AAB-092	PA-41	2	30	26	Y	07/04/1997	
AAB-092	PA-41	3	30	25	Y	07/04/1997	
AAB-086	PA-42	1	30	27	Y	07/04/1997	
AAB-086	PA-42	2	30	22	Y	07/04/1997	
AAB-086	PA-42	3	30	29	Y	07/04/1997	
AAB-087	PA-43	1	30	27	Y	07/04/1997	
AAB-087	PA-43	2	30	22	Y	07/04/1997	
AAB-087	PA-43	3	30	24	Y	07/04/1997	
AAB-091	PA-44	1	30	29	Y	07/04/1997	
AAB-091	PA-44	2	30	29	Y	07/04/1997	
AAB-091	PA-44	3	30	22	Y	07/04/1997	
AAB-126	PA-45	1	30	27	Y	07/04/1997	
AAB-126	PA-45	2	30	25	Y	07/04/1997	
AAB-126	PA-45	3	30	25	Y	07/04/1997	
AAB-127	PA-46	1	30	30	Y	07/04/1997	
AAB-127	PA-46	2	30	27	Y	07/04/1997	
AAB-127	PA-46	3	30	25	Y	07/04/1997	
AAB-127	PA-46	4	30	20	N	07/04/1997	
AAB-089	PA-47	1	30	21	Y	07/04/1997	

Table D-19. Battelle Marine Sciences Lab, *M. nasuta* 28-day Bioaccumulation Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Depurated (Y or N)	Recording Date	Remarks
AAB-089	PA-47	2	30	29	Y	07/04/1997	
AAB-089	PA-47	3	30	30	Y	07/04/1997	
AAB-088	PA-48	1	30	27	Y	07/04/1997	
AAB-088	PA-48	2	30	27	Y	07/04/1997	
AAB-088	PA-48	3	30	28	Y	07/04/1997	
AAB-083	PA-49	1	30	20	Y	07/04/1997	
AAB-083	PA-49	2	30	27	Y	07/04/1997	
AAB-083	PA-49	3	30	27	Y	07/04/1997	
AAB-094	PA-50	1	30	29	Y	07/04/1997	
AAB-094	PA-50	2	30	26	Y	07/04/1997	
AAB-094	PA-50	3	30	30	Y	07/04/1997	
AAB-085	PA-51	1	30	29	Y	07/04/1997	
AAB-085	PA-51	2	30	30	Y	07/04/1997	
AAB-085	PA-51	3	30	25	Y	07/04/1997	
AAB-084	PA-52	1	30	30	Y	07/04/1997	
AAB-084	PA-52	2	30	26	Y	07/04/1997	
AAB-084	PA-52	3	30	28	Y	07/04/1997	
AAB-090	PA-53	1	30	25	Y	07/04/1997	
AAB-090	PA-53	2	30	29	Y	07/04/1997	
AAB-090	PA-53	3	30	27	Y	07/04/1997	
AAB-107	EW-30	1	30	28	Y	07/04/1997	
AAB-107	EW-30	2	30	28	Y	07/04/1997	
AAB-107	EW-30	3	30	28	Y	07/04/1997	
AAB-104	EW-31	1	30	27	Y	07/04/1997	
AAB-104	EW-31	2	30	27	Y	07/04/1997	
AAB-104	EW-31	3	30	28	Y	07/04/1997	
AAB-095	EW-32	1	30	28	Y	07/04/1997	
AAB-095	EW-32	2	30	28	Y	07/04/1997	
AAB-095	EW-32	3	30	28	Y	07/04/1997	
AAB-124	EW-33	1	30	25	Y	07/04/1997	
AAB-124	EW-33	2	30	27	Y	07/04/1997	
AAB-124	EW-33	3	30	26	Y	07/04/1997	
AAB-108	EW-34	1	30	27	Y	07/04/1997	
AAB-108	EW-34	2	30	26	Y	07/04/1997	
AAB-108	EW-34	3	30	24	Y	07/04/1997	
AAB-097	EW-35	1	30	23	Y	07/04/1997	
AAB-097	EW-35	2	30	11	Y	07/04/1997	
AAB-097	EW-35	3	30	24	Y	07/04/1997	
AAB-105	EW-36	1	30	24	Y	07/04/1997	
AAB-105	EW-36	2	30	25	Y	07/04/1997	
AAB-105	EW-36	3	30	27	Y	07/04/1997	
AAB-105	EW-36	4	30	28	N	07/04/1997	
AAB-142	EW-37	1	30	28	Y	07/04/1997	
AAB-142	EW-37	2	30	21	Y	07/04/1997	
AAB-142	EW-37	3	30	27	Y	07/04/1997	
AAB-125	OR-24	1	30	23	Y	07/04/1997	
AAB-125	OR-24	2	30	29	Y	07/04/1997	
AAB-125	OR-24	3	30	29	Y	07/04/1997	

Table D-19. Battelle Marine Sciences Lab, *M. nasuta* 28-day Bioaccumulation Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Depurated (Y or N)	Recording Date	Remarks
AAB-103	OR-25	1	30	28	Y	07/04/1997	
AAB-103	OR-25	2	30	28	Y	07/04/1997	
AAB-103	OR-25	3	30	22	Y	07/04/1997	
AAB-116	OR-26	1	30	26	Y	07/04/1997	
AAB-116	OR-26	2	30	29	Y	07/04/1997	
AAB-116	OR-26	3	30	26	Y	07/04/1997	
AAB-116	OR-26	4	30	25	N	07/04/1997	
AAB-117	OR-27	1	30	25	Y	07/04/1997	
AAB-117	OR-27	2	30	27	Y	07/04/1997	
AAB-117	OR-27	3	30	30	Y	07/04/1997	
AAB-096	OR-28	1	30	23	Y	07/04/1997	
AAB-096	OR-28	2	30	27	Y	07/04/1997	
AAB-096	OR-28	3	30	26	Y	07/04/1997	
AAB-118	OR-29	1	30	28	Y	07/04/1997	
AAB-118	OR-29	2	30	25	Y	07/04/1997	
AAB-118	OR-29	3	30	30	Y	07/04/1997	
AAB-148	SB-01	1	30	28	Y	07/04/1997	
AAB-148	SB-01	2	30	27	Y	07/04/1997	
AAB-148	SB-01	3	30	29	Y	07/04/1997	
AAB-143	SB-02	1	30	26	Y	07/04/1997	
AAB-143	SB-02	2	30	27	Y	07/04/1997	
AAB-143	SB-02	3	30	28	Y	07/04/1997	
AAB-122	SB-03	1	30	28	Y	07/04/1997	
AAB-122	SB-03	2	30	27	Y	07/04/1997	
AAB-122	SB-03	3	30	29	Y	07/04/1997	
AAB-121	SB-04	1	30	26	Y	07/04/1997	
AAB-121	SB-04	2	30	20	Y	07/04/1997	
AAB-121	SB-04	3	30	24	Y	07/04/1997	
AAB-141	SB-05	1	30	27	Y	07/04/1997	
AAB-141	SB-05	2	30	27	Y	07/04/1997	
AAB-141	SB-05	3	30	24	Y	07/04/1997	
AAB-120	SB-06	1	30	21	Y	07/04/1997	
AAB-120	SB-06	2	30	26	Y	07/04/1997	
AAB-120	SB-06	3	30	27	Y	07/04/1997	
AAB-119	SB-07	1	30	30	Y	07/04/1997	
AAB-119	SB-07	2	30	24	Y	07/04/1997	
AAB-119	SB-07	3	30	26	Y	07/04/1997	
AAB-115	SB-08	1	30	26	Y	07/04/1997	
AAB-115	SB-08	2	30	28	Y	07/04/1997	
AAB-115	SB-08	3	30	26	Y	07/04/1997	
AAB-145	SB-09	1	30	29	Y	07/04/1997	
AAB-145	SB-09	2	30	29	Y	07/04/1997	
AAB-145	SB-09	3	30	29	Y	07/04/1997	
AAB-144	SB-10	1	30	27	Y	07/04/1997	
AAB-144	SB-10	2	30	27	Y	07/04/1997	
AAB-144	SB-10	3	30	26	Y	07/04/1997	
AAB-139	SB-11	1	30	27	Y	07/04/1997	
AAB-139	SB-11	2	30	29	Y	07/04/1997	

Table D-19. Battelle Marine Sciences Lab, *M. nasuta* 28-day Bioaccumulation Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Depurated (Y or N)	Recording Date	Remarks
AAB-139	SB-11	3	30	28	Y	07/04/1997	
AAB-154	SB-12	1	30	28	Y	07/04/1997	
AAB-154	SB-12	2	30	30	Y	07/04/1997	
AAB-154	SB-12	3	30	28	Y	07/04/1997	
AAB-113	SB-13	1	30	29	Y	07/04/1997	
AAB-113	SB-13	2	30	28	Y	07/04/1997	
AAB-113	SB-13	3	30	29	Y	07/04/1997	
AAB-138	SB-14	1	30	27	Y	07/04/1997	
AAB-138	SB-14	2	30	26	Y	07/04/1997	
AAB-138	SB-14	3	30	26	Y	07/04/1997	
AAB-114	SB-15	1	30	27	Y	07/04/1997	
AAB-114	SB-15	2	30	29	Y	07/04/1997	
AAB-114	SB-15	3	30	29	Y	07/04/1997	
AAB-112	SB-16	1	30	28	Y	07/04/1997	
AAB-112	SB-16	2	30	30	Y	07/04/1997	
AAB-112	SB-16	3	30	27	Y	07/04/1997	
AAB-146	SB-17	1	30	29	Y	07/04/1997	
AAB-146	SB-17	2	30	27	Y	07/04/1997	
AAB-146	SB-17	3	30	17	Y	07/04/1997	
AAB-100	SB-18	1	30	28	Y	07/04/1997	
AAB-100	SB-18	2	30	30	Y	07/04/1997	
AAB-100	SB-18	3	30	29	Y	07/04/1997	
AAB-101	SB-19	1	30	15	Y	07/04/1997	
AAB-101	SB-19	2	30	14	Y	07/04/1997	
AAB-101	SB-19	3	30	16	Y	07/04/1997	
AAB-109	SB-20	1	30	22	Y	07/04/1997	
AAB-109	SB-20	2	30	26	Y	07/04/1997	
AAB-109	SB-20	3	30	29	Y	07/04/1997	
AAB-102	SB-21	1	30	28	Y	07/04/1997	
AAB-102	SB-21	2	30	29	Y	07/04/1997	
AAB-102	SB-21	3	30	20	Y	07/04/1997	
AAB-102	SB-21	4	30	26	N	07/04/1997	
AAB-111	SB-22	1	30	27	Y	07/04/1997	
AAB-111	SB-22	2	30	28	Y	07/04/1997	
AAB-111	SB-22	3	30	30	Y	07/04/1997	
AAB-099	SB-23	1	30	25	Y	07/04/1997	
AAB-099	SB-23	2	30	28	Y	07/04/1997	
AAB-099	SB-23	3	30	28	Y	07/04/1997	
AAB-157	AB-67	1	30	28	Y	07/04/1997	
AAB-157	AB-67	2	30	20	Y	07/04/1997	
AAB-157	AB-67	3	30	20	Y	07/04/1997	
AAB-157	AB-67	4	30	26	Y	07/04/1997	
AAB-157	AB-67	5	30	26	Y	07/04/1997	
AAB-098	AL-64	1	30	18	Y	07/04/1997	
AAB-098	AL-64	2	30	25	Y	07/04/1997	
AAB-098	AL-64	3	30	20	Y	07/04/1997	
AAB-098	AL-64	4	30	27	Y	07/04/1997	
AAB-098	AL-64	5	30	22	Y	07/04/1997	

Table D-19. Battelle Marine Sciences Lab, *M. nasuta* 28-day Bioaccumulation Testing Results

Sample Identifier	Sediment Treatment	Replicate	Stocking Density	Number Alive	Depurated (Y or N)	Recording Date	Remarks
AAB-156	BF-66	1	30	24	Y	07/04/1997	
AAB-156	BF-66	2	30	28	Y	07/04/1997	
AAB-156	BF-66	3	30	25	Y	07/04/1997	
AAB-156	BF-66	4	30	24	Y	07/04/1997	
AAB-156	BF-66	5	30	27	Y	07/04/1997	
AAB-162	PC-63	1	30	24	Y	07/04/1997	
AAB-162	PC-63	2	30	25	Y	07/04/1997	
AAB-162	PC-63	3	30	26	Y	07/04/1997	
AAB-162	PC-63	4	30	30	Y	07/04/1997	
AAB-162	PC-63	5	30	27	Y	07/04/1997	
AAB-165	RR-65	1	30	26	Y	07/04/1997	
AAB-165	RR-65	2	30	26	Y	07/04/1997	
AAB-165	RR-65	3	30	26	Y	07/04/1997	
AAB-165	RR-65	4	30	28	Y	07/04/1997	
AAB-165	RR-65	5	30	25	Y	07/04/1997	
MacControl	M. nasuta Control	1	30	26	Y	07/04/1997	
MacControl	M. nasuta Control	2	30	26	Y	07/04/1997	
MacControl	M. nasuta Control	3	30	27	Y	07/04/1997	
MacControl	M. nasuta Control	4	30	26	Y	07/04/1997	
MacControl	M. nasuta Control	5	30	26	Y	07/04/1997	

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-158	IB-54	1	15.0	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-158	IB-54	2	14.9	32.0	7.7	7.6	128	06/06/1997	Day 0
AAB-158	IB-54	3	15.0	32.0	8.1	7.6	132	06/06/1997	Day 0
AAB-158	IB-54	1	15.8	32.0	7.8	7.7	126	06/07/1997	Day 1
AAB-158	IB-54	2	15.3	32.2	7.3	7.7	128	06/08/1997	Day 2
AAB-158	IB-54	3	15.2	31.7	8.0	7.6	132	06/09/1997	Day 3
AAB-158	IB-54	1	15.3	31.9	6.8	7.4	128	06/10/1997	Day 4
AAB-158	IB-54	2	15.2	31.9	7.8	7.7	128	06/11/1997	Day 5
AAB-158	IB-54	3	14.9	31.7	7.5	7.5	128	06/12/1997	Day 6
AAB-158	IB-54	1	15.6	31.7	7.7	7.7	126	06/13/1997	Day 7
AAB-158	IB-54	2	15.1	31.9	7.9	7.6	124	06/14/1997	Day 8
AAB-158	IB-54	3	15.1	31.7	7.8	7.7	132	06/15/1997	Day 9
AAB-158	IB-54	1	15.2	32.1	7.8	7.5	124	06/16/1997	Day 10
AAB-158	IB-54	2	15.5	31.5	7.8	7.6	124	06/17/1997	Day 11
AAB-158	IB-54	3	15.7	31.7	8.1	7.6	132	06/18/1997	Day 12
AAB-158	IB-54	1	15.9	31.8	7.7	7.6	126	06/19/1997	Day 13
AAB-158	IB-54	2	15.4	32.0	6.3	7.7	124	06/20/1997	Day 14
AAB-158	IB-54	3	14.6	32.1	8.0	7.5	128	06/21/1997	Day 15
AAB-158	IB-54	1	14.2	31.9	8.0	7.6	128	06/22/1997	Day 16
AAB-158	IB-54	2	15.8	31.7	8.1	7.6	128	06/23/1997	Day 17
AAB-158	IB-54	3	15.8	32.0	7.7	7.6	118	06/24/1997	Day 18
AAB-158	IB-54	1	15.4	31.9	7.7	7.7	128	06/25/1997	Day 19
AAB-158	IB-54	2	15.3	32.3	7.1	7.4	124	06/26/1997	Day 20
AAB-158	IB-54	3	15.3	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-158	IB-54	1	15.0	31.9	6.6	7.4	120	06/28/1997	Day 22
AAB-158	IB-54	2	15.0	32.1	6.5	7.5	124	06/29/1997	Day 23
AAB-158	IB-54	3	15.4	32.4	7.5	7.4	116	06/30/1997	Day 24
AAB-158	IB-54	1	15.6	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-158	IB-54	2	15.2	31.8	7.8	7.5	120	07/02/1997	Day 26
AAB-158	IB-54	3	15.3	31.7	7.7	7.4	116	07/03/1997	Day 27
AAB-158	IB-54	1	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-158	IB-54	2	14.9	32.1	6.9	7.5		07/04/1997	Day 28
AAB-158	IB-54	3	15.0	32.1	7.3	7.5		07/04/1997	Day 28
AAB-160	IB-55	1	14.7	32.0	7.7	7.5	128	06/06/1997	Day 0
AAB-160	IB-55	2	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-160	IB-55	3	14.9	32.0	7.8	7.5	124	06/06/1997	Day 0
AAB-160	IB-55	1	15.7	32.0	8.0	7.7	128	06/07/1997	Day 1
AAB-160	IB-55	2	14.9	32.2	7.4	7.6	120	06/08/1997	Day 2
AAB-160	IB-55	3	15.5	31.7	7.7	7.6	124	06/09/1997	Day 3
AAB-160	IB-55	1	15.2	31.9	7.3	7.4	132	06/10/1997	Day 4
AAB-160	IB-55	2	15.5	31.9	7.6	7.7	116	06/11/1997	Day 5
AAB-160	IB-55	3	15.0	31.7	7.4	7.5	124	06/12/1997	Day 6
AAB-160	IB-55	1	15.4	31.7	7.6	7.6	128	06/13/1997	Day 7
AAB-160	IB-55	2	15.3	32.0	7.7	7.6	120	06/14/1997	Day 8
AAB-160	IB-55	3	15.2	31.6	7.6	7.7	128	06/15/1997	Day 9
AAB-160	IB-55	1	15.0	31.8	7.6	7.5	126	06/16/1997	Day 10
AAB-160	IB-55	2	15.8	31.5	7.7	7.6	120	06/17/1997	Day 11
AAB-160	IB-55	3	15.7	31.7	8.1	7.6	124	06/18/1997	Day 12
AAB-160	IB-55	1	15.8	31.8	7.8	7.6	128	06/19/1997	Day 13
AAB-160	IB-55	2	15.8	32.0	6.1	7.7	116	06/20/1997	Day 14
AAB-160	IB-55	3	14.5	32.0	7.8	7.4	124	06/21/1997	Day 15
AAB-160	IB-55	1	14.0	31.9	7.7	7.6	128	06/22/1997	Day 16
AAB-160	IB-55	2	16.0	31.7	8.0	7.5	120	06/23/1997	Day 17
AAB-160	IB-55	3	15.9	32.0	7.5	7.6	126	06/24/1997	Day 18
AAB-160	IB-55	1	15.2	32.0	7.2	7.7	120	06/25/1997	Day 19
AAB-160	IB-55	2	15.5	32.3	7.2	7.4	116	06/26/1997	Day 20
AAB-160	IB-55	3	15.1	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-160	IB-55	1	14.7	32.0	5.5	7.3	118	06/28/1997	Day 22
AAB-160	IB-55	2	15.4	32.1	6.0	7.5	116	06/29/1997	Day 23
AAB-160	IB-55	3	15.4	32.4	7.6	7.4	120	06/30/1997	Day 24

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-160	IB-55	1	15.3	31.9	5.1	7.6	126	07/01/1997	Day 25
AAB-160	IB-55	2	15.4	31.7	7.4	7.5	132	07/02/1997	Day 26
AAB-160	IB-55	3	15.3	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-160	IB-55	1	14.9	32.0	6.5	7.5		07/04/1997	Day 28
AAB-160	IB-55	2	15.0	32.1	7.3	7.5		07/04/1997	Day 28
AAB-160	IB-55	3	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-159	IB-56	1	15.0	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-159	IB-56	2	15.1	32.0	7.9	7.6	126	06/06/1997	Day 0
AAB-159	IB-56	3	14.8	32.0	7.7	7.5	120	06/06/1997	Day 0
AAB-159	IB-56	4	15.2	32.0	8.1	7.6	124	06/06/1997	Day 0
AAB-159	IB-56	1	15.4	32.0	7.9	7.7	122	06/07/1997	Day 1
AAB-159	IB-56	2	15.5	32.2	7.4	7.7	128	06/08/1997	Day 2
AAB-159	IB-56	3	15.3	31.7	8.0	7.6	120	06/09/1997	Day 3
AAB-159	IB-56	4	15.3	31.8	8.0	7.6	120	06/09/1997	Day 3
AAB-159	IB-56	1	15.1	31.9	6.6	7.4	124	06/10/1997	Day 4
AAB-159	IB-56	2	15.4	31.9	7.8	7.7	124	06/11/1997	Day 5
AAB-159	IB-56	3	14.9	31.7	7.1	7.4	124	06/12/1997	Day 6
AAB-159	IB-56	4	15.0	31.7	7.2	7.5	120	06/12/1997	Day 6
AAB-159	IB-56	1	15.6	31.8	7.4	7.6	122	06/13/1997	Day 7
AAB-159	IB-56	2	15.3	32.0	7.7	7.6	126	06/14/1997	Day 8
AAB-159	IB-56	3	15.0	31.6	7.7	7.7	128	06/15/1997	Day 9
AAB-159	IB-56	4	15.3	31.8	7.7	7.7	120	06/15/1997	Day 9
AAB-159	IB-56	1	15.0	32.1	8.1	7.4	120	06/16/1997	Day 10
AAB-159	IB-56	2	15.8	31.5	7.8	7.6	128	06/17/1997	Day 11
AAB-159	IB-56	3	15.5	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-159	IB-56	4	15.8	31.7	8.1	7.6	120	06/18/1997	Day 12
AAB-159	IB-56	1	15.7	31.8	7.7	7.6	124	06/19/1997	Day 13
AAB-159	IB-56	2	15.6	31.9	6.4	7.7	128	06/20/1997	Day 14
AAB-159	IB-56	3	14.4	32.1	8.1	7.4	128	06/21/1997	Day 15
AAB-159	IB-56	4	14.8	32.1	8.0	7.5	116	06/21/1997	Day 15
AAB-159	IB-56	1	14.9	31.9	7.9	7.6	120	06/22/1997	Day 16
AAB-159	IB-56	2	16.0	31.7	8.0	7.5	128	06/23/1997	Day 17
AAB-159	IB-56	3	15.8	32.0	7.6	7.5	120	06/24/1997	Day 18
AAB-159	IB-56	4	16.0	32.0	7.4	7.6	118	06/24/1997	Day 18
AAB-159	IB-56	1	15.5	32.1	7.5	7.7	120	06/25/1997	Day 19
AAB-159	IB-56	2	15.6	32.3	7.5	7.5	124	06/26/1997	Day 20
AAB-159	IB-56	3	15.1	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-159	IB-56	4	15.4	31.7	6.5	7.3	124	06/27/1997	Day 21
AAB-159	IB-56	1	15.3	31.9	6.5	7.4	124	06/28/1997	Day 22
AAB-159	IB-56	2	15.3	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-159	IB-56	3	15.4	32.4	7.4	7.4	128	06/30/1997	Day 24
AAB-159	IB-56	4	15.5	32.4	7.5	7.4	120	06/30/1997	Day 24
AAB-159	IB-56	1	15.6	31.9	5.3	7.7	122	07/01/1997	Day 25
AAB-159	IB-56	2	15.4	31.5	7.8	7.5	120	07/02/1997	Day 26
AAB-159	IB-56	3	15.2	31.7	7.5	7.4	120	07/03/1997	Day 27
AAB-159	IB-56	4	15.4	31.7	7.7	7.4	128	07/03/1997	Day 27
AAB-159	IB-56	1	14.9	32.1	7.2	7.5		07/04/1997	Day 28
AAB-159	IB-56	2	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-159	IB-56	3	14.9	32.0	6.8	7.5		07/04/1997	Day 28
AAB-159	IB-56	4	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-129	IB-57	1	15.0	32.0	8.1	7.6	120	06/06/1997	Day 0
AAB-129	IB-57	2	15.1	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-129	IB-57	3	15.0	32.0	8.1	7.6	132	06/06/1997	Day 0
AAB-129	IB-57	1	15.4	32.0	7.9	7.7	116	06/07/1997	Day 1
AAB-129	IB-57	2	15.5	32.1	7.4	7.6	128	06/08/1997	Day 2
AAB-129	IB-57	3	15.1	31.7	8.0	7.6	128	06/09/1997	Day 3
AAB-129	IB-57	1	15.0	31.9	6.8	7.4	116	06/10/1997	Day 4
AAB-129	IB-57	2	15.4	31.9	7.7	7.7	128	06/11/1997	Day 5
AAB-129	IB-57	3	14.8	31.7	7.4	7.5	132	06/12/1997	Day 6
AAB-129	IB-57	1	15.6	31.7	7.8	7.7	116	06/13/1997	Day 7

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-129	IB-57	2	15.3	32.0	7.8	7.6	128	06/14/1997	Day 8
AAB-129	IB-57	3	15.1	31.8	7.8	7.7	128	06/15/1997	Day 9
AAB-129	IB-57	1	15.1	32.2	7.2	7.6	116	06/16/1997	Day 10
AAB-129	IB-57	2	15.7	31.5	7.8	7.5	130	06/17/1997	Day 11
AAB-129	IB-57	3	15.7	31.6	8.3	7.6	128	06/18/1997	Day 12
AAB-129	IB-57	1	15.7	31.8	7.7	7.6	116	06/19/1997	Day 13
AAB-129	IB-57	2	15.6	32.0	6.3	7.7	132	06/20/1997	Day 14
AAB-129	IB-57	3	14.6	32.1	8.0	7.4	124	06/21/1997	Day 15
AAB-129	IB-57	1	14.8	31.9	7.0	7.5	124	06/22/1997	Day 16
AAB-129	IB-57	2	16.0	31.7	7.9	7.5	132	06/23/1997	Day 17
AAB-129	IB-57	3	15.8	32.0	7.4	7.5	118	06/24/1997	Day 18
AAB-129	IB-57	1	15.4	32.0	7.5	7.7	132	06/25/1997	Day 19
AAB-129	IB-57	2	15.6	32.3	7.4	7.5	126	06/26/1997	Day 20
AAB-129	IB-57	3	15.2	31.8	6.3	7.3	124	06/27/1997	Day 21
AAB-129	IB-57	1	15.3	31.9	6.1	7.4	118	06/28/1997	Day 22
AAB-129	IB-57	2	15.3	32.1	6.4	7.5	124	06/29/1997	Day 23
AAB-129	IB-57	3	15.3	32.4	7.5	7.4	124	06/30/1997	Day 24
AAB-129	IB-57	1	15.5	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-129	IB-57	2	15.4	31.8	7.6	7.5	128	07/02/1997	Day 26
AAB-129	IB-57	3	15.3	31.7	7.7	7.4	124	07/03/1997	Day 27
AAB-129	IB-57	1	14.9	32.1	7.4	7.5		07/04/1997	Day 28
AAB-129	IB-57	2	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-129	IB-57	3	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-130	IB-58	1	15.0	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-130	IB-58	2	14.9	32.0	7.7	7.5	120	06/06/1997	Day 0
AAB-130	IB-58	3	15.1	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-130	IB-58	1	15.8	32.0	7.9	7.7	120	06/07/1997	Day 1
AAB-130	IB-58	2	15.6	32.1	7.4	7.7	132	06/08/1997	Day 2
AAB-130	IB-58	3	15.6	31.7	7.8	7.6	116	06/09/1997	Day 3
AAB-130	IB-58	1	15.3	31.9	6.9	7.4	122	06/10/1997	Day 4
AAB-130	IB-58	2	15.5	31.9	7.9	7.7	126	06/11/1997	Day 5
AAB-130	IB-58	3	15.1	31.7	7.4	7.5	116	06/12/1997	Day 6
AAB-130	IB-58	1	15.5	31.7	7.5	7.6	124	06/13/1997	Day 7
AAB-130	IB-58	2	15.5	31.9	7.7	7.6	124	06/14/1997	Day 8
AAB-130	IB-58	3	15.2	31.7	7.6	7.7	120	06/15/1997	Day 9
AAB-130	IB-58	1	15.1	32.1	7.7	7.5	124	06/16/1997	Day 10
AAB-130	IB-58	2	15.8	31.5	7.8	7.5	126	06/17/1997	Day 11
AAB-130	IB-58	3	15.8	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-130	IB-58	1	15.9	31.8	7.7	7.6	124	06/19/1997	Day 13
AAB-130	IB-58	2	15.8	31.9	6.4	7.7	124	06/20/1997	Day 14
AAB-130	IB-58	3	14.7	32.1	8.0	7.4	116	06/21/1997	Day 15
AAB-130	IB-58	1	14.1	31.8	7.9	7.6	120	06/22/1997	Day 16
AAB-130	IB-58	2	16.1	31.4	8.1	7.5	128	06/23/1997	Day 17
AAB-130	IB-58	3	16.0	32.0	7.5	7.6	120	06/24/1997	Day 18
AAB-130	IB-58	1	15.4	32.0	7.6	7.7	120	06/25/1997	Day 19
AAB-130	IB-58	2	15.8	32.3	7.3	7.4	124	06/26/1997	Day 20
AAB-130	IB-58	3	15.2	31.7	6.5	7.3	116	06/27/1997	Day 21
AAB-130	IB-58	1	15.0	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-130	IB-58	2	15.4	32.1	6.8	7.5	124	06/29/1997	Day 23
AAB-130	IB-58	3	15.5	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-130	IB-58	1	15.6	31.9	5.4	7.7	124	07/01/1997	Day 25
AAB-130	IB-58	2	15.5	31.8	7.9	7.5	124	07/02/1997	Day 26
AAB-130	IB-58	3	15.5	31.7	7.7	7.4	116	07/03/1997	Day 27
AAB-130	IB-58	1	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-130	IB-58	2	15.1	32.0	6.9	7.5		07/04/1997	Day 28
AAB-130	IB-58	3	15.1	32.0	7.3	7.5		07/04/1997	Day 28
AAB-161	IB-59	1	14.9	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-161	IB-59	2	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-161	IB-59	3	15.0	32.0	7.8	7.5	132	06/06/1997	Day 0
AAB-161	IB-59	1	15.4	32.0	7.9	7.7	128	06/07/1997	Day 1

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-161	IB-59	2	14.8	32.2	7.2	7.6	128	06/08/1997	Day 2
AAB-161	IB-59	3	15.6	31.7	7.9	7.6	140	06/09/1997	Day 3
AAB-161	IB-59	1	15.0	31.9	6.6	7.4	128	06/10/1997	Day 4
AAB-161	IB-59	2	15.4	31.9	7.9	7.7	128	06/11/1997	Day 5
AAB-161	IB-59	3	15.1	31.7	7.2	7.5	130	06/12/1997	Day 6
AAB-161	IB-59	1	15.5	31.8	7.6	7.7	132	06/13/1997	Day 7
AAB-161	IB-59	2	15.2	32.0	7.9	7.6	128	06/14/1997	Day 8
AAB-161	IB-59	3	15.3	31.7	7.7	7.7	128	06/15/1997	Day 9
AAB-161	IB-59	1	15.0	32.1	7.2	7.5	128	06/16/1997	Day 10
AAB-161	IB-59	2	15.7	31.5	7.8	7.6	128	06/17/1997	Day 11
AAB-161	IB-59	3	15.8	31.7	8.4	7.6	126	06/18/1997	Day 12
AAB-161	IB-59	1	15.7	31.8	7.6	7.6	128	06/19/1997	Day 13
AAB-161	IB-59	2	15.7	32.0	6.2	7.7	128	06/20/1997	Day 14
AAB-161	IB-59	3	14.7	32.0	7.8	7.4	124	06/21/1997	Day 15
AAB-161	IB-59	1	14.9	31.9	8.0	7.6	124	06/22/1997	Day 16
AAB-161	IB-59	2	16.0	31.7	8.0	7.5	124	06/23/1997	Day 17
AAB-161	IB-59	3	16.1	32.0	7.8	7.6	126	06/24/1997	Day 18
AAB-161	IB-59	1	15.4	32.1	7.2	7.6	132	06/25/1997	Day 19
AAB-161	IB-59	2	15.4	32.3	7.3	7.4	128	06/26/1997	Day 20
AAB-161	IB-59	3	15.3	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-161	IB-59	1	15.3	32.0	5.9	7.4	120	06/28/1997	Day 22
AAB-161	IB-59	2	15.4	32.1	6.1	7.5	128	06/29/1997	Day 23
AAB-161	IB-59	3	15.6	32.4	7.9	7.5	116	06/30/1997	Day 24
AAB-161	IB-59	1	15.6	32.0	5.3	7.6	116	07/01/1997	Day 25
AAB-161	IB-59	2	15.3	31.7	7.5	7.5	124	07/02/1997	Day 26
AAB-161	IB-59	3	15.5	31.7	7.7	7.4	116	07/03/1997	Day 27
AAB-161	IB-59	1	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-161	IB-59	2	15.0	32.1	7.2	7.5		07/04/1997	Day 28
AAB-161	IB-59	3	15.1	32.0	6.9	7.5		07/04/1997	Day 28
AAB-133	PA-38	1	15.0	32.0	8.1	7.6	124	06/06/1997	Day 0
AAB-133	PA-38	2	15.1	32.0	7.9	7.6	118	06/06/1997	Day 0
AAB-133	PA-38	3	15.0	32.0	7.9	7.6	128	06/06/1997	Day 0
AAB-133	PA-38	1	15.3	32.0	7.7	7.6	120	06/07/1997	Day 1
AAB-133	PA-38	2	15.5	32.1	7.4	7.7	124	06/08/1997	Day 2
AAB-133	PA-38	3	15.5	31.7	7.9	7.6	132	06/09/1997	Day 3
AAB-133	PA-38	1	15.0	31.9	6.8	7.4	120	06/10/1997	Day 4
AAB-133	PA-38	2	15.4	31.9	7.8	7.7	122	06/11/1997	Day 5
AAB-133	PA-38	3	15.0	31.7	7.5	7.5	132	06/12/1997	Day 6
AAB-133	PA-38	1	15.5	31.8	7.4	7.6	120	06/13/1997	Day 7
AAB-133	PA-38	2	15.4	32.0	7.8	7.6	118	06/14/1997	Day 8
AAB-133	PA-38	3	15.2	31.6	7.7	7.7	132	06/15/1997	Day 9
AAB-133	PA-38	1	15.1	32.2	7.3	7.6	120	06/16/1997	Day 10
AAB-133	PA-38	2	15.7	31.5	7.8	7.5	118	06/17/1997	Day 11
AAB-133	PA-38	3	15.7	31.7	8.2	7.6	132	06/18/1997	Day 12
AAB-133	PA-38	1	15.7	31.9	7.8	7.6	120	06/19/1997	Day 13
AAB-133	PA-38	2	15.7	31.9	6.3	7.7	120	06/20/1997	Day 14
AAB-133	PA-38	3	14.5	32.1	8.0	7.4	132	06/21/1997	Day 15
AAB-133	PA-38	1	14.8	31.9	7.3	7.6	120	06/22/1997	Day 16
AAB-133	PA-38	2	16.1	31.7	8.0	7.5	118	06/23/1997	Day 17
AAB-133	PA-38	3	16.0	32.0	7.6	7.6	128	06/24/1997	Day 18
AAB-133	PA-38	1	15.4	32.1	7.4	7.7	124	06/25/1997	Day 19
AAB-133	PA-38	2	15.7	32.3	7.5	7.5	124	06/26/1997	Day 20
AAB-133	PA-38	3	15.1	31.7	6.8	7.3	124	06/27/1997	Day 21
AAB-133	PA-38	1	15.2	32.0	5.9	7.4	116	06/28/1997	Day 22
AAB-133	PA-38	2	15.3	32.1	6.7	7.5	120	06/29/1997	Day 23
AAB-133	PA-38	3	15.4	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-133	PA-38	1	15.5	31.9	5.3	7.7	128	07/01/1997	Day 25
AAB-133	PA-38	2	15.4	31.8	7.8	7.5	120	07/02/1997	Day 26
AAB-133	PA-38	3	15.4	31.7	7.7	7.4	120	07/03/1997	Day 27
AAB-133	PA-38	1	14.9	32.1	7.4	7.5		07/04/1997	Day 28

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-133	PA-38	2	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-133	PA-38	3	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-128	PA-39	1	15.1	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-128	PA-39	2	15.2	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-128	PA-39	3	15.0	32.0	7.8	7.6	122	06/06/1997	Day 0
AAB-128	PA-39	1	15.9	32.0	7.9	7.7	120	06/07/1997	Day 1
AAB-128	PA-39	2	15.0	32.2	7.4	7.7	124	06/08/1997	Day 2
AAB-128	PA-39	3	15.5	31.7	7.9	7.6	124	06/09/1997	Day 3
AAB-128	PA-39	1	15.4	31.9	7.6	7.4	120	06/10/1997	Day 4
AAB-128	PA-39	2	15.7	31.9	7.7	7.7	120	06/11/1997	Day 5
AAB-128	PA-39	3	15.1	31.7	7.4	7.5	124	06/12/1997	Day 6
AAB-128	PA-39	1	15.6	31.6	7.7	7.6	116	06/13/1997	Day 7
AAB-128	PA-39	2	15.5	32.0	7.7	7.6	120	06/14/1997	Day 8
AAB-128	PA-39	3	15.2	31.7	7.8	7.7	128	06/15/1997	Day 9
AAB-128	PA-39	1	15.2	32.0	7.8	7.5	116	06/16/1997	Day 10
AAB-128	PA-39	2	16.0	31.5	7.7	7.5	120	06/17/1997	Day 11
AAB-128	PA-39	3	15.7	31.7	8.4	7.6	124	06/18/1997	Day 12
AAB-128	PA-39	1	16.0	31.8	7.8	7.6	118	06/19/1997	Day 13
AAB-128	PA-39	2	16.0	32.0	6.1	7.7	120	06/20/1997	Day 14
AAB-128	PA-39	3	14.5	31.9	7.9	7.4	120	06/21/1997	Day 15
AAB-128	PA-39	1	14.2	31.9	7.9	7.6	120	06/22/1997	Day 16
AAB-128	PA-39	2	16.2	31.7	7.9	7.5	116	06/23/1997	Day 17
AAB-128	PA-39	3	15.9	32.0	7.5	7.6	118	06/24/1997	Day 18
AAB-128	PA-39	1	15.4	32.0	7.4	7.7	116	06/25/1997	Day 19
AAB-128	PA-39	2	15.7	32.3	7.3	7.4	116	06/26/1997	Day 20
AAB-128	PA-39	3	15.2	31.7	6.5	7.3	116	06/27/1997	Day 21
AAB-128	PA-39	1	15.1	31.9	6.6	7.4	120	06/28/1997	Day 22
AAB-128	PA-39	2	15.7	32.1	6.1	7.5	116	06/29/1997	Day 23
AAB-128	PA-39	3	15.5	32.4	7.5	7.5	116	06/30/1997	Day 24
AAB-128	PA-39	1	15.6	31.9	5.4	7.7	118	07/01/1997	Day 25
AAB-128	PA-39	2	15.5	31.7	7.6	7.5	116	07/02/1997	Day 26
AAB-128	PA-39	3	15.4	31.7	7.7	7.4	124	07/03/1997	Day 27
AAB-128	PA-39	1	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-128	PA-39	2	15.2	32.0	7.3	7.5		07/04/1997	Day 28
AAB-128	PA-39	3	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-132	PA-40	1	15.0	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-132	PA-40	2	15.2	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-132	PA-40	3	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-132	PA-40	1	15.7	32.0	8.1	7.7	128	06/07/1997	Day 1
AAB-132	PA-40	2	15.6	32.1	7.6	7.7	128	06/08/1997	Day 2
AAB-132	PA-40	3	15.6	31.7	7.9	7.6	116	06/09/1997	Day 3
AAB-132	PA-40	1	15.2	31.9	6.9	7.4	132	06/10/1997	Day 4
AAB-132	PA-40	2	15.6	31.9	7.7	7.7	128	06/11/1997	Day 5
AAB-132	PA-40	3	15.1	31.7	7.6	7.5	120	06/12/1997	Day 6
AAB-132	PA-40	1	15.4	31.7	7.6	7.6	132	06/13/1997	Day 7
AAB-132	PA-40	2	15.5	31.9	7.8	7.6	128	06/14/1997	Day 8
AAB-132	PA-40	3	15.2	31.6	7.8	7.7	120	06/15/1997	Day 9
AAB-132	PA-40	1	14.9	32.1	7.5	7.5	132	06/16/1997	Day 10
AAB-132	PA-40	2	15.9	31.5	7.8	7.6	130	06/17/1997	Day 11
AAB-132	PA-40	3	15.7	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-132	PA-40	1	15.7	31.8	7.9	7.6	132	06/19/1997	Day 13
AAB-132	PA-40	2	15.8	31.9	6.3	7.7	132	06/20/1997	Day 14
AAB-132	PA-40	3	14.6	32.1	8.1	7.4	116	06/21/1997	Day 15
AAB-132	PA-40	1	13.9	31.8	7.6	7.6	132	06/22/1997	Day 16
AAB-132	PA-40	2	16.2	31.7	8.1	7.5	128	06/23/1997	Day 17
AAB-132	PA-40	3	16.1	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-132	PA-40	1	15.2	32.0	7.3	7.7	132	06/25/1997	Day 19
AAB-132	PA-40	2	15.9	32.3	7.5	7.5	120	06/26/1997	Day 20
AAB-132	PA-40	3	15.1	31.7	6.9	7.3	116	06/27/1997	Day 21
AAB-132	PA-40	1	14.8	31.9	5.7	7.3	124	06/28/1997	Day 22

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-132	PA-40	2	15.4	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-132	PA-40	3	15.5	32.4	7.9	7.4	116	06/30/1997	Day 24
AAB-132	PA-40	1	15.4	31.9	5.3	7.6	120	07/01/1997	Day 25
AAB-132	PA-40	2	15.6	31.8	7.9	7.5	116	07/02/1997	Day 26
AAB-132	PA-40	3	15.4	31.7	7.8	7.5	132	07/03/1997	Day 27
AAB-132	PA-40	1	14.9	32.0	6.8	7.4		07/04/1997	Day 28
AAB-132	PA-40	2	15.2	32.0	7.3	7.5		07/04/1997	Day 28
AAB-132	PA-40	3	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-092	PA-41	1	15.2	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-092	PA-41	2	15.0	32.0	7.8	7.6	116	06/06/1997	Day 0
AAB-092	PA-41	3	15.0	32.0	8.1	7.6	132	06/06/1997	Day 0
AAB-092	PA-41	1	15.8	32.0	8.1	7.7	120	06/07/1997	Day 1
AAB-092	PA-41	2	15.5	32.2	7.3	7.6	124	06/08/1997	Day 2
AAB-092	PA-41	3	15.2	31.7	8.1	7.6	128	06/09/1997	Day 3
AAB-092	PA-41	1	15.4	31.9	6.7	7.4	120	06/10/1997	Day 4
AAB-092	PA-41	2	15.3	31.9	8.0	7.7	116	06/11/1997	Day 5
AAB-092	PA-41	3	15.0	31.7	7.1	7.5	128	06/12/1997	Day 6
AAB-092	PA-41	1	16.0	31.8	7.6	7.6	118	06/13/1997	Day 7
AAB-092	PA-41	2	15.2	32.0	8.0	7.6	116	06/14/1997	Day 8
AAB-092	PA-41	3	15.3	31.8	7.6	7.7	128	06/15/1997	Day 9
AAB-092	PA-41	1	15.3	32.1	7.7	7.5	116	06/16/1997	Day 10
AAB-092	PA-41	2	15.6	31.5	8.0	7.6	116	06/17/1997	Day 11
AAB-092	PA-41	3	15.7	31.7	8.0	7.6	128	06/18/1997	Day 12
AAB-092	PA-41	1	16.2	31.8	7.8	7.6	118	06/19/1997	Day 13
AAB-092	PA-41	2	15.6	31.9	6.4	7.7	116	06/20/1997	Day 14
AAB-092	PA-41	3	14.7	32.1	7.9	7.5	124	06/21/1997	Day 15
AAB-092	PA-41	1	15.1	31.9	7.9	7.6	116	06/22/1997	Day 16
AAB-092	PA-41	2	16.0	31.7	8.0	7.5	116	06/23/1997	Day 17
AAB-092	PA-41	3	16.0	32.0	6.5	7.4	124	06/24/1997	Day 18
AAB-092	PA-41	1	15.9	32.1	7.4	7.7	124	06/25/1997	Day 19
AAB-092	PA-41	2	15.6	32.3	7.3	7.4	128	06/26/1997	Day 20
AAB-092	PA-41	3	15.5	31.8	6.3	7.3	116	06/27/1997	Day 21
AAB-092	PA-41	1	15.7	32.0	6.1	7.4	116	06/28/1997	Day 22
AAB-092	PA-41	2	15.0	32.1	7.8	7.4	124	06/29/1997	Day 23
AAB-092	PA-41	3	15.4	32.4	7.4	7.4	116	06/30/1997	Day 24
AAB-092	PA-41	1	15.9	32.0	5.2	7.6	122	07/01/1997	Day 25
AAB-092	PA-41	2	15.1	31.8	7.6	7.5	124	07/02/1997	Day 26
AAB-092	PA-41	3	15.4	31.7	7.6	7.4	116	07/03/1997	Day 27
AAB-092	PA-41	1	15.3	32.0	7.3	7.5		07/04/1997	Day 28
AAB-092	PA-41	2	14.9	32.0	6.7	7.5		07/04/1997	Day 28
AAB-092	PA-41	3	15.0	32.1	7.4	7.5		07/04/1997	Day 28
AAB-086	PA-42	1	14.9	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-086	PA-42	2	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-086	PA-42	3	15.0	32.0	8.1	7.6	128	06/06/1997	Day 0
AAB-086	PA-42	1	15.7	32.0	7.9	7.7	116	06/07/1997	Day 1
AAB-086	PA-42	2	15.4	32.2	7.5	7.7	132	06/08/1997	Day 2
AAB-086	PA-42	3	15.2	31.7	8.0	7.6	124	06/09/1997	Day 3
AAB-086	PA-42	1	15.2	31.9	7.0	7.4	120	06/10/1997	Day 4
AAB-086	PA-42	2	15.3	31.9	7.8	7.7	128	06/11/1997	Day 5
AAB-086	PA-42	3	14.9	31.7	7.5	7.5	124	06/12/1997	Day 6
AAB-086	PA-42	1	15.4	31.7	7.8	7.7	120	06/13/1997	Day 7
AAB-086	PA-42	2	15.2	31.9	7.8	7.6	128	06/14/1997	Day 8
AAB-086	PA-42	3	15.2	31.7	7.9	7.7	128	06/15/1997	Day 9
AAB-086	PA-42	1	15.0	32.0	7.8	7.5	116	06/16/1997	Day 10
AAB-086	PA-42	2	15.7	31.5	7.8	7.6	128	06/17/1997	Day 11
AAB-086	PA-42	3	15.7	31.7	8.2	7.6	124	06/18/1997	Day 12
AAB-086	PA-42	1	15.7	31.8	7.8	7.6	120	06/19/1997	Day 13
AAB-086	PA-42	2	15.4	31.9	6.4	7.7	128	06/20/1997	Day 14
AAB-086	PA-42	3	14.6	32.1	8.0	7.4	120	06/21/1997	Day 15
AAB-086	PA-42	1	14.0	31.9	8.0	7.6	124	06/22/1997	Day 16

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-086	PA-42	2	15.8	31.7	8.1	7.5	132	06/23/1997	Day 17
AAB-086	PA-42	3	15.8	32.0	7.7	7.6	124	06/24/1997	Day 18
AAB-086	PA-42	1	15.2	32.1	7.6	7.7	120	06/25/1997	Day 19
AAB-086	PA-42	2	15.5	32.3	7.5	7.5	122	06/26/1997	Day 20
AAB-086	PA-42	3	15.3	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-086	PA-42	1	14.9	31.9	6.6	7.4	120	06/28/1997	Day 22
AAB-086	PA-42	2	15.1	32.1	6.6	7.5	120	06/29/1997	Day 23
AAB-086	PA-42	3	15.3	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-086	PA-42	1	15.4	31.9	5.4	7.6	116	07/01/1997	Day 25
AAB-086	PA-42	2	15.2	31.8	7.8	7.5	116	07/02/1997	Day 26
AAB-086	PA-42	3	15.3	31.7	7.8	7.4	116	07/03/1997	Day 27
AAB-086	PA-42	1	14.8	32.0	7.0	7.5		07/04/1997	Day 28
AAB-086	PA-42	2	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-086	PA-42	3	15.0	32.0	7.5	7.5		07/04/1997	Day 28
AAB-087	PA-43	1	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-087	PA-43	2	14.9	32.0	7.7	7.6	122	06/06/1997	Day 0
AAB-087	PA-43	3	14.8	32.0	7.6	7.5	126	06/06/1997	Day 0
AAB-087	PA-43	1	15.6	32.0	8.0	7.7	132	06/07/1997	Day 1
AAB-087	PA-43	2	15.6	32.2	7.3	7.7	128	06/08/1997	Day 2
AAB-087	PA-43	3	15.3	31.7	7.9	7.6	132	06/09/1997	Day 3
AAB-087	PA-43	1	15.1	31.9	7.1	7.4	132	06/10/1997	Day 4
AAB-087	PA-43	2	15.4	31.9	8.0	7.7	122	06/11/1997	Day 5
AAB-087	PA-43	3	14.9	31.7	7.3	7.5	128	06/12/1997	Day 6
AAB-087	PA-43	1	15.7	31.7	7.7	7.7	132	06/13/1997	Day 7
AAB-087	PA-43	2	15.5	31.9	7.7	7.6	122	06/14/1997	Day 8
AAB-087	PA-43	3	15.0	31.7	7.6	7.7	132	06/15/1997	Day 9
AAB-087	PA-43	1	15.1	32.1	7.8	7.5	128	06/16/1997	Day 10
AAB-087	PA-43	2	15.8	31.5	7.9	7.6	124	06/17/1997	Day 11
AAB-087	PA-43	3	15.5	31.7	8.2	7.6	128	06/18/1997	Day 12
AAB-087	PA-43	1	15.9	31.8	7.9	7.6	128	06/19/1997	Day 13
AAB-087	PA-43	2	15.6	32.1	6.3	7.7	124	06/20/1997	Day 14
AAB-087	PA-43	3	14.2	32.1	7.9	7.4	128	06/21/1997	Day 15
AAB-087	PA-43	1	15.0	31.9	8.0	7.6	124	06/22/1997	Day 16
AAB-087	PA-43	2	16.1	31.7	7.8	7.5	118	06/23/1997	Day 17
AAB-087	PA-43	3	15.8	31.9	7.7	7.6	130	06/24/1997	Day 18
AAB-087	PA-43	1	15.6	32.0	7.6	7.7	120	06/25/1997	Day 19
AAB-087	PA-43	2	15.7	32.4	7.3	7.4	116	06/26/1997	Day 20
AAB-087	PA-43	3	15.0	31.7	6.9	7.4	128	06/27/1997	Day 21
AAB-087	PA-43	1	15.5	32.0	6.3	7.4	116	06/28/1997	Day 22
AAB-087	PA-43	2	15.2	32.1	7.9	7.4	116	06/29/1997	Day 23
AAB-087	PA-43	3	15.3	32.4	7.7	7.5	124	06/30/1997	Day 24
AAB-087	PA-43	1	15.8	31.9	5.4	7.7	122	07/01/1997	Day 25
AAB-087	PA-43	2	15.5	31.8	7.7	7.5	116	07/02/1997	Day 26
AAB-087	PA-43	3	15.2	31.7	7.8	7.5	124	07/03/1997	Day 27
AAB-087	PA-43	1	15.0	32.1	7.5	7.5		07/04/1997	Day 28
AAB-087	PA-43	2	15.0	32.1	6.6	7.5		07/04/1997	Day 28
AAB-087	PA-43	3	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-091	PA-44	1	15.0	32.0	7.9	7.6	130	06/06/1997	Day 0
AAB-091	PA-44	2	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-091	PA-44	3	14.7	32.0	7.8	7.5	132	06/06/1997	Day 0
AAB-091	PA-44	1	15.9	32.0	8.0	7.7	130	06/07/1997	Day 1
AAB-091	PA-44	2	15.5	32.2	7.5	7.7	120	06/08/1997	Day 2
AAB-091	PA-44	3	15.4	31.7	8.0	7.6	120	06/09/1997	Day 3
AAB-091	PA-44	1	15.4	31.9	6.9	7.5	132	06/10/1997	Day 4
AAB-091	PA-44	2	15.5	31.9	7.7	7.7	120	06/11/1997	Day 5
AAB-091	PA-44	3	14.9	31.7	7.4	7.5	120	06/12/1997	Day 6
AAB-091	PA-44	1	15.6	31.7	7.8	7.7	130	06/13/1997	Day 7
AAB-091	PA-44	2	15.4	31.9	7.9	7.6	120	06/14/1997	Day 8
AAB-091	PA-44	3	15.0	31.7	7.6	7.7	120	06/15/1997	Day 9
AAB-091	PA-44	1	15.2	32.1	7.8	7.5	132	06/16/1997	Day 10

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-091	PA-44	2	15.7	31.4	7.9	7.6	124	06/17/1997	Day 11
AAB-091	PA-44	3	15.5	31.7	8.1	7.5	120	06/18/1997	Day 12
AAB-091	PA-44	1	15.9	31.8	7.8	7.6	134	06/19/1997	Day 13
AAB-091	PA-44	2	15.6	32.0	6.3	7.7	120	06/20/1997	Day 14
AAB-091	PA-44	3	14.5	32.0	7.9	7.4	120	06/21/1997	Day 15
AAB-091	PA-44	1	14.2	31.8	8.0	7.6	132	06/22/1997	Day 16
AAB-091	PA-44	2	16.1	31.7	8.0	7.5	120	06/23/1997	Day 17
AAB-091	PA-44	3	15.9	32.0	7.2	7.5	120	06/24/1997	Day 18
AAB-091	PA-44	1	15.4	32.1	7.7	7.7	128	06/25/1997	Day 19
AAB-091	PA-44	2	15.7	32.4	7.5	7.5	122	06/26/1997	Day 20
AAB-091	PA-44	3	15.0	31.8	6.4	7.3	116	06/27/1997	Day 21
AAB-091	PA-44	1	15.1	31.9	6.7	7.4	124	06/28/1997	Day 22
AAB-091	PA-44	2	15.2	32.1	6.7	7.5	120	06/29/1997	Day 23
AAB-091	PA-44	3	15.3	32.4	7.7	7.5	116	06/30/1997	Day 24
AAB-091	PA-44	1	15.7	31.9	5.4	7.7	122	07/01/1997	Day 25
AAB-091	PA-44	2	15.4	31.8	7.8	7.5	118	07/02/1997	Day 26
AAB-091	PA-44	3	15.3	31.8	7.5	7.4	116	07/03/1997	Day 27
AAB-091	PA-44	1	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-091	PA-44	2	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-091	PA-44	3	14.8	32.0	6.7	7.5		07/04/1997	Day 28
AAB-126	PA-45	1	14.7	32.0	7.8	7.5	130	06/06/1997	Day 0
AAB-126	PA-45	2	14.8	32.0	7.8	7.6	124	06/06/1997	Day 0
AAB-126	PA-45	3	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-126	PA-45	1	15.7	32.0	7.9	7.7	126	06/07/1997	Day 1
AAB-126	PA-45	2	15.4	32.2	7.1	7.6	124	06/08/1997	Day 2
AAB-126	PA-45	3	15.6	31.7	7.8	7.6	116	06/09/1997	Day 3
AAB-126	PA-45	1	15.2	31.9	6.8	7.4	128	06/10/1997	Day 4
AAB-126	PA-45	2	15.4	31.9	7.9	7.7	124	06/11/1997	Day 5
AAB-126	PA-45	3	15.2	31.7	7.6	7.5	120	06/12/1997	Day 6
AAB-126	PA-45	1	15.4	31.7	7.7	7.7	128	06/13/1997	Day 7
AAB-126	PA-45	2	15.2	31.9	7.6	7.6	124	06/14/1997	Day 8
AAB-126	PA-45	3	15.3	31.6	7.8	7.7	120	06/15/1997	Day 9
AAB-126	PA-45	1	15.0	32.0	7.8	7.5	128	06/16/1997	Day 10
AAB-126	PA-45	2	15.6	31.5	7.9	7.6	120	06/17/1997	Day 11
AAB-126	PA-45	3	15.8	31.6	8.3	7.6	118	06/18/1997	Day 12
AAB-126	PA-45	1	15.8	31.8	7.9	7.6	128	06/19/1997	Day 13
AAB-126	PA-45	2	15.4	32.1	6.3	7.7	124	06/20/1997	Day 14
AAB-126	PA-45	3	14.8	32.1	8.0	7.4	116	06/21/1997	Day 15
AAB-126	PA-45	1	14.0	31.9	8.0	7.6	128	06/22/1997	Day 16
AAB-126	PA-45	2	15.9	31.7	7.8	7.5	124	06/23/1997	Day 17
AAB-126	PA-45	3	16.1	32.0	7.6	7.6	118	06/24/1997	Day 18
AAB-126	PA-45	1	15.3	32.1	7.5	7.7	128	06/25/1997	Day 19
AAB-126	PA-45	2	15.5	32.3	7.3	7.4	120	06/26/1997	Day 20
AAB-126	PA-45	3	15.3	31.7	6.6	7.3	120	06/27/1997	Day 21
AAB-126	PA-45	1	14.8	31.9	6.5	7.4	124	06/28/1997	Day 22
AAB-126	PA-45	2	15.2	32.1	6.4	7.5	116	06/29/1997	Day 23
AAB-126	PA-45	3	15.5	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-126	PA-45	1	15.5	32.0	5.4	7.7	116	07/01/1997	Day 25
AAB-126	PA-45	2	15.1	31.1	7.5	7.5	120	07/02/1997	Day 26
AAB-126	PA-45	3	15.5	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-126	PA-45	1	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-126	PA-45	2	14.7	32.2	7.0	7.5		07/04/1997	Day 28
AAB-126	PA-45	3	15.1	32.1	7.2	7.5		07/04/1997	Day 28
AAB-127	PA-46	1	15.0	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-127	PA-46	2	15.0	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-127	PA-46	3	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-127	PA-46	4	14.7	32.0	7.8	7.5	130	06/06/1997	Day 0
AAB-127	PA-46	1	15.5	32.0	8.0	7.7	122	06/07/1997	Day 1
AAB-127	PA-46	4	15.8	32.0	7.9	7.7	128	06/07/1997	Day 1
AAB-127	PA-46	2	15.5	32.1	7.4	7.6	116	06/08/1997	Day 2

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-127	PA-46	3	15.6	31.7	7.9	7.6	116	06/09/1997	Day 3
AAB-127	PA-46	1	15.1	31.9	6.8	7.4	124	06/10/1997	Day 4
AAB-127	PA-46	4	15.1	31.9	6.4	7.4	128	06/10/1997	Day 4
AAB-127	PA-46	2	15.4	31.9	7.7	7.7	118	06/11/1997	Day 5
AAB-127	PA-46	3	15.1	31.7	7.5	7.5	120	06/12/1997	Day 6
AAB-127	PA-46	1	15.7	31.8	7.6	7.7	124	06/13/1997	Day 7
AAB-127	PA-46	4	15.4	31.7	7.7	7.7	128	06/13/1997	Day 7
AAB-127	PA-46	2	15.3	31.9	7.8	7.6	116	06/14/1997	Day 8
AAB-127	PA-46	3	15.2	31.6	7.8	7.7	120	06/15/1997	Day 9
AAB-127	PA-46	1	15.1	32.1	7.6	7.5	120	06/16/1997	Day 10
AAB-127	PA-46	4	15.0	32.1	7.7	7.5	126	06/16/1997	Day 10
AAB-127	PA-46	2	15.7	31.2	7.8	7.6	116	06/17/1997	Day 11
AAB-127	PA-46	3	15.8	31.7	8.1	7.6	118	06/18/1997	Day 12
AAB-127	PA-46	1	15.9	31.8	7.8	7.6	120	06/19/1997	Day 13
AAB-127	PA-46	4	15.8	31.8	7.8	7.6	128	06/19/1997	Day 13
AAB-127	PA-46	2	15.6	32.0	6.3	7.7	116	06/20/1997	Day 14
AAB-127	PA-46	3	14.6	32.1	8.1	7.5	116	06/21/1997	Day 15
AAB-127	PA-46	1	15.0	31.9	7.8	7.6	132	06/22/1997	Day 16
AAB-127	PA-46	4	14.0	31.9	8.0	7.6	124	06/22/1997	Day 16
AAB-127	PA-46	2	16.0	31.7	8.1	7.5	120	06/23/1997	Day 17
AAB-127	PA-46	3	16.0	32.0	7.5	7.6	118	06/24/1997	Day 18
AAB-127	PA-46	1	15.5	32.1	7.3	7.6	132	06/25/1997	Day 19
AAB-127	PA-46	4	15.2	32.1	7.7	7.7	120	06/25/1997	Day 19
AAB-127	PA-46	2	15.6	32.3	7.6	7.5	120	06/26/1997	Day 20
AAB-127	PA-46	3	15.2	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-127	PA-46	1	15.4	31.9	6.3	7.4	120	06/28/1997	Day 22
AAB-127	PA-46	4	15.0	31.9	6.7	7.4	128	06/28/1997	Day 22
AAB-127	PA-46	2	15.2	32.1	6.7	7.5	120	06/29/1997	Day 23
AAB-127	PA-46	3	15.5	32.4	7.6	7.5	120	06/30/1997	Day 24
AAB-127	PA-46	1	15.7	31.9	5.3	7.7	118	07/01/1997	Day 25
AAB-127	PA-46	4	15.5	31.9	5.3	7.7	124	07/01/1997	Day 25
AAB-127	PA-46	2	15.3	31.8	8.0	7.5	116	07/02/1997	Day 26
AAB-127	PA-46	3	15.3	31.7	7.4	7.4	120	07/03/1997	Day 27
AAB-127	PA-46	1	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-127	PA-46	2	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-127	PA-46	3	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-127	PA-46	4	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-089	PA-47	1	15.0	32.0	8.0	7.6	118	06/06/1997	Day 0
AAB-089	PA-47	2	15.0	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-089	PA-47	3	15.0	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-089	PA-47	1	15.8	32.0	7.9	7.7	120	06/07/1997	Day 1
AAB-089	PA-47	2	15.4	32.2	7.6	7.7	124	06/08/1997	Day 2
AAB-089	PA-47	3	15.5	31.4	7.9	7.6	124	06/09/1997	Day 3
AAB-089	PA-47	1	15.3	31.9	6.9	7.4	120	06/10/1997	Day 4
AAB-089	PA-47	2	15.4	31.9	7.8	7.7	124	06/11/1997	Day 5
AAB-089	PA-47	3	15.0	31.7	7.5	7.5	124	06/12/1997	Day 6
AAB-089	PA-47	1	15.5	31.7	7.8	7.7	120	06/13/1997	Day 7
AAB-089	PA-47	2	15.3	32.0	7.9	7.6	124	06/14/1997	Day 8
AAB-089	PA-47	3	15.1	31.7	7.8	7.7	120	06/15/1997	Day 9
AAB-089	PA-47	1	15.2	32.1	7.8	7.5	120	06/16/1997	Day 10
AAB-089	PA-47	2	15.7	31.5	7.8	7.6	124	06/17/1997	Day 11
AAB-089	PA-47	3	15.6	31.6	8.3	7.6	124	06/18/1997	Day 12
AAB-089	PA-47	1	15.9	31.7	7.8	7.6	120	06/19/1997	Day 13
AAB-089	PA-47	2	15.5	31.9	6.4	7.7	124	06/20/1997	Day 14
AAB-089	PA-47	3	14.5	31.6	8.0	7.4	124	06/21/1997	Day 15
AAB-089	PA-47	1	14.1	31.9	8.0	7.6	120	06/22/1997	Day 16
AAB-089	PA-47	2	16.0	31.5	8.1	7.5	116	06/23/1997	Day 17
AAB-089	PA-47	3	15.9	32.0	7.4	7.6	120	06/24/1997	Day 18
AAB-089	PA-47	1	15.4	32.0	7.7	7.7	124	06/25/1997	Day 19
AAB-089	PA-47	2	15.6	32.2	7.6	7.5	124	06/26/1997	Day 20

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-089	PA-47	3	15.1	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-089	PA-47	1	15.0	31.9	6.7	7.4	116	06/28/1997	Day 22
AAB-089	PA-47	2	15.2	32.1	6.6	7.5	132	06/29/1997	Day 23
AAB-089	PA-47	3	15.3	32.4	7.5	7.5	120	06/30/1997	Day 24
AAB-089	PA-47	1	15.6	31.9	5.3	7.7	120	07/01/1997	Day 25
AAB-089	PA-47	2	15.3	31.7	7.9	7.5	128	07/02/1997	Day 26
AAB-089	PA-47	3	15.3	31.7	7.7	7.4	124	07/03/1997	Day 27
AAB-089	PA-47	1	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-089	PA-47	2	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-089	PA-47	3	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-088	PA-48	1	14.8	32.0	7.8	7.5	132	06/06/1997	Day 0
AAB-088	PA-48	2	14.9	32.0	7.7	7.5	120	06/06/1997	Day 0
AAB-088	PA-48	3	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-088	PA-48	1	15.7	32.0	8.0	7.7	132	06/07/1997	Day 1
AAB-088	PA-48	2	15.4	32.2	7.4	7.7	120	06/08/1997	Day 2
AAB-088	PA-48	3	15.4	31.7	7.8	7.6	120	06/09/1997	Day 3
AAB-088	PA-48	1	15.2	31.9	7.0	7.4	132	06/10/1997	Day 4
AAB-088	PA-48	2	15.3	31.9	7.9	7.7	120	06/11/1997	Day 5
AAB-088	PA-48	3	15.0	31.7	7.3	7.5	120	06/12/1997	Day 6
AAB-088	PA-48	1	15.4	31.7	7.8	7.6	128	06/13/1997	Day 7
AAB-088	PA-48	2	15.2	32.0	7.8	7.6	122	06/14/1997	Day 8
AAB-088	PA-48	3	15.1	31.6	7.6	7.7	120	06/15/1997	Day 9
AAB-088	PA-48	1	15.0	32.1	7.9	7.5	124	06/16/1997	Day 10
AAB-088	PA-48	2	15.6	31.5	7.9	7.5	120	06/17/1997	Day 11
AAB-088	PA-48	3	15.5	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-088	PA-48	1	15.8	31.8	7.8	7.6	124	06/19/1997	Day 13
AAB-088	PA-48	2	15.4	32.0	6.5	7.7	116	06/20/1997	Day 14
AAB-088	PA-48	3	14.4	32.2	7.9	7.4	116	06/21/1997	Day 15
AAB-088	PA-48	1	14.1	31.9	8.0	7.6	128	06/22/1997	Day 16
AAB-088	PA-48	2	15.8	31.7	7.9	7.5	120	06/23/1997	Day 17
AAB-088	PA-48	3	15.8	32.0	7.5	7.5	118	06/24/1997	Day 18
AAB-088	PA-48	1	15.2	32.0	7.6	7.7	124	06/25/1997	Day 19
AAB-088	PA-48	2	15.4	32.4	7.5	7.5	116	06/26/1997	Day 20
AAB-088	PA-48	3	15.0	31.8	6.4	7.3	118	06/27/1997	Day 21
AAB-088	PA-48	1	14.9	31.9	6.6	7.4	120	06/28/1997	Day 22
AAB-088	PA-48	2	15.1	32.1	6.4	7.5	116	06/29/1997	Day 23
AAB-088	PA-48	3	15.3	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-088	PA-48	1	15.5	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-088	PA-48	2	15.1	31.7	7.7	7.5	116	07/02/1997	Day 26
AAB-088	PA-48	3	15.2	31.7	7.7	7.4	120	07/03/1997	Day 27
AAB-088	PA-48	1	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-088	PA-48	2	14.9	32.0	6.7	7.5		07/04/1997	Day 28
AAB-088	PA-48	3	14.9	32.1	7.2	7.5		07/04/1997	Day 28
AAB-083	PA-49	1	14.8	32.0	7.7	7.5	116	06/06/1997	Day 0
AAB-083	PA-49	2	15.1	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-083	PA-49	3	15.1	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-083	PA-49	1	15.7	32.0	7.7	7.6	120	06/07/1997	Day 1
AAB-083	PA-49	2	15.1	32.2	7.5	7.7	124	06/08/1997	Day 2
AAB-083	PA-49	3	15.3	31.7	8.2	7.6	124	06/09/1997	Day 3
AAB-083	PA-49	1	15.3	31.9	6.7	7.3	120	06/10/1997	Day 4
AAB-083	PA-49	2	15.6	31.9	8.0	7.7	122	06/11/1997	Day 5
AAB-083	PA-49	3	15.0	31.7	7.4	7.5	124	06/12/1997	Day 6
AAB-083	PA-49	1	15.6	31.7	7.8	7.6	120	06/13/1997	Day 7
AAB-083	PA-49	2	15.5	32.0	7.9	7.6	126	06/14/1997	Day 8
AAB-083	PA-49	3	15.3	31.7	7.8	7.7	120	06/15/1997	Day 9
AAB-083	PA-49	1	15.2	32.1	7.8	7.5	116	06/16/1997	Day 10
AAB-083	PA-49	2	15.9	31.5	7.9	7.6	120	06/17/1997	Day 11
AAB-083	PA-49	3	15.9	31.7	8.3	7.6	120	06/18/1997	Day 12
AAB-083	PA-49	1	15.9	31.8	7.8	7.6	118	06/19/1997	Day 13
AAB-083	PA-49	2	15.9	32.0	6.3	7.7	124	06/20/1997	Day 14

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-083	PA-49	3	14.8	31.8	8.0	7.4	120	06/21/1997	Day 15
AAB-083	PA-49	1	14.2	31.9	7.9	7.6	120	06/22/1997	Day 16
AAB-083	PA-49	2	16.1	31.7	8.0	7.5	120	06/23/1997	Day 17
AAB-083	PA-49	3	16.0	32.0	7.6	7.6	128	06/24/1997	Day 18
AAB-083	PA-49	1	15.4	32.0	7.6	7.6	120	06/25/1997	Day 19
AAB-083	PA-49	2	15.4	32.3	7.2	7.4	128	06/26/1997	Day 20
AAB-083	PA-49	3	15.5	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-083	PA-49	1	15.0	31.9	6.4	7.4	116	06/28/1997	Day 22
AAB-083	PA-49	2	15.4	32.1	6.4	7.5	124	06/29/1997	Day 23
AAB-083	PA-49	3	15.5	32.3	7.4	7.4	120	06/30/1997	Day 24
AAB-083	PA-49	1	15.6	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-083	PA-49	2	15.4	31.8	7.7	7.5	120	07/02/1997	Day 26
AAB-083	PA-49	3	15.4	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-083	PA-49	1	15.2	31.5	6.9	7.5		07/04/1997	Day 28
AAB-083	PA-49	2	15.0	32.1	7.3	7.5		07/04/1997	Day 28
AAB-083	PA-49	3	15.0	32.1	7.4	7.5		07/04/1997	Day 28
AAB-094	PA-50	1	14.8	32.0	7.6	7.5	118	06/06/1997	Day 0
AAB-094	PA-50	2	15.0	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-094	PA-50	3	15.3	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-094	PA-50	1	15.6	32.1	7.7	7.6	120	06/07/1997	Day 1
AAB-094	PA-50	2	15.4	32.2	7.2	7.7	128	06/08/1997	Day 2
AAB-094	PA-50	3	15.7	31.7	7.9	7.6	120	06/09/1997	Day 3
AAB-094	PA-50	1	15.2	31.9	7.6	7.4	120	06/10/1997	Day 4
AAB-094	PA-50	2	15.4	31.9	7.9	7.7	122	06/11/1997	Day 5
AAB-094	PA-50	3	15.3	31.7	7.6	7.5	120	06/12/1997	Day 6
AAB-094	PA-50	1	15.3	31.7	7.7	7.6	118	06/13/1997	Day 7
AAB-094	PA-50	2	15.2	32.0	7.9	7.6	124	06/14/1997	Day 8
AAB-094	PA-50	3	15.4	31.6	7.8	7.7	120	06/15/1997	Day 9
AAB-094	PA-50	1	14.9	32.0	7.4	7.5	116	06/16/1997	Day 10
AAB-094	PA-50	2	15.6	31.5	8.0	7.6	126	06/17/1997	Day 11
AAB-094	PA-50	3	15.9	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-094	PA-50	1	15.7	31.8	7.8	7.6	116	06/19/1997	Day 13
AAB-094	PA-50	2	15.3	32.0	6.4	7.7	128	06/20/1997	Day 14
AAB-094	PA-50	3	14.8	32.1	8.1	7.5	124	06/21/1997	Day 15
AAB-094	PA-50	1	14.0	31.9	7.7	7.6	124	06/22/1997	Day 16
AAB-094	PA-50	2	15.9	31.7	8.1	7.5	124	06/23/1997	Day 17
AAB-094	PA-50	3	16.2	32.0	7.5	7.6	124	06/24/1997	Day 18
AAB-094	PA-50	1	15.1	32.0	7.4	7.6	120	06/25/1997	Day 19
AAB-094	PA-50	2	15.4	32.2	7.3	7.4	126	06/26/1997	Day 20
AAB-094	PA-50	3	15.4	31.7	6.7	7.3	118	06/27/1997	Day 21
AAB-094	PA-50	1	14.6	31.9	5.9	7.3	118	06/28/1997	Day 22
AAB-094	PA-50	2	15.1	32.1	6.4	7.5	120	06/29/1997	Day 23
AAB-094	PA-50	3	15.6	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-094	PA-50	1	15.2	31.9	5.1	7.6	116	07/01/1997	Day 25
AAB-094	PA-50	2	15.2	31.8	7.5	7.5	124	07/02/1997	Day 26
AAB-094	PA-50	3	15.6	31.7	7.7	7.4	128	07/03/1997	Day 27
AAB-094	PA-50	1	14.7	32.1	6.6	7.5		07/04/1997	Day 28
AAB-094	PA-50	2	14.9	32.1	7.1	7.4		07/04/1997	Day 28
AAB-094	PA-50	3	15.2	32.0	7.2	7.5		07/04/1997	Day 28
AAB-085	PA-51	1	15.2	32.0	8.1	7.6	124	06/06/1997	Day 0
AAB-085	PA-51	2	15.2	32.0	7.8	7.6	132	06/06/1997	Day 0
AAB-085	PA-51	3	15.0	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-085	PA-51	1	15.6	32.0	7.9	7.7	120	06/07/1997	Day 1
AAB-085	PA-51	2	15.5	32.1	7.5	7.6	132	06/08/1997	Day 2
AAB-085	PA-51	3	15.1	31.7	8.0	7.6	120	06/09/1997	Day 3
AAB-085	PA-51	1	15.2	31.9	7.0	7.4	120	06/10/1997	Day 4
AAB-085	PA-51	2	15.5	31.9	7.7	7.7	128	06/11/1997	Day 5
AAB-085	PA-51	3	14.8	31.7	6.8	7.5	120	06/12/1997	Day 6
AAB-085	PA-51	1	15.8	31.7	7.6	7.7	120	06/13/1997	Day 7
AAB-085	PA-51	2	15.3	31.9	7.7	7.6	132	06/14/1997	Day 8

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-085	PA-51	3	15.1	31.8	7.7	7.7	120	06/15/1997	Day 9
AAB-085	PA-51	1	15.2	32.1	7.1	7.6	122	06/16/1997	Day 10
AAB-085	PA-51	2	15.8	31.5	7.8	7.6	132	06/17/1997	Day 11
AAB-085	PA-51	3	15.7	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-085	PA-51	1	15.9	31.9	7.7	7.6	120	06/19/1997	Day 13
AAB-085	PA-51	2	15.5	31.9	6.4	7.7	132	06/20/1997	Day 14
AAB-085	PA-51	3	14.6	32.2	8.1	7.5	116	06/21/1997	Day 15
AAB-085	PA-51	1	15.0	31.9	7.9	7.6	116	06/22/1997	Day 16
AAB-085	PA-51	2	16.0	31.7	8.0	7.5	132	06/23/1997	Day 17
AAB-085	PA-51	3	15.9	32.0	7.3	7.6	124	06/24/1997	Day 18
AAB-085	PA-51	1	15.6	31.9	7.4	7.7	120	06/25/1997	Day 19
AAB-085	PA-51	2	15.6	32.3	7.5	7.5	130	06/26/1997	Day 20
AAB-085	PA-51	3	15.3	31.7	6.3	7.3	116	06/27/1997	Day 21
AAB-085	PA-51	1	15.4	31.9	6.4	7.4	124	06/28/1997	Day 22
AAB-085	PA-51	2	15.2	32.1	6.5	7.5	128	06/29/1997	Day 23
AAB-085	PA-51	3	15.4	32.4	7.6	7.4	132	06/30/1997	Day 24
AAB-085	PA-51	1	15.7	31.9	5.2	7.7	120	07/01/1997	Day 25
AAB-085	PA-51	2	15.3	31.8	7.8	7.5	128	07/02/1997	Day 26
AAB-085	PA-51	3	15.3	31.7	7.7	7.4	116	07/03/1997	Day 27
AAB-085	PA-51	1	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-085	PA-51	2	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-085	PA-51	3	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-084	PA-52	1	15.0	32.0	7.9	7.5	132	06/06/1997	Day 0
AAB-084	PA-52	2	15.1	32.0	8.1	7.6	124	06/06/1997	Day 0
AAB-084	PA-52	3	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-084	PA-52	1	15.8	32.0	7.9	7.7	132	06/07/1997	Day 1
AAB-084	PA-52	2	15.0	32.2	7.5	7.7	124	06/08/1997	Day 2
AAB-084	PA-52	3	15.2	31.7	8.0	7.6	120	06/09/1997	Day 3
AAB-084	PA-52	1	15.3	31.9	6.9	7.5	132	06/10/1997	Day 4
AAB-084	PA-52	2	15.6	31.9	7.8	7.7	116	06/11/1997	Day 5
AAB-084	PA-52	3	14.9	31.7	6.9	7.5	120	06/12/1997	Day 6
AAB-084	PA-52	1	15.6	31.7	7.7	7.6	124	06/13/1997	Day 7
AAB-084	PA-52	2	15.3	31.9	7.9	7.7	116	06/14/1997	Day 8
AAB-084	PA-52	3	15.3	31.8	7.7	7.7	120	06/15/1997	Day 9
AAB-084	PA-52	1	15.2	32.1	7.8	7.5	122	06/16/1997	Day 10
AAB-084	PA-52	2	15.8	31.5	7.8	7.5	116	06/17/1997	Day 11
AAB-084	PA-52	3	15.7	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-084	PA-52	1	15.9	31.8	7.8	7.6	124	06/19/1997	Day 13
AAB-084	PA-52	2	15.9	32.0	6.2	7.7	120	06/20/1997	Day 14
AAB-084	PA-52	3	14.8	32.1	7.9	7.4	120	06/21/1997	Day 15
AAB-084	PA-52	1	14.2	31.9	8.0	7.6	124	06/22/1997	Day 16
AAB-084	PA-52	2	16.0	31.4	8.1	7.6	128	06/23/1997	Day 17
AAB-084	PA-52	3	15.9	32.0	7.3	7.6	120	06/24/1997	Day 18
AAB-084	PA-52	1	15.4	31.7	7.6	7.7	116	06/25/1997	Day 19
AAB-084	PA-52	2	15.4	32.4	7.1	7.4	128	06/26/1997	Day 20
AAB-084	PA-52	3	15.4	31.8	6.1	7.3	116	06/27/1997	Day 21
AAB-084	PA-52	1	15.1	31.9	6.6	7.4	122	06/28/1997	Day 22
AAB-084	PA-52	2	15.6	32.1	6.2	7.5	124	06/29/1997	Day 23
AAB-084	PA-52	3	15.4	32.4	7.0	7.4	116	06/30/1997	Day 24
AAB-084	PA-52	1	15.6	31.9	5.4	7.7	120	07/01/1997	Day 25
AAB-084	PA-52	2	15.4	31.8	7.8	7.5	120	07/02/1997	Day 26
AAB-084	PA-52	3	15.4	31.7	7.6	7.4	116	07/03/1997	Day 27
AAB-084	PA-52	1	15.0	31.9	7.2	7.5		07/04/1997	Day 28
AAB-084	PA-52	2	15.0	32.0	7.5	7.5		07/04/1997	Day 28
AAB-084	PA-52	3	15.1	32.0	7.4	7.5		07/04/1997	Day 28
AAB-090	PA-53	1	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-090	PA-53	2	15.0	32.0	8.1	7.6	128	06/06/1997	Day 0
AAB-090	PA-53	3	15.2	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-090	PA-53	1	15.7	32.0	7.9	7.7	128	06/07/1997	Day 1
AAB-090	PA-53	2	14.8	32.2	7.4	7.6	128	06/08/1997	Day 2

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-090	PA-53	3	15.7	31.7	8.2	7.6	116	06/09/1997	Day 3
AAB-090	PA-53	1	15.2	31.9	7.0	7.5	128	06/10/1997	Day 4
AAB-090	PA-53	2	15.4	31.9	8.0	7.7	124	06/11/1997	Day 5
AAB-090	PA-53	3	15.2	31.7	7.5	7.5	116	06/12/1997	Day 6
AAB-090	PA-53	1	15.4	31.7	7.8	7.7	128	06/13/1997	Day 7
AAB-090	PA-53	2	15.2	32.0	7.9	7.6	126	06/14/1997	Day 8
AAB-090	PA-53	3	15.4	31.7	7.8	7.7	120	06/15/1997	Day 9
AAB-090	PA-53	1	15.1	32.1	7.8	7.5	130	06/16/1997	Day 10
AAB-090	PA-53	2	15.7	31.4	8.0	7.6	124	06/17/1997	Day 11
AAB-090	PA-53	3	15.9	29.0	8.3	7.6	118	06/18/1997	Day 12
AAB-090	PA-53	1	15.8	31.8	7.9	7.6	128	06/19/1997	Day 13
AAB-090	PA-53	2	15.8	32.0	6.2	7.7	124	06/20/1997	Day 14
AAB-090	PA-53	3	14.9	32.0	8.0	7.4	116	06/21/1997	Day 15
AAB-090	PA-53	1	14.1	31.8	8.1	7.6	132	06/22/1997	Day 16
AAB-090	PA-53	2	15.9	31.7	8.2	7.5	116	06/23/1997	Day 17
AAB-090	PA-53	3	16.1	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-090	PA-53	1	15.3	32.1	7.6	7.7	132	06/25/1997	Day 19
AAB-090	PA-53	2	15.5	32.3	7.4	7.4	120	06/26/1997	Day 20
AAB-090	PA-53	3	15.4	31.6	6.7	7.3	120	06/27/1997	Day 21
AAB-090	PA-53	1	14.9	31.9	6.6	7.4	126	06/28/1997	Day 22
AAB-090	PA-53	2	15.5	32.1	6.2	7.5	120	06/29/1997	Day 23
AAB-090	PA-53	3	15.6	32.4	7.5	7.4	120	06/30/1997	Day 24
AAB-090	PA-53	1	15.5	31.9	5.4	7.7	120	07/01/1997	Day 25
AAB-090	PA-53	2	15.3	31.8	7.7	7.5	124	07/02/1997	Day 26
AAB-090	PA-53	3	15.6	31.7	7.7	7.4	116	07/03/1997	Day 27
AAB-090	PA-53	1	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-090	PA-53	2	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-090	PA-53	3	15.2	32.0	7.3	7.5		07/04/1997	Day 28
AAB-107	EW-30	1	15.0	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-107	EW-30	2	15.3	32.0	8.1	7.6	120	06/06/1997	Day 0
AAB-107	EW-30	3	15.0	32.0	7.9	7.6	132	06/06/1997	Day 0
AAB-107	EW-30	1	15.7	32.0	8.0	7.7	128	06/07/1997	Day 1
AAB-107	EW-30	2	15.2	32.1	7.4	7.7	116	06/08/1997	Day 2
AAB-107	EW-30	3	15.5	31.7	7.8	7.6	132	06/09/1997	Day 3
AAB-107	EW-30	1	15.3	31.9	6.7	7.4	124	06/10/1997	Day 4
AAB-107	EW-30	2	15.8	31.9	7.7	7.7	124	06/11/1997	Day 5
AAB-107	EW-30	3	15.0	31.7	7.4	7.5	132	06/12/1997	Day 6
AAB-107	EW-30	1	15.5	31.7	7.5	7.6	128	06/13/1997	Day 7
AAB-107	EW-30	2	15.6	32.0	7.8	7.6	122	06/14/1997	Day 8
AAB-107	EW-30	3	15.1	31.7	7.6	7.7	132	06/15/1997	Day 9
AAB-107	EW-30	1	15.1	32.1	7.4	7.5	126	06/16/1997	Day 10
AAB-107	EW-30	2	16.0	31.5	7.8	7.6	124	06/17/1997	Day 11
AAB-107	EW-30	3	15.7	31.7	8.2	7.6	132	06/18/1997	Day 12
AAB-107	EW-30	1	15.7	31.8	7.6	7.6	124	06/19/1997	Day 13
AAB-107	EW-30	2	16.0	31.9	6.1	7.7	124	06/20/1997	Day 14
AAB-107	EW-30	3	14.5	32.0	8.0	7.4	128	06/21/1997	Day 15
AAB-107	EW-30	1	14.0	31.9	7.8	7.6	128	06/22/1997	Day 16
AAB-107	EW-30	2	16.2	31.7	7.9	7.5	124	06/23/1997	Day 17
AAB-107	EW-30	3	15.9	32.0	7.5	7.6	122	06/24/1997	Day 18
AAB-107	EW-30	1	15.2	32.0	7.4	7.7	128	06/25/1997	Day 19
AAB-107	EW-30	2	15.6	31.3	7.2	7.4	126	06/26/1997	Day 20
AAB-107	EW-30	3	15.1	31.8	6.6	7.3	116	06/27/1997	Day 21
AAB-107	EW-30	1	14.9	31.9	6.6	7.4	120	06/28/1997	Day 22
AAB-107	EW-30	2	15.6	32.1	6.2	7.5	120	06/29/1997	Day 23
AAB-107	EW-30	3	15.4	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-107	EW-30	1	15.5	31.9	5.4	7.7	118	07/01/1997	Day 25
AAB-107	EW-30	2	15.6	31.7	7.6	7.5	118	07/02/1997	Day 26
AAB-107	EW-30	3	15.2	31.7	7.6	7.4	124	07/03/1997	Day 27
AAB-107	EW-30	1	14.9	32.1	7.2	7.5		07/04/1997	Day 28
AAB-107	EW-30	2	15.2	32.1	7.3	7.5		07/04/1997	Day 28

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-107	EW-30	3	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-104	EW-31	1	15.0	32.0	7.7	7.5	128	06/06/1997	Day 0
AAB-104	EW-31	2	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-104	EW-31	3	14.7	32.0	7.9	7.6	126	06/06/1997	Day 0
AAB-104	EW-31	1	15.8	32.0	8.1	7.7	132	06/07/1997	Day 1
AAB-104	EW-31	2	15.5	32.2	7.4	7.6	124	06/08/1997	Day 2
AAB-104	EW-31	3	15.4	31.7	7.8	7.6	128	06/09/1997	Day 3
AAB-104	EW-31	1	15.4	31.9	7.1	7.4	120	06/10/1997	Day 4
AAB-104	EW-31	2	15.4	31.9	7.8	7.7	122	06/11/1997	Day 5
AAB-104	EW-31	3	14.9	31.7	7.5	7.5	132	06/12/1997	Day 6
AAB-104	EW-31	1	15.5	31.7	7.6	7.6	118	06/13/1997	Day 7
AAB-104	EW-31	2	15.3	32.0	7.8	7.6	122	06/14/1997	Day 8
AAB-104	EW-31	3	15.0	31.7	7.8	7.7	132	06/15/1997	Day 9
AAB-104	EW-31	1	15.1	32.0	7.7	7.5	116	06/16/1997	Day 10
AAB-104	EW-31	2	15.7	31.5	7.8	7.6	122	06/17/1997	Day 11
AAB-104	EW-31	3	15.6	31.7	8.2	7.6	130	06/18/1997	Day 12
AAB-104	EW-31	1	15.8	31.8	7.8	7.6	116	06/19/1997	Day 13
AAB-104	EW-31	2	15.6	31.9	6.3	7.7	120	06/20/1997	Day 14
AAB-104	EW-31	3	14.4	32.1	7.9	7.4	124	06/21/1997	Day 15
AAB-104	EW-31	1	14.1	31.9	7.8	7.6	116	06/22/1997	Day 16
AAB-104	EW-31	2	16.0	31.7	7.9	7.5	120	06/23/1997	Day 17
AAB-104	EW-31	3	15.8	32.0	7.6	7.6	128	06/24/1997	Day 18
AAB-104	EW-31	1	15.3	32.0	7.4	7.7	128	06/25/1997	Day 19
AAB-104	EW-31	2	15.7	32.1	7.5	7.5	116	06/26/1997	Day 20
AAB-104	EW-31	3	15.0	31.8	6.6	7.3	126	06/27/1997	Day 21
AAB-104	EW-31	1	14.8	31.9	5.9	7.4	120	06/28/1997	Day 22
AAB-104	EW-31	2	15.3	32.1	7.9	7.5	116	06/29/1997	Day 23
AAB-104	EW-31	3	15.4	32.4	7.8	7.4	124	06/30/1997	Day 24
AAB-104	EW-31	1	15.5	31.9	5.4	7.7	124	07/01/1997	Day 25
AAB-104	EW-31	2	15.4	31.8	7.7	7.5	116	07/02/1997	Day 26
AAB-104	EW-31	3	15.2	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-104	EW-31	1	15.0	32.0	6.7	7.5		07/04/1997	Day 28
AAB-104	EW-31	2	15.0	32.0	6.7	7.5		07/04/1997	Day 28
AAB-104	EW-31	3	14.8	32.0	7.0	7.5		07/04/1997	Day 28
AAB-095	EW-32	1	15.1	32.0	7.9	7.6	128	06/06/1997	Day 0
AAB-095	EW-32	2	14.8	32.0	7.6	7.5	130	06/06/1997	Day 0
AAB-095	EW-32	3	15.2	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-095	EW-32	1	15.9	32.0	7.9	7.7	130	06/07/1997	Day 1
AAB-095	EW-32	2	15.4	32.2	7.3	7.7	124	06/08/1997	Day 2
AAB-095	EW-32	3	15.3	31.7	7.9	7.6	116	06/09/1997	Day 3
AAB-095	EW-32	1	15.4	31.9	6.9	7.4	120	06/10/1997	Day 4
AAB-095	EW-32	2	15.3	31.9	8.0	7.7	118	06/11/1997	Day 5
AAB-095	EW-32	3	15.1	31.7	7.5	7.5	120	06/12/1997	Day 6
AAB-095	EW-32	1	15.6	31.7	7.7	7.7	120	06/13/1997	Day 7
AAB-095	EW-32	2	15.3	32.0	7.7	7.6	118	06/14/1997	Day 8
AAB-095	EW-32	3	15.4	31.7	7.7	7.7	120	06/15/1997	Day 9
AAB-095	EW-32	1	15.2	32.1	7.7	7.5	120	06/16/1997	Day 10
AAB-095	EW-32	2	15.7	31.5	8.0	7.6	118	06/17/1997	Day 11
AAB-095	EW-32	3	16.0	31.6	8.2	7.6	118	06/18/1997	Day 12
AAB-095	EW-32	1	16.0	31.8	7.7	7.6	120	06/19/1997	Day 13
AAB-095	EW-32	2	15.7	32.0	6.2	7.7	116	06/20/1997	Day 14
AAB-095	EW-32	3	14.8	32.1	7.9	7.4	130	06/21/1997	Day 15
AAB-095	EW-32	1	14.3	31.9	7.9	7.6	124	06/22/1997	Day 16
AAB-095	EW-32	2	15.9	31.8	7.6	7.5	124	06/23/1997	Day 17
AAB-095	EW-32	3	16.1	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-095	EW-32	1	15.5	32.0	7.6	7.7	116	06/25/1997	Day 19
AAB-095	EW-32	2	15.5	32.4	7.1	7.4	116	06/26/1997	Day 20
AAB-095	EW-32	3	15.5	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-095	EW-32	1	15.2	31.9	6.7	7.4	128	06/28/1997	Day 22
AAB-095	EW-32	2	15.2	32.1	7.6	7.4	120	06/29/1997	Day 23

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-095	EW-32	3	15.6	32.4	7.4	7.4	116	06/30/1997	Day 24
AAB-095	EW-32	1	15.7	31.9	5.4	7.7	128	07/01/1997	Day 25
AAB-095	EW-32	2	15.2	31.7	7.5	7.5	116	07/02/1997	Day 26
AAB-095	EW-32	3	15.6	31.7	7.9	7.5	116	07/03/1997	Day 27
AAB-095	EW-32	1	15.1	32.0	7.1	7.5		07/04/1997	Day 28
AAB-095	EW-32	2	14.9	32.0	6.5	7.5		07/04/1997	Day 28
AAB-095	EW-32	3	15.2	32.1	7.4	7.5		07/04/1997	Day 28
AAB-124	EW-33	1	15.1	32.0	7.8	7.6	124	06/06/1997	Day 0
AAB-124	EW-33	2	14.9	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-124	EW-33	3	14.9	32.0	7.8	7.5	118	06/06/1997	Day 0
AAB-124	EW-33	1	15.5	32.0	7.8	7.7	120	06/07/1997	Day 1
AAB-124	EW-33	2	14.8	32.2	7.4	7.6	128	06/08/1997	Day 2
AAB-124	EW-33	3	15.4	31.7	7.9	7.6	120	06/09/1997	Day 3
AAB-124	EW-33	1	15.1	31.9	6.5	7.4	124	06/10/1997	Day 4
AAB-124	EW-33	2	15.4	31.9	7.9	7.7	124	06/11/1997	Day 5
AAB-124	EW-33	3	14.9	31.7	7.6	7.5	116	06/12/1997	Day 6
AAB-124	EW-33	1	15.7	31.7	7.1	7.6	124	06/13/1997	Day 7
AAB-124	EW-33	2	15.2	32.0	7.8	7.6	124	06/14/1997	Day 8
AAB-124	EW-33	3	15.0	31.6	7.8	7.7	124	06/15/1997	Day 9
AAB-124	EW-33	1	15.1	32.1	8.2	7.4	120	06/16/1997	Day 10
AAB-124	EW-33	2	15.7	31.5	7.9	7.6	126	06/17/1997	Day 11
AAB-124	EW-33	3	15.6	31.7	8.3	7.6	118	06/18/1997	Day 12
AAB-124	EW-33	1	15.7	31.8	7.2	7.6	122	06/19/1997	Day 13
AAB-124	EW-33	2	15.7	32.0	6.1	7.7	124	06/20/1997	Day 14
AAB-124	EW-33	3	14.4	32.1	8.1	7.4	120	06/21/1997	Day 15
AAB-124	EW-33	1	15.0	31.9	7.7	7.6	120	06/22/1997	Day 16
AAB-124	EW-33	2	16.0	31.8	8.0	7.5	120	06/23/1997	Day 17
AAB-124	EW-33	3	15.9	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-124	EW-33	1	15.6	31.9	7.2	7.7	124	06/25/1997	Day 19
AAB-124	EW-33	2	15.4	32.4	7.3	7.5	132	06/26/1997	Day 20
AAB-124	EW-33	3	14.9	31.7	6.6	7.4	128	06/27/1997	Day 21
AAB-124	EW-33	1	15.3	32.0	5.5	7.4	116	06/28/1997	Day 22
AAB-124	EW-33	2	15.4	32.1	6.4	7.5	124	06/29/1997	Day 23
AAB-124	EW-33	3	15.3	32.4	7.7	7.5	124	06/30/1997	Day 24
AAB-124	EW-33	1	15.7	31.9	5.2	7.7	116	07/01/1997	Day 25
AAB-124	EW-33	2	15.3	31.7	7.2	7.5	116	07/02/1997	Day 26
AAB-124	EW-33	3	15.1	31.7	7.5	7.5	124	07/03/1997	Day 27
AAB-124	EW-33	1	15.0	32.0	7.4	7.5		07/04/1997	Day 28
AAB-124	EW-33	2	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-124	EW-33	3	14.8	32.0	6.8	7.5		07/04/1997	Day 28
AAB-108	EW-34	1	15.2	32.0	7.7	7.5	118	06/06/1997	Day 0
AAB-108	EW-34	2	15.0	32.0	7.7	7.5	116	06/06/1997	Day 0
AAB-108	EW-34	3	14.8	32.0	7.5	7.5	124	06/06/1997	Day 0
AAB-108	EW-34	1	16.0	32.0	7.7	7.6	124	06/07/1997	Day 1
AAB-108	EW-34	2	15.0	32.2	6.8	7.6	120	06/08/1997	Day 2
AAB-108	EW-34	3	15.4	31.7	8.0	7.6	128	06/09/1997	Day 3
AAB-108	EW-34	1	15.6	31.9	7.4	7.4	124	06/10/1997	Day 4
AAB-108	EW-34	2	15.5	31.9	7.5	7.6	126	06/11/1997	Day 5
AAB-108	EW-34	3	14.9	31.7	7.4	7.5	128	06/12/1997	Day 6
AAB-108	EW-34	1	15.7	31.7	7.7	7.6	124	06/13/1997	Day 7
AAB-108	EW-34	2	15.5	32.0	7.7	7.6	126	06/14/1997	Day 8
AAB-108	EW-34	3	15.0	31.7	7.6	7.7	128	06/15/1997	Day 9
AAB-108	EW-34	1	15.3	32.1	7.8	7.5	120	06/16/1997	Day 10
AAB-108	EW-34	2	15.9	31.5	7.9	7.6	128	06/17/1997	Day 11
AAB-108	EW-34	3	15.6	31.7	8.3	7.6	128	06/18/1997	Day 12
AAB-108	EW-34	1	16.1	31.7	7.7	7.6	120	06/19/1997	Day 13
AAB-108	EW-34	2	16.0	32.0	6.1	7.7	124	06/20/1997	Day 14
AAB-108	EW-34	3	14.5	31.8	7.9	7.5	128	06/21/1997	Day 15
AAB-108	EW-34	1	14.4	31.9	7.8	7.6	124	06/22/1997	Day 16
AAB-108	EW-34	2	16.1	31.5	8.1	7.5	120	06/23/1997	Day 17

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-108	EW-34	3	15.9	32.0	7.6	7.6	124	06/24/1997	Day 18
AAB-108	EW-34	1	15.6	32.0	7.5	7.7	120	06/25/1997	Day 19
AAB-108	EW-34	2	15.5	32.4	7.0	7.4	116	06/26/1997	Day 20
AAB-108	EW-34	3	15.1	31.8	6.5	7.3	116	06/27/1997	Day 21
AAB-108	EW-34	1	15.2	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-108	EW-34	2	15.6	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-108	EW-34	3	15.3	32.4	7.8	7.5	120	06/30/1997	Day 24
AAB-108	EW-34	1	15.7	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-108	EW-34	2	15.5	31.8	7.5	7.5	122	07/02/1997	Day 26
AAB-108	EW-34	3	15.3	31.7	7.8	7.5	116	07/03/1997	Day 27
AAB-108	EW-34	1	15.2	32.0	6.7	7.5		07/04/1997	Day 28
AAB-108	EW-34	2	15.1	32.0	7.3	7.5		07/04/1997	Day 28
AAB-108	EW-34	3	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-097	EW-35	1	14.9	32.0	7.8	7.6	128	06/06/1997	Day 0
AAB-097	EW-35	2	14.8	32.1	7.7	7.5	118	06/06/1997	Day 0
AAB-097	EW-35	3	15.0	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-097	EW-35	1	15.8	32.0	8.0	7.7	130	06/07/1997	Day 1
AAB-097	EW-35	2	15.5	32.2	7.3	7.6	124	06/08/1997	Day 2
AAB-097	EW-35	3	15.6	31.7	7.8	7.6	128	06/09/1997	Day 3
AAB-097	EW-35	1	15.3	31.9	7.5	7.4	132	06/10/1997	Day 4
AAB-097	EW-35	2	15.2	32.0	7.8	7.7	120	06/11/1997	Day 5
AAB-097	EW-35	3	15.1	31.7	7.5	7.5	128	06/12/1997	Day 6
AAB-097	EW-35	1	15.4	31.7	7.7	7.6	128	06/13/1997	Day 7
AAB-097	EW-35	2	15.3	32.0	7.8	7.6	120	06/14/1997	Day 8
AAB-097	EW-35	3	15.2	31.6	7.7	7.7	132	06/15/1997	Day 9
AAB-097	EW-35	1	15.0	32.0	7.7	7.5	128	06/16/1997	Day 10
AAB-097	EW-35	2	15.7	31.5	7.9	7.6	124	06/17/1997	Day 11
AAB-097	EW-35	3	15.7	31.7	8.2	7.6	128	06/18/1997	Day 12
AAB-097	EW-35	1	15.8	31.8	7.9	7.6	128	06/19/1997	Day 13
AAB-097	EW-35	2	15.6	32.0	6.3	7.7	120	06/20/1997	Day 14
AAB-097	EW-35	3	14.6	32.0	8.0	7.5	128	06/21/1997	Day 15
AAB-097	EW-35	1	14.0	31.8	7.9	7.6	128	06/22/1997	Day 16
AAB-097	EW-35	2	16.0	31.7	8.2	7.6	120	06/23/1997	Day 17
AAB-097	EW-35	3	16.0	32.0	7.4	7.6	126	06/24/1997	Day 18
AAB-097	EW-35	1	15.2	32.0	7.3	7.7	128	06/25/1997	Day 19
AAB-097	EW-35	2	15.6	32.3	7.2	7.4	116	06/26/1997	Day 20
AAB-097	EW-35	3	15.1	31.8	6.6	7.3	124	06/27/1997	Day 21
AAB-097	EW-35	1	14.7	31.9	5.9	7.3	120	06/28/1997	Day 22
AAB-097	EW-35	2	15.3	32.1	6.8	7.5	116	06/29/1997	Day 23
AAB-097	EW-35	3	15.4	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-097	EW-35	1	15.4	31.9	5.3	7.7	118	07/01/1997	Day 25
AAB-097	EW-35	2	15.3	31.7	7.8	7.5	116	07/02/1997	Day 26
AAB-097	EW-35	3	15.4	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-097	EW-35	1	14.9	32.0	6.7	7.5		07/04/1997	Day 28
AAB-097	EW-35	2	15.0	32.0	6.7	7.5		07/04/1997	Day 28
AAB-097	EW-35	3	15.1	32.1	7.3	7.5		07/04/1997	Day 28
AAB-105	EW-36	1	15.1	32.0	8.1	7.6	128	06/06/1997	Day 0
AAB-105	EW-36	2	15.1	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-105	EW-36	3	15.1	32.0	7.9	7.6	130	06/06/1997	Day 0
AAB-105	EW-36	4	14.9	32.0	7.9	7.6	132	06/06/1997	Day 0
AAB-105	EW-36	1	15.5	32.0	7.9	7.7	122	06/07/1997	Day 1
AAB-105	EW-36	2	14.9	32.2	7.2	7.6	120	06/08/1997	Day 2
AAB-105	EW-36	4	15.4	32.2	7.3	7.6	124	06/08/1997	Day 2
AAB-105	EW-36	3	15.5	31.7	7.7	7.6	124	06/09/1997	Day 3
AAB-105	EW-36	1	15.1	31.9	6.7	7.4	124	06/10/1997	Day 4
AAB-105	EW-36	2	15.6	31.9	7.8	7.7	120	06/11/1997	Day 5
AAB-105	EW-36	4	15.3	31.9	7.8	7.7	126	06/11/1997	Day 5
AAB-105	EW-36	3	15.1	31.7	7.4	7.5	120	06/12/1997	Day 6
AAB-105	EW-36	1	15.7	31.7	7.1	7.6	124	06/13/1997	Day 7
AAB-105	EW-36	2	15.4	32.0	7.8	7.6	124	06/14/1997	Day 8

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-105	EW-36	4	15.3	31.9	7.8	7.6	128	06/14/1997	Day 8
AAB-105	EW-36	3	15.2	31.6	7.7	7.7	124	06/15/1997	Day 9
AAB-105	EW-36	1	15.1	32.1	6.9	7.6	120	06/16/1997	Day 10
AAB-105	EW-36	2	15.8	31.5	7.7	7.6	122	06/17/1997	Day 11
AAB-105	EW-36	4	15.7	31.5	7.6	7.5	130	06/17/1997	Day 11
AAB-105	EW-36	3	15.7	31.7	8.1	7.6	122	06/18/1997	Day 12
AAB-105	EW-36	1	15.8	31.8	7.6	7.6	120	06/19/1997	Day 13
AAB-105	EW-36	2	15.9	31.9	5.9	7.7	120	06/20/1997	Day 14
AAB-105	EW-36	4	15.5	31.9	6.3	7.7	128	06/20/1997	Day 14
AAB-105	EW-36	3	14.6	32.1	8.0	7.4	120	06/21/1997	Day 15
AAB-105	EW-36	1	15.0	31.9	7.7	7.6	116	06/22/1997	Day 16
AAB-105	EW-36	2	16.1	31.8	7.9	7.5	116	06/23/1997	Day 17
AAB-105	EW-36	4	15.9	31.7	8.0	7.5	132	06/23/1997	Day 17
AAB-105	EW-36	3	16.1	31.9	7.5	7.6	118	06/24/1997	Day 18
AAB-105	EW-36	1	15.5	32.0	6.8	7.6	124	06/25/1997	Day 19
AAB-105	EW-36	2	15.6	32.4	7.2	7.4	116	06/26/1997	Day 20
AAB-105	EW-36	4	15.6	32.3	7.5	7.4	118	06/26/1997	Day 20
AAB-105	EW-36	3	15.1	31.7	6.7	7.4	128	06/27/1997	Day 21
AAB-105	EW-36	1	15.2	32.0	5.7	7.4	116	06/28/1997	Day 22
AAB-105	EW-36	2	15.5	32.1	6.1	7.5	116	06/29/1997	Day 23
AAB-105	EW-36	4	15.2	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-105	EW-36	3	15.4	32.4	7.6	7.5	132	06/30/1997	Day 24
AAB-105	EW-36	1	15.6	32.0	5.2	7.7	128	07/01/1997	Day 25
AAB-105	EW-36	2	15.5	31.8	7.6	7.5	128	07/02/1997	Day 26
AAB-105	EW-36	4	15.4	31.6	7.9	7.5	116	07/02/1997	Day 26
AAB-105	EW-36	3	15.3	31.7	7.7	7.4	128	07/03/1997	Day 27
AAB-105	EW-36	1	14.9	32.0	7.1	7.4		07/04/1997	Day 28
AAB-105	EW-36	2	15.1	32.1	7.3	7.5		07/04/1997	Day 28
AAB-105	EW-36	3	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-105	EW-36	4	15.0	31.9	7.2	7.5		07/04/1997	Day 28
AAB-142	EW-37	1	15.0	32.0	8.0	7.6	116	06/06/1997	Day 0
AAB-142	EW-37	2	14.8	32.0	7.8	7.6	126	06/06/1997	Day 0
AAB-142	EW-37	3	15.0	32.0	7.9	7.6	122	06/06/1997	Day 0
AAB-142	EW-37	1	15.7	32.0	7.9	7.7	130	06/07/1997	Day 1
AAB-142	EW-37	2	15.3	32.2	6.9	7.6	128	06/08/1997	Day 2
AAB-142	EW-37	3	15.5	31.7	7.8	7.6	124	06/09/1997	Day 3
AAB-142	EW-37	1	15.2	31.9	6.8	7.5	132	06/10/1997	Day 4
AAB-142	EW-37	2	15.2	31.9	7.9	7.7	124	06/11/1997	Day 5
AAB-142	EW-37	3	15.0	31.7	7.5	7.5	126	06/12/1997	Day 6
AAB-142	EW-37	1	15.4	31.7	7.7	7.6	132	06/13/1997	Day 7
AAB-142	EW-37	2	15.1	31.9	7.8	7.6	126	06/14/1997	Day 8
AAB-142	EW-37	3	15.2	31.6	7.7	7.7	128	06/15/1997	Day 9
AAB-142	EW-37	1	15.1	32.1	7.7	7.5	132	06/16/1997	Day 10
AAB-142	EW-37	2	15.5	31.5	7.9	7.6	128	06/17/1997	Day 11
AAB-142	EW-37	3	15.7	31.6	8.2	7.6	124	06/18/1997	Day 12
AAB-142	EW-37	1	15.8	31.8	7.8	7.6	132	06/19/1997	Day 13
AAB-142	EW-37	2	15.2	32.0	6.4	7.7	130	06/20/1997	Day 14
AAB-142	EW-37	3	14.6	32.1	8.0	7.5	120	06/21/1997	Day 15
AAB-142	EW-37	1	14.0	31.9	8.0	7.6	132	06/22/1997	Day 16
AAB-142	EW-37	2	15.7	31.7	8.2	7.6	132	06/23/1997	Day 17
AAB-142	EW-37	3	16.0	32.0	7.6	7.6	122	06/24/1997	Day 18
AAB-142	EW-37	1	15.3	32.1	7.5	7.7	128	06/25/1997	Day 19
AAB-142	EW-37	2	15.4	32.4	7.3	7.5	128	06/26/1997	Day 20
AAB-142	EW-37	3	15.1	31.8	6.8	7.4	116	06/27/1997	Day 21
AAB-142	EW-37	1	14.9	31.9	6.6	7.4	116	06/28/1997	Day 22
AAB-142	EW-37	2	15.0	32.1	6.6	7.5	128	06/29/1997	Day 23
AAB-142	EW-37	3	15.5	32.4	7.6	7.5	116	06/30/1997	Day 24
AAB-142	EW-37	1	15.5	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-142	EW-37	2	15.1	31.8	7.7	7.5	128	07/02/1997	Day 26
AAB-142	EW-37	3	15.4	31.7	7.8	7.5	124	07/03/1997	Day 27

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-142	EW-37	1	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-142	EW-37	2	14.7	32.0	6.9	7.5		07/04/1997	Day 28
AAB-142	EW-37	3	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-125	OR-24	1	14.8	32.0	7.7	7.5	122	06/06/1997	Day 0
AAB-125	OR-24	2	15.4	32.0	8.1	7.6	120	06/06/1997	Day 0
AAB-125	OR-24	3	14.9	32.0	7.7	7.6	120	06/06/1997	Day 0
AAB-125	OR-24	1	15.7	32.0	8.1	7.7	124	06/07/1997	Day 1
AAB-125	OR-24	2	15.2	32.2	7.5	7.7	116	06/08/1997	Day 2
AAB-125	OR-24	3	15.5	31.7	7.9	7.6	120	06/09/1997	Day 3
AAB-125	OR-24	1	15.2	31.9	7.4	7.4	124	06/10/1997	Day 4
AAB-125	OR-24	2	15.8	31.9	7.7	7.7	126	06/11/1997	Day 5
AAB-125	OR-24	3	15.0	31.7	7.5	7.5	124	06/12/1997	Day 6
AAB-125	OR-24	1	15.4	31.8	7.7	7.6	124	06/13/1997	Day 7
AAB-125	OR-24	2	15.7	32.0	7.8	7.6	128	06/14/1997	Day 8
AAB-125	OR-24	3	15.1	31.6	7.7	7.7	124	06/15/1997	Day 9
AAB-125	OR-24	1	15.0	32.1	7.3	7.5	122	06/16/1997	Day 10
AAB-125	OR-24	2	16.1	31.5	7.9	7.6	128	06/17/1997	Day 11
AAB-125	OR-24	3	15.7	31.6	8.3	7.6	122	06/18/1997	Day 12
AAB-125	OR-24	1	15.7	31.8	7.8	7.5	122	06/19/1997	Day 13
AAB-125	OR-24	2	15.9	32.0	6.2	7.7	128	06/20/1997	Day 14
AAB-125	OR-24	3	14.5	32.1	7.9	7.4	120	06/21/1997	Day 15
AAB-125	OR-24	1	13.9	31.7	7.7	7.5	124	06/22/1997	Day 16
AAB-125	OR-24	2	16.2	30.7	8.0	7.5	128	06/23/1997	Day 17
AAB-125	OR-24	3	16.0	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-125	OR-24	1	15.1	32.2	7.0	7.6	120	06/25/1997	Day 19
AAB-125	OR-24	2	15.6	32.3	7.0	7.4	116	06/26/1997	Day 20
AAB-125	OR-24	3	15.2	31.7	6.7	7.3	118	06/27/1997	Day 21
AAB-125	OR-24	1	14.9	31.9	6.5	7.4	120	06/28/1997	Day 22
AAB-125	OR-24	2	15.7	32.1	6.3	7.5	116	06/29/1997	Day 23
AAB-125	OR-24	3	15.4	32.4	7.9	7.5	116	06/30/1997	Day 24
AAB-125	OR-24	1	15.4	32.0	5.5	7.7	116	07/01/1997	Day 25
AAB-125	OR-24	2	15.6	31.7	7.5	7.5	116	07/02/1997	Day 26
AAB-125	OR-24	3	15.4	31.7	7.7	7.5	116	07/03/1997	Day 27
AAB-125	OR-24	1	14.9	32.0	6.8	7.5		07/04/1997	Day 28
AAB-125	OR-24	2	15.1	32.1	7.2	7.5		07/04/1997	Day 28
AAB-125	OR-24	3	15.0	32.0	6.9	7.5		07/04/1997	Day 28
AAB-103	OR-25	1	15.0	32.0	7.7	7.5	120	06/06/1997	Day 0
AAB-103	OR-25	2	15.1	32.0	8.0	7.6	130	06/06/1997	Day 0
AAB-103	OR-25	3	14.9	32.0	7.7	7.5	126	06/06/1997	Day 0
AAB-103	OR-25	1	15.9	32.1	7.8	7.7	118	06/07/1997	Day 1
AAB-103	OR-25	2	15.5	32.1	7.4	7.7	132	06/08/1997	Day 2
AAB-103	OR-25	3	15.4	31.7	7.7	7.6	128	06/09/1997	Day 3
AAB-103	OR-25	1	15.5	31.9	6.5	7.4	120	06/10/1997	Day 4
AAB-103	OR-25	2	15.4	31.9	7.7	7.7	128	06/11/1997	Day 5
AAB-103	OR-25	3	15.0	31.7	7.3	7.5	124	06/12/1997	Day 6
AAB-103	OR-25	1	15.6	31.7	7.5	7.6	120	06/13/1997	Day 7
AAB-103	OR-25	2	15.3	32.0	7.8	7.6	130	06/14/1997	Day 8
AAB-103	OR-25	3	15.1	31.6	7.5	7.7	128	06/15/1997	Day 9
AAB-103	OR-25	1	15.2	32.1	7.4	7.5	120	06/16/1997	Day 10
AAB-103	OR-25	2	15.8	31.4	7.8	7.5	132	06/17/1997	Day 11
AAB-103	OR-25	3	15.6	31.7	8.1	7.6	124	06/18/1997	Day 12
AAB-103	OR-25	1	15.9	31.8	7.5	7.6	120	06/19/1997	Day 13
AAB-103	OR-25	2	15.6	31.9	6.3	7.7	132	06/20/1997	Day 14
AAB-103	OR-25	3	14.5	32.0	7.8	7.4	124	06/21/1997	Day 15
AAB-103	OR-25	1	14.3	31.9	7.8	7.6	120	06/22/1997	Day 16
AAB-103	OR-25	2	16.0	31.7	8.0	7.5	130	06/23/1997	Day 17
AAB-103	OR-25	3	15.9	32.0	7.4	7.6	124	06/24/1997	Day 18
AAB-103	OR-25	1	15.4	31.8	7.3	7.6	128	06/25/1997	Day 19
AAB-103	OR-25	2	15.6	32.0	7.4	7.5	118	06/26/1997	Day 20
AAB-103	OR-25	3	15.0	31.8	6.5	7.3	118	06/27/1997	Day 21

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-103	OR-25	1	15.2	31.9	6.3	7.4	118	06/28/1997	Day 22
AAB-103	OR-25	2	15.3	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-103	OR-25	3	15.4	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-103	OR-25	1	15.7	31.9	5.2	7.6	118	07/01/1997	Day 25
AAB-103	OR-25	2	15.4	31.6	7.7	7.5	132	07/02/1997	Day 26
AAB-103	OR-25	3	15.3	31.7	7.6	7.4	128	07/03/1997	Day 27
AAB-103	OR-25	1	15.2	32.1	7.1	7.4		07/04/1997	Day 28
AAB-103	OR-25	2	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-103	OR-25	3	14.9	32.0	6.7	7.5		07/04/1997	Day 28
AAB-116	OR-26	1	15.0	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-116	OR-26	2	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-116	OR-26	3	15.0	32.0	7.7	7.5	122	06/06/1997	Day 0
AAB-116	OR-26	4	14.7	32.0	7.6	7.5	132	06/06/1997	Day 0
AAB-116	OR-26	1	15.7	32.0	7.7	7.7	126	06/07/1997	Day 1
AAB-116	OR-26	4	15.8	32.0	7.8	7.7	132	06/07/1997	Day 1
AAB-116	OR-26	2	14.9	32.2	7.0	7.6	120	06/08/1997	Day 2
AAB-116	OR-26	3	15.6	31.7	7.9	7.6	116	06/09/1997	Day 3
AAB-116	OR-26	1	15.2	31.9	6.7	7.4	128	06/10/1997	Day 4
AAB-116	OR-26	4	15.3	31.9	7.2	7.4	134	06/10/1997	Day 4
AAB-116	OR-26	2	15.4	31.9	7.7	7.7	124	06/11/1997	Day 5
AAB-116	OR-26	3	15.2	31.7	7.1	7.5	116	06/12/1997	Day 6
AAB-116	OR-26	1	15.4	31.7	7.7	7.7	128	06/13/1997	Day 7
AAB-116	OR-26	4	15.5	31.7	7.7	7.6	132	06/13/1997	Day 7
AAB-116	OR-26	2	15.3	32.0	7.8	7.6	124	06/14/1997	Day 8
AAB-116	OR-26	3	15.2	31.7	7.4	7.7	116	06/15/1997	Day 9
AAB-116	OR-26	1	15.1	32.1	7.7	7.5	128	06/16/1997	Day 10
AAB-116	OR-26	4	15.1	32.1	7.8	7.5	132	06/16/1997	Day 10
AAB-116	OR-26	2	15.7	31.5	7.9	7.6	124	06/17/1997	Day 11
AAB-116	OR-26	3	15.8	31.7	8.0	7.6	124	06/18/1997	Day 12
AAB-116	OR-26	1	15.8	31.8	7.8	7.6	128	06/19/1997	Day 13
AAB-116	OR-26	4	15.8	31.8	7.8	7.6	132	06/19/1997	Day 13
AAB-116	OR-26	2	15.9	32.0	5.9	7.7	124	06/20/1997	Day 14
AAB-116	OR-26	3	14.5	32.2	7.8	7.4	128	06/21/1997	Day 15
AAB-116	OR-26	1	14.1	31.9	8.0	7.6	128	06/22/1997	Day 16
AAB-116	OR-26	4	14.0	31.9	7.8	7.6	132	06/22/1997	Day 16
AAB-116	OR-26	2	16.0	31.7	8.0	7.6	124	06/23/1997	Day 17
AAB-116	OR-26	3	16.1	31.9	7.2	7.5	120	06/24/1997	Day 18
AAB-116	OR-26	1	15.2	32.1	7.4	7.7	120	06/25/1997	Day 19
AAB-116	OR-26	4	15.2	32.0	7.3	7.7	132	06/25/1997	Day 19
AAB-116	OR-26	2	15.5	32.4	7.1	7.4	116	06/26/1997	Day 20
AAB-116	OR-26	3	15.5	31.8	6.3	7.3	118	06/27/1997	Day 21
AAB-116	OR-26	1	15.0	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-116	OR-26	4	14.9	31.9	6.5	7.4	126	06/28/1997	Day 22
AAB-116	OR-26	2	15.6	32.1	6.4	7.5	116	06/29/1997	Day 23
AAB-116	OR-26	3	15.7	32.4	7.8	7.5	116	06/30/1997	Day 24
AAB-116	OR-26	1	15.5	31.9	5.3	7.7	120	07/01/1997	Day 25
AAB-116	OR-26	4	15.5	31.9	5.4	7.7	124	07/01/1997	Day 25
AAB-116	OR-26	2	15.4	31.8	7.5	7.5	130	07/02/1997	Day 26
AAB-116	OR-26	3	15.5	31.8	7.4	7.4	120	07/03/1997	Day 27
AAB-116	OR-26	1	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-116	OR-26	2	15.0	32.0	7.4	7.5		07/04/1997	Day 28
AAB-116	OR-26	3	15.1	32.2	6.6	7.5		07/04/1997	Day 28
AAB-116	OR-26	4	14.9	32.0	6.8	7.5		07/04/1997	Day 28
AAB-117	OR-27	1	15.2	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-117	OR-27	2	14.8	32.0	7.8	7.6	122	06/06/1997	Day 0
AAB-117	OR-27	3	15.0	32.0	7.8	7.5	120	06/06/1997	Day 0
AAB-117	OR-27	1	15.7	32.0	7.8	7.7	120	06/07/1997	Day 1
AAB-117	OR-27	2	15.3	32.2	6.9	7.6	128	06/08/1997	Day 2
AAB-117	OR-27	3	15.1	31.7	7.9	7.6	124	06/09/1997	Day 3
AAB-117	OR-27	1	15.1	31.9	6.9	7.4	124	06/10/1997	Day 4

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-117	OR-27	2	15.2	31.9	8.1	7.7	120	06/11/1997	Day 5
AAB-117	OR-27	3	14.9	31.7	7.1	7.5	128	06/12/1997	Day 6
AAB-117	OR-27	1	15.8	31.7	7.7	7.7	124	06/13/1997	Day 7
AAB-117	OR-27	2	15.3	31.8	7.9	7.7	120	06/14/1997	Day 8
AAB-117	OR-27	3	15.2	31.8	7.5	7.7	128	06/15/1997	Day 9
AAB-117	OR-27	1	15.1	32.1	6.9	7.6	120	06/16/1997	Day 10
AAB-117	OR-27	2	15.5	31.5	7.8	7.5	120	06/17/1997	Day 11
AAB-117	OR-27	3	15.8	31.7	7.6	7.6	126	06/18/1997	Day 12
AAB-117	OR-27	1	15.9	31.8	7.7	7.6	122	06/19/1997	Day 13
AAB-117	OR-27	2	15.6	32.1	6.4	7.7	120	06/20/1997	Day 14
AAB-117	OR-27	3	14.7	32.1	7.8	7.4	120	06/21/1997	Day 15
AAB-117	OR-27	1	15.0	31.9	7.9	7.6	120	06/22/1997	Day 16
AAB-117	OR-27	2	15.9	31.9	8.4	7.5	120	06/23/1997	Day 17
AAB-117	OR-27	3	15.9	32.0	7.4	7.6	118	06/24/1997	Day 18
AAB-117	OR-27	1	15.6	32.1	7.3	7.7	124	06/25/1997	Day 19
AAB-117	OR-27	2	15.3	32.4	7.6	7.4	116	06/26/1997	Day 20
AAB-117	OR-27	3	15.4	31.8	6.4	7.3	116	06/27/1997	Day 21
AAB-117	OR-27	1	15.3	31.9	6.2	7.4	118	06/28/1997	Day 22
AAB-117	OR-27	2	15.1	32.1	7.9	7.5	116	06/29/1997	Day 23
AAB-117	OR-27	3	15.4	32.4	7.3	7.4	116	06/30/1997	Day 24
AAB-117	OR-27	1	15.7	32.0	5.3	7.7	116	07/01/1997	Day 25
AAB-117	OR-27	2	15.2	31.8	7.6	7.5	128	07/02/1997	Day 26
AAB-117	OR-27	3	15.4	31.7	7.5	7.4	120	07/03/1997	Day 27
AAB-117	OR-27	1	15.0	32.0	7.4	7.5		07/04/1997	Day 28
AAB-117	OR-27	2	14.8	32.0	6.8	7.4		07/04/1997	Day 28
AAB-117	OR-27	3	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-096	OR-28	1	14.8	32.0	7.7	7.5	130	06/06/1997	Day 0
AAB-096	OR-28	2	15.1	32.0	7.6	7.5	128	06/06/1997	Day 0
AAB-096	OR-28	3	15.1	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-096	OR-28	1	15.7	32.0	7.9	7.7	132	06/07/1997	Day 1
AAB-096	OR-28	2	15.5	32.2	7.2	7.6	132	06/08/1997	Day 2
AAB-096	OR-28	3	15.2	31.7	7.9	7.6	128	06/09/1997	Day 3
AAB-096	OR-28	1	15.3	31.9	7.2	7.4	132	06/10/1997	Day 4
AAB-096	OR-28	2	15.6	31.8	7.6	7.7	126	06/11/1997	Day 5
AAB-096	OR-28	3	14.9	31.7	7.0	7.5	124	06/12/1997	Day 6
AAB-096	OR-28	1	15.4	31.7	7.7	7.6	132	06/13/1997	Day 7
AAB-096	OR-28	2	15.3	32.0	7.3	7.6	128	06/14/1997	Day 8
AAB-096	OR-28	3	15.2	31.8	7.7	7.7	128	06/15/1997	Day 9
AAB-096	OR-28	1	15.1	32.1	7.8	7.5	132	06/16/1997	Day 10
AAB-096	OR-28	2	15.7	31.5	7.8	7.5	128	06/17/1997	Day 11
AAB-096	OR-28	3	15.8	31.7	7.7	7.6	126	06/18/1997	Day 12
AAB-096	OR-28	1	15.8	31.8	7.9	7.6	132	06/19/1997	Day 13
AAB-096	OR-28	2	15.6	32.0	6.4	7.7	128	06/20/1997	Day 14
AAB-096	OR-28	3	14.7	32.1	7.9	7.4	124	06/21/1997	Day 15
AAB-096	OR-28	1	14.0	31.9	7.8	7.6	132	06/22/1997	Day 16
AAB-096	OR-28	2	15.9	31.6	8.1	7.5	132	06/23/1997	Day 17
AAB-096	OR-28	3	15.9	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-096	OR-28	1	15.2	32.0	7.5	7.7	132	06/25/1997	Day 19
AAB-096	OR-28	2	15.5	32.3	7.1	7.4	124	06/26/1997	Day 20
AAB-096	OR-28	3	15.4	31.8	6.4	7.3	120	06/27/1997	Day 21
AAB-096	OR-28	1	14.9	31.9	6.4	7.4	128	06/28/1997	Day 22
AAB-096	OR-28	2	15.0	32.1	6.4	7.5	120	06/29/1997	Day 23
AAB-096	OR-28	3	15.5	32.4	7.4	7.4	116	06/30/1997	Day 24
AAB-096	OR-28	1	15.5	31.9	5.4	7.7	124	07/01/1997	Day 25
AAB-096	OR-28	2	15.2	31.7	7.4	7.5	120	07/02/1997	Day 26
AAB-096	OR-28	3	15.4	31.7	7.5	7.4	128	07/03/1997	Day 27
AAB-096	OR-28	1	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-096	OR-28	2	15.0	32.0	6.6	7.5		07/04/1997	Day 28
AAB-096	OR-28	3	15.0	32.1	7.3	7.5		07/04/1997	Day 28
AAB-118	OR-29	1	14.9	32.0	7.9	7.6	132	06/06/1997	Day 0

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-118	OR-29	2	14.9	32.0	7.9	7.6	122	06/06/1997	Day 0
AAB-118	OR-29	3	14.9	32.0	7.8	7.6	132	06/06/1997	Day 0
AAB-118	OR-29	1	15.4	32.0	7.6	7.6	132	06/07/1997	Day 1
AAB-118	OR-29	2	15.4	32.1	7.4	7.6	120	06/08/1997	Day 2
AAB-118	OR-29	3	15.1	31.7	8.0	7.6	132	06/09/1997	Day 3
AAB-118	OR-29	1	15.0	31.9	6.7	7.4	132	06/10/1997	Day 4
AAB-118	OR-29	2	15.3	31.9	7.6	7.7	120	06/11/1997	Day 5
AAB-118	OR-29	3	14.9	31.7	7.1	7.5	132	06/12/1997	Day 6
AAB-118	OR-29	1	15.6	31.7	7.6	7.6	130	06/13/1997	Day 7
AAB-118	OR-29	2	14.9	31.8	7.8	7.6	120	06/14/1997	Day 8
AAB-118	OR-29	3	15.1	31.8	7.8	7.7	132	06/15/1997	Day 9
AAB-118	OR-29	1	15.0	32.1	7.6	7.5	132	06/16/1997	Day 10
AAB-118	OR-29	2	15.6	31.4	7.7	7.6	124	06/17/1997	Day 11
AAB-118	OR-29	3	15.6	31.7	8.0	7.6	132	06/18/1997	Day 12
AAB-118	OR-29	1	15.8	31.8	7.7	7.6	130	06/19/1997	Day 13
AAB-118	OR-29	2	15.4	31.9	6.3	7.8	120	06/20/1997	Day 14
AAB-118	OR-29	3	14.6	32.2	8.0	7.5	132	06/21/1997	Day 15
AAB-118	OR-29	1	14.9	31.9	7.9	7.6	128	06/22/1997	Day 16
AAB-118	OR-29	2	15.9	31.7	7.9	7.5	120	06/23/1997	Day 17
AAB-118	OR-29	3	15.8	32.0	7.7	7.6	126	06/24/1997	Day 18
AAB-118	OR-29	1	15.5	32.1	7.4	7.7	132	06/25/1997	Day 19
AAB-118	OR-29	2	15.5	32.3	7.4	7.5	120	06/26/1997	Day 20
AAB-118	OR-29	3	15.3	31.8	6.1	7.3	120	06/27/1997	Day 21
AAB-118	OR-29	1	15.2	31.9	6.4	7.4	120	06/28/1997	Day 22
AAB-118	OR-29	2	15.2	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-118	OR-29	3	15.5	32.4	7.1	7.4	124	06/30/1997	Day 24
AAB-118	OR-29	1	15.6	31.9	5.3	7.7	120	07/01/1997	Day 25
AAB-118	OR-29	2	15.2	31.8	7.6	7.5	116	07/02/1997	Day 26
AAB-118	OR-29	3	15.3	31.7	7.3	7.4	124	07/03/1997	Day 27
AAB-118	OR-29	1	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-118	OR-29	2	14.9	32.1	7.1	7.5		07/04/1997	Day 28
AAB-118	OR-29	3	14.9	31.7	7.1	7.5		07/04/1997	Day 28
AAB-148	SB-01	1	15.0	32.0	7.9	7.6	128	06/06/1997	Day 0
AAB-148	SB-01	2	15.1	32.0	8.1	7.6	128	06/06/1997	Day 0
AAB-148	SB-01	3	14.8	32.0	7.6	7.5	124	06/06/1997	Day 0
AAB-148	SB-01	1	15.8	32.0	7.8	7.7	120	06/07/1997	Day 1
AAB-148	SB-01	2	14.8	32.2	7.1	7.6	124	06/08/1997	Day 2
AAB-148	SB-01	3	15.3	31.7	7.8	7.6	124	06/09/1997	Day 3
AAB-148	SB-01	1	15.3	31.9	6.9	7.4	120	06/10/1997	Day 4
AAB-148	SB-01	2	15.4	31.9	7.7	7.7	122	06/11/1997	Day 5
AAB-148	SB-01	3	14.9	31.7	7.1	7.5	124	06/12/1997	Day 6
AAB-148	SB-01	1	15.4	31.7	7.6	7.6	122	06/13/1997	Day 7
AAB-148	SB-01	2	15.2	32.0	7.7	7.6	120	06/14/1997	Day 8
AAB-148	SB-01	3	15.1	31.6	7.5	7.7	128	06/15/1997	Day 9
AAB-148	SB-01	1	15.0	32.0	7.7	7.5	122	06/16/1997	Day 10
AAB-148	SB-01	2	15.7	31.4	7.8	7.6	124	06/17/1997	Day 11
AAB-148	SB-01	3	15.5	31.7	8.0	7.6	124	06/18/1997	Day 12
AAB-148	SB-01	1	15.8	31.8	7.7	7.6	122	06/19/1997	Day 13
AAB-148	SB-01	2	15.6	32.0	5.9	7.7	120	06/20/1997	Day 14
AAB-148	SB-01	3	14.4	32.1	7.9	7.4	120	06/21/1997	Day 15
AAB-148	SB-01	1	14.1	31.8	7.9	7.6	124	06/22/1997	Day 16
AAB-148	SB-01	2	15.9	31.7	7.8	7.5	126	06/23/1997	Day 17
AAB-148	SB-01	3	15.9	32.0	7.5	7.6	120	06/24/1997	Day 18
AAB-148	SB-01	1	15.3	32.0	7.4	7.7	120	06/25/1997	Day 19
AAB-148	SB-01	2	15.4	32.4	7.4	7.4	120	06/26/1997	Day 20
AAB-148	SB-01	3	15.1	31.8	6.5	7.3	116	06/27/1997	Day 21
AAB-148	SB-01	1	14.9	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-148	SB-01	2	15.4	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-148	SB-01	3	15.3	32.4	7.8	7.4	120	06/30/1997	Day 24
AAB-148	SB-01	1	15.5	31.9	5.4	7.7	126	07/01/1997	Day 25

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-148	SB-01	2	15.3	31.8	7.7	7.5	132	07/02/1997	Day 26
AAB-148	SB-01	3	15.2	31.7	7.5	7.4	124	07/03/1997	Day 27
AAB-148	SB-01	1	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-148	SB-01	2	14.9	32.0	7.2	7.4		07/04/1997	Day 28
AAB-148	SB-01	3	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-143	SB-02	1	15.0	32.0	7.9	7.6	122	06/06/1997	Day 0
AAB-143	SB-02	2	14.9	32.0	7.8	7.6	128	06/06/1997	Day 0
AAB-143	SB-02	3	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-143	SB-02	1	15.7	32.0	7.8	7.7	120	06/07/1997	Day 1
AAB-143	SB-02	2	15.4	32.1	7.6	7.7	132	06/08/1997	Day 2
AAB-143	SB-02	3	15.5	31.7	7.9	7.6	120	06/09/1997	Day 3
AAB-143	SB-02	1	15.3	31.9	6.9	7.5	120	06/10/1997	Day 4
AAB-143	SB-02	2	15.4	31.9	7.8	7.7	130	06/11/1997	Day 5
AAB-143	SB-02	3	15.0	31.7	7.1	7.5	120	06/12/1997	Day 6
AAB-143	SB-02	1	15.4	31.7	7.6	7.7	118	06/13/1997	Day 7
AAB-143	SB-02	2	15.2	32.0	7.8	7.6	120	06/14/1997	Day 8
AAB-143	SB-02	3	15.2	31.7	7.2	7.7	124	06/15/1997	Day 9
AAB-143	SB-02	1	15.1	32.1	7.7	7.5	118	06/16/1997	Day 10
AAB-143	SB-02	2	15.7	31.5	7.8	7.6	122	06/17/1997	Day 11
AAB-143	SB-02	3	15.5	31.7	8.0	7.6	124	06/18/1997	Day 12
AAB-143	SB-02	1	15.8	31.8	7.6	7.6	120	06/19/1997	Day 13
AAB-143	SB-02	2	15.4	31.9	6.3	7.7	120	06/20/1997	Day 14
AAB-143	SB-02	3	14.6	32.1	7.8	7.4	120	06/21/1997	Day 15
AAB-143	SB-02	1	14.1	31.8	7.9	7.6	120	06/22/1997	Day 16
AAB-143	SB-02	2	15.9	31.7	8.1	7.5	120	06/23/1997	Day 17
AAB-143	SB-02	3	15.8	32.0	6.7	7.5	120	06/24/1997	Day 18
AAB-143	SB-02	1	15.3	32.0	7.5	7.7	120	06/25/1997	Day 19
AAB-143	SB-02	2	15.5	28.9	7.7	7.5	116	06/26/1997	Day 20
AAB-143	SB-02	3	14.9	31.8	6.4	7.3	128	06/27/1997	Day 21
AAB-143	SB-02	1	14.9	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-143	SB-02	2	15.1	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-143	SB-02	3	15.3	32.4	7.7	7.4	128	06/30/1997	Day 24
AAB-143	SB-02	1	15.5	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-143	SB-02	2	15.3	31.3	7.9	7.5	128	07/02/1997	Day 26
AAB-143	SB-02	3	15.1	31.7	7.5	7.4	128	07/03/1997	Day 27
AAB-143	SB-02	1	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-143	SB-02	2	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-143	SB-02	3	14.7	31.9	6.9	7.4		07/04/1997	Day 28
AAB-122	SB-03	1	15.0	31.9	7.9	7.6	128	06/06/1997	Day 0
AAB-122	SB-03	2	15.1	32.0	7.5	7.5	120	06/06/1997	Day 0
AAB-122	SB-03	3	15.0	32.0	7.5	7.5	124	06/06/1997	Day 0
AAB-122	SB-03	1	15.4	32.0	7.8	7.7	128	06/07/1997	Day 1
AAB-122	SB-03	2	15.6	32.2	7.1	7.6	120	06/08/1997	Day 2
AAB-122	SB-03	3	15.5	31.7	7.6	7.6	116	06/09/1997	Day 3
AAB-122	SB-03	1	15.1	31.9	6.6	7.4	128	06/10/1997	Day 4
AAB-122	SB-03	2	15.4	31.9	7.8	7.7	116	06/11/1997	Day 5
AAB-122	SB-03	3	15.0	31.7	7.0	7.5	120	06/12/1997	Day 6
AAB-122	SB-03	1	15.6	31.7	7.4	7.7	128	06/13/1997	Day 7
AAB-122	SB-03	2	15.3	32.0	7.7	7.6	120	06/14/1997	Day 8
AAB-122	SB-03	3	15.1	31.6	7.3	7.7	120	06/15/1997	Day 9
AAB-122	SB-03	1	15.0	32.1	8.3	7.4	128	06/16/1997	Day 10
AAB-122	SB-03	2	15.7	31.4	8.0	7.6	118	06/17/1997	Day 11
AAB-122	SB-03	3	15.6	31.7	8.0	7.6	120	06/18/1997	Day 12
AAB-122	SB-03	1	15.6	31.8	7.2	7.6	128	06/19/1997	Day 13
AAB-122	SB-03	2	15.5	32.1	6.2	7.7	120	06/20/1997	Day 14
AAB-122	SB-03	3	14.5	32.1	7.8	7.4	120	06/21/1997	Day 15
AAB-122	SB-03	1	14.9	31.9	7.2	7.6	120	06/22/1997	Day 16
AAB-122	SB-03	2	15.9	31.7	7.9	7.5	120	06/23/1997	Day 17
AAB-122	SB-03	3	15.8	32.0	6.6	7.4	118	06/24/1997	Day 18
AAB-122	SB-03	1	15.5	31.9	7.0	7.7	124	06/25/1997	Day 19

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-122	SB-03	2	15.7	32.4	7.2	7.4	120	06/26/1997	Day 20
AAB-122	SB-03	3	14.9	31.8	5.7	7.2	116	06/27/1997	Day 21
AAB-122	SB-03	1	15.2	32.0	5.5	7.3	116	06/28/1997	Day 22
AAB-122	SB-03	2	15.2	32.1	6.7	7.5	116	06/29/1997	Day 23
AAB-122	SB-03	3	15.4	32.4	7.9	7.4	124	06/30/1997	Day 24
AAB-122	SB-03	1	15.6	31.9	5.2	7.7	120	07/01/1997	Day 25
AAB-122	SB-03	2	15.3	31.4	7.5	7.5	120	07/02/1997	Day 26
AAB-122	SB-03	3	15.2	31.8	7.5	7.4	116	07/03/1997	Day 27
AAB-122	SB-03	1	14.9	32.1	7.2	7.4		07/04/1997	Day 28
AAB-122	SB-03	2	15.1	32.0	6.9	7.5		07/04/1997	Day 28
AAB-122	SB-03	3	14.7	32.1	7.0	7.4		07/04/1997	Day 28
AAB-121	SB-04	1	15.0	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-121	SB-04	2	14.8	32.0	7.7	7.6	128	06/06/1997	Day 0
AAB-121	SB-04	3	14.8	32.0	7.5	7.5	130	06/06/1997	Day 0
AAB-121	SB-04	1	15.8	32.0	7.7	7.7	118	06/07/1997	Day 1
AAB-121	SB-04	2	15.4	32.2	7.2	7.6	128	06/08/1997	Day 2
AAB-121	SB-04	3	15.3	31.7	8.0	7.6	120	06/09/1997	Day 3
AAB-121	SB-04	1	15.3	31.9	6.7	7.4	116	06/10/1997	Day 4
AAB-121	SB-04	2	15.3	31.9	7.9	7.7	126	06/11/1997	Day 5
AAB-121	SB-04	3	14.8	31.7	6.9	7.4	116	06/12/1997	Day 6
AAB-121	SB-04	1	15.5	31.7	7.6	7.6	118	06/13/1997	Day 7
AAB-121	SB-04	2	15.2	32.0	7.7	7.6	126	06/14/1997	Day 8
AAB-121	SB-04	3	14.9	31.7	7.1	7.7	120	06/15/1997	Day 9
AAB-121	SB-04	1	15.2	32.1	7.6	7.5	116	06/16/1997	Day 10
AAB-121	SB-04	2	15.5	31.5	7.9	7.6	124	06/17/1997	Day 11
AAB-121	SB-04	3	15.6	31.7	8.1	7.6	118	06/18/1997	Day 12
AAB-121	SB-04	1	15.9	31.9	7.7	7.6	118	06/19/1997	Day 13
AAB-121	SB-04	2	15.3	32.1	6.3	7.7	124	06/20/1997	Day 14
AAB-121	SB-04	3	14.4	32.0	7.7	7.4	120	06/21/1997	Day 15
AAB-121	SB-04	1	14.2	31.9	8.0	7.6	116	06/22/1997	Day 16
AAB-121	SB-04	2	15.8	31.7	7.7	7.5	124	06/23/1997	Day 17
AAB-121	SB-04	3	15.9	32.0	6.9	7.5	120	06/24/1997	Day 18
AAB-121	SB-04	1	15.4	32.0	7.6	7.7	128	06/25/1997	Day 19
AAB-121	SB-04	2	15.4	32.3	7.2	7.4	116	06/26/1997	Day 20
AAB-121	SB-04	3	14.9	31.8	6.2	7.3	120	06/27/1997	Day 21
AAB-121	SB-04	1	15.0	31.9	6.5	7.4	118	06/28/1997	Day 22
AAB-121	SB-04	2	14.9	32.1	6.2	7.5	116	06/29/1997	Day 23
AAB-121	SB-04	3	15.3	32.5	7.2	7.4	120	06/30/1997	Day 24
AAB-121	SB-04	1	15.5	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-121	SB-04	2	15.2	31.7	7.6	7.5	132	07/02/1997	Day 26
AAB-121	SB-04	3	15.1	31.7	7.2	7.4	120	07/03/1997	Day 27
AAB-121	SB-04	1	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-121	SB-04	2	14.7	32.1	6.6	7.5		07/04/1997	Day 28
AAB-121	SB-04	3	14.8	32.0	6.6	7.5		07/04/1997	Day 28
AAB-141	SB-05	1	15.0	32.0	8.0	7.6	116	06/06/1997	Day 0
AAB-141	SB-05	2	15.0	32.0	7.8	7.6	120	06/06/1997	Day 0
AAB-141	SB-05	3	14.8	32.0	7.6	7.5	128	06/06/1997	Day 0
AAB-141	SB-05	1	15.9	32.0	7.7	7.7	124	06/07/1997	Day 1
AAB-141	SB-05	2	15.4	32.2	7.2	7.6	124	06/08/1997	Day 2
AAB-141	SB-05	3	15.3	31.7	7.7	7.6	132	06/09/1997	Day 3
AAB-141	SB-05	1	15.4	31.8	6.8	7.5	128	06/10/1997	Day 4
AAB-141	SB-05	2	15.4	31.9	7.6	7.7	120	06/11/1997	Day 5
AAB-141	SB-05	3	14.9	31.6	7.1	7.5	130	06/12/1997	Day 6
AAB-141	SB-05	1	15.6	31.7	7.6	7.7	124	06/13/1997	Day 7
AAB-141	SB-05	2	15.3	31.9	7.8	7.6	120	06/14/1997	Day 8
AAB-141	SB-05	3	15.0	31.7	7.0	7.7	120	06/15/1997	Day 9
AAB-141	SB-05	1	15.2	32.1	7.7	7.5	126	06/16/1997	Day 10
AAB-141	SB-05	2	15.7	31.5	7.8	7.6	124	06/17/1997	Day 11
AAB-141	SB-05	3	15.6	31.6	7.8	7.6	120	06/18/1997	Day 12
AAB-141	SB-05	1	15.9	31.8	7.7	7.6	124	06/19/1997	Day 13

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-141	SB-05	2	15.5	32.0	6.1	7.7	120	06/20/1997	Day 14
AAB-141	SB-05	3	14.3	32.1	7.7	7.4	116	06/21/1997	Day 15
AAB-141	SB-05	1	14.3	31.8	7.9	7.6	128	06/22/1997	Day 16
AAB-141	SB-05	2	15.9	31.7	8.0	7.6	120	06/23/1997	Day 17
AAB-141	SB-05	3	15.8	32.0	6.5	7.5	120	06/24/1997	Day 18
AAB-141	SB-05	1	15.4	32.0	7.5	7.7	132	06/25/1997	Day 19
AAB-141	SB-05	2	15.5	31.4	7.5	7.5	120	06/26/1997	Day 20
AAB-141	SB-05	3	14.8	31.9	6.4	7.3	122	06/27/1997	Day 21
AAB-141	SB-05	1	15.1	31.9	6.6	7.4	116	06/28/1997	Day 22
AAB-141	SB-05	2	15.1	32.1	6.4	7.5	116	06/29/1997	Day 23
AAB-141	SB-05	3	15.4	32.4	7.7	7.4	120	06/30/1997	Day 24
AAB-141	SB-05	1	15.7	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-141	SB-05	2	15.2	31.8	7.7	7.5	116	07/02/1997	Day 26
AAB-141	SB-05	3	15.3	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-141	SB-05	1	15.1	32.0	7.3	7.5		07/04/1997	Day 28
AAB-141	SB-05	2	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-141	SB-05	3	14.9	32.0	6.7	7.5		07/04/1997	Day 28
AAB-120	SB-06	1	14.7	32.0	7.5	7.5	132	06/06/1997	Day 0
AAB-120	SB-06	2	15.1	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-120	SB-06	3	14.8	32.0	7.6	7.5	126	06/06/1997	Day 0
AAB-120	SB-06	1	15.6	32.0	8.2	7.7	130	06/07/1997	Day 1
AAB-120	SB-06	2	15.1	32.2	7.2	7.6	120	06/08/1997	Day 2
AAB-120	SB-06	3	15.4	31.7	7.9	7.6	124	06/09/1997	Day 3
AAB-120	SB-06	1	15.2	31.9	7.5	7.4	132	06/10/1997	Day 4
AAB-120	SB-06	2	15.7	31.9	7.8	7.7	116	06/11/1997	Day 5
AAB-120	SB-06	3	15.0	31.7	7.3	7.5	128	06/12/1997	Day 6
AAB-120	SB-06	1	15.3	31.7	7.4	7.6	128	06/13/1997	Day 7
AAB-120	SB-06	2	15.5	31.9	7.7	7.6	128	06/14/1997	Day 8
AAB-120	SB-06	3	15.1	31.7	7.6	7.7	128	06/15/1997	Day 9
AAB-120	SB-06	1	14.9	32.0	7.3	7.5	128	06/16/1997	Day 10
AAB-120	SB-06	2	15.9	31.5	7.6	7.6	128	06/17/1997	Day 11
AAB-120	SB-06	3	15.6	31.7	8.1	7.6	124	06/18/1997	Day 12
AAB-120	SB-06	1	15.7	31.7	7.8	7.5	128	06/19/1997	Day 13
AAB-120	SB-06	2	16.2	31.9	6.0	7.7	124	06/20/1997	Day 14
AAB-120	SB-06	3	14.5	32.1	7.7	7.4	124	06/21/1997	Day 15
AAB-120	SB-06	1	14.0	31.9	7.8	7.6	128	06/22/1997	Day 16
AAB-120	SB-06	2	16.3	31.7	7.8	7.5	120	06/23/1997	Day 17
AAB-120	SB-06	3	15.9	32.0	7.7	7.6	128	06/24/1997	Day 18
AAB-120	SB-06	1	15.1	32.2	6.8	7.6	128	06/25/1997	Day 19
AAB-120	SB-06	2	15.7	32.4	7.1	7.4	120	06/26/1997	Day 20
AAB-120	SB-06	3	15.2	31.8	6.4	7.3	120	06/27/1997	Day 21
AAB-120	SB-06	1	14.7	31.9	5.4	7.3	124	06/28/1997	Day 22
AAB-120	SB-06	2	15.6	32.1	6.3	7.5	116	06/29/1997	Day 23
AAB-120	SB-06	3	15.5	32.4	7.8	7.4	120	06/30/1997	Day 24
AAB-120	SB-06	1	15.2	31.9	5.0	7.6	120	07/01/1997	Day 25
AAB-120	SB-06	2	15.6	31.8	7.4	7.5	116	07/02/1997	Day 26
AAB-120	SB-06	3	15.4	31.7	7.4	7.4	120	07/03/1997	Day 27
AAB-120	SB-06	1	14.8	32.1	6.6	7.4		07/04/1997	Day 28
AAB-120	SB-06	2	15.1	32.1	7.3	7.4		07/04/1997	Day 28
AAB-120	SB-06	3	15.0	32.0	6.7	7.5		07/04/1997	Day 28
AAB-119	SB-07	1	15.0	31.9	8.0	7.6	128	06/06/1997	Day 0
AAB-119	SB-07	2	14.7	32.0	7.7	7.6	120	06/06/1997	Day 0
AAB-119	SB-07	3	15.0	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-119	SB-07	1	15.4	32.0	7.7	7.7	126	06/07/1997	Day 1
AAB-119	SB-07	2	15.3	32.2	7.0	7.6	128	06/08/1997	Day 2
AAB-119	SB-07	3	15.2	31.7	7.8	7.6	120	06/09/1997	Day 3
AAB-119	SB-07	1	15.0	31.9	6.5	7.4	128	06/10/1997	Day 4
AAB-119	SB-07	2	15.2	31.9	7.9	7.7	120	06/11/1997	Day 5
AAB-119	SB-07	3	15.0	31.7	7.3	7.5	120	06/12/1997	Day 6
AAB-119	SB-07	1	15.6	31.8	7.6	7.7	128	06/13/1997	Day 7

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-119	SB-07	2	15.4	31.3	8.1	7.6	118	06/14/1997	Day 8
AAB-119	SB-07	3	15.2	31.7	7.7	7.7	120	06/15/1997	Day 9
AAB-119	SB-07	1	15.0	32.1	8.3	7.4	124	06/16/1997	Day 10
AAB-119	SB-07	2	15.5	31.5	7.9	7.5	120	06/17/1997	Day 11
AAB-119	SB-07	3	15.9	31.7	8.1	7.6	118	06/18/1997	Day 12
AAB-119	SB-07	1	15.7	31.9	7.7	7.6	124	06/19/1997	Day 13
AAB-119	SB-07	2	15.5	31.9	6.4	7.7	120	06/20/1997	Day 14
AAB-119	SB-07	3	14.7	32.3	7.9	7.4	132	06/21/1997	Day 15
AAB-119	SB-07	1	14.9	31.8	7.8	7.6	120	06/22/1997	Day 16
AAB-119	SB-07	2	15.9	31.7	8.2	7.5	120	06/23/1997	Day 17
AAB-119	SB-07	3	15.9	32.0	7.5	7.6	128	06/24/1997	Day 18
AAB-119	SB-07	1	15.5	31.8	7.3	7.7	120	06/25/1997	Day 19
AAB-119	SB-07	2	15.5	32.3	7.5	7.4	132	06/26/1997	Day 20
AAB-119	SB-07	3	15.4	31.8	6.4	7.3	116	06/27/1997	Day 21
AAB-119	SB-07	1	15.3	31.9	6.1	7.4	116	06/28/1997	Day 22
AAB-119	SB-07	2	15.1	32.1	7.8	7.5	128	06/29/1997	Day 23
AAB-119	SB-07	3	15.5	32.4	7.4	7.4	116	06/30/1997	Day 24
AAB-119	SB-07	1	15.6	31.9	5.2	7.6	130	07/01/1997	Day 25
AAB-119	SB-07	2	15.1	31.8	7.5	7.5	124	07/02/1997	Day 26
AAB-119	SB-07	3	15.4	31.7	7.6	7.4	124	07/03/1997	Day 27
AAB-119	SB-07	1	14.9	32.0	7.4	7.5		07/04/1997	Day 28
AAB-119	SB-07	2	14.8	32.0	6.5	7.5		07/04/1997	Day 28
AAB-119	SB-07	3	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-115	SB-08	1	15.0	31.9	7.9	7.6	128	06/06/1997	Day 0
AAB-115	SB-08	2	15.1	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-115	SB-08	3	15.2	32.0	7.9	7.5	122	06/06/1997	Day 0
AAB-115	SB-08	1	15.4	32.0	7.7	7.7	128	06/07/1997	Day 1
AAB-115	SB-08	2	15.0	32.1	7.2	7.6	124	06/08/1997	Day 2
AAB-115	SB-08	3	15.5	31.7	7.9	7.6	120	06/09/1997	Day 3
AAB-115	SB-08	1	15.0	31.9	6.6	7.4	124	06/10/1997	Day 4
AAB-115	SB-08	2	15.5	31.9	7.7	7.7	120	06/11/1997	Day 5
AAB-115	SB-08	3	15.0	31.7	7.5	7.5	120	06/12/1997	Day 6
AAB-115	SB-08	1	15.5	31.8	7.5	7.6	128	06/13/1997	Day 7
AAB-115	SB-08	2	15.5	32.0	7.7	7.6	122	06/14/1997	Day 8
AAB-115	SB-08	3	15.1	31.6	7.7	7.7	120	06/15/1997	Day 9
AAB-115	SB-08	1	15.0	32.1	8.0	7.4	126	06/16/1997	Day 10
AAB-115	SB-08	2	15.8	31.5	7.7	7.5	120	06/17/1997	Day 11
AAB-115	SB-08	3	15.7	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-115	SB-08	1	15.6	31.8	7.4	7.6	128	06/19/1997	Day 13
AAB-115	SB-08	2	15.8	32.0	6.0	7.7	120	06/20/1997	Day 14
AAB-115	SB-08	3	14.5	31.1	8.1	7.5	116	06/21/1997	Day 15
AAB-115	SB-08	1	14.8	31.9	7.4	7.6	120	06/22/1997	Day 16
AAB-115	SB-08	2	16.1	31.7	7.9	7.5	116	06/23/1997	Day 17
AAB-115	SB-08	3	16.0	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-115	SB-08	1	15.4	32.0	6.5	7.6	120	06/25/1997	Day 19
AAB-115	SB-08	2	15.5	32.3	7.2	7.4	124	06/26/1997	Day 20
AAB-115	SB-08	3	15.1	31.8	6.6	7.3	120	06/27/1997	Day 21
AAB-115	SB-08	1	15.1	32.0	5.5	7.3	128	06/28/1997	Day 22
AAB-115	SB-08	2	15.6	32.1	6.2	7.5	120	06/29/1997	Day 23
AAB-115	SB-08	3	15.4	32.4	7.8	7.5	116	06/30/1997	Day 24
AAB-115	SB-08	1	15.6	31.9	5.2	7.6	124	07/01/1997	Day 25
AAB-115	SB-08	2	15.4	31.5	7.4	7.5	116	07/02/1997	Day 26
AAB-115	SB-08	3	15.4	31.7	7.8	7.5	128	07/03/1997	Day 27
AAB-115	SB-08	1	15.0	32.0	7.4	7.5		07/04/1997	Day 28
AAB-115	SB-08	2	15.1	31.5	7.2	7.4		07/04/1997	Day 28
AAB-115	SB-08	3	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-145	SB-09	1	14.9	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-145	SB-09	2	15.1	32.0	8.1	7.6	128	06/06/1997	Day 0
AAB-145	SB-09	3	15.0	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-145	SB-09	1	15.7	32.0	7.8	7.7	120	06/07/1997	Day 1

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-145	SB-09	2	15.0	32.2	7.0	7.6	124	06/08/1997	Day 2
AAB-145	SB-09	3	15.2	31.7	8.0	7.6	124	06/09/1997	Day 3
AAB-145	SB-09	1	15.3	31.9	6.7	7.4	120	06/10/1997	Day 4
AAB-145	SB-09	2	15.5	31.9	7.7	7.7	120	06/11/1997	Day 5
AAB-145	SB-09	3	14.9	31.7	6.8	7.5	122	06/12/1997	Day 6
AAB-145	SB-09	1	15.5	31.7	7.6	7.6	120	06/13/1997	Day 7
AAB-145	SB-09	2	15.3	32.0	7.8	7.6	120	06/14/1997	Day 8
AAB-145	SB-09	3	15.2	31.7	7.5	7.7	124	06/15/1997	Day 9
AAB-145	SB-09	1	15.1	32.1	7.7	7.5	120	06/16/1997	Day 10
AAB-145	SB-09	2	15.7	31.5	7.8	7.6	124	06/17/1997	Day 11
AAB-145	SB-09	3	15.7	31.7	8.1	7.6	120	06/18/1997	Day 12
AAB-145	SB-09	1	15.8	32.1	7.7	7.6	120	06/19/1997	Day 13
AAB-145	SB-09	2	15.7	32.0	6.0	7.7	120	06/20/1997	Day 14
AAB-145	SB-09	3	14.7	32.1	7.4	7.4	116	06/21/1997	Day 15
AAB-145	SB-09	1	14.1	31.9	7.9	7.6	120	06/22/1997	Day 16
AAB-145	SB-09	2	16.1	31.7	7.8	7.5	120	06/23/1997	Day 17
AAB-145	SB-09	3	15.9	32.0	7.3	7.5	118	06/24/1997	Day 18
AAB-145	SB-09	1	15.3	32.0	7.4	7.6	120	06/25/1997	Day 19
AAB-145	SB-09	2	15.5	32.3	7.3	7.4	120	06/26/1997	Day 20
AAB-145	SB-09	3	15.5	31.8	6.0	7.3	116	06/27/1997	Day 21
AAB-145	SB-09	1	14.9	31.9	6.5	7.4	120	06/28/1997	Day 22
AAB-145	SB-09	2	15.5	32.1	6.4	7.5	120	06/29/1997	Day 23
AAB-145	SB-09	3	15.4	32.4	7.4	7.4	116	06/30/1997	Day 24
AAB-145	SB-09	1	15.5	31.9	5.4	7.7	120	07/01/1997	Day 25
AAB-145	SB-09	2	15.4	31.7	7.7	7.5	120	07/02/1997	Day 26
AAB-145	SB-09	3	15.3	31.7	7.2	7.4	120	07/03/1997	Day 27
AAB-145	SB-09	1	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-145	SB-09	2	15.0	32.0	7.3	7.5		07/04/1997	Day 28
AAB-145	SB-09	3	15.0	32.0	7.3	7.4		07/04/1997	Day 28
AAB-144	SB-10	1	15.1	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-144	SB-10	2	15.1	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-144	SB-10	3	15.2	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-144	SB-10	1	15.6	32.0	7.7	7.7	124	06/07/1997	Day 1
AAB-144	SB-10	2	15.5	32.2	7.2	7.6	124	06/08/1997	Day 2
AAB-144	SB-10	3	15.5	31.8	7.4	7.6	116	06/09/1997	Day 3
AAB-144	SB-10	1	15.1	31.9	6.1	7.4	124	06/10/1997	Day 4
AAB-144	SB-10	2	15.4	31.9	7.6	7.7	120	06/11/1997	Day 5
AAB-144	SB-10	3	15.0	31.7	6.7	7.5	116	06/12/1997	Day 6
AAB-144	SB-10	1	15.7	31.7	7.3	7.6	124	06/13/1997	Day 7
AAB-144	SB-10	2	15.3	31.9	7.7	7.6	120	06/14/1997	Day 8
AAB-144	SB-10	3	15.1	31.7	7.1	7.7	120	06/15/1997	Day 9
AAB-144	SB-10	1	15.1	32.1	8.3	7.4	120	06/16/1997	Day 10
AAB-144	SB-10	2	15.7	31.5	7.7	7.5	120	06/17/1997	Day 11
AAB-144	SB-10	3	15.5	31.7	8.1	7.6	118	06/18/1997	Day 12
AAB-144	SB-10	1	15.8	31.9	7.6	7.6	122	06/19/1997	Day 13
AAB-144	SB-10	2	15.5	31.9	6.3	7.7	120	06/20/1997	Day 14
AAB-144	SB-10	3	14.4	32.2	7.6	7.4	116	06/21/1997	Day 15
AAB-144	SB-10	1	15.0	31.9	7.9	7.6	116	06/22/1997	Day 16
AAB-144	SB-10	2	16.0	31.4	8.0	7.5	120	06/23/1997	Day 17
AAB-144	SB-10	3	16.1	32.0	7.5	7.6	120	06/24/1997	Day 18
AAB-144	SB-10	1	15.6	32.0	7.3	7.7	124	06/25/1997	Day 19
AAB-144	SB-10	2	15.6	32.3	7.5	7.5	116	06/26/1997	Day 20
AAB-144	SB-10	3	15.2	31.7	6.6	7.3	120	06/27/1997	Day 21
AAB-144	SB-10	1	15.4	31.9	6.1	7.4	116	06/28/1997	Day 22
AAB-144	SB-10	2	15.2	32.1	6.2	7.5	116	06/29/1997	Day 23
AAB-144	SB-10	3	15.4	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-144	SB-10	1	15.7	31.9	5.2	7.6	120	07/01/1997	Day 25
AAB-144	SB-10	2	15.4	31.8	7.6	7.5	120	07/02/1997	Day 26
AAB-144	SB-10	3	15.4	31.7	7.6	7.4	116	07/03/1997	Day 27
AAB-144	SB-10	1	15.0	32.0	7.3	7.5		07/04/1997	Day 28

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-144	SB-10	2	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-144	SB-10	3	15.1	32.0	6.7	7.5		07/04/1997	Day 28
AAB-139	SB-11	1	15.0	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-139	SB-11	2	14.9	32.0	7.7	7.5	118	06/06/1997	Day 0
AAB-139	SB-11	3	15.1	32.0	8.1	7.6	124	06/06/1997	Day 0
AAB-139	SB-11	1	15.8	32.0	7.7	7.7	118	06/07/1997	Day 1
AAB-139	SB-11	2	15.4	32.2	7.2	7.6	124	06/08/1997	Day 2
AAB-139	SB-11	3	15.2	31.8	7.9	7.6	116	06/09/1997	Day 3
AAB-139	SB-11	1	15.4	31.8	6.9	7.4	116	06/10/1997	Day 4
AAB-139	SB-11	2	15.2	31.9	7.9	7.7	118	06/11/1997	Day 5
AAB-139	SB-11	3	15.0	31.7	7.2	7.5	116	06/12/1997	Day 6
AAB-139	SB-11	1	15.6	31.7	7.6	7.7	116	06/13/1997	Day 7
AAB-139	SB-11	2	15.2	31.9	8.0	7.7	120	06/14/1997	Day 8
AAB-139	SB-11	3	15.3	31.8	7.7	7.7	116	06/15/1997	Day 9
AAB-139	SB-11	1	15.2	32.1	7.7	7.5	116	06/16/1997	Day 10
AAB-139	SB-11	2	15.5	31.5	7.9	7.6	120	06/17/1997	Day 11
AAB-139	SB-11	3	15.8	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-139	SB-11	1	15.9	31.7	7.8	7.6	120	06/19/1997	Day 13
AAB-139	SB-11	2	15.5	31.9	6.3	7.7	120	06/20/1997	Day 14
AAB-139	SB-11	3	14.7	32.1	7.9	7.4	116	06/21/1997	Day 15
AAB-139	SB-11	1	14.3	31.8	8.0	7.6	116	06/22/1997	Day 16
AAB-139	SB-11	2	15.9	31.7	8.2	7.5	120	06/23/1997	Day 17
AAB-139	SB-11	3	15.9	32.0	7.6	7.6	128	06/24/1997	Day 18
AAB-139	SB-11	1	15.4	32.0	7.6	7.7	116	06/25/1997	Day 19
AAB-139	SB-11	2	15.5	32.3	7.4	7.4	128	06/26/1997	Day 20
AAB-139	SB-11	3	15.4	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-139	SB-11	1	15.0	31.9	6.6	7.4	124	06/28/1997	Day 22
AAB-139	SB-11	2	15.2	32.1	8.0	7.5	120	06/29/1997	Day 23
AAB-139	SB-11	3	15.4	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-139	SB-11	1	15.6	31.9	5.4	7.7	124	07/01/1997	Day 25
AAB-139	SB-11	2	15.2	31.7	7.6	7.5	132	07/02/1997	Day 26
AAB-139	SB-11	3	15.3	31.7	7.3	7.4	124	07/03/1997	Day 27
AAB-139	SB-11	1	15.0	32.1	7.3	7.5		07/04/1997	Day 28
AAB-139	SB-11	2	14.8	32.0	6.7	7.5		07/04/1997	Day 28
AAB-139	SB-11	3	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-154	SB-12	1	14.9	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-154	SB-12	2	15.3	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-154	SB-12	3	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-154	SB-12	1	15.7	32.0	7.8	7.7	116	06/07/1997	Day 1
AAB-154	SB-12	2	15.2	32.2	7.1	7.6	132	06/08/1997	Day 2
AAB-154	SB-12	3	15.5	31.5	7.7	7.6	120	06/09/1997	Day 3
AAB-154	SB-12	1	15.2	31.9	6.8	7.4	120	06/10/1997	Day 4
AAB-154	SB-12	2	15.8	31.9	7.8	7.7	128	06/11/1997	Day 5
AAB-154	SB-12	3	15.0	31.7	7.4	7.5	122	06/12/1997	Day 6
AAB-154	SB-12	1	15.4	31.7	7.6	7.7	120	06/13/1997	Day 7
AAB-154	SB-12	2	15.6	32.0	7.7	7.6	128	06/14/1997	Day 8
AAB-154	SB-12	3	15.2	31.6	7.7	7.7	124	06/15/1997	Day 9
AAB-154	SB-12	1	15.1	32.1	7.7	7.5	118	06/16/1997	Day 10
AAB-154	SB-12	2	16.0	31.5	7.8	7.6	128	06/17/1997	Day 11
AAB-154	SB-12	3	15.7	31.7	8.2	7.6	124	06/18/1997	Day 12
AAB-154	SB-12	1	15.8	31.8	7.7	7.6	118	06/19/1997	Day 13
AAB-154	SB-12	2	15.9	32.0	6.1	7.7	128	06/20/1997	Day 14
AAB-154	SB-12	3	14.5	32.1	8.0	7.5	120	06/21/1997	Day 15
AAB-154	SB-12	1	14.1	31.9	7.9	7.6	116	06/22/1997	Day 16
AAB-154	SB-12	2	16.3	31.7	7.9	7.5	124	06/23/1997	Day 17
AAB-154	SB-12	3	16.0	31.9	7.5	7.6	120	06/24/1997	Day 18
AAB-154	SB-12	1	15.3	32.0	7.5	7.7	124	06/25/1997	Day 19
AAB-154	SB-12	2	15.8	32.0	7.1	7.4	116	06/26/1997	Day 20
AAB-154	SB-12	3	15.0	31.8	6.7	7.3	126	06/27/1997	Day 21
AAB-154	SB-12	1	14.9	31.9	6.5	7.4	120	06/28/1997	Day 22

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-154	SB-12	2	15.7	32.1	6.2	7.5	116	06/29/1997	Day 23
AAB-154	SB-12	3	15.4	32.4	7.5	7.4	120	06/30/1997	Day 24
AAB-154	SB-12	1	15.4	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-154	SB-12	2	15.7	31.6	7.4	7.5	116	07/02/1997	Day 26
AAB-154	SB-12	3	15.3	31.7	7.7	7.4	120	07/03/1997	Day 27
AAB-154	SB-12	1	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-154	SB-12	2	15.3	31.9	7.3	7.5		07/04/1997	Day 28
AAB-154	SB-12	3	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-113	SB-13	1	14.8	32.0	7.8	7.6	116	06/06/1997	Day 0
AAB-113	SB-13	2	14.9	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-113	SB-13	3	15.0	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-113	SB-13	1	15.8	32.0	7.9	7.7	120	06/07/1997	Day 1
AAB-113	SB-13	2	15.4	32.2	7.3	7.6	120	06/08/1997	Day 2
AAB-113	SB-13	3	15.6	31.5	7.8	7.6	120	06/09/1997	Day 3
AAB-113	SB-13	1	15.3	31.9	6.8	7.4	116	06/10/1997	Day 4
AAB-113	SB-13	2	15.3	31.9	7.6	7.7	122	06/11/1997	Day 5
AAB-113	SB-13	3	15.0	31.7	7.5	7.5	120	06/12/1997	Day 6
AAB-113	SB-13	1	15.5	31.7	7.7	7.6	118	06/13/1997	Day 7
AAB-113	SB-13	2	15.2	31.9	7.7	7.6	124	06/14/1997	Day 8
AAB-113	SB-13	3	15.2	31.6	7.7	7.7	120	06/15/1997	Day 9
AAB-113	SB-13	1	15.2	32.0	7.6	7.5	116	06/16/1997	Day 10
AAB-113	SB-13	2	15.6	31.3	7.8	7.6	124	06/17/1997	Day 11
AAB-113	SB-13	3	15.7	31.7	8.1	7.6	128	06/18/1997	Day 12
AAB-113	SB-13	1	15.8	31.8	7.6	7.6	116	06/19/1997	Day 13
AAB-113	SB-13	2	15.5	32.0	6.3	7.7	120	06/20/1997	Day 14
AAB-113	SB-13	3	14.5	32.1	8.1	7.4	120	06/21/1997	Day 15
AAB-113	SB-13	1	14.1	31.8	8.1	7.6	116	06/22/1997	Day 16
AAB-113	SB-13	2	15.8	31.8	8.1	7.6	124	06/23/1997	Day 17
AAB-113	SB-13	3	16.0	32.0	7.5	7.6	124	06/24/1997	Day 18
AAB-113	SB-13	1	15.3	32.1	7.5	7.7	116	06/25/1997	Day 19
AAB-113	SB-13	2	15.4	32.4	7.3	7.4	118	06/26/1997	Day 20
AAB-113	SB-13	3	15.0	31.8	6.7	7.3	120	06/27/1997	Day 21
AAB-113	SB-13	1	15.0	31.9	6.5	7.4	128	06/28/1997	Day 22
AAB-113	SB-13	2	15.2	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-113	SB-13	3	15.4	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-113	SB-13	1	15.5	31.9	5.4	7.7	126	07/01/1997	Day 25
AAB-113	SB-13	2	15.2	31.8	7.6	7.5	120	07/02/1997	Day 26
AAB-113	SB-13	3	15.4	31.7	7.8	7.4	120	07/03/1997	Day 27
AAB-113	SB-13	1	14.9	32.0	7.1	7.5		07/04/1997	Day 28
AAB-113	SB-13	2	14.9	32.0	7.0	7.4		07/04/1997	Day 28
AAB-113	SB-13	3	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-138	SB-14	1	14.9	32.0	7.7	7.5	130	06/06/1997	Day 0
AAB-138	SB-14	2	14.9	32.0	7.9	7.6	128	06/06/1997	Day 0
AAB-138	SB-14	3	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-138	SB-14	1	15.9	32.0	7.8	7.7	128	06/07/1997	Day 1
AAB-138	SB-14	2	15.4	32.2	7.2	7.6	128	06/08/1997	Day 2
AAB-138	SB-14	3	15.1	31.7	7.8	7.6	124	06/09/1997	Day 3
AAB-138	SB-14	1	15.5	31.9	6.9	7.5	124	06/10/1997	Day 4
AAB-138	SB-14	2	15.4	31.9	7.8	7.7	128	06/11/1997	Day 5
AAB-138	SB-14	3	14.8	31.7	7.2	7.5	124	06/12/1997	Day 6
AAB-138	SB-14	1	15.7	31.7	7.7	7.7	124	06/13/1997	Day 7
AAB-138	SB-14	2	15.3	32.0	7.7	7.6	128	06/14/1997	Day 8
AAB-138	SB-14	3	15.2	31.8	7.7	7.7	132	06/15/1997	Day 9
AAB-138	SB-14	1	15.3	32.0	8.1	7.5	120	06/16/1997	Day 10
AAB-138	SB-14	2	15.7	31.5	7.9	7.6	130	06/17/1997	Day 11
AAB-138	SB-14	3	15.7	31.7	8.2	7.6	124	06/18/1997	Day 12
AAB-138	SB-14	1	16.0	31.7	7.7	7.6	120	06/19/1997	Day 13
AAB-138	SB-14	2	15.4	32.0	6.3	7.7	128	06/20/1997	Day 14
AAB-138	SB-14	3	14.6	32.1	8.0	7.4	120	06/21/1997	Day 15
AAB-138	SB-14	1	14.3	31.9	8.1	7.6	124	06/22/1997	Day 16

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-138	SB-14	2	16.0	31.7	8.0	7.5	128	06/23/1997	Day 17
AAB-138	SB-14	3	15.8	32.0	7.7	7.6	118	06/24/1997	Day 18
AAB-138	SB-14	1	15.5	32.1	7.7	7.7	124	06/25/1997	Day 19
AAB-138	SB-14	2	15.5	32.4	7.2	7.4	116	06/26/1997	Day 20
AAB-138	SB-14	3	15.3	31.8	6.3	7.3	124	06/27/1997	Day 21
AAB-138	SB-14	1	15.1	31.9	6.7	7.4	120	06/28/1997	Day 22
AAB-138	SB-14	2	15.1	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-138	SB-14	3	15.3	32.4	7.5	7.5	120	06/30/1997	Day 24
AAB-138	SB-14	1	15.7	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-138	SB-14	2	15.3	31.8	7.6	7.5	128	07/02/1997	Day 26
AAB-138	SB-14	3	15.3	31.8	7.7	7.4	120	07/03/1997	Day 27
AAB-138	SB-14	1	15.1	32.0	7.1	7.5		07/04/1997	Day 28
AAB-138	SB-14	2	14.8	31.9	7.1	7.5		07/04/1997	Day 28
AAB-138	SB-14	3	14.9	32.0	7.2	7.4		07/04/1997	Day 28
AAB-114	SB-15	1	14.9	32.0	7.7	7.5	122	06/06/1997	Day 0
AAB-114	SB-15	2	15.0	32.0	7.6	7.5	126	06/06/1997	Day 0
AAB-114	SB-15	3	15.3	32.0	8.1	7.6	120	06/06/1997	Day 0
AAB-114	SB-15	1	15.7	32.0	7.7	7.7	124	06/07/1997	Day 1
AAB-114	SB-15	2	15.4	32.2	6.5	7.6	128	06/08/1997	Day 2
AAB-114	SB-15	3	15.4	31.7	7.8	7.6	120	06/09/1997	Day 3
AAB-114	SB-15	1	15.2	31.9	6.8	7.4	124	06/10/1997	Day 4
AAB-114	SB-15	2	15.3	31.9	7.5	7.7	124	06/11/1997	Day 5
AAB-114	SB-15	3	15.1	31.7	7.2	7.5	118	06/12/1997	Day 6
AAB-114	SB-15	1	15.4	31.7	7.6	7.6	132	06/13/1997	Day 7
AAB-114	SB-15	2	15.2	32.0	7.5	7.6	124	06/14/1997	Day 8
AAB-114	SB-15	3	15.4	31.7	7.5	7.7	116	06/15/1997	Day 9
AAB-114	SB-15	1	14.9	32.1	7.6	7.5	122	06/16/1997	Day 10
AAB-114	SB-15	2	15.7	31.5	7.8	7.5	126	06/17/1997	Day 11
AAB-114	SB-15	3	15.9	31.7	8.0	7.6	120	06/18/1997	Day 12
AAB-114	SB-15	1	15.7	31.8	7.8	7.6	124	06/19/1997	Day 13
AAB-114	SB-15	2	15.5	32.0	6.1	7.7	128	06/20/1997	Day 14
AAB-114	SB-15	3	14.8	32.1	7.9	7.4	116	06/21/1997	Day 15
AAB-114	SB-15	1	14.0	31.9	7.9	7.6	124	06/22/1997	Day 16
AAB-114	SB-15	2	16.0	31.7	7.5	7.5	124	06/23/1997	Day 17
AAB-114	SB-15	3	16.0	32.0	7.4	7.6	126	06/24/1997	Day 18
AAB-114	SB-15	1	15.2	32.0	7.3	7.7	120	06/25/1997	Day 19
AAB-114	SB-15	2	15.5	32.4	7.0	7.4	116	06/26/1997	Day 20
AAB-114	SB-15	3	15.5	31.7	6.5	7.3	120	06/27/1997	Day 21
AAB-114	SB-15	1	14.9	31.9	6.3	7.4	116	06/28/1997	Day 22
AAB-114	SB-15	2	15.2	32.1	6.4	7.5	124	06/29/1997	Day 23
AAB-114	SB-15	3	15.5	32.4	7.5	7.4	116	06/30/1997	Day 24
AAB-114	SB-15	1	15.4	31.9	5.4	7.7	120	07/01/1997	Day 25
AAB-114	SB-15	2	15.2	31.8	7.4	7.5	116	07/02/1997	Day 26
AAB-114	SB-15	3	15.5	31.7	7.5	7.4	124	07/03/1997	Day 27
AAB-114	SB-15	1	14.9	32.0	6.9	7.5		07/04/1997	Day 28
AAB-114	SB-15	2	14.8	32.1	6.7	7.4		07/04/1997	Day 28
AAB-114	SB-15	3	15.1	32.0	7.3	7.5		07/04/1997	Day 28
AAB-112	SB-16	1	15.0	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-112	SB-16	2	14.9	32.0	7.9	7.5	116	06/06/1997	Day 0
AAB-112	SB-16	3	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-112	SB-16	1	15.7	32.0	7.9	7.7	120	06/07/1997	Day 1
AAB-112	SB-16	2	15.5	32.2	7.2	7.6	120	06/08/1997	Day 2
AAB-112	SB-16	3	15.6	31.7	7.9	7.6	120	06/09/1997	Day 3
AAB-112	SB-16	1	15.2	31.8	6.8	7.4	124	06/10/1997	Day 4
AAB-112	SB-16	2	15.4	31.9	7.7	7.7	120	06/11/1997	Day 5
AAB-112	SB-16	3	15.1	31.7	7.5	7.5	120	06/12/1997	Day 6
AAB-112	SB-16	1	15.4	31.7	7.7	7.7	124	06/13/1997	Day 7
AAB-112	SB-16	2	15.2	32.0	7.8	7.6	116	06/14/1997	Day 8
AAB-112	SB-16	3	15.3	31.6	7.7	7.7	120	06/15/1997	Day 9
AAB-112	SB-16	1	15.1	32.0	7.7	7.5	124	06/16/1997	Day 10

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-112	SB-16	2	15.7	31.5	7.8	7.6	122	06/17/1997	Day 11
AAB-112	SB-16	3	15.8	31.7	8.1	7.6	120	06/18/1997	Day 12
AAB-112	SB-16	1	15.8	31.8	7.8	7.6	124	06/19/1997	Day 13
AAB-112	SB-16	2	15.5	31.9	6.3	7.7	116	06/20/1997	Day 14
AAB-112	SB-16	3	14.7	32.0	8.1	7.5	116	06/21/1997	Day 15
AAB-112	SB-16	1	14.1	31.8	7.9	7.6	124	06/22/1997	Day 16
AAB-112	SB-16	2	15.9	31.7	8.1	7.5	120	06/23/1997	Day 17
AAB-112	SB-16	3	16.1	32.0	7.5	7.6	120	06/24/1997	Day 18
AAB-112	SB-16	1	15.3	32.1	7.6	7.7	124	06/25/1997	Day 19
AAB-112	SB-16	2	15.5	32.2	7.4	7.5	116	06/26/1997	Day 20
AAB-112	SB-16	3	15.2	31.7	6.8	7.3	128	06/27/1997	Day 21
AAB-112	SB-16	1	14.9	31.9	6.6	7.4	118	06/28/1997	Day 22
AAB-112	SB-16	2	15.1	32.1	6.4	7.5	116	06/29/1997	Day 23
AAB-112	SB-16	3	15.5	32.4	7.6	7.4	120	06/30/1997	Day 24
AAB-112	SB-16	1	15.5	31.9	5.3	7.7	118	07/01/1997	Day 25
AAB-112	SB-16	2	15.2	31.6	7.8	7.5	116	07/02/1997	Day 26
AAB-112	SB-16	3	15.5	31.7	7.7	7.5	124	07/03/1997	Day 27
AAB-112	SB-16	1	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-112	SB-16	2	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-112	SB-16	3	15.0	32.0	7.2	7.5		07/04/1997	Day 28
AAB-146	SB-17	1	15.0	32.0	7.4	7.5	124	06/06/1997	Day 0
AAB-146	SB-17	2	14.9	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-146	SB-17	3	14.9	32.1	7.6	7.5	122	06/06/1997	Day 0
AAB-146	SB-17	1	15.7	32.0	8.0	7.7	128	06/07/1997	Day 1
AAB-146	SB-17	2	15.4	32.1	7.6	7.7	120	06/08/1997	Day 2
AAB-146	SB-17	3	15.5	31.7	7.9	7.6	128	06/09/1997	Day 3
AAB-146	SB-17	1	15.3	31.9	7.0	7.4	128	06/10/1997	Day 4
AAB-146	SB-17	2	15.4	31.9	7.7	7.7	116	06/11/1997	Day 5
AAB-146	SB-17	3	15.1	31.7	7.2	7.5	120	06/12/1997	Day 6
AAB-146	SB-17	1	15.4	31.7	7.7	7.6	126	06/13/1997	Day 7
AAB-146	SB-17	2	15.2	32.0	7.9	7.6	118	06/14/1997	Day 8
AAB-146	SB-17	3	15.2	31.7	7.5	7.7	124	06/15/1997	Day 9
AAB-146	SB-17	1	15.0	32.1	7.5	7.5	124	06/16/1997	Day 10
AAB-146	SB-17	2	15.7	31.5	7.8	7.6	118	06/17/1997	Day 11
AAB-146	SB-17	3	15.6	31.7	8.2	7.6	120	06/18/1997	Day 12
AAB-146	SB-17	1	15.7	31.8	7.8	7.6	126	06/19/1997	Day 13
AAB-146	SB-17	2	15.5	32.0	6.3	7.7	116	06/20/1997	Day 14
AAB-146	SB-17	3	14.4	32.0	7.8	7.4	120	06/21/1997	Day 15
AAB-146	SB-17	1	14.0	31.8	7.7	7.6	124	06/22/1997	Day 16
AAB-146	SB-17	2	15.9	31.5	8.1	7.6	116	06/23/1997	Day 17
AAB-146	SB-17	3	15.9	32.0	7.4	7.5	120	06/24/1997	Day 18
AAB-146	SB-17	1	15.2	32.1	6.9	7.6	116	06/25/1997	Day 19
AAB-146	SB-17	2	15.5	32.3	7.5	7.5	124	06/26/1997	Day 20
AAB-146	SB-17	3	15.0	31.9	6.3	7.3	120	06/27/1997	Day 21
AAB-146	SB-17	1	14.9	32.0	6.2	7.4	130	06/28/1997	Day 22
AAB-146	SB-17	2	15.2	32.1	6.7	7.5	120	06/29/1997	Day 23
AAB-146	SB-17	3	15.4	32.4	7.6	7.5	116	06/30/1997	Day 24
AAB-146	SB-17	1	15.4	31.9	5.3	7.7	132	07/01/1997	Day 25
AAB-146	SB-17	2	15.3	31.7	7.9	7.5	116	07/02/1997	Day 26
AAB-146	SB-17	3	15.3	31.7	7.7	7.4	120	07/03/1997	Day 27
AAB-146	SB-17	1	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-146	SB-17	2	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-146	SB-17	3	15.0	32.1	6.9	7.5		07/04/1997	Day 28
AAB-100	SB-18	1	15.1	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-100	SB-18	2	15.0	32.0	8.0	7.5	120	06/06/1997	Day 0
AAB-100	SB-18	3	14.9	32.0	7.8	7.6	120	06/06/1997	Day 0
AAB-100	SB-18	1	15.9	32.0	7.8	7.7	132	06/07/1997	Day 1
AAB-100	SB-18	2	15.6	32.2	7.3	7.6	120	06/08/1997	Day 2
AAB-100	SB-18	3	15.5	31.7	7.8	7.6	120	06/09/1997	Day 3
AAB-100	SB-18	1	15.5	31.9	6.7	7.4	124	06/10/1997	Day 4

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-100	SB-18	2	15.5	31.9	7.6	7.7	118	06/11/1997	Day 5
AAB-100	SB-18	3	15.0	31.7	7.3	7.5	120	06/12/1997	Day 6
AAB-100	SB-18	1	15.7	31.7	7.6	7.7	126	06/13/1997	Day 7
AAB-100	SB-18	2	15.4	32.0	7.8	7.6	120	06/14/1997	Day 8
AAB-100	SB-18	3	15.1	31.6	7.7	7.7	120	06/15/1997	Day 9
AAB-100	SB-18	1	15.3	32.1	7.7	7.5	124	06/16/1997	Day 10
AAB-100	SB-18	2	15.8	31.4	7.8	7.6	120	06/17/1997	Day 11
AAB-100	SB-18	3	15.7	31.7	8.1	7.6	120	06/18/1997	Day 12
AAB-100	SB-18	1	15.9	31.8	7.4	7.6	126	06/19/1997	Day 13
AAB-100	SB-18	2	15.6	32.0	6.2	7.7	116	06/20/1997	Day 14
AAB-100	SB-18	3	14.5	32.0	7.9	7.4	120	06/21/1997	Day 15
AAB-100	SB-18	1	14.5	31.9	7.7	7.6	120	06/22/1997	Day 16
AAB-100	SB-18	2	16.0	31.7	7.9	7.5	116	06/23/1997	Day 17
AAB-100	SB-18	3	16.0	32.0	7.3	7.6	120	06/24/1997	Day 18
AAB-100	SB-18	1	15.5	32.0	7.5	7.7	120	06/25/1997	Day 19
AAB-100	SB-18	2	15.7	32.3	7.4	7.5	116	06/26/1997	Day 20
AAB-100	SB-18	3	15.1	31.8	6.6	7.3	116	06/27/1997	Day 21
AAB-100	SB-18	1	15.2	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-100	SB-18	2	15.3	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-100	SB-18	3	15.4	32.4	7.7	7.4	116	06/30/1997	Day 24
AAB-100	SB-18	1	15.7	31.9	5.3	7.7	124	07/01/1997	Day 25
AAB-100	SB-18	2	15.5	31.8	7.8	7.5	116	07/02/1997	Day 26
AAB-100	SB-18	3	15.3	31.7	7.6	7.4	120	07/03/1997	Day 27
AAB-100	SB-18	1	15.0	32.1	7.2	7.5		07/04/1997	Day 28
AAB-100	SB-18	2	15.1	32.0	7.3	7.5		07/04/1997	Day 28
AAB-100	SB-18	3	14.9	32.0	6.6	7.5		07/04/1997	Day 28
AAB-101	SB-19	1	14.9	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-101	SB-19	2	14.8	32.0	7.7	7.5	120	06/06/1997	Day 0
AAB-101	SB-19	3	15.2	32.0	8.2	7.6	120	06/06/1997	Day 0
AAB-101	SB-19	1	15.7	32.0	7.9	7.7	128	06/07/1997	Day 1
AAB-101	SB-19	2	15.3	32.2	7.1	7.6	120	06/08/1997	Day 2
AAB-101	SB-19	3	15.3	31.8	8.2	7.6	116	06/09/1997	Day 3
AAB-101	SB-19	1	15.3	31.8	6.9	7.5	128	06/10/1997	Day 4
AAB-101	SB-19	2	15.2	31.9	7.8	7.7	118	06/11/1997	Day 5
AAB-101	SB-19	3	15.1	31.7	7.3	7.5	116	06/12/1997	Day 6
AAB-101	SB-19	1	15.4	31.7	7.7	7.7	126	06/13/1997	Day 7
AAB-101	SB-19	2	15.2	31.5	7.8	7.6	120	06/14/1997	Day 8
AAB-101	SB-19	3	15.3	31.8	7.7	7.7	116	06/15/1997	Day 9
AAB-101	SB-19	1	15.1	32.1	7.8	7.5	128	06/16/1997	Day 10
AAB-101	SB-19	2	15.5	31.5	7.9	7.6	120	06/17/1997	Day 11
AAB-101	SB-19	3	15.9	31.7	8.1	7.6	116	06/18/1997	Day 12
AAB-101	SB-19	1	15.7	31.8	7.9	7.6	122	06/19/1997	Day 13
AAB-101	SB-19	2	15.4	32.1	6.4	7.7	124	06/20/1997	Day 14
AAB-101	SB-19	3	14.8	32.1	8.1	7.5	132	06/21/1997	Day 15
AAB-101	SB-19	1	14.0	31.9	8.1	7.6	128	06/22/1997	Day 16
AAB-101	SB-19	2	15.8	31.7	7.8	7.5	124	06/23/1997	Day 17
AAB-101	SB-19	3	16.0	32.0	7.7	7.6	126	06/24/1997	Day 18
AAB-101	SB-19	1	15.2	32.0	7.7	7.7	124	06/25/1997	Day 19
AAB-101	SB-19	2	15.4	32.2	7.2	7.4	116	06/26/1997	Day 20
AAB-101	SB-19	3	15.5	31.8	6.5	7.3	120	06/27/1997	Day 21
AAB-101	SB-19	1	14.9	31.9	6.7	7.4	118	06/28/1997	Day 22
AAB-101	SB-19	2	15.1	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-101	SB-19	3	15.5	32.4	7.7	7.4	120	06/30/1997	Day 24
AAB-101	SB-19	1	15.5	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-101	SB-19	2	15.2	31.7	7.8	7.5	120	07/02/1997	Day 26
AAB-101	SB-19	3	15.5	31.7	7.8	7.5	116	07/03/1997	Day 27
AAB-101	SB-19	1	14.8	32.1	7.2	7.5		07/04/1997	Day 28
AAB-101	SB-19	2	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-101	SB-19	3	15.1	32.1	7.3	7.5		07/04/1997	Day 28
AAB-109	SB-20	1	14.9	32.0	7.9	7.6	128	06/06/1997	Day 0

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-109	SB-20	2	15.0	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-109	SB-20	3	15.0	32.0	8.0	7.6	116	06/06/1997	Day 0
AAB-109	SB-20	1	15.7	32.0	7.9	7.7	126	06/07/1997	Day 1
AAB-109	SB-20	2	14.8	32.2	7.3	7.6	120	06/08/1997	Day 2
AAB-109	SB-20	3	15.2	31.7	8.2	7.6	116	06/09/1997	Day 3
AAB-109	SB-20	1	15.2	31.9	6.9	7.4	128	06/10/1997	Day 4
AAB-109	SB-20	2	15.4	31.9	7.7	7.7	118	06/11/1997	Day 5
AAB-109	SB-20	3	14.9	31.7	7.0	7.5	128	06/12/1997	Day 6
AAB-109	SB-20	1	15.4	31.7	7.8	7.7	124	06/13/1997	Day 7
AAB-109	SB-20	2	15.2	32.0	7.8	7.6	120	06/14/1997	Day 8
AAB-109	SB-20	3	15.2	31.8	7.8	7.7	128	06/15/1997	Day 9
AAB-109	SB-20	1	15.1	32.1	7.7	7.5	128	06/16/1997	Day 10
AAB-109	SB-20	2	15.6	31.5	7.6	7.5	120	06/17/1997	Day 11
AAB-109	SB-20	3	15.8	31.7	8.3	7.6	126	06/18/1997	Day 12
AAB-109	SB-20	1	15.8	31.8	7.7	7.6	128	06/19/1997	Day 13
AAB-109	SB-20	2	15.7	32.1	6.2	7.7	120	06/20/1997	Day 14
AAB-109	SB-20	3	14.7	32.1	8.0	7.4	120	06/21/1997	Day 15
AAB-109	SB-20	1	14.1	31.8	8.0	7.6	124	06/22/1997	Day 16
AAB-109	SB-20	2	16.0	31.6	7.9	7.5	118	06/23/1997	Day 17
AAB-109	SB-20	3	16.0	32.0	7.6	7.6	120	06/24/1997	Day 18
AAB-109	SB-20	1	15.3	32.0	7.7	7.7	120	06/25/1997	Day 19
AAB-109	SB-20	2	15.5	32.4	7.3	7.4	120	06/26/1997	Day 20
AAB-109	SB-20	3	15.5	31.7	6.5	7.3	116	06/27/1997	Day 21
AAB-109	SB-20	1	14.9	31.9	6.7	7.4	118	06/28/1997	Day 22
AAB-109	SB-20	2	15.4	32.1	6.1	7.5	116	06/29/1997	Day 23
AAB-109	SB-20	3	15.5	32.4	7.3	7.4	104	06/30/1997	Day 24
AAB-109	SB-20	1	15.5	31.9	5.4	7.7	118	07/01/1997	Day 25
AAB-109	SB-20	2	15.3	31.6	7.6	7.5	126	07/02/1997	Day 26
AAB-109	SB-20	3	15.4	31.7	7.6	7.4	124	07/03/1997	Day 27
AAB-109	SB-20	1	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-109	SB-20	2	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-109	SB-20	3	14.9	31.9	7.1	7.4		07/04/1997	Day 28
AAB-102	SB-21	1	15.0	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-102	SB-21	2	15.1	32.0	7.5	7.5	120	06/06/1997	Day 0
AAB-102	SB-21	3	14.9	32.0	7.8	7.6	126	06/06/1997	Day 0
AAB-102	SB-21	4	15.0	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-102	SB-21	1	15.7	32.0	7.8	7.7	128	06/07/1997	Day 1
AAB-102	SB-21	2	15.6	32.1	7.1	7.6	124	06/08/1997	Day 2
AAB-102	SB-21	3	15.5	31.7	7.7	7.6	128	06/09/1997	Day 3
AAB-102	SB-21	4	15.1	31.7	7.9	7.6	128	06/09/1997	Day 3
AAB-102	SB-21	1	15.2	31.9	6.8	7.4	128	06/10/1997	Day 4
AAB-102	SB-21	2	15.4	31.9	8.0	7.7	118	06/11/1997	Day 5
AAB-102	SB-21	3	15.0	31.7	7.2	7.5	132	06/12/1997	Day 6
AAB-102	SB-21	4	14.8	31.7	7.2	7.5	128	06/12/1997	Day 6
AAB-102	SB-21	1	15.4	31.7	7.7	7.7	132	06/13/1997	Day 7
AAB-102	SB-21	2	15.3	31.9	7.8	7.6	120	06/14/1997	Day 8
AAB-102	SB-21	3	15.1	31.7	7.8	7.7	132	06/15/1997	Day 9
AAB-102	SB-21	4	15.2	31.7	7.9	7.7	128	06/15/1997	Day 9
AAB-102	SB-21	1	15.1	32.1	7.7	7.5	130	06/16/1997	Day 10
AAB-102	SB-21	2	15.7	31.5	7.9	7.5	120	06/17/1997	Day 11
AAB-102	SB-21	3	15.6	31.7	8.3	7.6	128	06/18/1997	Day 12
AAB-102	SB-21	4	15.6	31.7	8.0	7.6	128	06/18/1997	Day 12
AAB-102	SB-21	1	15.8	31.8	7.8	7.6	128	06/19/1997	Day 13
AAB-102	SB-21	2	15.9	31.9	6.3	7.7	120	06/20/1997	Day 14
AAB-102	SB-21	3	14.5	32.1	7.8	7.4	128	06/21/1997	Day 15
AAB-102	SB-21	4	14.6	32.1	7.9	7.4	128	06/21/1997	Day 15
AAB-102	SB-21	1	14.1	31.8	8.0	7.6	132	06/22/1997	Day 16
AAB-102	SB-21	2	16.1	31.7	7.9	7.5	120	06/23/1997	Day 17
AAB-102	SB-21	3	15.9	31.7	7.5	7.6	128	06/24/1997	Day 18
AAB-102	SB-21	4	15.8	32.0	7.2	7.6	118	06/24/1997	Day 18

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-102	SB-21	1	15.3	32.1	7.5	7.7	128	06/25/1997	Day 19
AAB-102	SB-21	2	15.7	32.3	7.3	7.4	116	06/26/1997	Day 20
AAB-102	SB-21	3	15.1	31.8	6.6	7.3	124	06/27/1997	Day 21
AAB-102	SB-21	4	15.2	31.8	6.0	7.3	120	06/27/1997	Day 21
AAB-102	SB-21	1	14.9	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-102	SB-21	2	15.4	32.1	8.1	7.5	116	06/29/1997	Day 23
AAB-102	SB-21	3	15.4	32.4	7.6	7.4	124	06/30/1997	Day 24
AAB-102	SB-21	4	15.3	32.4	6.7	7.4	116	06/30/1997	Day 24
AAB-102	SB-21	1	15.5	31.9	5.3	7.7	128	07/01/1997	Day 25
AAB-102	SB-21	2	15.4	31.8	7.7	7.5	116	07/02/1997	Day 26
AAB-102	SB-21	3	15.3	31.7	7.6	7.4	124	07/03/1997	Day 27
AAB-102	SB-21	4	15.3	31.7	7.7	7.5	116	07/03/1997	Day 27
AAB-102	SB-21	1	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-102	SB-21	2	15.1	32.0	6.6	7.5		07/04/1997	Day 28
AAB-102	SB-21	3	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-102	SB-21	4	14.9	32.1	7.4	7.5		07/04/1997	Day 28
AAB-111	SB-22	1	15.1	32.0	7.9	7.6	132	06/06/1997	Day 0
AAB-111	SB-22	2	15.1	32.0	7.8	7.5	124	06/06/1997	Day 0
AAB-111	SB-22	3	15.0	32.0	7.9	7.6	118	06/06/1997	Day 0
AAB-111	SB-22	1	15.9	32.0	8.0	7.7	128	06/07/1997	Day 1
AAB-111	SB-22	2	15.7	32.2	7.3	7.6	124	06/08/1997	Day 2
AAB-111	SB-22	3	15.4	31.7	7.8	7.6	124	06/09/1997	Day 3
AAB-111	SB-22	1	15.4	31.9	6.9	7.5	132	06/10/1997	Day 4
AAB-111	SB-22	2	15.6	31.9	7.9	7.7	120	06/11/1997	Day 5
AAB-111	SB-22	3	14.9	31.7	7.5	7.5	128	06/12/1997	Day 6
AAB-111	SB-22	1	15.6	31.7	7.7	7.7	128	06/13/1997	Day 7
AAB-111	SB-22	2	15.5	31.9	7.9	7.6	132	06/14/1997	Day 8
AAB-111	SB-22	3	15.0	31.7	7.9	7.7	128	06/15/1997	Day 9
AAB-111	SB-22	1	15.2	32.1	7.8	7.5	128	06/16/1997	Day 10
AAB-111	SB-22	2	15.8	31.5	7.9	7.6	132	06/17/1997	Day 11
AAB-111	SB-22	3	15.6	31.7	8.3	7.6	124	06/18/1997	Day 12
AAB-111	SB-22	1	15.9	31.8	7.8	7.6	128	06/19/1997	Day 13
AAB-111	SB-22	2	15.4	32.0	6.1	7.7	124	06/20/1997	Day 14
AAB-111	SB-22	3	14.4	32.1	8.1	7.5	120	06/21/1997	Day 15
AAB-111	SB-22	1	14.2	31.9	8.0	7.6	132	06/22/1997	Day 16
AAB-111	SB-22	2	16.2	31.6	8.0	7.5	124	06/23/1997	Day 17
AAB-111	SB-22	3	15.8	32.0	7.6	7.6	124	06/24/1997	Day 18
AAB-111	SB-22	1	15.4	32.0	7.7	7.7	128	06/25/1997	Day 19
AAB-111	SB-22	2	15.8	32.4	7.3	7.4	124	06/26/1997	Day 20
AAB-111	SB-22	3	14.9	31.8	6.7	7.3	116	06/27/1997	Day 21
AAB-111	SB-22	1	15.1	31.9	6.7	7.5	124	06/28/1997	Day 22
AAB-111	SB-22	2	15.4	32.1	6.7	7.5	120	06/29/1997	Day 23
AAB-111	SB-22	3	15.4	32.4	7.8	7.5	116	06/30/1997	Day 24
AAB-111	SB-22	1	15.6	31.9	5.4	7.7	122	07/01/1997	Day 25
AAB-111	SB-22	2	15.6	31.6	7.5	7.5	120	07/02/1997	Day 26
AAB-111	SB-22	3	15.2	31.7	7.8	7.5	120	07/03/1997	Day 27
AAB-111	SB-22	1	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-111	SB-22	2	15.2	32.0	7.2	7.4		07/04/1997	Day 28
AAB-111	SB-22	3	14.9	32.0	7.2	7.5		07/04/1997	Day 28
AAB-099	SB-23	1	15.1	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-099	SB-23	2	15.1	32.0	8.0	7.6	132	06/06/1997	Day 0
AAB-099	SB-23	3	15.1	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-099	SB-23	1	15.9	32.0	7.8	7.7	128	06/07/1997	Day 1
AAB-099	SB-23	2	15.6	32.1	7.4	7.7	128	06/08/1997	Day 2
AAB-099	SB-23	3	15.6	31.7	7.8	7.6	120	06/09/1997	Day 3
AAB-099	SB-23	1	15.4	31.9	6.9	7.5	132	06/10/1997	Day 4
AAB-099	SB-23	2	15.5	31.9	7.6	7.7	122	06/11/1997	Day 5
AAB-099	SB-23	3	15.1	31.7	7.4	7.5	124	06/12/1997	Day 6
AAB-099	SB-23	1	15.6	31.7	7.6	7.7	128	06/13/1997	Day 7
AAB-099	SB-23	2	15.4	32.0	7.7	7.6	124	06/14/1997	Day 8

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-099	SB-23	3	15.3	31.6	7.6	7.7	120	06/15/1997	Day 9
AAB-099	SB-23	1	15.2	32.1	7.6	7.5	128	06/16/1997	Day 10
AAB-099	SB-23	2	15.8	31.4	7.7	7.6	120	06/17/1997	Day 11
AAB-099	SB-23	3	15.8	31.7	8.0	7.6	122	06/18/1997	Day 12
AAB-099	SB-23	1	15.9	31.8	7.7	7.6	128	06/19/1997	Day 13
AAB-099	SB-23	2	15.7	31.9	6.2	7.7	124	06/20/1997	Day 14
AAB-099	SB-23	3	14.6	32.1	7.9	7.4	120	06/21/1997	Day 15
AAB-099	SB-23	1	14.3	31.9	7.9	7.6	132	06/22/1997	Day 16
AAB-099	SB-23	2	16.1	31.7	7.9	7.5	120	06/23/1997	Day 17
AAB-099	SB-23	3	16.1	32.0	6.9	7.6	120	06/24/1997	Day 18
AAB-099	SB-23	1	15.4	32.1	7.5	7.7	128	06/25/1997	Day 19
AAB-099	SB-23	2	15.7	32.3	7.4	7.5	124	06/26/1997	Day 20
AAB-099	SB-23	3	15.2	31.7	6.5	7.3	120	06/27/1997	Day 21
AAB-099	SB-23	1	15.1	31.9	6.6	7.4	120	06/28/1997	Day 22
AAB-099	SB-23	2	15.3	32.1	6.5	7.5	116	06/29/1997	Day 23
AAB-099	SB-23	3	15.5	32.4	7.6	7.5	116	06/30/1997	Day 24
AAB-099	SB-23	1	15.7	31.9	5.3	7.7	116	07/01/1997	Day 25
AAB-099	SB-23	2	15.5	31.7	7.7	7.5	122	07/02/1997	Day 26
AAB-099	SB-23	3	15.4	31.7	7.7	7.5	120	07/03/1997	Day 27
AAB-099	SB-23	1	15.1	32.0	7.2	7.5		07/04/1997	Day 28
AAB-099	SB-23	2	15.2	32.0	7.3	7.5		07/04/1997	Day 28
AAB-099	SB-23	3	15.1	32.0	7.1	7.5		07/04/1997	Day 28
AAB-157	AB-67	1	15.1	32.0	8.1	7.6	120	06/06/1997	Day 0
AAB-157	AB-67	2	14.8	32.0	7.7	7.6	122	06/06/1997	Day 0
AAB-157	AB-67	3	14.9	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-157	AB-67	4	15.1	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-157	AB-67	5	14.9	32.0	7.7	7.6	118	06/06/1997	Day 0
AAB-157	AB-67	1	15.6	32.0	7.9	7.7	124	06/07/1997	Day 1
AAB-157	AB-67	5	15.8	32.0	8.2	7.7	120	06/07/1997	Day 1
AAB-157	AB-67	2	15.4	32.2	7.4	7.7	124	06/08/1997	Day 2
AAB-157	AB-67	4	14.9	32.2	7.3	7.6	124	06/08/1997	Day 2
AAB-157	AB-67	3	15.2	31.8	7.6	7.6	116	06/09/1997	Day 3
AAB-157	AB-67	1	15.1	31.9	6.8	7.4	128	06/10/1997	Day 4
AAB-157	AB-67	5	15.3	31.9	6.9	7.4	116	06/10/1997	Day 4
AAB-157	AB-67	2	15.3	31.9	7.8	7.7	122	06/11/1997	Day 5
AAB-157	AB-67	4	15.3	31.9	7.8	7.7	118	06/11/1997	Day 5
AAB-157	AB-67	3	14.7	31.8	7.1	7.5	116	06/12/1997	Day 6
AAB-157	AB-67	1	15.6	31.8	7.5	7.7	126	06/13/1997	Day 7
AAB-157	AB-67	5	15.4	31.7	7.7	7.6	120	06/13/1997	Day 7
AAB-157	AB-67	2	15.3	32.0	7.9	7.6	128	06/14/1997	Day 8
AAB-157	AB-67	4	15.2	32.0	7.7	7.6	124	06/14/1997	Day 8
AAB-157	AB-67	3	14.9	31.7	7.3	7.7	120	06/15/1997	Day 9
AAB-157	AB-67	1	15.1	32.1	7.0	7.6	124	06/16/1997	Day 10
AAB-157	AB-67	5	15.0	32.1	7.5	7.5	118	06/16/1997	Day 10
AAB-157	AB-67	2	15.7	31.4	7.9	7.6	128	06/17/1997	Day 11
AAB-157	AB-67	4	15.6	31.5	8.1	7.6	124	06/17/1997	Day 11
AAB-157	AB-67	3	15.4	31.7	8.2	7.6	116	06/18/1997	Day 12
AAB-157	AB-67	1	15.6	31.9	7.6	7.6	124	06/19/1997	Day 13
AAB-157	AB-67	5	15.8	31.8	7.8	7.6	116	06/19/1997	Day 13
AAB-157	AB-67	2	15.5	31.9	6.4	7.7	128	06/20/1997	Day 14
AAB-157	AB-67	4	15.8	32.0	6.2	7.7	120	06/20/1997	Day 14
AAB-157	AB-67	3	14.2	32.1	7.8	7.4	116	06/21/1997	Day 15
AAB-157	AB-67	1	14.8	31.9	7.4	7.6	124	06/22/1997	Day 16
AAB-157	AB-67	5	14.0	31.9	7.6	7.6	116	06/22/1997	Day 16
AAB-157	AB-67	2	16.0	31.7	8.2	7.5	130	06/23/1997	Day 17
AAB-157	AB-67	4	16.0	31.7	8.2	7.6	116	06/23/1997	Day 17
AAB-157	AB-67	3	15.8	32.0	7.1	7.5	120	06/24/1997	Day 18
AAB-157	AB-67	1	15.4	32.1	7.2	7.7	124	06/25/1997	Day 19
AAB-157	AB-67	5	15.2	32.1	7.0	7.6	124	06/25/1997	Day 19
AAB-157	AB-67	2	15.6	32.3	7.5	7.5	120	06/26/1997	Day 20

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-157	AB-67	4	15.5	32.3	7.4	7.5	116	06/26/1997	Day 20
AAB-157	AB-67	3	14.7	31.9	6.4	7.3	120	06/27/1997	Day 21
AAB-157	AB-67	1	15.2	32.0	6.0	7.4	116	06/28/1997	Day 22
AAB-157	AB-67	5	14.7	31.9	5.8	7.4	118	06/28/1997	Day 22
AAB-157	AB-67	2	15.2	32.1	6.7	7.5	120	06/29/1997	Day 23
AAB-157	AB-67	4	15.4	32.1	6.3	7.5	116	06/29/1997	Day 23
AAB-157	AB-67	3	15.3	32.4	7.8	7.5	116	06/30/1997	Day 24
AAB-157	AB-67	1	15.6	31.9	5.2	7.7	118	07/01/1997	Day 25
AAB-157	AB-67	5	15.4	32.0	5.3	7.6	116	07/01/1997	Day 25
AAB-157	AB-67	2	15.3	31.8	7.9	7.5	116	07/02/1997	Day 26
AAB-157	AB-67	4	15.3	31.8	7.8	7.5	132	07/02/1997	Day 26
AAB-157	AB-67	3	15.1	31.8	7.6	7.4	116	07/03/1997	Day 27
AAB-157	AB-67	1	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-157	AB-67	2	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-157	AB-67	3	14.7	32.0	6.9	7.5		07/04/1997	Day 28
AAB-157	AB-67	4	14.9	32.0	7.4	7.5		07/04/1997	Day 28
AAB-157	AB-67	5	15.0	32.0	6.7	7.5		07/04/1997	Day 28
AAB-098	AL-64	1	14.8	32.0	7.7	7.5	120	06/06/1997	Day 0
AAB-098	AL-64	2	15.3	32.0	8.1	7.6	120	06/06/1997	Day 0
AAB-098	AL-64	3	15.0	32.0	7.9	7.6	130	06/06/1997	Day 0
AAB-098	AL-64	4	15.2	32.0	8.2	7.6	120	06/06/1997	Day 0
AAB-098	AL-64	5	15.2	32.0	8.0	7.6	130	06/06/1997	Day 0
AAB-098	AL-64	1	15.6	32.1	8.0	7.7	124	06/07/1997	Day 1
AAB-098	AL-64	5	16.0	32.0	8.0	7.7	132	06/07/1997	Day 1
AAB-098	AL-64	2	15.1	32.2	7.5	7.7	116	06/08/1997	Day 2
AAB-098	AL-64	3	15.5	31.7	7.8	7.6	128	06/09/1997	Day 3
AAB-098	AL-64	4	15.4	31.7	8.0	7.6	116	06/09/1997	Day 3
AAB-098	AL-64	1	15.1	31.9	6.7	7.4	124	06/10/1997	Day 4
AAB-098	AL-64	5	15.5	31.9	6.8	7.5	132	06/10/1997	Day 4
AAB-098	AL-64	2	15.7	31.9	7.7	7.7	116	06/11/1997	Day 5
AAB-098	AL-64	3	15.0	31.7	7.5	7.5	128	06/12/1997	Day 6
AAB-098	AL-64	4	15.1	31.7	7.5	7.6	116	06/12/1997	Day 6
AAB-098	AL-64	1	15.2	31.7	7.4	7.6	124	06/13/1997	Day 7
AAB-098	AL-64	5	15.7	31.7	7.7	7.7	132	06/13/1997	Day 7
AAB-098	AL-64	2	15.6	32.0	7.8	7.6	116	06/14/1997	Day 8
AAB-098	AL-64	3	15.2	31.6	7.8	7.7	132	06/15/1997	Day 9
AAB-098	AL-64	4	15.4	31.7	7.8	7.7	116	06/15/1997	Day 9
AAB-098	AL-64	1	14.9	32.1	7.7	7.5	122	06/16/1997	Day 10
AAB-098	AL-64	5	15.2	32.1	7.7	7.5	132	06/16/1997	Day 10
AAB-098	AL-64	2	16.0	31.5	7.8	7.6	118	06/17/1997	Day 11
AAB-098	AL-64	3	15.7	31.7	8.3	7.6	130	06/18/1997	Day 12
AAB-098	AL-64	4	16.0	31.7	8.2	7.6	118	06/18/1997	Day 12
AAB-098	AL-64	1	15.7	31.9	7.8	7.6	122	06/19/1997	Day 13
AAB-098	AL-64	5	16.0	31.8	7.8	7.6	132	06/19/1997	Day 13
AAB-098	AL-64	2	16.1	31.9	6.1	7.7	120	06/20/1997	Day 14
AAB-098	AL-64	3	14.5	32.1	8.1	7.5	128	06/21/1997	Day 15
AAB-098	AL-64	4	14.8	32.1	8.0	7.4	116	06/21/1997	Day 15
AAB-098	AL-64	1	13.9	31.9	7.8	7.6	120	06/22/1997	Day 16
AAB-098	AL-64	5	14.3	31.9	7.9	7.6	132	06/22/1997	Day 16
AAB-098	AL-64	2	16.2	31.7	8.0	7.5	128	06/23/1997	Day 17
AAB-098	AL-64	3	16.0	31.9	7.6	7.6	128	06/24/1997	Day 18
AAB-098	AL-64	4	16.1	32.0	7.6	7.6	122	06/24/1997	Day 18
AAB-098	AL-64	1	15.1	32.0	7.4	7.7	120	06/25/1997	Day 19
AAB-098	AL-64	5	15.5	32.0	7.6	7.7	132	06/25/1997	Day 19
AAB-098	AL-64	2	15.6	32.4	7.3	7.5	116	06/26/1997	Day 20
AAB-098	AL-64	3	15.1	31.8	6.8	7.4	124	06/27/1997	Day 21
AAB-098	AL-64	4	15.5	31.7	6.6	7.4	124	06/27/1997	Day 21
AAB-098	AL-64	1	14.7	32.0	6.1	7.4	116	06/28/1997	Day 22
AAB-098	AL-64	5	15.2	31.9	6.5	7.4	128	06/28/1997	Day 22
AAB-098	AL-64	2	15.7	32.1	6.1	7.5	120	06/29/1997	Day 23

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-098	AL-64	3	15.4	32.4	7.6	7.5	120	06/30/1997	Day 24
AAB-098	AL-64	4	15.5	32.4	7.5	7.5	120	06/30/1997	Day 24
AAB-098	AL-64	1	15.4	32.0	5.3	7.6	116	07/01/1997	Day 25
AAB-098	AL-64	5	15.7	31.9	5.3	7.7	124	07/01/1997	Day 25
AAB-098	AL-64	2	15.5	31.8	7.7	7.5	116	07/02/1997	Day 26
AAB-098	AL-64	3	15.4	31.7	7.7	7.5	120	07/03/1997	Day 27
AAB-098	AL-64	4	15.4	31.7	7.8	7.5	116	07/03/1997	Day 27
AAB-098	AL-64	1	14.8	32.1	6.9	7.5		07/04/1997	Day 28
AAB-098	AL-64	2	15.1	32.1	7.4	7.5		07/04/1997	Day 28
AAB-098	AL-64	3	15.0	32.0	7.0	7.5		07/04/1997	Day 28
AAB-098	AL-64	4	15.0	32.0	7.5	7.5		07/04/1997	Day 28
AAB-098	AL-64	5	15.1	32.0	7.1	7.5		07/04/1997	Day 28
AAB-156	BF-66	1	15.1	32.0	8.2	7.6	124	06/06/1997	Day 0
AAB-156	BF-66	2	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-156	BF-66	3	15.1	32.0	8.0	7.6	120	06/06/1997	Day 0
AAB-156	BF-66	4	15.0	32.0	7.7	7.6	122	06/06/1997	Day 0
AAB-156	BF-66	5	15.0	32.0	7.9	7.6	124	06/06/1997	Day 0
AAB-156	BF-66	1	15.5	32.0	7.9	7.7	124	06/07/1997	Day 1
AAB-156	BF-66	4	15.9	32.0	7.9	7.7	124	06/07/1997	Day 1
AAB-156	BF-66	2	15.4	32.2	7.4	7.6	120	06/08/1997	Day 2
AAB-156	BF-66	3	15.2	31.8	8.0	7.6	116	06/09/1997	Day 3
AAB-156	BF-66	5	15.5	31.7	7.9	7.6	124	06/09/1997	Day 3
AAB-156	BF-66	1	15.0	31.9	7.1	7.4	124	06/10/1997	Day 4
AAB-156	BF-66	4	15.3	31.9	7.1	7.4	124	06/10/1997	Day 4
AAB-156	BF-66	2	15.4	31.8	7.7	7.7	116	06/11/1997	Day 5
AAB-156	BF-66	3	15.0	31.7	7.3	7.5	116	06/12/1997	Day 6
AAB-156	BF-66	5	15.0	31.7	7.6	7.5	124	06/12/1997	Day 6
AAB-156	BF-66	1	15.7	31.7	7.8	7.7	128	06/13/1997	Day 7
AAB-156	BF-66	4	15.5	31.7	7.7	7.6	120	06/13/1997	Day 7
AAB-156	BF-66	2	15.3	31.9	7.9	7.6	118	06/14/1997	Day 8
AAB-156	BF-66	3	15.3	31.8	7.6	7.7	124	06/15/1997	Day 9
AAB-156	BF-66	5	15.1	31.7	7.7	7.7	120	06/15/1997	Day 9
AAB-156	BF-66	1	15.1	32.2	7.2	7.6	124	06/16/1997	Day 10
AAB-156	BF-66	4	15.1	32.1	7.8	7.5	122	06/16/1997	Day 10
AAB-156	BF-66	2	15.7	31.3	7.8	7.6	118	06/17/1997	Day 11
AAB-156	BF-66	3	15.7	31.7	8.0	7.6	116	06/18/1997	Day 12
AAB-156	BF-66	5	15.7	31.7	8.1	7.6	124	06/18/1997	Day 12
AAB-156	BF-66	1	15.7	31.9	7.8	7.6	122	06/19/1997	Day 13
AAB-156	BF-66	4	15.9	31.7	7.9	7.6	120	06/19/1997	Day 13
AAB-156	BF-66	2	15.3	31.9	6.3	7.7	116	06/20/1997	Day 14
AAB-156	BF-66	3	14.7	32.1	7.9	7.4	116	06/21/1997	Day 15
AAB-156	BF-66	5	14.5	32.1	8.0	7.5	120	06/21/1997	Day 15
AAB-156	BF-66	1	14.9	31.9	7.9	7.6	120	06/22/1997	Day 16
AAB-156	BF-66	4	14.1	31.9	7.8	7.6	120	06/22/1997	Day 16
AAB-156	BF-66	2	15.9	31.7	8.1	7.6	116	06/23/1997	Day 17
AAB-156	BF-66	3	16.0	32.0	7.0	7.6	120	06/24/1997	Day 18
AAB-156	BF-66	5	16.0	32.0	7.5	7.6	120	06/24/1997	Day 18
AAB-156	BF-66	1	15.4	32.1	7.2	7.6	120	06/25/1997	Day 19
AAB-156	BF-66	4	15.4	32.0	7.4	7.7	120	06/25/1997	Day 19
AAB-156	BF-66	2	15.5	32.3	7.4	7.5	116	06/26/1997	Day 20
AAB-156	BF-66	3	15.4	31.8	6.1	7.3	116	06/27/1997	Day 21
AAB-156	BF-66	5	15.0	31.7	6.6	7.3	116	06/27/1997	Day 21
AAB-156	BF-66	1	15.3	32.0	6.0	7.4	120	06/28/1997	Day 22
AAB-156	BF-66	4	15.0	31.9	6.5	7.4	116	06/28/1997	Day 22
AAB-156	BF-66	2	15.1	32.1	6.4	7.5	116	06/29/1997	Day 23
AAB-156	BF-66	3	15.4	32.4	7.5	7.4	124	06/30/1997	Day 24
AAB-156	BF-66	5	15.3	32.4	7.6	7.4	116	06/30/1997	Day 24
AAB-156	BF-66	1	15.6	31.9	5.1	7.6	116	07/01/1997	Day 25
AAB-156	BF-66	4	15.6	31.9	5.3	7.6	116	07/01/1997	Day 25
AAB-156	BF-66	2	15.2	31.7	7.6	7.5	120	07/02/1997	Day 26

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-156	BF-66	3	15.4	31.7	7.5	7.4	120	07/03/1997	Day 27
AAB-156	BF-66	5	15.3	31.7	7.6	7.4	128	07/03/1997	Day 27
AAB-156	BF-66	1	14.9	32.1	7.3	7.5		07/04/1997	Day 28
AAB-156	BF-66	2	14.9	32.0	7.3	7.5		07/04/1997	Day 28
AAB-156	BF-66	3	15.0	32.0	7.4	7.4		07/04/1997	Day 28
AAB-156	BF-66	4	15.0	32.0	6.8	7.5		07/04/1997	Day 28
AAB-156	BF-66	5	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-162	PC-63	1	15.1	32.0	7.9	7.6	120	06/06/1997	Day 0
AAB-162	PC-63	2	15.2	32.0	8.0	7.6	124	06/06/1997	Day 0
AAB-162	PC-63	3	14.8	32.0	7.7	7.6	128	06/06/1997	Day 0
AAB-162	PC-63	4	14.8	32.0	7.7	7.6	132	06/06/1997	Day 0
AAB-162	PC-63	5	15.3	32.0	7.9	7.6	116	06/06/1997	Day 0
AAB-162	PC-63	1	15.9	32.0	8.0	7.7	120	06/07/1997	Day 1
AAB-162	PC-63	4	15.8	32.0	8.0	7.7	130	06/07/1997	Day 1
AAB-162	PC-63	2	15.1	32.1	7.4	7.7	124	06/08/1997	Day 2
AAB-162	PC-63	5	15.7	32.1	7.5	7.7	116	06/08/1997	Day 2
AAB-162	PC-63	3	15.3	31.7	7.9	7.6	132	06/09/1997	Day 3
AAB-162	PC-63	1	15.4	31.9	7.0	7.5	124	06/10/1997	Day 4
AAB-162	PC-63	4	15.2	31.9	6.9	7.4	132	06/10/1997	Day 4
AAB-162	PC-63	2	15.7	31.9	7.8	7.7	122	06/11/1997	Day 5
AAB-162	PC-63	5	15.7	31.9	7.8	7.7	124	06/11/1997	Day 5
AAB-162	PC-63	3	14.9	31.7	7.5	7.5	128	06/12/1997	Day 6
AAB-162	PC-63	1	15.6	31.7	7.9	7.7	120	06/13/1997	Day 7
AAB-162	PC-63	4	15.4	31.7	7.7	7.7	120	06/13/1997	Day 7
AAB-162	PC-63	2	15.5	32.0	7.8	7.6	122	06/14/1997	Day 8
AAB-162	PC-63	5	15.5	32.0	7.9	7.6	126	06/14/1997	Day 8
AAB-162	PC-63	3	15.0	31.6	7.6	7.7	128	06/15/1997	Day 9
AAB-162	PC-63	1	15.2	32.1	8.0	7.5	120	06/16/1997	Day 10
AAB-162	PC-63	4	15.0	32.1	7.7	7.5	120	06/16/1997	Day 10
AAB-162	PC-63	2	15.9	31.4	7.9	7.6	122	06/17/1997	Day 11
AAB-162	PC-63	5	15.9	31.5	7.8	7.6	124	06/17/1997	Day 11
AAB-162	PC-63	3	15.5	31.7	8.3	7.6	128	06/18/1997	Day 12
AAB-162	PC-63	1	15.9	31.8	7.9	7.6	124	06/19/1997	Day 13
AAB-162	PC-63	4	15.7	31.8	8.0	7.6	124	06/19/1997	Day 13
AAB-162	PC-63	2	16.1	32.0	6.1	7.7	124	06/20/1997	Day 14
AAB-162	PC-63	5	15.9	32.0	6.3	7.7	124	06/20/1997	Day 14
AAB-162	PC-63	3	14.3	32.1	8.0	7.4	128	06/21/1997	Day 15
AAB-162	PC-63	1	14.2	31.7	8.2	7.6	128	06/22/1997	Day 16
AAB-162	PC-63	4	13.9	31.8	8.1	7.6	124	06/22/1997	Day 16
AAB-162	PC-63	2	16.2	31.7	8.0	7.5	120	06/23/1997	Day 17
AAB-162	PC-63	5	16.2	31.6	8.1	7.5	124	06/23/1997	Day 17
AAB-162	PC-63	3	15.8	32.0	7.8	7.6	128	06/24/1997	Day 18
AAB-162	PC-63	1	15.4	32.0	7.8	7.7	128	06/25/1997	Day 19
AAB-162	PC-63	4	15.2	32.0	7.6	7.7	120	06/25/1997	Day 19
AAB-162	PC-63	2	15.6	32.3	7.3	7.4	132	06/26/1997	Day 20
AAB-162	PC-63	5	15.9	32.3	7.6	7.5	124	06/26/1997	Day 20
AAB-162	PC-63	3	15.0	31.8	6.6	7.3	120	06/27/1997	Day 21
AAB-162	PC-63	1	15.0	31.9	6.8	7.5	128	06/28/1997	Day 22
AAB-162	PC-63	4	14.7	31.9	6.3	7.4	118	06/28/1997	Day 22
AAB-162	PC-63	2	15.6	32.1	6.0	7.5	128	06/29/1997	Day 23
AAB-162	PC-63	5	15.5	32.1	6.8	7.5	120	06/29/1997	Day 23
AAB-162	PC-63	3	15.4	32.4	7.6	7.5	120	06/30/1997	Day 24
AAB-162	PC-63	1	15.6	31.9	5.5	7.7	124	07/01/1997	Day 25
AAB-162	PC-63	4	15.4	31.9	5.4	7.7	116	07/01/1997	Day 25
AAB-162	PC-63	2	15.6	31.7	7.7	7.5	128	07/02/1997	Day 26
AAB-162	PC-63	5	15.6	31.7	7.7	7.5	120	07/02/1997	Day 26
AAB-162	PC-63	3	15.2	31.7	7.8	7.5	124	07/03/1997	Day 27
AAB-162	PC-63	1	15.0	32.0	7.1	7.5		07/04/1997	Day 28
AAB-162	PC-63	2	15.1	32.0	7.5	7.5		07/04/1997	Day 28
AAB-162	PC-63	3	14.9	32.0	6.9	7.5		07/04/1997	Day 28

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
AAB-162	PC-63	4	14.9	32.0	7.0	7.5		07/04/1997	Day 28
AAB-162	PC-63	5	15.3	31.9	7.3	7.5		07/04/1997	Day 28
AAB-165	RR-65	1	15.0	32.0	8.1	7.6	116	06/06/1997	Day 0
AAB-165	RR-65	2	14.9	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-165	RR-65	3	14.9	32.0	7.9	7.6	132	06/06/1997	Day 0
AAB-165	RR-65	4	15.0	32.0	8.0	7.6	128	06/06/1997	Day 0
AAB-165	RR-65	5	15.1	32.0	8.0	7.6	122	06/06/1997	Day 0
AAB-165	RR-65	1	15.4	32.0	8.0	7.7	122	06/07/1997	Day 1
AAB-165	RR-65	2	15.3	32.2	7.6	7.7	132	06/08/1997	Day 2
AAB-165	RR-65	4	14.9	32.1	7.5	7.7	128	06/08/1997	Day 2
AAB-165	RR-65	5	15.5	32.2	7.7	7.7	128	06/08/1997	Day 2
AAB-165	RR-65	3	15.1	31.7	7.9	7.6	132	06/09/1997	Day 3
AAB-165	RR-65	1	15.1	31.9	7.1	7.4	128	06/10/1997	Day 4
AAB-165	RR-65	2	15.3	31.9	7.8	7.7	128	06/11/1997	Day 5
AAB-165	RR-65	4	15.4	31.8	7.9	7.7	122	06/11/1997	Day 5
AAB-165	RR-65	5	15.5	31.9	7.8	7.7	120	06/11/1997	Day 5
AAB-165	RR-65	3	14.9	31.7	7.4	7.5	132	06/12/1997	Day 6
AAB-165	RR-65	1	15.6	31.7	7.7	7.7	130	06/13/1997	Day 7
AAB-165	RR-65	2	15.1	32.0	7.9	7.6	132	06/14/1997	Day 8
AAB-165	RR-65	4	15.2	32.0	7.8	7.6	124	06/14/1997	Day 8
AAB-165	RR-65	5	15.3	32.0	7.9	7.6	124	06/14/1997	Day 8
AAB-165	RR-65	3	15.2	31.8	7.6	7.7	132	06/15/1997	Day 9
AAB-165	RR-65	1	15.1	32.2	7.1	7.6	124	06/16/1997	Day 10
AAB-165	RR-65	2	15.6	31.5	7.9	7.6	132	06/17/1997	Day 11
AAB-165	RR-65	4	15.7	31.5	7.9	7.6	128	06/17/1997	Day 11
AAB-165	RR-65	5	15.8	31.5	7.9	7.6	124	06/17/1997	Day 11
AAB-165	RR-65	3	15.7	31.7	8.2	7.6	132	06/18/1997	Day 12
AAB-165	RR-65	1	15.7	31.8	7.5	7.6	124	06/19/1997	Day 13
AAB-165	RR-65	2	15.4	32.0	6.4	7.7	132	06/20/1997	Day 14
AAB-165	RR-65	4	15.8	32.0	6.1	7.7	124	06/20/1997	Day 14
AAB-165	RR-65	5	15.6	31.9	6.4	7.8	128	06/20/1997	Day 14
AAB-165	RR-65	3	14.7	32.1	7.9	7.4	124	06/21/1997	Day 15
AAB-165	RR-65	1	14.9	31.9	7.7	7.6	124	06/22/1997	Day 16
AAB-165	RR-65	2	15.9	31.7	8.2	7.6	132	06/23/1997	Day 17
AAB-165	RR-65	4	16.0	31.3	8.2	7.6	124	06/23/1997	Day 17
AAB-165	RR-65	5	16.0	31.3	8.2	7.6	124	06/23/1997	Day 17
AAB-165	RR-65	3	15.8	32.0	7.6	7.6	124	06/24/1997	Day 18
AAB-165	RR-65	1	15.5	32.1	7.4	7.7	120	06/25/1997	Day 19
AAB-165	RR-65	2	15.4	32.2	7.6	7.5	124	06/26/1997	Day 20
AAB-165	RR-65	4	15.5	32.4	7.3	7.5	120	06/26/1997	Day 20
AAB-165	RR-65	5	15.7	32.3	7.5	7.5	122	06/26/1997	Day 20
AAB-165	RR-65	3	15.3	31.8	6.2	7.3	116	06/27/1997	Day 21
AAB-165	RR-65	1	15.2	32.0	6.0	7.4	126	06/28/1997	Day 22
AAB-165	RR-65	2	15.1	32.1	6.6	7.5	120	06/29/1997	Day 23
AAB-165	RR-65	4	15.5	32.1	6.3	7.5	116	06/29/1997	Day 23
AAB-165	RR-65	5	15.3	32.1	6.6	7.5	116	06/29/1997	Day 23
AAB-165	RR-65	3	15.4	32.4	7.4	7.4	116	06/30/1997	Day 24
AAB-165	RR-65	1	15.6	32.0	5.3	7.7	120	07/01/1997	Day 25
AAB-165	RR-65	2	15.2	31.8	7.9	7.5	128	07/02/1997	Day 26
AAB-165	RR-65	4	15.3	31.8	7.6	7.5	116	07/02/1997	Day 26
AAB-165	RR-65	5	15.4	31.6	7.9	7.5	120	07/02/1997	Day 26
AAB-165	RR-65	3	15.4	31.7	7.6	7.4	116	07/03/1997	Day 27
AAB-165	RR-65	1	14.9	32.1	7.2	7.5		07/04/1997	Day 28
AAB-165	RR-65	2	14.8	32.0	7.1	7.5		07/04/1997	Day 28
AAB-165	RR-65	3	15.0	32.1	7.2	7.5		07/04/1997	Day 28
AAB-165	RR-65	4	14.9	32.1	7.2	7.5		07/04/1997	Day 28
AAB-165	RR-65	5	15.0	32.0	7.2	7.5		07/04/1997	Day 28
MacControl	M. nasuta Control	1	15.1	32.0	8.1	7.6	132	06/06/1997	Day 0
MacControl	M. nasuta Control	2	14.9	32.0	7.6	7.5	126	06/06/1997	Day 0
MacControl	M. nasuta Control	3	14.8	32.0	7.8	7.6	126	06/06/1997	Day 0

Table D-20. Battelle Marine Sciences Lab, *E. estuarius* 10-day Solid-Phase Testing Overlying Water Quality

Sample Identifier	Sediment Treatment	Replicate	Temperature (° C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Flow Rate (mL/min)	Recording Date	Remarks
MacControl	M. nasuta Control	4	14.9	32.0	7.9	7.6	116	06/06/1997	Day 0
MacControl	M. nasuta Control	5	15.0	32.0	8.1	7.6	116	06/06/1997	Day 0
MacControl	M. nasuta Control	1	15.5	32.0	8.0	7.7	124	06/07/1997	Day 1
MacControl	M. nasuta Control	2	15.3	32.2	7.2	7.7	124	06/08/1997	Day 2
MacControl	M. nasuta Control	4	15.5	32.2	7.4	7.7	116	06/08/1997	Day 2
MacControl	M. nasuta Control	3	15.4	31.7	8.0	7.6	128	06/09/1997	Day 3
MacControl	M. nasuta Control	5	15.2	31.7	8.0	7.6	116	06/09/1997	Day 3
MacControl	M. nasuta Control	1	15.1	31.9	7.0	7.5	124	06/10/1997	Day 4
MacControl	M. nasuta Control	2	15.2	31.9	8.1	7.7	118	06/11/1997	Day 5
MacControl	M. nasuta Control	4	15.5	31.9	7.6	7.7	118	06/11/1997	Day 5
MacControl	M. nasuta Control	3	15.0	31.7	7.5	7.5	128	06/12/1997	Day 6
MacControl	M. nasuta Control	5	14.9	31.7	7.4	7.6	116	06/12/1997	Day 6
MacControl	M. nasuta Control	1	15.7	31.7	7.7	7.7	128	06/13/1997	Day 7
MacControl	M. nasuta Control	2	15.2	31.9	7.9	7.7	120	06/14/1997	Day 8
MacControl	M. nasuta Control	4	15.4	31.9	7.7	7.6	120	06/14/1997	Day 8
MacControl	M. nasuta Control	3	15.1	31.7	7.5	7.7	132	06/15/1997	Day 9
MacControl	M. nasuta Control	5	15.2	31.7	7.8	7.7	116	06/15/1997	Day 9
MacControl	M. nasuta Control	1	15.1	32.1	7.0	7.6	124	06/16/1997	Day 10
MacControl	M. nasuta Control	2	15.5	31.5	8.0	7.6	122	06/17/1997	Day 11
MacControl	M. nasuta Control	4	15.8	31.4	7.8	7.6	118	06/17/1997	Day 11
MacControl	M. nasuta Control	3	15.6	31.7	8.4	7.6	126	06/18/1997	Day 12
MacControl	M. nasuta Control	5	15.8	31.7	8.0	7.6	116	06/18/1997	Day 12
MacControl	M. nasuta Control	1	15.8	31.8	7.9	7.6	124	06/19/1997	Day 13
MacControl	M. nasuta Control	2	15.4	32.0	6.3	7.7	120	06/20/1997	Day 14
MacControl	M. nasuta Control	4	15.6	31.9	6.3	7.7	116	06/20/1997	Day 14
MacControl	M. nasuta Control	3	14.4	32.1	7.9	7.4	124	06/21/1997	Day 15
MacControl	M. nasuta Control	5	14.7	32.1	7.9	7.5	120	06/21/1997	Day 15
MacControl	M. nasuta Control	1	14.9	31.9	7.8	7.6	124	06/22/1997	Day 16
MacControl	M. nasuta Control	2	15.8	31.7	8.1	7.5	120	06/23/1997	Day 17
MacControl	M. nasuta Control	4	16.0	31.7	8.0	7.5	116	06/23/1997	Day 17
MacControl	M. nasuta Control	3	15.8	32.0	7.5	7.6	122	06/24/1997	Day 18
MacControl	M. nasuta Control	5	15.9	32.0	7.6	7.6	126	06/24/1997	Day 18
MacControl	M. nasuta Control	1	15.5	32.1	7.4	7.7	120	06/25/1997	Day 19
MacControl	M. nasuta Control	2	15.4	32.3	7.6	7.4	124	06/26/1997	Day 20
MacControl	M. nasuta Control	4	15.6	32.3	7.5	7.5	116	06/26/1997	Day 20
MacControl	M. nasuta Control	3	15.1	31.8	6.6	7.3	130	06/27/1997	Day 21
MacControl	M. nasuta Control	5	15.3	31.8	6.4	7.3	124	06/27/1997	Day 21
MacControl	M. nasuta Control	1	15.4	31.9	6.2	7.4	116	06/28/1997	Day 22
MacControl	M. nasuta Control	2	15.1	32.1	8.1	7.5	120	06/29/1997	Day 23
MacControl	M. nasuta Control	4	15.2	32.1	6.7	7.5	116	06/29/1997	Day 23
MacControl	M. nasuta Control	3	15.3	32.4	7.9	7.5	124	06/30/1997	Day 24
MacControl	M. nasuta Control	5	15.4	32.4	7.5	7.4	120	06/30/1997	Day 24
MacControl	M. nasuta Control	1	15.7	31.9	5.2	7.7	120	07/01/1997	Day 25
MacControl	M. nasuta Control	2	15.2	31.7	7.8	7.5	116	07/02/1997	Day 26
MacControl	M. nasuta Control	4	15.3	31.8	7.8	7.5	120	07/02/1997	Day 26
MacControl	M. nasuta Control	3	15.3	31.7	7.7	7.4	120	07/03/1997	Day 27
MacControl	M. nasuta Control	5	15.3	31.7	7.7	7.4	120	07/03/1997	Day 27
MacControl	M. nasuta Control	1	15.0	32.0	7.4	7.5		07/04/1997	Day 28
MacControl	M. nasuta Control	2	14.8	32.0	6.8	7.5		07/04/1997	Day 28
MacControl	M. nasuta Control	3	15.0	32.0	7.0	7.5		07/04/1997	Day 28
MacControl	M. nasuta Control	4	15.0	32.0	7.3	7.5		07/04/1997	Day 28
MacControl	M. nasuta Control	5	14.9	32.1	7.3	7.5		07/04/1997	Day 28

APPENDIX E

Data Quality Assessment

Appendix E. Data Quality Assessment

This data quality assessment was performed by Battelle to evaluate the data relative to the data quality objectives (DQOs) and measurement quality objectives (MQOs) established in the *Quality Assurance Project Plan (QAPP)*. Project-specific DQOs and MQOs were developed as part of the *Hunters Point Shipyard Parcel F Validation Study Work Plan* (September 2000) to ensure that all data collected were of acceptable quality and appropriate to meet the project objectives.

Every data package was reviewed according to the laboratory's internal review process. At Battelle, all data received a full peer and technical review. The data then were audited by Battelle' independent quality assurance offices to ensure that data were complete, traceable, and in compliance with the data requirements of the QAPP. At Severn-Trent Laboratories, a minimum of 10 percent of all data were audited by the independent quality assurance office. Case narratives were prepared by each analytical laboratory. Data qualifiers were assigned by the laboratories to indicate quality control (QC) failures (Table E-1). Electronic data deliverables (EDD) were prepared for each sample batch or sample delivery group (SDG) and loaded into the project database. The output of the database was audited for completeness, accuracy, and consistency.

Table E-1. Navy Environmental Data Transfer Standard (NEDTS) Data Qualifiers

Data Qualifiers	
A	Indicates that the tentatively identified compound (TIC) is a suspected aldol_condensation product
B	Analyte found in both sample and associated blank. The "B" will be reported on the result associated with the field samples, not the blank
C	Presence confirmed by gas chromatography/mass spectrometry (GC/MS) (pesticides only)
D	Dilution run. Initial run outside linear range of instrument
E	Estimate, result outside linear range of instrument (GC/MS only)
J	Estimated value
R	Rejected
S	Reported value determined by Method of Standard Additions (MSA)
U	The value was less than the instrument detection limit (IDL) or the analyte was not detected
W	Post-digestion spike out of control limits
X	Indicates manual modification of result or U.S. EPA qualifier
Quality Control Qualifiers	
M	Duplicate inject precision did not agree
N	Spiked sample recovery not within control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for the MSA is less than 0.995

All chemical of potential ecological concern (COPEC) data were submitted to Laboratory Data Consultants (LDC) (Carlsbad, CA) for independent, third-party data validation. The polycyclic aromatic hydrocarbon (PAH), polychlorinated biphenyl (PCB)/pesticide, trace metals, and toxicology data generated for this study were generated using low-level (National Oceanic and Atmospheric Administration States and Trends [NS&T])analytical methods that are appropriate for the assessment of ecological and human health risk. There are no formal validation guidelines for the validation of these methods. Validation emulated functional guideline criteria, evaluating the data vs. the requirements of the QAPP and laboratory Statements of Procedure (SOPs). Total petroleum hydrocarbon (TPH)-diesel range organics (DRO) data were generated according to U.S. EPA SW-846 Method 8015B and were validated according to standard Contract Laboratory Program (CLP) practice.

The data were validated in accordance with Southwest Division Environmental Work Instruction #1 (Chemical Data Validation) for a naval facility that is listed on the National Priorities List (NPL): 20% of the samples received Level IV validation and 80% of the samples received Level-III data validation.

Level III data validation assumed that reported data values were correct as reported. Data quality was assessed by verifying that the criteria defined in the QAPP for each compound class were achieved (Table E-2).

Level IV data validation was based on the assessment of raw data packages, which include all data required for a full review and assessment of compound selection, integration, interference assessment, and requantification (e.g., spectra and chromatograms). Level IV data validation included requantification of reported QC and field sample values using the raw data files. In addition, instrument performance, calibration methods, and calibration standards were reviewed to ensure that the detection limits and data values were accurate and appropriate. The results of the validation were presented in formal validation reports. Validation (final) qualifiers were entered by the validators into an electronic data deliverable (EDD). Thus all data are reported with both laboratory and final qualifiers that indicate data fitness for use.

Table E-2. Level III Data Validation Assessment Parameters

Criteria	PAH (GC/MS)	Butyltin and TPH-DRO (GC)	Pesticides/ PCBs (GC)	Trace Metals	Wet Chemistry
Holding times	X	X	X	X	X
Instrument tunes	X				
Initial and continuing calibrations	X	X	X	X	X
Blanks	X (5X/10X rule)	X (5X/10X rule)	X	X	X
LCS/ Laboratory set limits	X	X		X	X
Surrogates	X	X	X		
MS/MSD	X	X	X	X	X
Duplicates				X	X
Internal standard area performance	X				
Target compound retention times		X	X		
Instrument performance			X		
Interference with compound quantification			X		

LCS = laboratory control sample.
MS/MSD = matrix spike/matrix spike duplicate.

LDC implemented conservative approaches to qualification due to lack of specificity of the QAPP. All reported values, regardless of estimate (J) qualifiers assigned by the laboratory, were validated vs. the MQOs. Thus, procedural blank values detected at levels below the reporting limit (RL) were still assessed by the “5 times” rule that states that if a compound detected in the procedural blank is also detected in a sample at <5 times the procedural blank level, then the sample concentration is flagged as UJ (the “10 times” rule for common laboratory contaminants did not apply because these compounds

were not analyzed for the Validation Study). A second conservative review procedure calls for all compounds in a sample to be qualified if any one of the surrogates in the sample falls outside the MQOs. Battelle's standard approach is to qualify those compounds that fall within the molecular range of the surrogate. For these two reasons, Battelle laboratory qualifiers may differ from LDC qualifiers.

Table E-3. Acronyms and Abbreviations

CLP	Contract Laboratory Program
DBT	Dibutyltin
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
DQO	Data Quality Objective
EDD	Electronic Data Deliverable
GC/MS	Gas Chromatography/Mass Spectrometry
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LDC	Laboratory Data Consultants
MQO	Measurement Quality Objective
MS	Matrix Spike
MSA	Method of Standard Additions
MSD	Matrix Spike Duplicate
NIST	National Institute Of Standards And Technology
NOAA	National Oceanic And Atmospheric Administration
NPL	National Priorities List
NS&T	National Oceanic and Atmospheric Administration Status and Trends
PAH	Polycyclic Aromatic Hydrocarbon
PB	Procedural Blank
PCB	Polychlorinated Biphenyl
PD	Percent Difference
QAPP	Quality Assurance Project Plan
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SDG	Sample Delivery Group
SOP	Standard Operating Procedure
SRM	Standard Reference Material
TBT	Tributylin
TIE	Toxicity Identification Evaluation
TOC	Total Organic Carbon
TPH-DRO	Total Petroleum Hydrocarbons-Diesel Range Organics
U.S. EPA	United States Environmental Protection Agency

E.1 SEDIMENT DATA QUALITY

Approximately 150 QC samples were processed with sediment analytical chemistry batches to monitor and assess data quality. The results of these analyses are summarized below.

E.1.1 Sediment Grain Size

Laboratory duplicates were analyzed to monitor the data quality of the grain-size analysis. Laboratory duplicates were processed for five of the six analytical batches. Measures of accuracy are not defined for grain-size analysis.

MQOs for grain size were defined in the QAPP. The QC sample results indicate that data are acceptable and fit for use. Precision between duplicate samples were within the historical control values for all four grain-size classes (gravel, sand, silt, and clay).

No data were qualified or "rejected" during third-party validation.

E.1.2 Sediment Total Organic Carbon

Three types of QC samples (Blank, Standard Reference Material [SRM], and a Laboratory Duplicate) were to be analyzed to monitor the data quality of the TOC analysis. Instead, at least one method blank, LCS, and laboratory duplicate were processed and analyzed for each of the five TOC sediment batches. In addition, MS/MSD samples (as SRMs) were processed with four of the five analytical batches.

MQOs for TOC were defined in the QAPP. The QC sample results indicate that data are, in general, acceptable and fit for use. No TOC was detected in the 10 procedural blank samples at levels exceeding the MQO. LCS recoveries were acceptable for nine of the 10 samples analyzed. A combination of laboratory duplicates and/or MS/MSDs were analyzed for this data set. Recoveries of all MS, MSD, and LCS samples met the recovery MQO with the exception of one LCS recovery. MS/MSD pairs and laboratory duplicates met the precision MQO with one exception. Laboratory data qualifiers were applied to the QC sample data to indicate exceedences.

No data were "rejected" during third-party validation; J and UJ qualifiers were assigned to data that exceeded holding time, accuracy, or precision criteria.

E.1.3 Sediment Polycyclic Aromatic Hydrocarbons

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus three surrogates per sample were analyzed to monitor the data quality of the PAH analysis. All but one required QC sample (a laboratory duplicate in one batch) was processed and analyzed as required for each of the nine PAH sediment batches.

MQOs for PAHs were defined in the QAPP. The QC sample results indicate that data are, in general, acceptable and fit for use. Procedural blank data was generally excellent; only naphthalene was detected in the procedural blanks at levels exceeding the MQO. Affected data were "B" qualified. LCS recoveries for PAHs were acceptable in all nine analytical batches with one exception: in one batch, indeno(1,2,3-cd)pyrene, fell slightly below (~36%) the recovery MQO. MS recoveries of PAHs met the MQO for all compounds in most analytical batches; in two batches, recoveries of approximately 50% of the compounds failed to meet the criteria. A review of the data indicated that sample inhomogeneity may have caused these exceedences because the LCS recoveries for the same batches were acceptable.

National Institute of Standards and Technology (NIST) SRM 1944 was processed with every analytical batch. Recoveries of all 20 certified PAHs vs. the certified ranges were acceptable for most batches and only one compound, most commonly dibenz[a,h]anthracene, was exceeded in the others. A laboratory duplicate was processed with nine of the 10 analytical batches. All relative percent differences (RPDs) achieved the MQO in three duplicates; one-to-two compounds exceeded the criteria for two duplicates, and all or most RPDs failed to meet the criteria in three samples. An assessment of the surrogate recoveries indicated that, for the most part, sample extraction procedures were in control and that precision appeared to be significantly affected by inhomogeneity.

Three surrogate compounds, d12-Chrysene, d8-Naphthalene, and d10-Phenanthrene, were used to monitor the extraction efficiency for each sample. Of the almost 150 field samples processed and analyzed, recoveries were acceptable with few exceptions, most commonly d8-Naphthalene. Four samples were re-extracted due to low PAH recoveries. In two instances the sample results were similar to the initial analyses; in the other two instances the re-extracted data were reported.

No data were "rejected" during third-party validation; data qualifiers U and/or J were added to data affected by MQO failures of surrogate, MS, or LSC recoveries, and duplicate RPD exceedences.

E.1.4 Sediment Pesticides

Pesticides and PCBs were quantified from the same sample extract and analysis. Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus two surrogates per sample were required to monitor the data quality of the PCB/pesticide analysis. All but one required QC sample (a laboratory duplicate in one batch) was processed and analyzed as required for each of the 10 PCB/pesticide sediment batches.

MQOs for pesticides were defined in the QAPP. In general, the results of the QC samples indicate that data are acceptable and fit for use. No pesticides were detected in the procedural blanks at levels exceeding the MQO. LCS recoveries for pesticides were acceptable for eight of 10 analytical batches. In the remaining two batches, one compound (2,4'-DDT) fell slightly below (~30%) the MQO. Matrix spike recoveries of pesticides ranged from 0 exceedances vs. the MQO, to recovery exceedences of most of the 12 pesticides measured (one batch). Recovery of 2,4-DDT and 2,4-DDD were the most common MS recovery failures. NIST SRM 1944 was processed with every analytical batch. Recoveries of the two certified pesticides vs. the certified ranges were acceptable for all 10 batches with the exception of 4,4'-DDT in three batches. Precision could be assessed for only a few compounds because in most cases the samples selected as laboratory duplicates contained sediment contaminant concentrations at the level of the RL. For those compounds detected in the duplicate pairs at levels greater than the RL, precision was acceptable for all compounds in all but three batches.

Two surrogate compounds, Cl3(34) and Cl5(112), were used to monitor the extraction efficiency for each sample. Of the almost 150 field samples processed and analyzed, surrogate recoveries were acceptable for all samples in two batches and approximately 25 exceedences were noted among the other eight batches. In four instances, the recoveries of both surrogates failed the MQOs. These samples were re-extracted and the re-extracted data are reported.

Data for eight undetected compounds for one sample (AAB-112) in analytical batch B01-239 was qualified as "rejected" during third-party validation due to the unacceptable recovery of one surrogate compound. This sample required dilution due to high PCB concentrations; data from the diluted run are acceptable and the rejected data from the initial analysis are not likely to have an effect on data

interpretation. Data qualifiers U and/or J were added to data affected by MQO failures of holding times, surrogate, MS, or SRM recoveries, and duplicate RPD exceedences.

E.1.5 Sediment PCB Congeners and Aroclors

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus two surrogates per sample were required to monitor the data quality of the PCB/pesticide analysis. All but one required QC sample (a laboratory duplicate in one batch) was processed and analyzed as required for each of the 10 PCB/pesticide sediment batches.

MQOs for PCB congeners and Aroclors were defined in the QAPP. In general, the results of the QC samples indicate that data are acceptable and fit for use. No PCB congeners or Aroclors were detected in the procedural blanks at levels exceeding the MQO. LCS recoveries for PCB congeners were acceptable for all batches; separate Aroclor LCSs were not prepared. MS recoveries of PCB congeners ranged from 0 exceedences vs. the MQO (two batches), to recovery exceedences of 22 of the 24 PCB congeners measured (one batch). NIST SRM 1944 was processed with every analytical batch. Recoveries of the 19 certified PCB congeners vs. the certified ranges ranged from one to five exceedences. A laboratory duplicate was processed with nine of the 10 analytical batches. Precision could be assessed for only a few compounds because in most cases the samples selected as laboratory duplicates contained sediment contaminant concentrations at the level or below the RL. PCB precision for compounds greater than the RL ranged from 0 to two exceedences in seven batches with the three remaining batches contained a large number of exceedences, primarily related to low but detectable concentrations of PCBs and sample inhomogeneity.

Two surrogate compounds, Cl3(34) and Cl5(112), were used to monitor the extraction efficiency for each sample. Of the almost 150 field samples processed and analyzed, surrogate recoveries were acceptable for all samples in two batches and approximately 25 exceedences were noted among the other eight batches. In four instances, the recoveries of both surrogates failed the MQOs. These samples were re-extracted and the re-extracted data were reported.

Data for three compounds for one sample (AAB-112) in analytical batch B01-239 was qualified as "rejected" during third-party validation. Data qualifiers U and/or J were added to data affected by MQO failures of holding times, surrogate, MS, or SRM recoveries, and duplicate RPD exceedences.

E.1.6 Sediment Butyltins

Four types of QC samples (Blank, MS, MSD, and LCS) plus one surrogate per sample were required to monitor the data quality of the PCB/pesticide analysis. All QC samples (plus one additional laboratory duplicate in one batch) were processed and analyzed as required for each of the eight butyltin sediment batches.

MQOs for butyltins were defined in the QAPP. In general, the results of the QC samples indicate that data are acceptable and fit for use. No butyltins were detected in the procedural blanks at levels greater than the MQO. LCS recoveries for butyltins were acceptable for all batches. MS recoveries met the MQOs for all but two analytical batches. In both of these batches, native (background) concentrations of tributyltin (TBT) and/or dibutyltin (DBT) were high; therefore, the calculated matrix spike recoveries are not reliable. The precision of all MS/MSD analyses were acceptable with the exception of TBT in one batch. TBT precision also was greater than the MQO in the laboratory duplicate sample.

All surrogate recovery data met the MQO acceptance criteria.

No data were qualified as "rejected" during third-party validation. The data qualifier "J" was added to data for three samples affected by recovery or precision exceedences.

E.1.7 Sediment Trace Metals

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) were analyzed with every 20 field samples to monitor the data quality of the trace metals analysis, for a total of eight QC "sets."

MQOs for trace metals were defined in the QAPP. The QC sample results indicate that data are, in general, acceptable and fit for use. Most trace metals were not detected in the procedural blanks at levels MQO. A total of six exceedences were noted (Cr, Hg, Mn, Pb, and Zn). Affected data were "B" qualified, as appropriate. All LCS recoveries for trace metals were acceptable in all five SDGs with the exception of four elements (Ag, As, Mo, and Sb) in one SDG. MS recoveries of trace metals met the MQO for all elements with the following exceptions: Al, Cu, Fe, and Mn (two exceedances each); and Pb and Zn (one exceedance each). Two SRMs, MESS-2 and PACS-2, were processed with every 20 samples. Recoveries of the 17 certified trace metals vs. the certified values were acceptable for 13 elements in all five SDGs. Zn, Cd, and Ag were under-recovered, and Cu was over-recovered in one or more SRMs. A laboratory duplicate was processed with every 20 samples. All RPDs achieved the MQO in with the exception of one Cd value.

No data were "rejected" during third-party validation; data qualifiers U and/or J were added to data affected by MQO failures of the ICV, MS, or LSC recoveries, and duplicate RPD exceedences.

E.1.8 Sediment Total Petroleum Hydrocarbons

Five types of QC samples (Blank, SRM [Diesel], MS, Duplicates, and LCS) plus one surrogate per sample were to be analyzed to monitor the data quality of the TPH analysis. A total of seven procedural blanks and LSCs, one for every 20 field samples, were processed as required; the MS/MSD were substituted for the Diesel SRM for all but one set of 20 samples. That set of 20 did not include an SRM or MS/MSD.

MQOs for TPH in the diesel range were defined in the QAPP. The QC sample results indicate that data are acceptable and fit for use. Procedural blank data were acceptable. No TPH was detected at levels greater than the MQO. LCS recoveries for TPH were acceptable in six of the seven samples. Of the six MS/MSD pairs processed with the field samples, a recovery exceedence of one sample was noted in five of seven samples.

The surrogate compound benzo(a)pyrene was used to monitor the extraction efficiency for each sample. Of the almost 150 field samples processed and analyzed, recoveries were acceptable in all samples.

No data were "rejected" during third-party validation; data qualifiers U and/or J were added to data affected by MQO failures of the continuing calibration standard, MS or LSC recoveries, and duplicate RPD exceedences.

E.2 WATER DATA QUALITY

Five equipment blanks were collected during field activities to measure field-related contamination. One equipment blank was collected in each sampling area by pouring water over and around the stainless steel utensils used to collect sediment samples from the samplers. Water samples were also collected as part of the toxicity identification evaluation (TIE).

E.2.1 Water Polycyclic Aromatic Hydrocarbons

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus three surrogates per sample were analyzed to monitor the data quality of the PAH analysis. All required QC samples were processed and analyzed as required for each of the four PAH water batches with the exception of a laboratory duplicate in the equipment blank batch.

MQOs for PAHs were defined in the QAPP. The QC sample results indicate that data are acceptable and fit for use. Procedural blank data was excellent; no compounds were detected in the procedural blanks at levels greater than the MQO. LCS, MS, and the internal SRM recoveries for all PAHs were acceptable and met the recovery MQO. The precision of all but two compounds (naphthalene and benzo[a]anthracene) in the LCS/LCSD met the precision criteria.

Three surrogate compounds, d12-Chrysene, d8-Naphthalene, and d10-Phenanthrene, were used to monitor the extraction efficiency for each sample. Surrogate recoveries were acceptable in all but four samples.

Concentrations of PAHs were detected in each of the five equipment blanks at levels from slightly, to significantly greater than the RL. Most commonly, naphthalene and 2-methylnaphthalene were detected as high as 370 and 89 ng/L, respectively. The levels of these compounds appear to reflect field-related contamination because, although these compounds are common laboratory contaminants at low levels, these concentrations greatly exceed historical values. The procedural blank for the related laboratory batch contained no compounds above the RL.

No data were “rejected” during third-party validation; the data qualifier U was added to phenanthrene data to reflect the presence of this compound in the procedural blank at a concentration *less than* the RL, as well as J and/or U qualifiers related to precision and surrogate recoveries exceedences.

E.2.2 Water Pesticides

Pesticides and PCBs were quantified from the same sample extract and analysis. Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus two surrogates per sample were analyzed to monitor the data quality of the PCB/pesticide analysis. All required QC samples were processed and analyzed as required for each of the four PCB/pesticide water batches with the exception of a laboratory duplicate in the equipment blank batch.

MQOs for pesticides were defined in the QAPP. The QC sample results indicate that data are acceptable and fit for use. Procedural blank data was excellent; no compounds were detected in the procedural blanks at levels greater than the MQO. LCS, MS, and the internal SRM recoveries for all pesticides were acceptable and met the recovery MQO. The precision of all compounds in the LCS/LCSD, with the exception of *gamma*-chlordane in one LCS, met the precision criteria.

Two surrogate compounds, Cl3(34) and Cl5(112), were used to monitor the extraction efficiency for each sample. Surrogate recoveries were acceptable with one exception.

No pesticides were detected in the equipment blank samples above the reporting limit.
No data were "rejected" during third-party validation; the data qualifiers J and/or U were added to data to reflect surrogate and precision exceedences.

E.2.3 Water PCB Congeners and Aroclors

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus two surrogates per sample were required to monitor the data quality of the PCB/pesticide analysis. All required QC samples were processed and analyzed as required for each of the four PCB/pesticide water batches with the exception of a laboratory duplicate in the equipment blank batch.

MQOs for PCBs were defined in the QAPP. The QC sample results indicate that data are acceptable and fit for use. Procedural blank data was excellent; no compounds were detected in the procedural blanks at levels greater than the MQO. LCS, MS, and the internal SRM recoveries for all PCBs were acceptable and met the recovery MQO with the exception of two PCBs in one MS and one PCB in the SRM. The precision of all compounds in the LCS/LCSD, with the exception of *gamma*-chlordane in one LCS, met the precision criteria.

Two surrogate compounds, Cl3(34) and Cl5(112), were used to monitor the extraction efficiency for each sample. Surrogate recoveries were acceptable with one exception.

No PCBs were detected in the equipment blank samples above the reporting limit.

No data were "rejected" during third-party validation; the data qualifiers J and/or U were added to data for several compounds to reflect accuracy and precision exceedences.

E.2.4 Water Butyltins

Three types of QC samples (Blank, LCS, and duplicate) plus one surrogate per sample were required to monitor the data quality of the butyltins analysis. All QC samples were processed and analyzed as required for each of the two butyltin water batches.

MQOs for butyltins were defined in the QAPP. The results of the QC samples were excellent and indicate that data are acceptable and fit for use. No butyltins were detected in the procedural blanks at levels greater than the MQO. LCS and LCSD recoveries for butyltins were acceptable for both batches. The precision of all LCS/LCSD analyses were acceptable.

All surrogate recovery data met the MQO acceptance criteria.

No butyltins were detected in the equipment blank samples above the reporting limit.

No data were qualified or "rejected" during third-party validation.

E.2.5 Water Trace Metals

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) were analyzed with every 20 field samples to monitor the data quality of the trace metals analysis.

MQOs for trace metals were defined in the QAPP. The QC sample results indicate that data are, in general, acceptable and fit for use. Most trace metals were not detected in the procedural blanks at levels greater than the MQO. A total of 10 results were detected at levels greater than the RL (Cr, Mo, Al, Fe, Hg, Cu, V, Zn, As, and Mn). Affected data were "B" qualified, as appropriate. All LCS recoveries for trace metals were acceptable with the exception of V. MS/MSD recoveries of trace metals met the MQO for all elements. Two SRMs, 1643d and CASS-4, were processed with every 20 samples. Recoveries of the five trace metals were slightly lower than the MQOs; one metal, Pb, was over-recovered. A laboratory duplicate was processed with every 20 samples. All RPDs achieved the MQO.

Several trace metals were detected in the equipment blanks at levels above the RL. These elements likely reflect low-level field, not laboratory contamination. While greater than the RL, the levels detected in water are still notably less than those of the related sediment samples.

No data were "rejected" during third-party validation; data qualifiers U and/or J were added to data affected by holding time failures (Hg), and MQO failures of the procedural blank, LCS, and SRM.

E.2.6 Water Total Petroleum Hydrocarbons

Four types of QC samples (Blank, MS, Duplicates, and LCS) plus one surrogate per sample were analyzed to monitor the data quality of the TPH analysis. Water samples were analyzed in three separate SDGs to meeting holding times. Three sets of QC samples, one for each SDG, were processed as required.

MQOs for TPH in the diesel range were defined in the QAPP. The QC sample results indicate that data are acceptable and fit for use. Procedural blank data were acceptable. No TPH was detected at levels greater than the MQO. LCS, MS, and MSD recoveries for TPH were acceptable in all SDGs. Precision between the MS/MSD was acceptable.

The surrogate compound benzo(a)pyrene was used to monitor the extraction efficiency for each sample; recoveries were acceptable in all samples.

No data were qualified or "rejected" during third-party validation.

E.3 TISSUE DATA QUALITY

E.3.1 Tissue Polycyclic Aromatic Hydrocarbons

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus three surrogates per sample were analyzed to monitor the data quality of the PAH analysis. All required QC samples were processed and analyzed as required for each of the eight PAH tissue batches.

MQOs for PAHs were defined in the QAPP. The QC sample results indicate that data are, in general, acceptable and fit for use. Procedural blank data was excellent; no compounds were detected in the procedural blanks at levels greater than the MQO. LCS recoveries for PAHs were acceptable in all analytical batches with the exception of indeno(1,2,3-cd)pyrene in one *M. nasuta* sample. MS recoveries of PAHs met the MQO for all compounds in all analytical batches with one exception: most of the MS extract for one *M. nasuta* batch was lost in the laboratory and thus recoveries fell below the MQOs. NIST SRM 1974a was processed with every analytical batch. Recoveries of the 17 certified PAHs vs. the

certified ranges were acceptable for most-to-some compounds in each batch. In general from two to 11 MQO exceedences were noted in each SRM analyzed. Two reasons were noted for these exceedences: the tissue concentrations in this SRM approached the RL and the SRM also contained co-eluting compounds (e.g., benzo(j)fluoranthene) that interfere with accurate peak integration. A laboratory duplicate was processed with each analytical batch. All RPDs achieved the MQO where compounds were detected at levels greater than the RL, with the exception of two or three compounds in each of two *M. nasuta* batches.

Three surrogate compounds, d12-Chrysene, d8-Naphthalene, and d10-Phenanthrene, were used to monitor the extraction efficiency for each sample. Of the approximately 200 samples processed and analyzed, recoveries were acceptable with exceptions in three samples. No samples required re-extraction as the result of surrogate recovery failures.

No data were "rejected" during third-party validation. Data qualifiers U and/or J were added to data affected by MQO failures of surrogate, MS, SRM, or LSC recoveries, and duplicate RPD exceedences. benzo(k)fluoranthene was qualified with NJ in two *M. nasuta* batches due to co-elution with benzo(j)fluoranthene in the SRM.

E.3.2 Tissue Pesticides

Pesticides and PCBs were quantified from the same sample extract and analysis. Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus two surrogates per sample were required to monitor the data quality of the PCB/pesticide analysis. All QC samples were analyzed as required for each of the eight PCB/pesticide sediment batches.

MQOs for pesticides were defined in the QAPP. In general, the results of the QC samples indicate that data are acceptable and fit for use. No pesticides were detected in the procedural blanks at levels greater than the MQO. LCS recoveries for pesticides were acceptable for three of eight analytical batches. In the remaining five batches, one compound, 2,4'-DDT fell slightly below (~30%) the MQO. For some of these batches, the MS recovery was acceptable although the LSC data exceeded the MQO. MS recoveries of pesticides generally were acceptable. Either 4,4-DDE or 2,4-DDT exceeded the MQO in four batches; in one *M. nasuta* batch all recoveries were low because of extract loss during processing; in the combined invertebrate/forage fish batch/edible tissue batch several recoveries were low due to elevated background and the related interference with peak integration. All pesticide recoveries were acceptable in one batch. NIST SRM 1974a was processed with every analytical batch. Recoveries of the five certified pesticides vs. the certified ranges were acceptable for all eight batches with the exception of 4,4'-DDT, 4,4-DDE, and/or *gamma*-chlordane in three batches. Precision could be assessed for only a few compounds because in most cases the samples selected as laboratory duplicates contained sediment contaminant concentrations at the level of the RL. For those compounds detected in the duplicate pairs at levels greater than the RL, precision was acceptable for all but one or three compounds in two batches.

Two surrogate compounds, Cl3(34) and Cl5(112), were used to monitor the extraction efficiency for each sample. Of the almost 200 samples processed and analyzed, surrogate recoveries were acceptable for Cl3(34) in all batches with the exception of three samples in two batches. The presence of a negative peak in the area of Cl5(112) interfered with peak integration in many samples. However, because the interference was related to this specific compound this does not reflect a general failure of data quality.

Six pesticides for three forage fish samples, six pesticides for four Human Health Evaluation fish samples, and all pesticides in one *M. nasuta* sample were qualified as "rejected" during third-party

validation. Data qualifiers U and/or J were added to data affected by MQO failures of one or more accuracy or precision exceedences.

E.3.3 Tissue PCB Congeners and Aroclors

Pesticides and PCBs were quantified from the same sample extract and analysis. Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) plus two surrogates per sample were required to monitor the data quality of the PCB/pesticide analysis. All QC samples were analyzed as required for each of the eight PCB/pesticide sediment batches.

MQOs for PCB congeners and Aroclors were defined in the QAPP. In general, the results of the QC samples indicate that data are acceptable and fit for use. No PCB congeners or Aroclors were detected in the procedural blanks at levels greater than the MQO. LCS recoveries for PCB congeners were acceptable for all batches; separate Aroclor LCSs were not prepared. MS recoveries of PCBs were generally acceptable. One to three PCBs exceeded the MQO in four batches; in one *M. nasuta* batch all recoveries were low because of extract loss during processing; in the combined invertebrate/forage fish batch/edible tissue batch several recoveries were low due to elevated background and the related interference with peak integration. All PCB recoveries were acceptable in two batches. NIST SRM 1974a was processed with every analytical batch. Recoveries of the 13 certified PCB congeners vs. the certified ranges were acceptable with a single exceedence in one sample. A laboratory duplicate was processed with each analytical batch. Precision could be assessed for only a few compounds because in most cases the samples selected as laboratory duplicates contained sediment contaminant concentrations at or below the RL. PCB precision for compounds greater than the RL were acceptable for all PCBs in six of eight batches. In the other two batches, four of 13 PCB congeners exceeded the MQOs.

Two surrogate compounds, Cl3(34) and Cl5(112), were used to monitor the extraction efficiency for each sample. Of the almost 200 samples processed and analyzed, surrogate recoveries were acceptable for Cl3(34) in all batches with the exception of three samples in two batches. The presence of a negative peak in the area of Cl5(112) interfered with peak integration in many samples. However, because the interference was related to this specific compound this does not reflect a general failure of data quality.

Eight PCB congeners and all Aroclors for three forage fish samples and eight PCB congeners in four Human Health Evaluation fish samples were qualified as “rejected” during third-party validation based on the unacceptable recovery of one surrogate compound. A matrix interference prevented the integration of the peak associated with this surrogate compound; however, the recovery of the other surrogate compound in all of the samples was acceptable, and recoveries of both surrogate compounds were acceptable in all non-matrix samples (e.g. blanks and LCS). Most of the associated matrix spike recoveries were acceptable as well. Therefore, the extraction efficiency for these samples appears to be acceptable. Only non-detected values were flagged as rejected. Based on these results, overall data quality and data interpretation are not likely to be affected.

Data qualifiers U and/or J were added to data affected by MQO failures of one or more accuracy or precision exceedences.

E.3.4 Tissue Butyltins

Four types of QC samples (Blank, MS, MSD, and LCS) plus one surrogate per sample were required to monitor the data quality of the PCB/pesticide analysis. All QC samples were processed and analyzed as required for each of the eight butyltin tissue batches.

(MQOs for butyltins were defined in the QAPP. The results of the QC samples indicate that data are acceptable and fit for use. No butyltins were detected in the procedural blanks at levels greater than the MQO. LCS recoveries for butyltins were acceptable for all batches with two exceptions: TBT in one *M. nasuta* batch and both TBT and DBT in the combined invertebrate/forage fish batch/edible tissue batch. MS/MSD recoveries met the MQOs for all analytical batches. The precision of all MS/MSD analyses was acceptable in all batches.

All surrogate recovery data met the MQO acceptance criteria with one exception.

No data were qualified as "rejected" during third-party validation. The data qualifiers "J" or UJ were added to data for 17 samples affected by recovery or precision exceedences.

E.3.5 Tissue Polychlorinated Dioxindibenzofurans

Four types of QC samples (Blank, MS, Duplicates, and LCS), in addition to surrogate compounds, were analyzed with every 20 field samples to monitor the data quality of the dioxin/furan analysis in one analytical batch. An SRM was also analyzed with one SDG. All QC samples were processed and analyzed as required.

MQOs for dioxin/furan were defined in the QAPP. In general, the results of the QC samples indicate that data are acceptable and fit for use. No dioxin/furan was detected in the procedural blank at levels greater than the MQO. LCS recoveries for dioxin/furan were acceptable. SRM recoveries were acceptable with the exception of eight compounds that were over-recovered. MS recoveries met the MQOs for all but one compound: the recovery of OCDD and the MS/MSD precision for this compound exceeded the MQO.

All surrogate recovery data met the MQO acceptance criteria.

No data were qualified as "rejected" during third-party validation. The data qualifier J and/or UJ was added to data for samples affected by routine calibration, accuracy, or precision exceedences.

E.3.6 Tissue Trace Metals

Five types of QC samples (Blank, SRM, MS, Duplicates, and LCS) were to be analyzed with every 20 field samples to monitor the data quality of the trace metals analysis, for a total of approximately six QC "sets." It was noted during validation that the MS was not processed and analyzed at a frequency of 1 per ≤ 20 samples.

MQOs for trace metals were defined in the QAPP. The QC sample results indicate that data are, in general, acceptable and fit for use. Most trace metals were not detected in the procedural blanks at levels greater than the MQO. Nine compounds were detected in the blanks at level greater than five times those of the associated field samples (Ag, As, Ba, Cr, Hg, Mo, Sb, Se, and V). Affected data were "B" qualified, as appropriate. LCS recoveries were acceptable for all samples with the exception of Ag in three samples and Hg in one sample. MS recoveries of trace metals met the MQO for all elements except Ag. Two SRMs, DORM-2 and DOLT-2, were processed with every 20 samples. Recoveries of the 14 certified trace metals vs. the certified values were acceptable for five elements in samples. The recoveries of the other nine elements were exceeded in at least one analysis. A laboratory duplicate was processed with every 20 samples. All RPDs achieved the MQO for all elements in all samples with two exceptions: Cr and Ag.

No data were "rejected" during third-party validation; data qualifiers U and/or J were added to data affected by MQO failures of the MS or SRM recoveries, duplicate RPD exceedences, or detected concentrations in the blanks at level greater than five times those of the associated field samples.

E.4 TOXICITY TEST DATA QUALITY

E.4.1 *Eohaustorius estuarius* 10-Day Toxicology Test Data Quality

Two QC measures were incorporated into the design of the *E. estuarius* test: native control survival and a reference toxicant test. The results of the toxicity tests were acceptable: the average native control survival was >90% for all acute toxicity tests. The results of the ammonia reference toxicant test met the control chart criteria (± 2 standard deviations of the historical mean).

E.4.2 *Strongylocentrotus. purpuratus* Sediment-Water Interface (SWI) Test Data Quality

Three quality control measures were incorporated into the design of the .*S. purpuratus* SWI test: native control survival, native control development, and a copper reference toxicant test. The results of the toxicity tests were acceptable: the average native control survival was >90% for all SWI tests and normal development was >70% in all native controls. The results of the copper reference toxicant test, as well as two additional reference toxicants (ammonia and cadmium), met the control chart criteria (± 2 standard deviations of the historical mean).

E.4.3 *Macoma nasuta* Bioassay Test

Two QC measures were incorporated into the design of the *M. nasuta* bioassay: native control survival and a reference toxicant test. In general, the results of the toxicity tests were acceptable. The average native control survival was slightly less than the MQO (87.3%). The results of the ammonia reference toxicant test met the control chart criteria (± 2 standard deviations of the historical mean).

E.5 FIELD QUALITY CONTROL SAMPLES

Two types of field QC samples were collected: field duplicates of surface sediment grab samples (sediment chemistry analysis only) and equipment blanks. The collection of field QC samples is described in Section 3.1.1.2 of the main document. The samples were collected to assess sampling reproducibility and identify any field contamination; however, numerical MQOs were not specified.

E.5.1 Field Duplicates

Results for field duplicate samples are reported in Appendix B. In general, the RPDs between chemical concentrations measured in field duplicate samples were relatively low (i.e., less than 20%) for results that were unqualified and greater than 5 times the MDL. Results for PAHs were more variable than the results for other organic compounds. RPDs for metals results were less than 20% with the exception of the field duplicate samples from Station EW-33 in Area VIII, where RPDs for many metals exceeded 20%. These results indicate that the Validation Study sediment chemistry results show acceptable sampling reproducibility.

E.5.2 Equipment Blanks

Five equipment blanks were collected during the Validation Study field sampling. Equipment blank results are provided in Appendix B. Trace levels of metals were detected in all equipment blanks. Organic compounds were not detected with the following exceptions:

- 2-methylnaphthalene and naphthalene were detected in all equipment blanks at maximum concentrations of 89.5 ng/L and 370 ng/L, respectively.
- Traces of several other PAHs were detected in one or more equipment blanks.
- TBT was detected in one equipment blank at a concentration of 14.87 ng/L.

Although trace levels of field contamination appear to have occurred, the sediment sample chemistry results do not appear to have been affected.

APPENDIX F

Sediment and Tissue Chemistry Data Analysis

Appendix F. Sediment and Tissue Chemistry Data Analysis

This appendix provides supporting information regarding the preparation and evaluation of sediment and tissue chemistry data generated for the Hunters Point Shipyard (HPS) Validation Study. Data preparation included the calculation of total concentrations for summed chemicals (e.g., polychlorinated biphenyls [PCBs]) and polycyclic aromatic hydrocarbons (PAHs), and the calculation of effects range-median quotients (ERM-Qs) for sediment. Sediment chemistry data analyses presented in this appendix include box plots and statistical summary tables for grab and core samples. Plots of sediment chemistry results vs. tissue chemistry results for *Macoma nasuta* tissue samples from the laboratory bioaccumulation test are provided in this appendix. Chemistry results for field-collected hard-bodied and soft-bodied invertebrate tissue samples with sediment chemistry results from nearby stations also are provided. Sediment chemistry data collected for the Validation Study were compared to ambient station data for San Francisco Bay; the ambient data set is described below.

F.1 DATA PREPARATION

Analytical results for sediment and tissue samples were loaded into a centralized database after data validation and prior to data evaluation. The tabulated data were prepared for data analysis following the procedures described below.

F.1.1 Sediment Chemistry Data

Prior to evaluation, sediment chemistry data sets were prepared using the following guidelines:

- Delete "R" qualified data (as discussed in Appendix E, the omission of rejected data is unlikely to affect data interpretation or study conclusions).
- Calculate summed analytical results for total low molecular weight PAHs (LPAHs), total high molecular weight PAHs (HPAHs), total polychlorinated biphenyls (PCBs), and total dichlorodiphenyltrichloroethane (DDT); set non-detected values to zero.
- Chemicals included in summed groups were as follows:

<u>Total LPAHs (sum of 7 constituents)</u>

Acenaphthene	Fluorene
Acenaphthylene	Naphthalene
Anthracene	Phenanthrene
2-Methylnaphthalene	

<u>Total HPAHs (sum of 10 constituents) for evaluation of site concentrations</u>

Benzo(a)anthracene	Chrysene
Benzo(a)pyrene	Dibenzo(a,h)anthracene
Benzo(b)fluoranthene	Fluoranthene
Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene
Benzo(k)fluoranthene	Pyrene

<u>Total HPAHs (sum of 6 constituents) for comparison to ER-M and calculation of ERM-Q</u>

Benzo(a)anthracene	Chrysene
Benzo(a)pyrene	Dibenzo(a,h)anthracene
Pyrene	Fluoranthene

Total PCBs (two times the sum of 22 congeners)

PCB008, PCB018, PCB028, PCB044, PCB052, PCB066, PCB077, PCB101, PCB105, PCB110, PCB118, PCB126, PCB128, PCB129, PCB138, PCB153, PCB170, PCB180, PCB187, PCB195, PCB206, PCB209

Total 4,4'-DDx (sum of 4,4′-DDD, 4,4′-DDE, and 4,4′-DDT).

The ERM-Qs were calculated using the following equation:

$$\text{ERM - Q} = \frac{1}{n}\sum_{i=1}^{n}\frac{\text{COPEC}_i}{\text{ER - M}_i} \qquad \text{(F-1)}$$

where ERM-Q = ER-M quotient
n = number of COPECs included in the quotient
COPEC = concentration of individual COPEC in site sample
ER-M = effects range-median for the COPEC.

Both individual constituents (i.e., a total of 19) and sums (i.e., totals) of organic compounds were included in the ERM-Q. In general, only constituents with a published ER-M value were used (Long and Morgan, 1991; Long et al., 1995); however, a benchmark value of 25.1 µg/kg for tributyltin (TBT) was used in the absence of an ER-M value (Roy F. Weston, 1996; effects-based screening value based on an organic carbon-normalized concentration and assuming 2% organic carbon content). Prior to calculation of the ERM-Q, the data were prepared using the following guidelines:

- Delete "R" qualified data.
- Calculate sums (i.e., totals) of organic compounds using the individual analyte groups identified for preparing sediment chemistry data.
- Include the following chemicals in the ERM-Q calculation:

Metals

Antimony	Chromium	Mercury	Selenium
Arsenic	Copper	Nickel	Zinc
Cadmium	Lead	Silver	

Organics

4,4′-DDD	4,4′-DDT	Total HPAHs	Total PCBs
4,4′-DDE	Total DDT	Total LPAHs	Tributyltin
Dieldrin	Endrin	*alpha*-Chlordane	

- If an individual or summed (i.e., total) result is not detected, set the result to zero for the ERM-Q calculation.

F.1.2 Tissue Chemistry Data

Prior to evaluation, the tissue chemistry data sets were prepared using the following guidelines:

- Delete "R" qualified data.
- Calculate summed analytical results for total LPAHs, total HPAHs, total PCBs, and total DDT using the individual analyte groups identified in Section F.1.1.

F.2 SEDIMENT CHEMISTRY DATA EVALUATION

This section discusses the methods used to prepare box plots using the surface sediment chemistry data for HPS. As part of the evaluation, site-specific data were compared with ambient data available for San Francisco Bay.

F.2.1 San Francisco Bay Ambient Data Sets

Whenever available, the data collected as part of the Bay Protection and Toxic Hotspot Cleanup Program (BPTCP) and the San Francisco Estuary Institute (SFEI) Regional Monitoring Program (RMP) were used to represent ambient conditions in San Francisco Bay. All available sediment chemistry results from 1993 through 1997 from stations classified as ambient in *Ambient Concentrations of Toxic Chemicals in Sediments* (RWQCB, 1998) were used for this purpose. For aluminum and chromium, only the RMP results were used because the BPTCP used a more rigorous (i.e., total) digestion method to analyze for those chemicals. Therefore, the BPTCP results were not considered comparable to the RMP or site results.

For organic compounds, both individual analytes and summed (i.e., total) analytes within a group were compared to ambient concentrations. The following summed concentrations were used: total LPAHs, total HPAHs, total PCBs, and total 4,4'-DDx. For total concentrations, the same analytes were summed for ambient stations as for the HPS stations to maintain comparability. All nondetected results used in a sum were given a value of zero before summation.

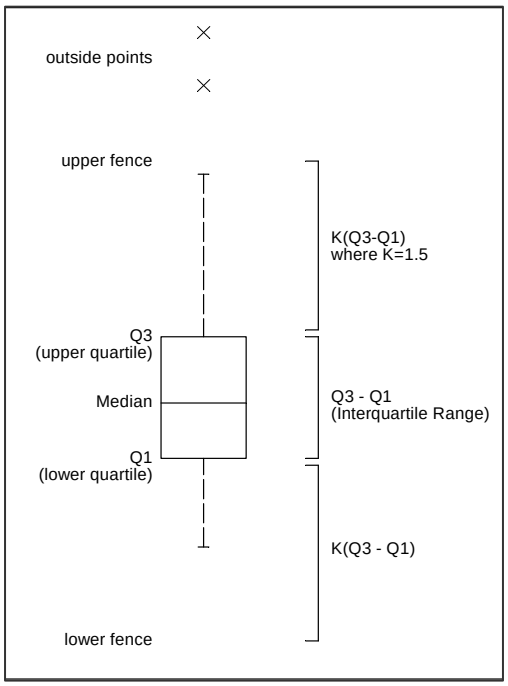
F.2.2 Box Plots

This appendix is intended to augment the discussion of sediment chemistry presented in Section 4.0 of the main text, and presents side-by-side box plots for all COPECs measured in surface sediment as part of the Validation Study. Box plots of inorganic chemicals are presented in Figures F-1 through F-10. Individual pesticides are presented in Figures F-11 through F-15. Individual PAHs are presented in Figures F-16 through F-23. Butyltins are presented in Figure F-24. Total PCBs are presented in Figure F-25 as Aroclor 1260 and as total PCBs estimated as two times the sum of the 22 measured congeners. Total HPAHs are presented in Figure F-26, with the top plot representing the total of the six PAHs used in the ERM-Q calculation, and the bottom plot the sum of all ten HPAHs. Figure F-27 presents the total low molecular weight PAHs, and total 4-4'DDx.

Box plots summarize information about the shape and spread of the distribution of concentrations from a data set. The y-axis displays the observed concentrations of the data in the appropriate units. The bottom edge of the box represents the lower quartile (Q1, equivalent to the 25th percentile) of the data; 25% of the data falls below this value. The upper edge of the box represents the third or upper quartile of the data (Q3, equivalent to the 75th percentile); 25% of the data are above this value. The height of the box (i.e., the interquartile range, Q3-Q1) provides a measure of the spread of the concentrations. The horizontal line across the box represents the median (i.e., the 50th percentile or second quartile) of the data, providing a measure of the center of the concentration distribution. In a normal distribution, the median line divides the box into two approximately equal parts, indicating that the shape of the concentration distribution is symmetric. If the median divides the box into unequal parts, it indicates that the distribution is skewed or nonsymmetrical.

Extending vertically beyond the box are dashed lines (i.e., "whiskers") defined by upper and lower "fences." The length of each fence is a multiple of the interquartile range as defined by the following equation, where "K" is a constant typically assigned a value of 1.5:

$$\text{Interquartile Range} = K \times (Q3\text{-}Q1) \qquad \text{(F-2)}$$



The fences are not precisely plotted in the box plots, but rather are implied by the length of the whiskers, which terminate at "adjacent values." Adjacent values are defined as the largest (or smallest) observed concentration within the range defined by the upper (or lower) fence. Therefore, the concentration range enclosed by the fences is the equivalent of a nonparametric confidence interval around the median. When all of the data are plotted as points overlaying the box plot, concentrations falling beyond the whiskers (i.e., "outside points") represent data that should be evaluated as potential outliers (i.e., extreme or unusual concentration values).

Several lines were plotted across the box plots to assist in data interpretation. The large dashed line represents the ER-M, if one was available, and if the range of the data included the ER-M. When all values were much lower than the ER-M, the numeric value of the ER-M was indicated in the top left corner of the plot. The dotted line indicates the published ambient upper tolerance limit (assuming 100% fines) (RWQCB, 1998).

In addition, the right hand box plot in each figure shows the relevant ambient data (if available). Ambient data for most inorganic constituents represent a combination of RMP and BPTCP reference site data from 1993 to 1997. The only exceptions are antimony, aluminum and chromium. For antimony, BPTCP reference site data is presented alone (because this constituent was not reported by the RMP). For aluminum and chromium, BPTCP data prepared by total dissolution (in hydrofluoric acid) was presented to maximize comparability with the 2001 fixed lab Navy data. To illustrate why aluminum and chromium should only be compared to BPTCP data, Figures F-1 and F-2 were generated. In both figures it is apparent that data from the Navy reference sites is much more comparable to the BPTCP data than to the RMP data, owing to differences in sample preparation. The Validation Study (as well as BPTCP) used a more complete digestion technique to prepare samples, thereby pulling aluminum and chromium out of the sediment matrix.

For organic constituents, box plots also show results in comparison to both the 1993 data and ambient data (RMP and/or BPTCP). As indicated in the figure labels, for several constituents (e.g., TBT, endosulfan, and Aroclor 1260), only BPTCP data were available; for *gamma*-chlordane and 2-methylnaphthalene, only RMP data were available; and for DBT, no ambient data were available.

The final box plot, Figure F-28, presents the ERM-Qs calculated at each station. The lines drawn across the plot were ERM-Q values of interest for the weight of evidence scoring. An ERM-Q of 0.3 represents the upper tolerance limit of the ERM-Q calculated for the same list of constituents as used in the Validation Study, but using ambient data.

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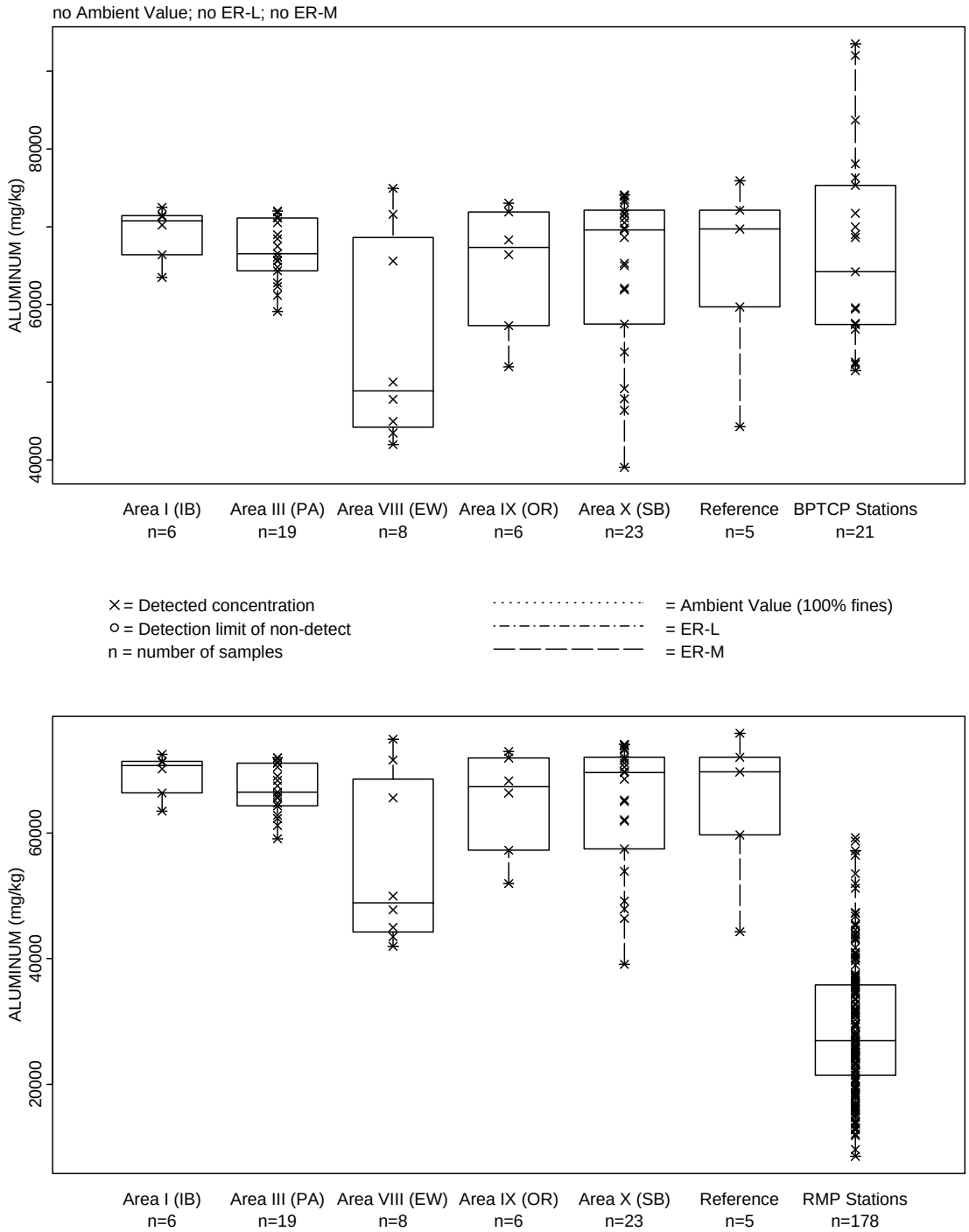

Figure F-1. COPEC concentrations in HPS and Reference sediments: Aluminum (by total hydrofluoric acid extraction) (HPS and BPTCP), RMP is near total extraction without hydrofluoric acid

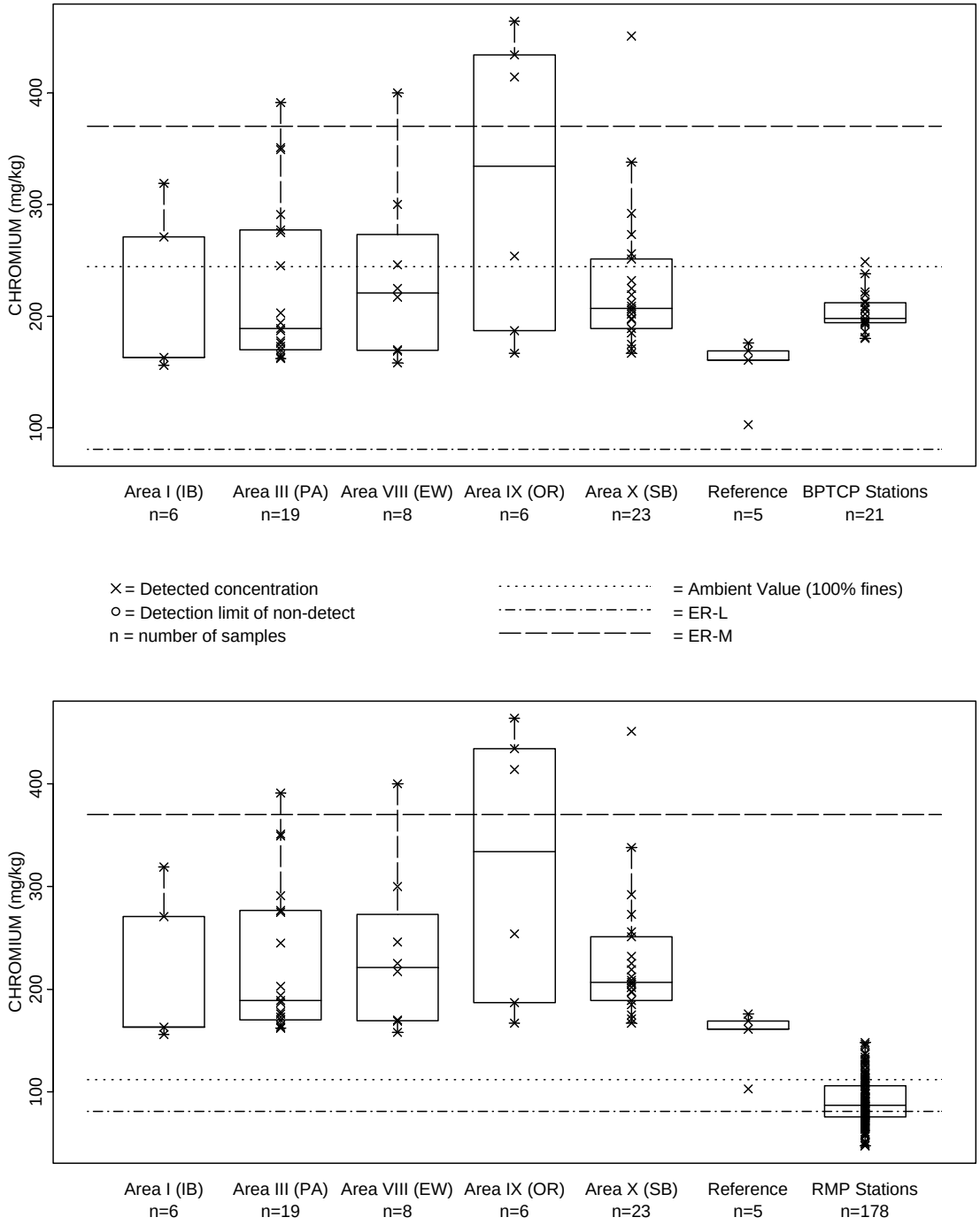

Figure F-2. COPEC concentrations in HPS and Reference sediments: Chromium (by total hydrofluoric acid extraction) (HPS and BPTCP), RMP is near total extraction without hydrofluoric acid

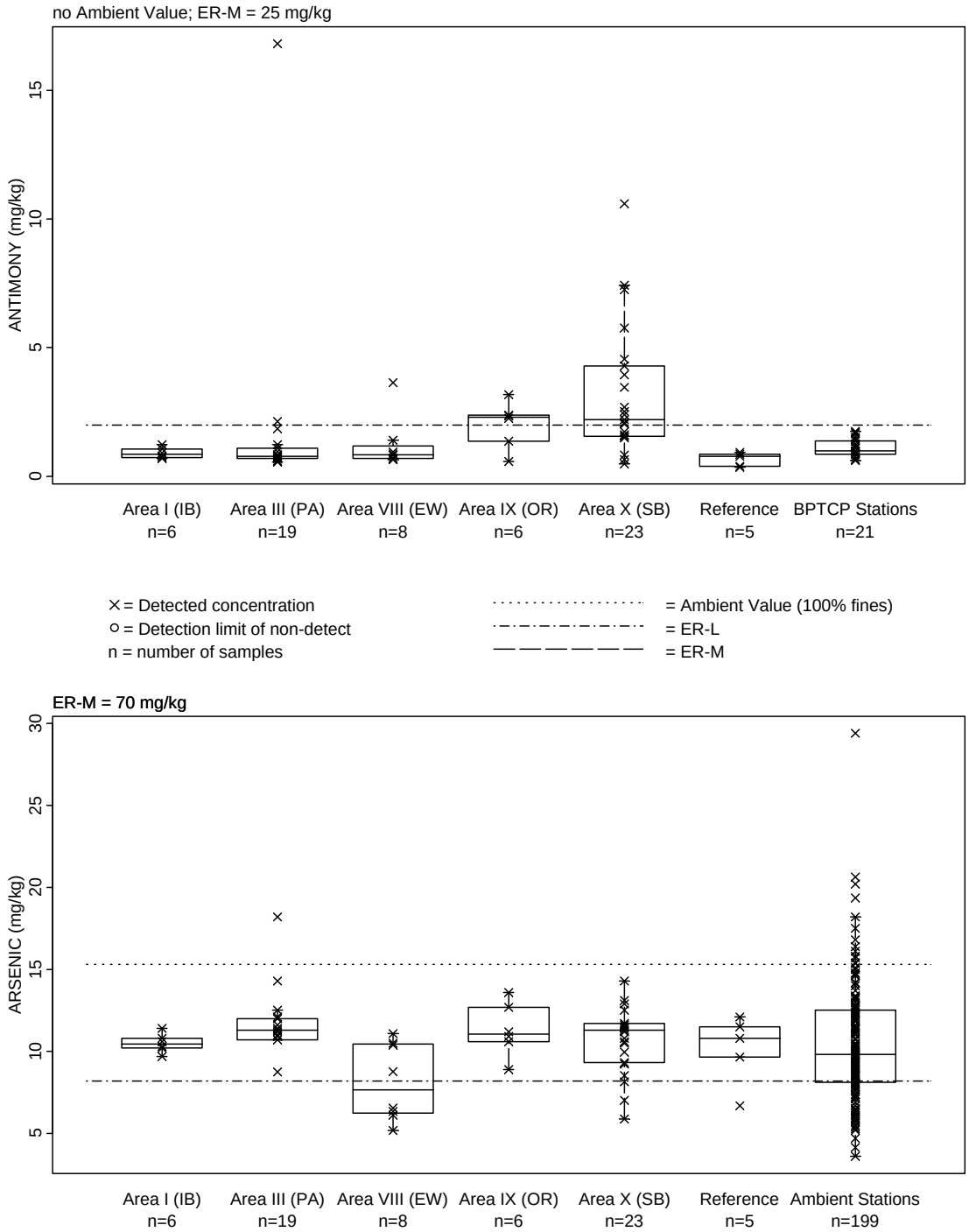

Figure F-3. COPEC concentrations in HPS and Reference sediments: Antimony and Arsenic

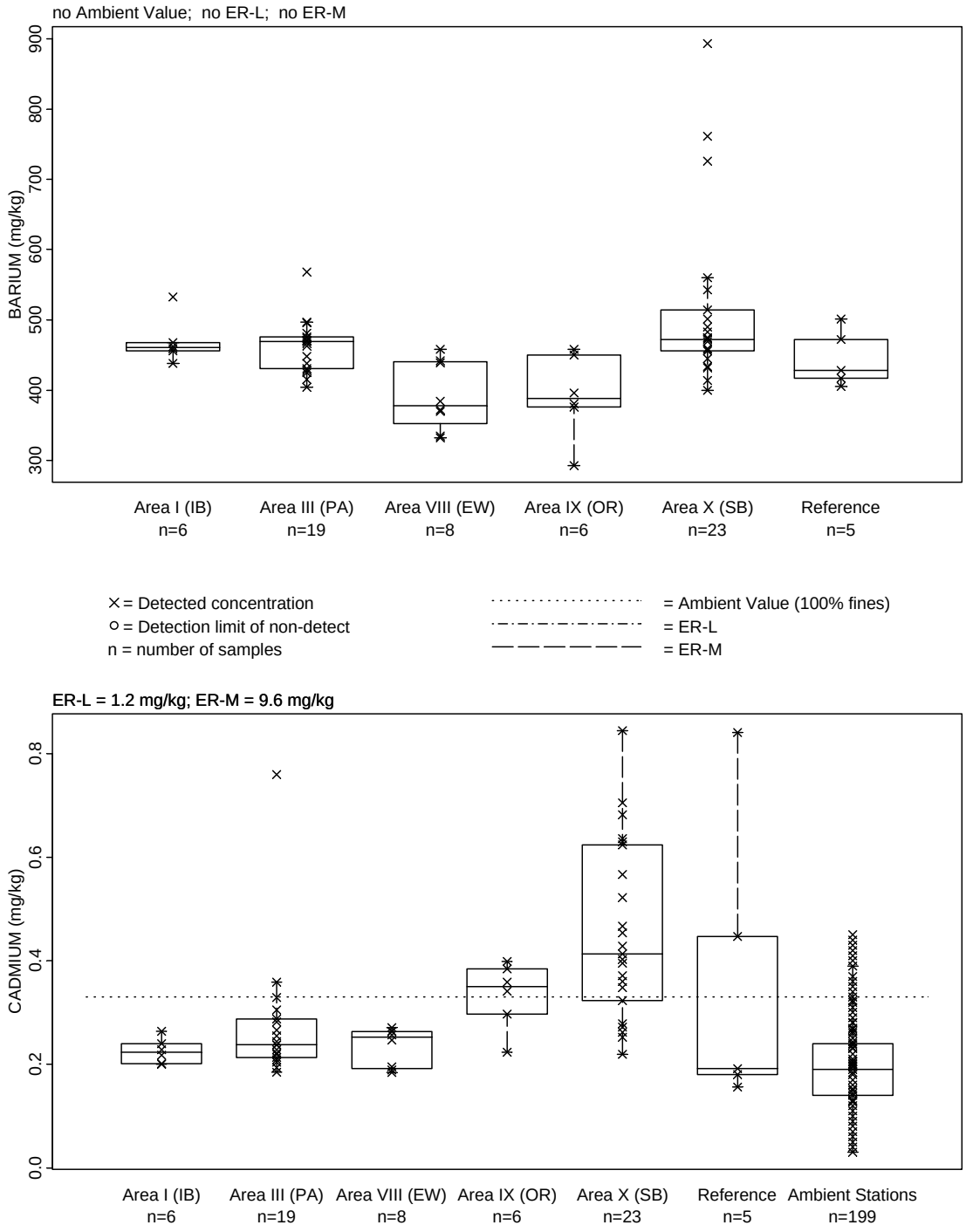

Figure F-4. COPEC concentrations in HPS and Reference sediments: Barium and Cadmium

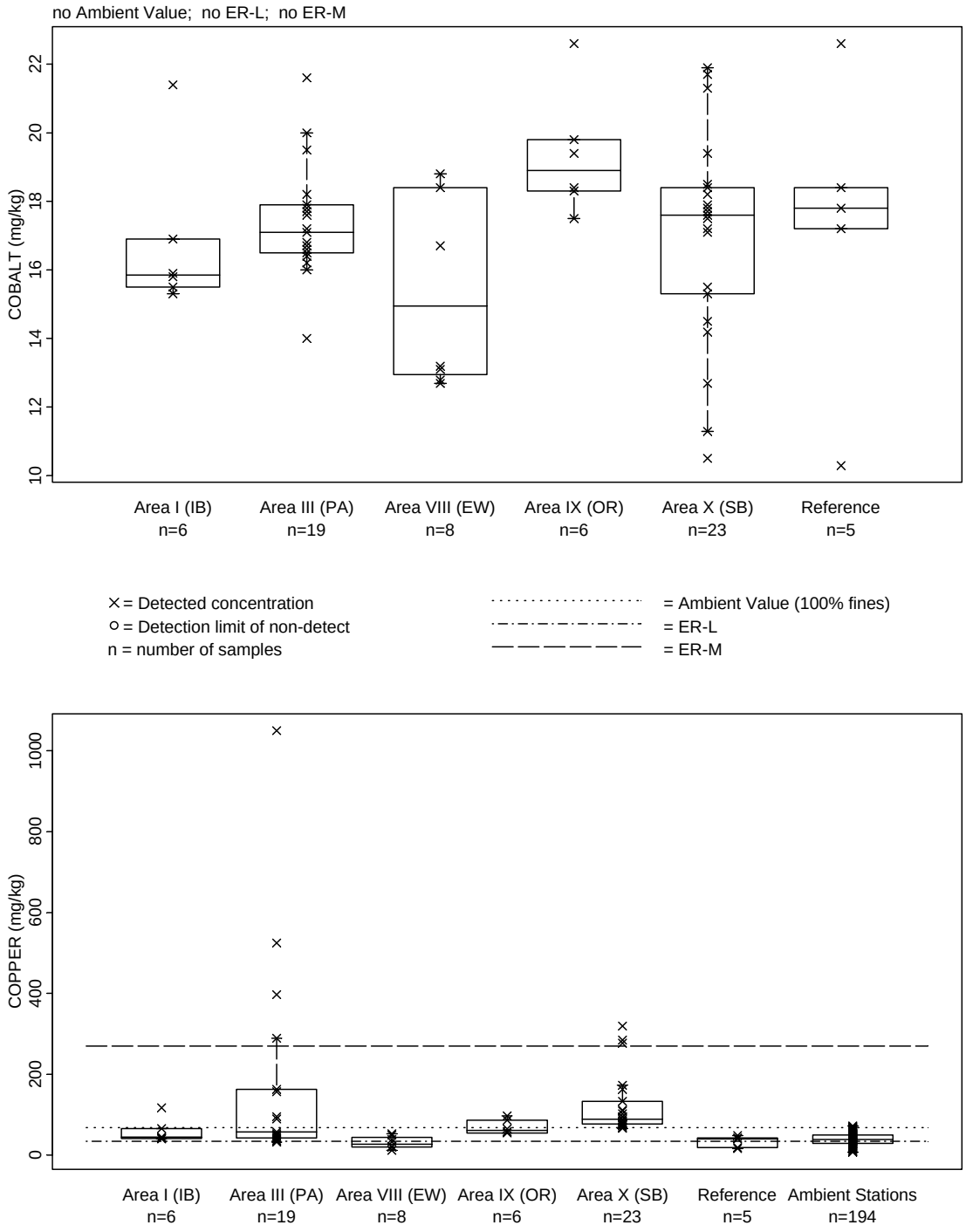

Figure F-5. COPEC concentrations in HPS and Reference sediments: Cobalt and Copper

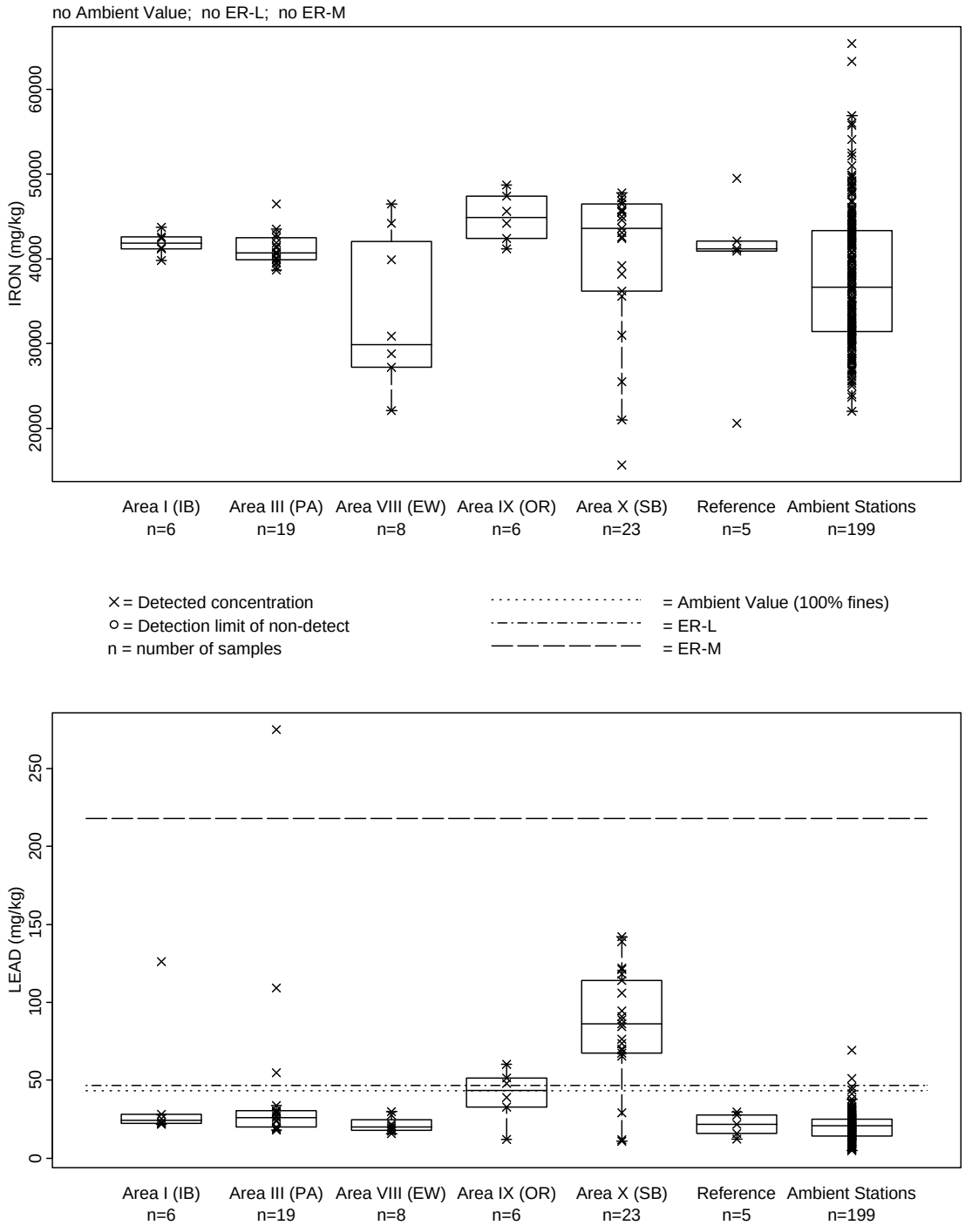

Figure F-6. COPEC concentrations in HPS and Reference sediments: Iron and Lead

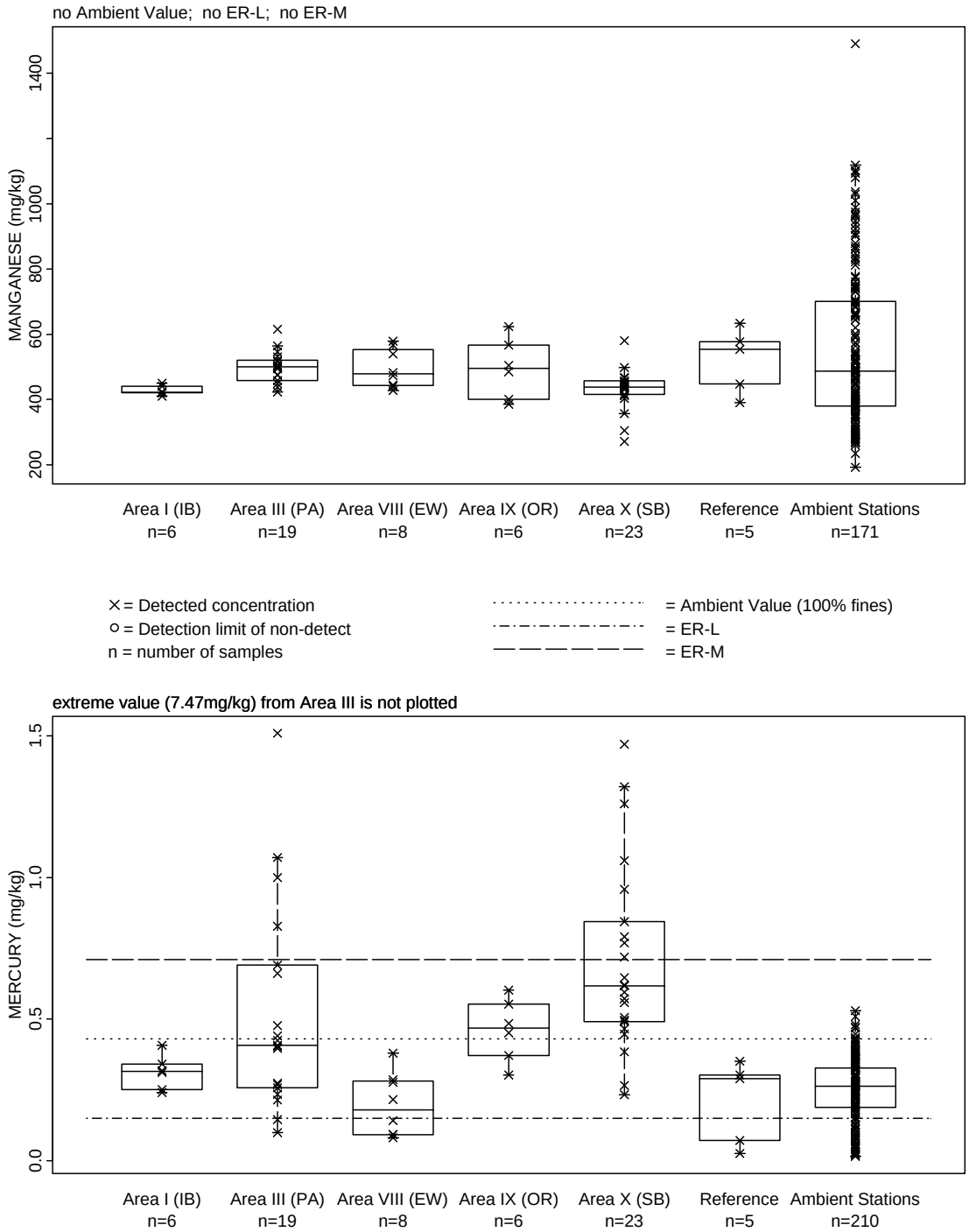

Figure F-7. COPEC concentrations in HPS and Reference sediments: Manganese and Mercury

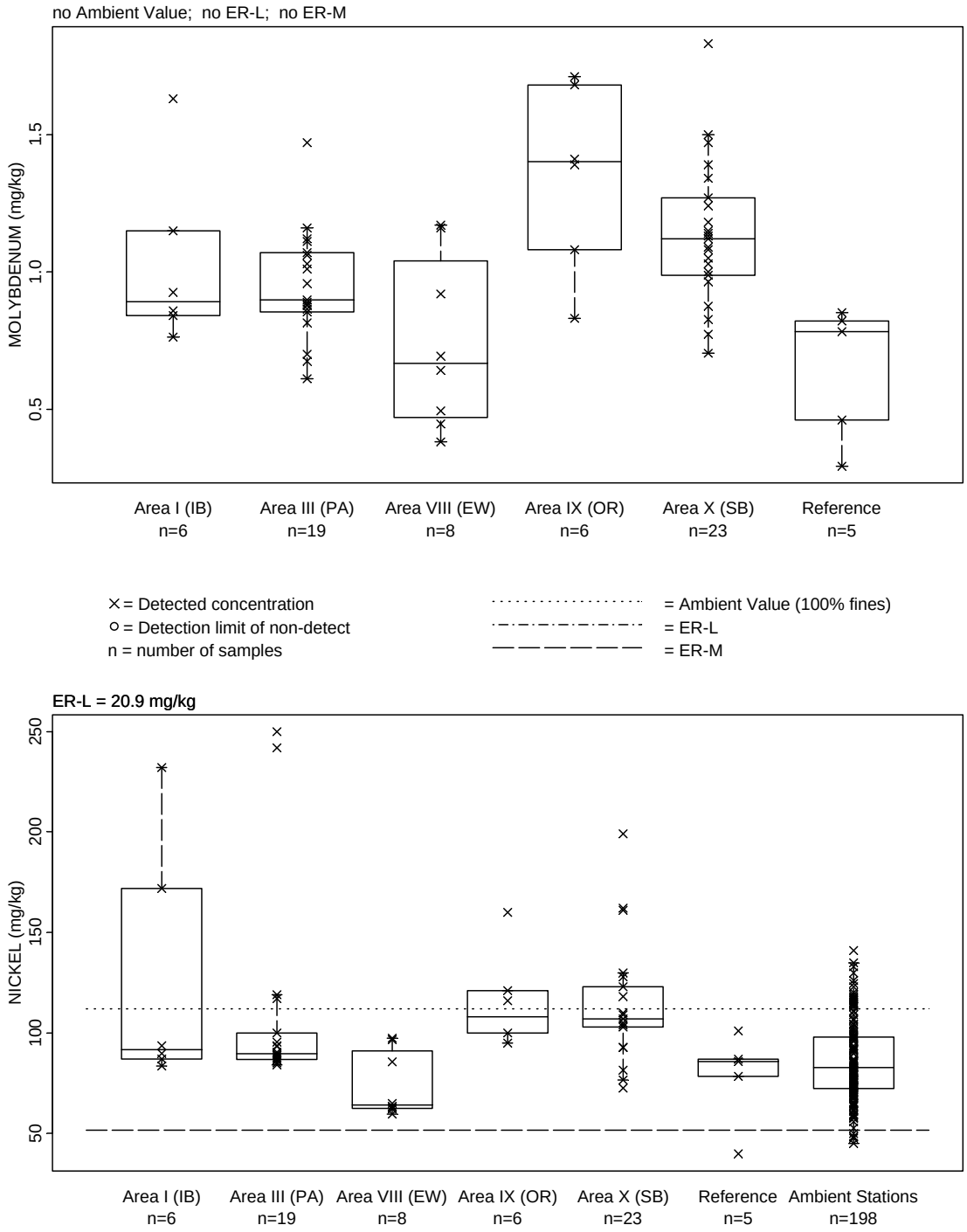

Figure F-8. COPEC concentrations in HPS and Reference sediments: Molybdenum and Nickel

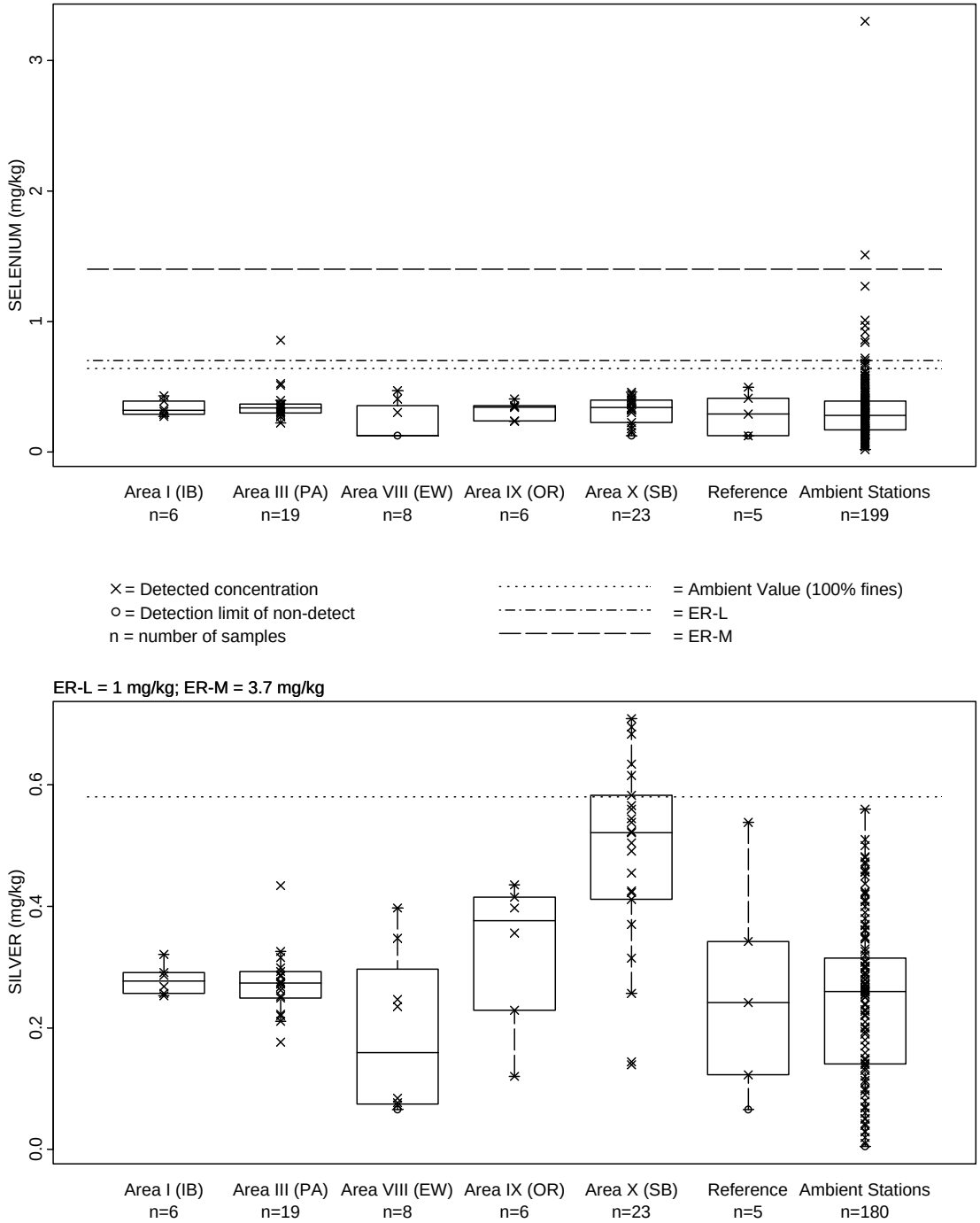

Figure F-9. COPEC concentrations in HPS and Reference sediments: Selenium and Silver

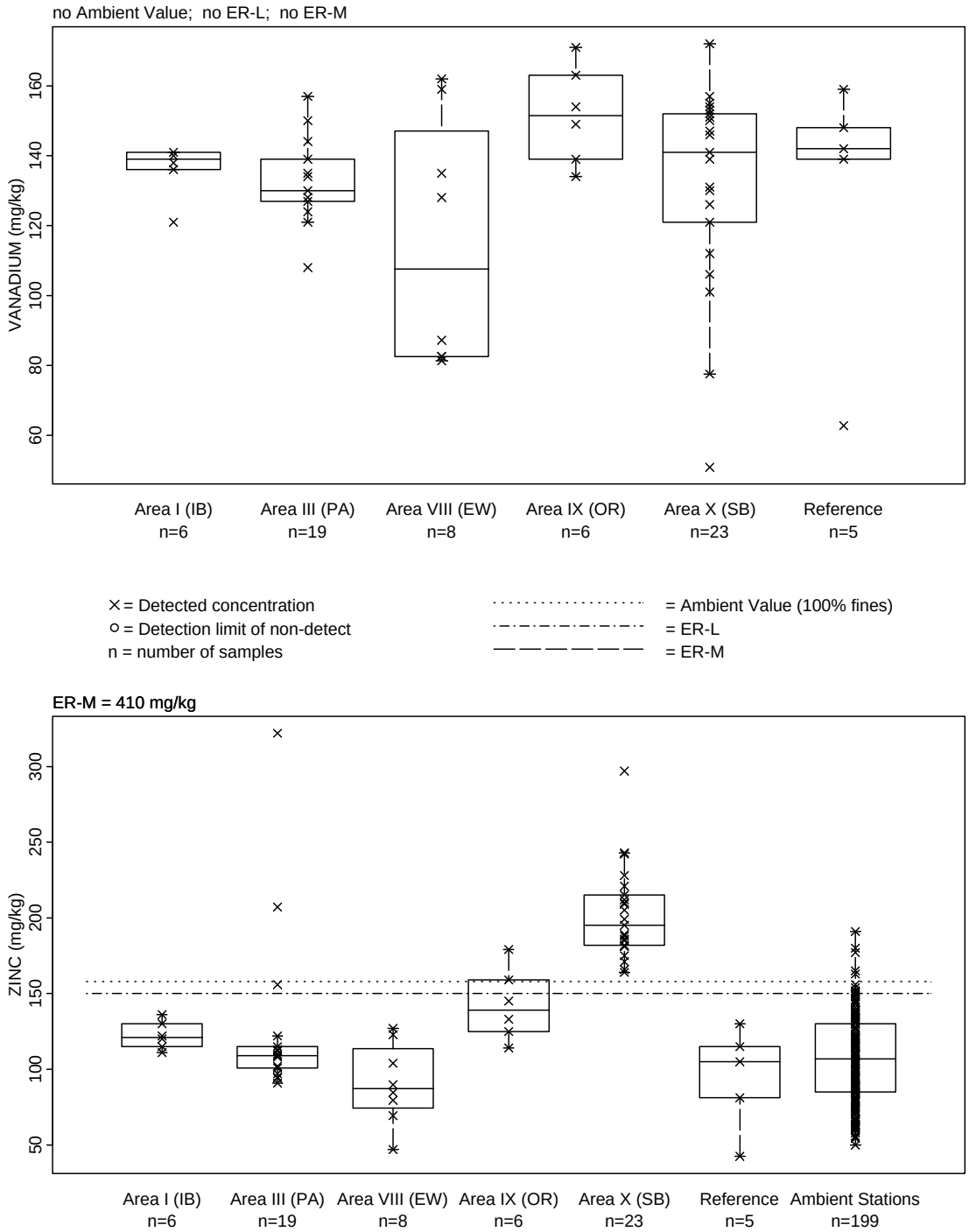

Figure F-10. COPEC concentrations in HPS and Reference sediments: Vanadium and Zinc

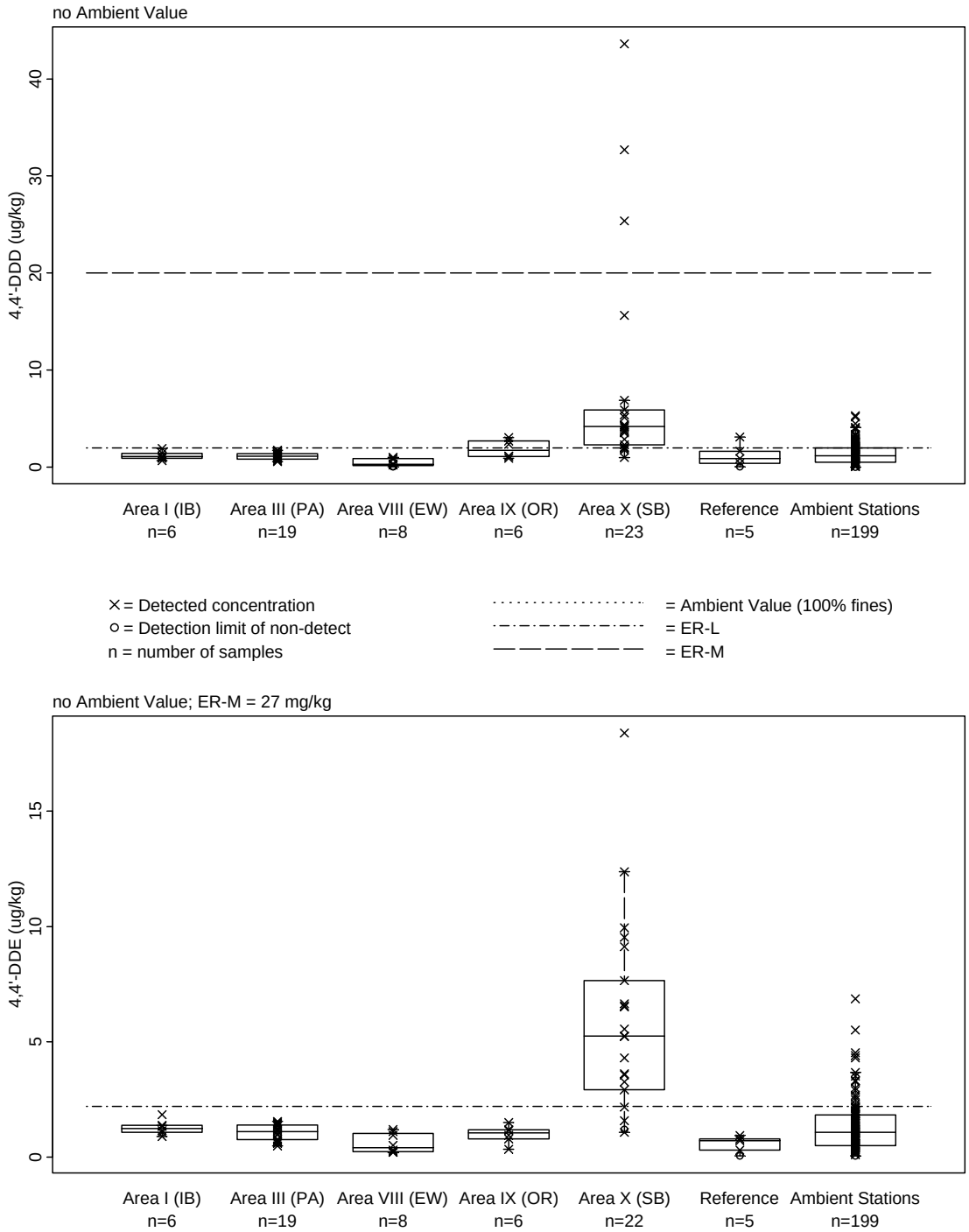

Figure F-11. COPEC concentrations in HPS and Reference sediments: 4,4'-DDD and 4,4'-DDE

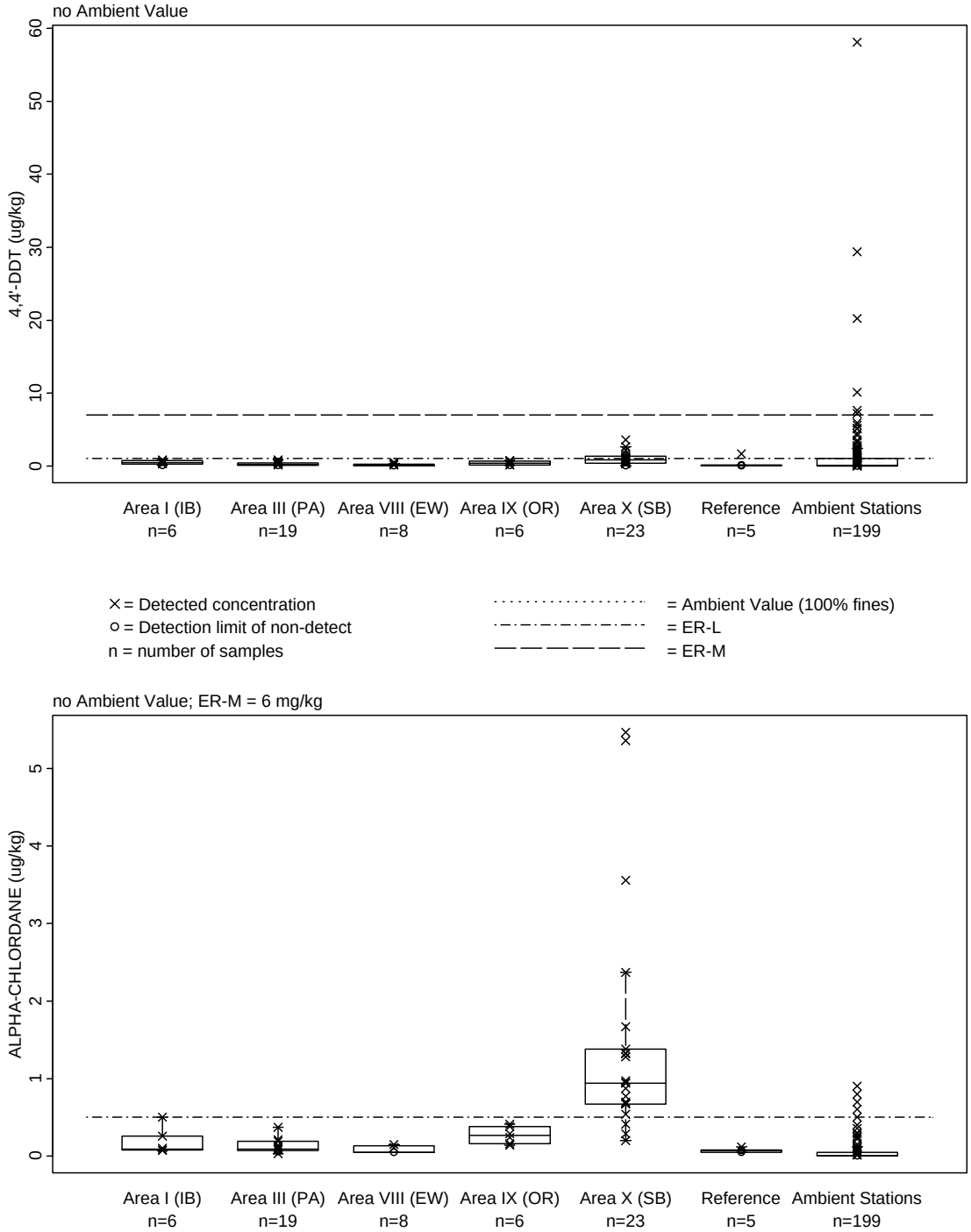

Figure F-12. COPEC concentrations in HPS and Reference sediments: 4,4'-DDT and *alpha*-Chlordane

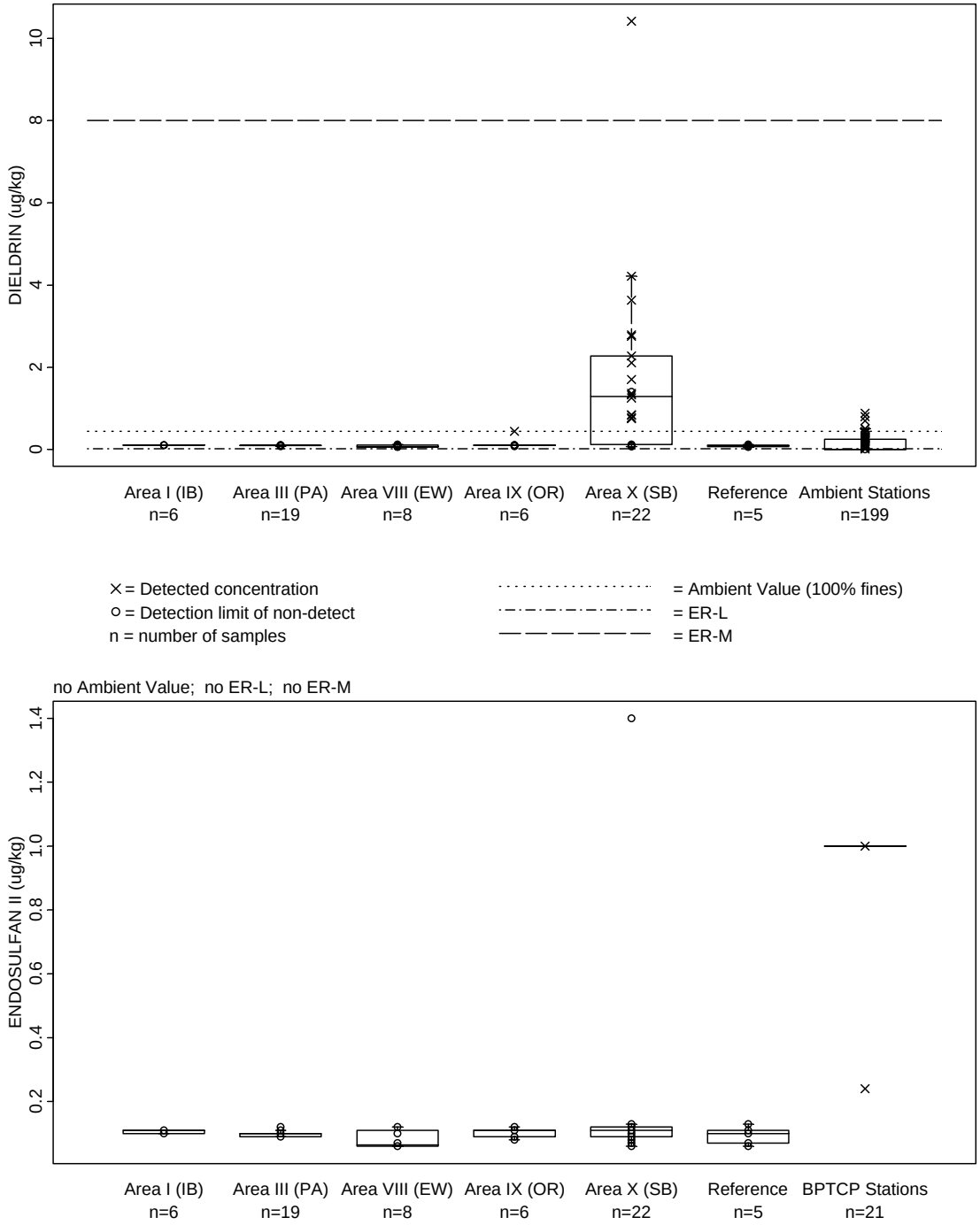

Figure F-13. COPEC concentrations in HPS and Reference sediments: Dieldrin and Endosulfan II

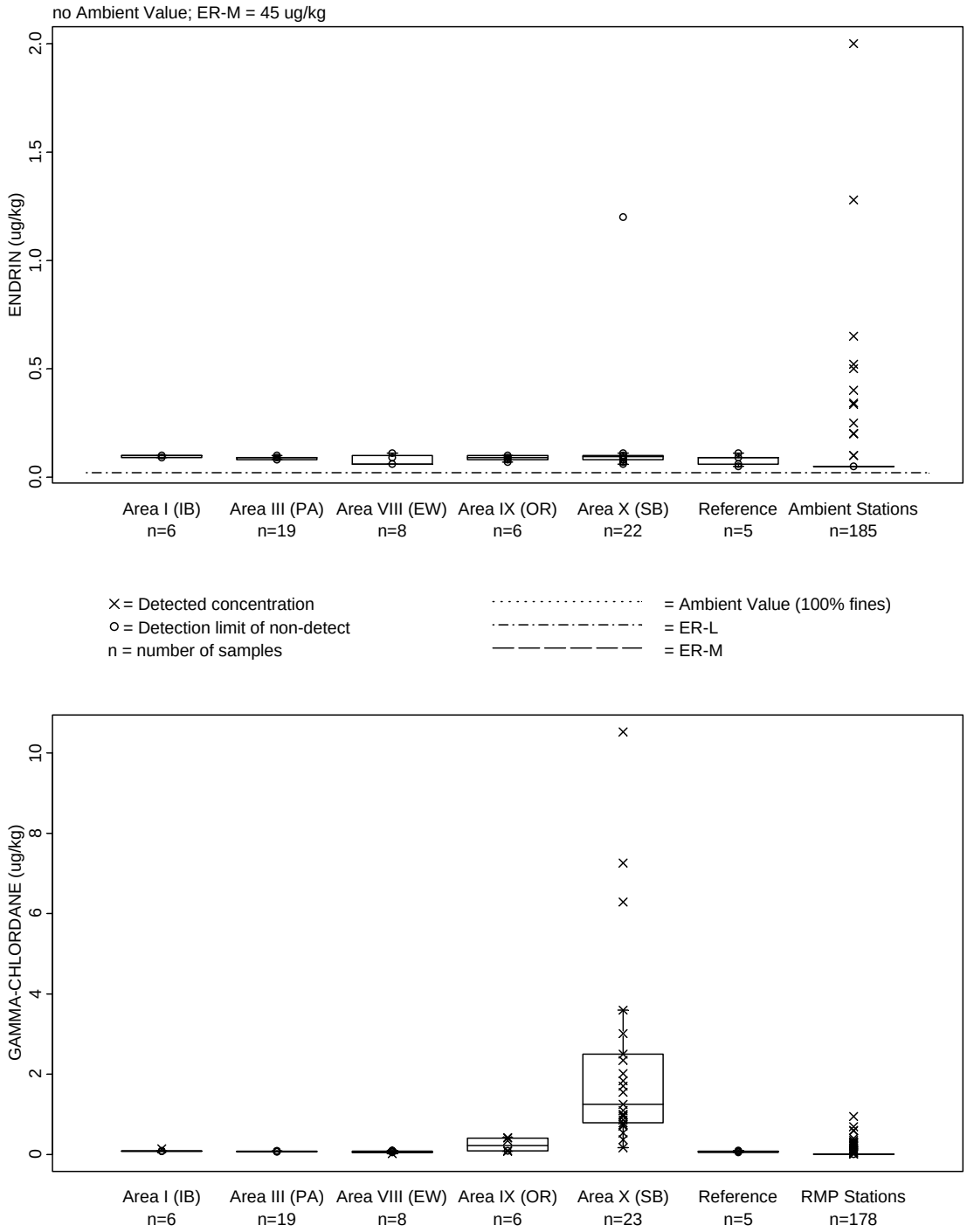

Figure F-14. COPEC concentrations in HPS and Reference sediments: Endrin and *gamma*-Chlordane

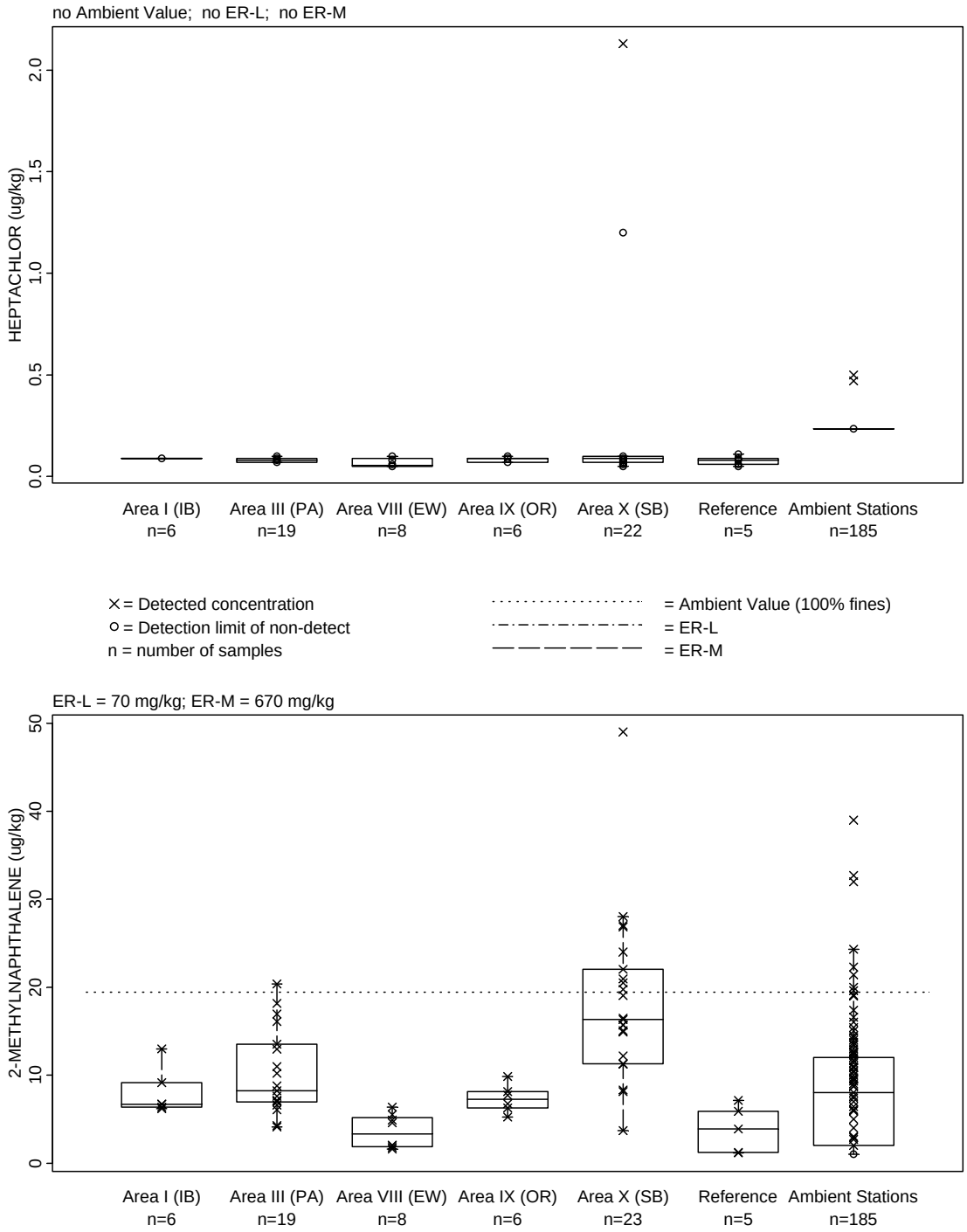

Figure F-15. COPEC concentrations in HPS and Reference sediments: Heptachlor and 2-Methylnaphthalene

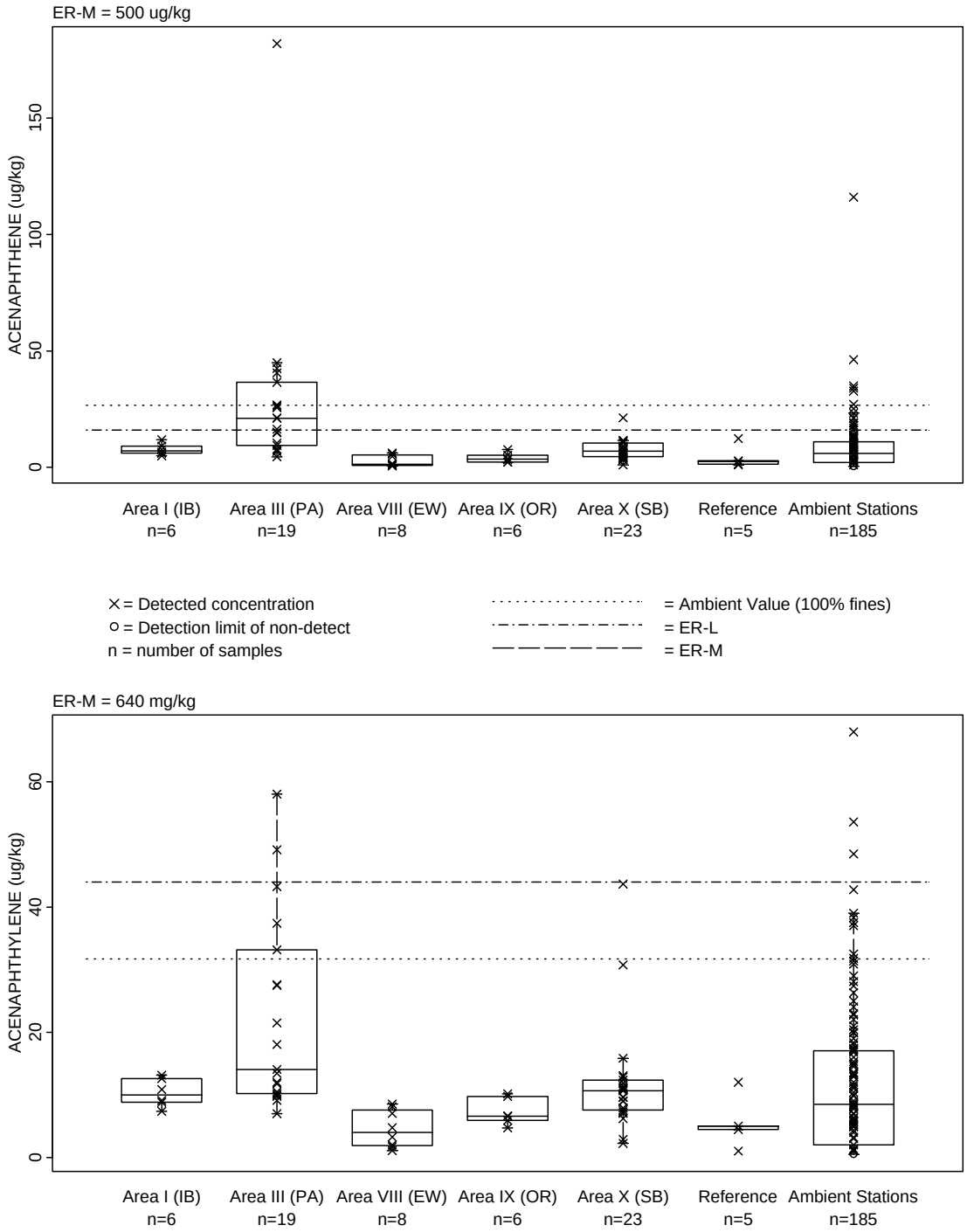

Figure F-16. COPEC concentrations in HPS and Reference sediments: Acenaphthene and Acenaphthylene

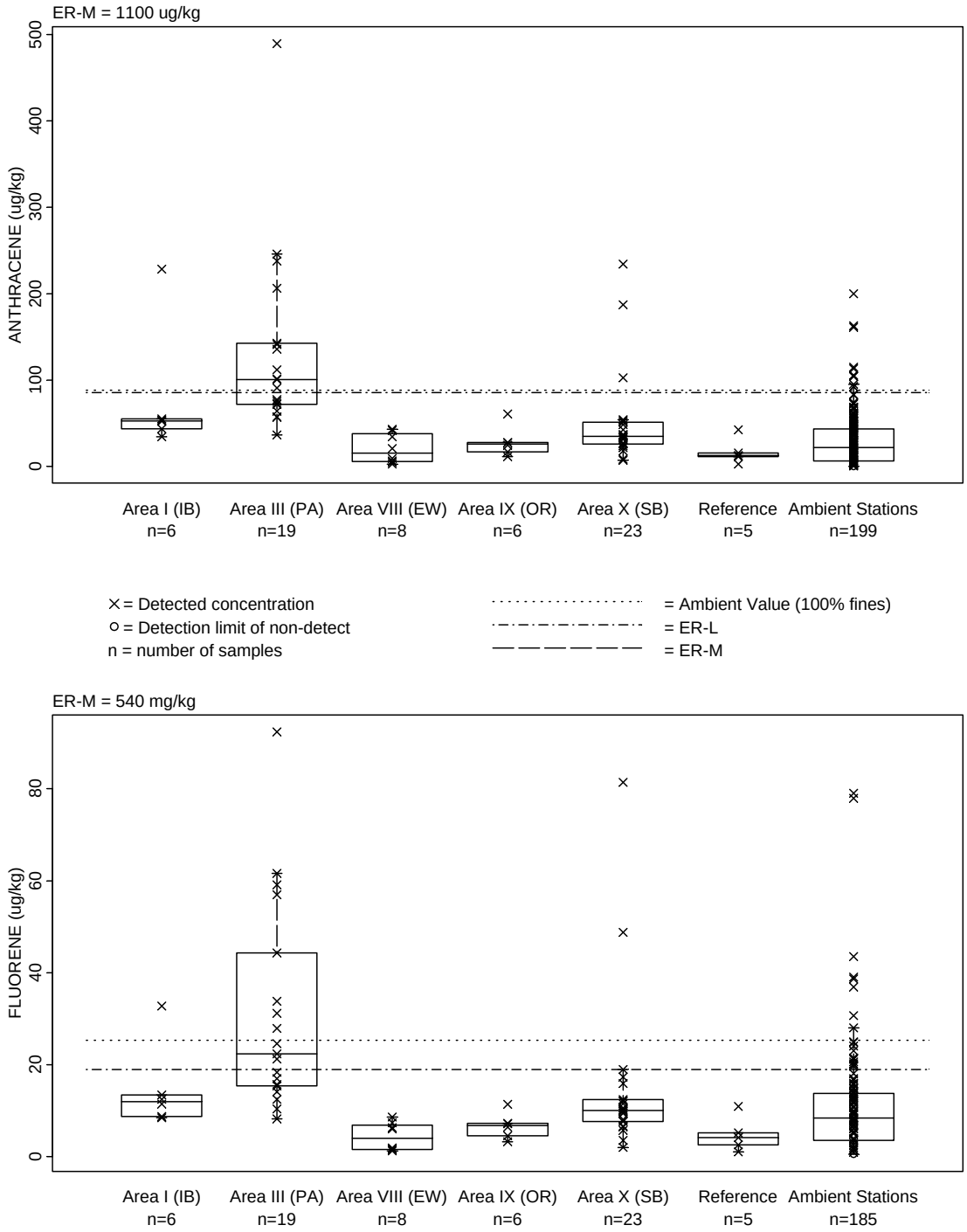

Figure F-17. COPEC concentrations in HPS and Reference sediments: Anthracene and Fluorene

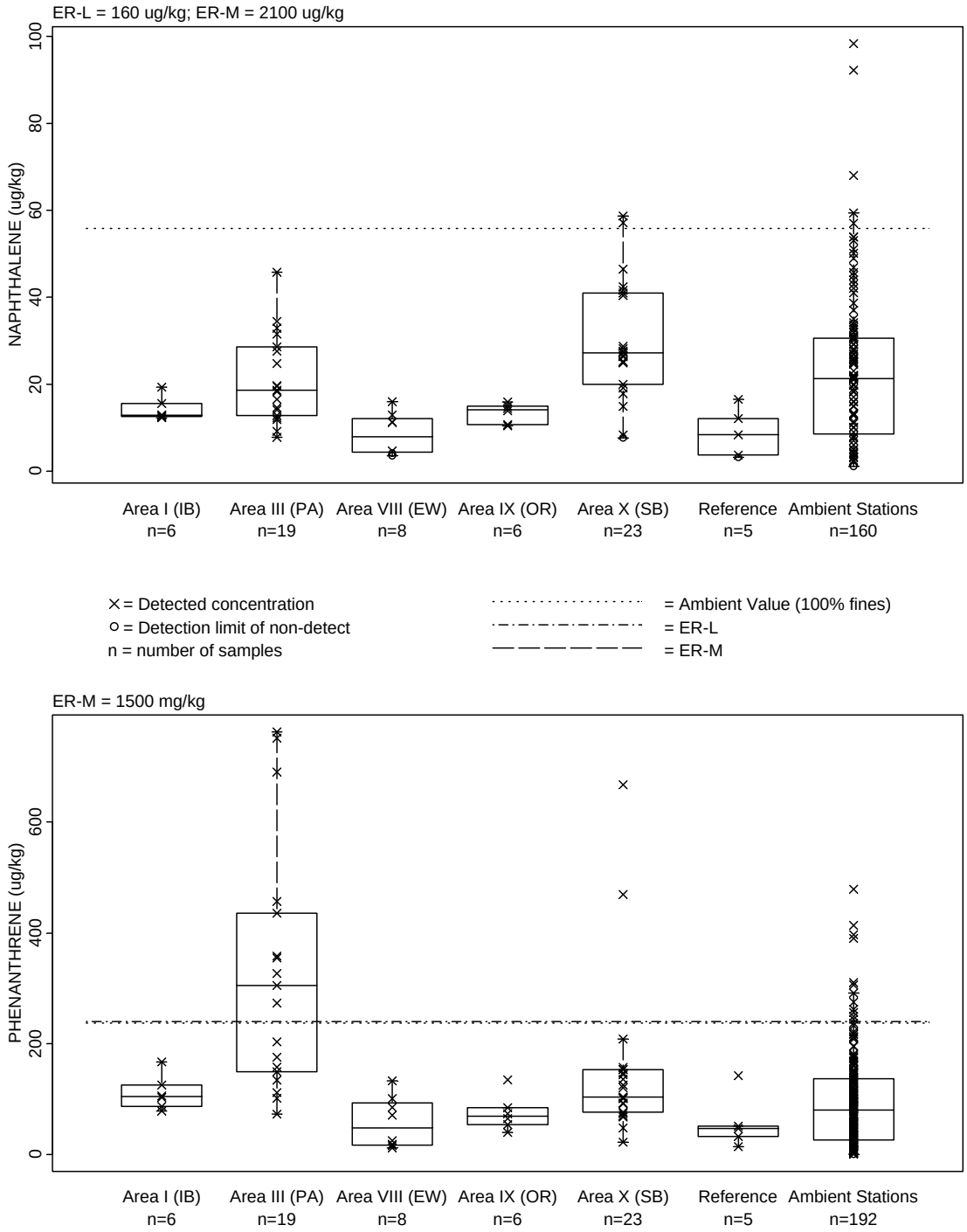

Figure F-18. COPEC concentrations in HPS and Reference sediments: Naphthalene and Phenanthrene

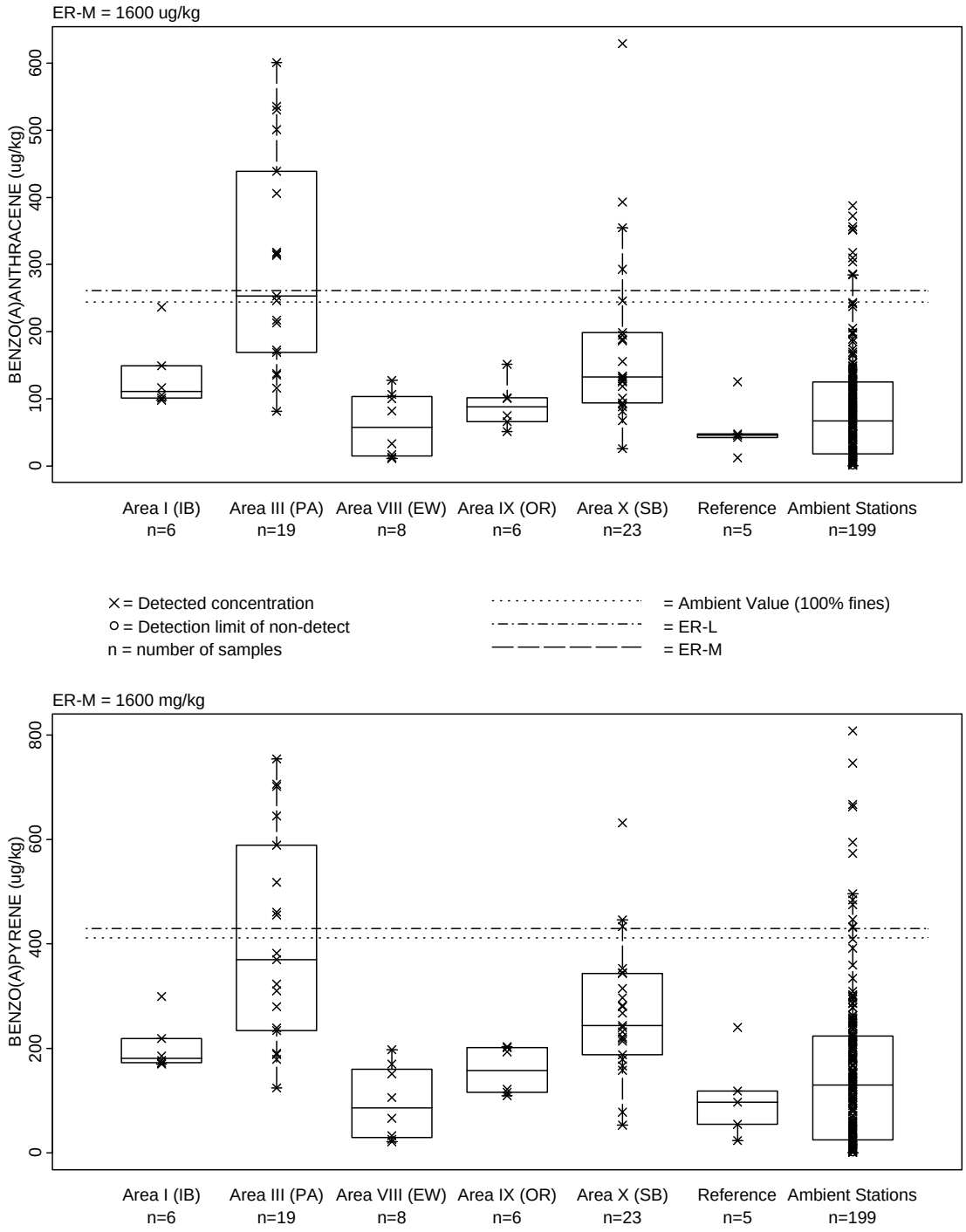

Figure F-19. COPEC concentrations in HPS and Reference sediments: Benzo(a)anthracene and Benzo(a)pyrene

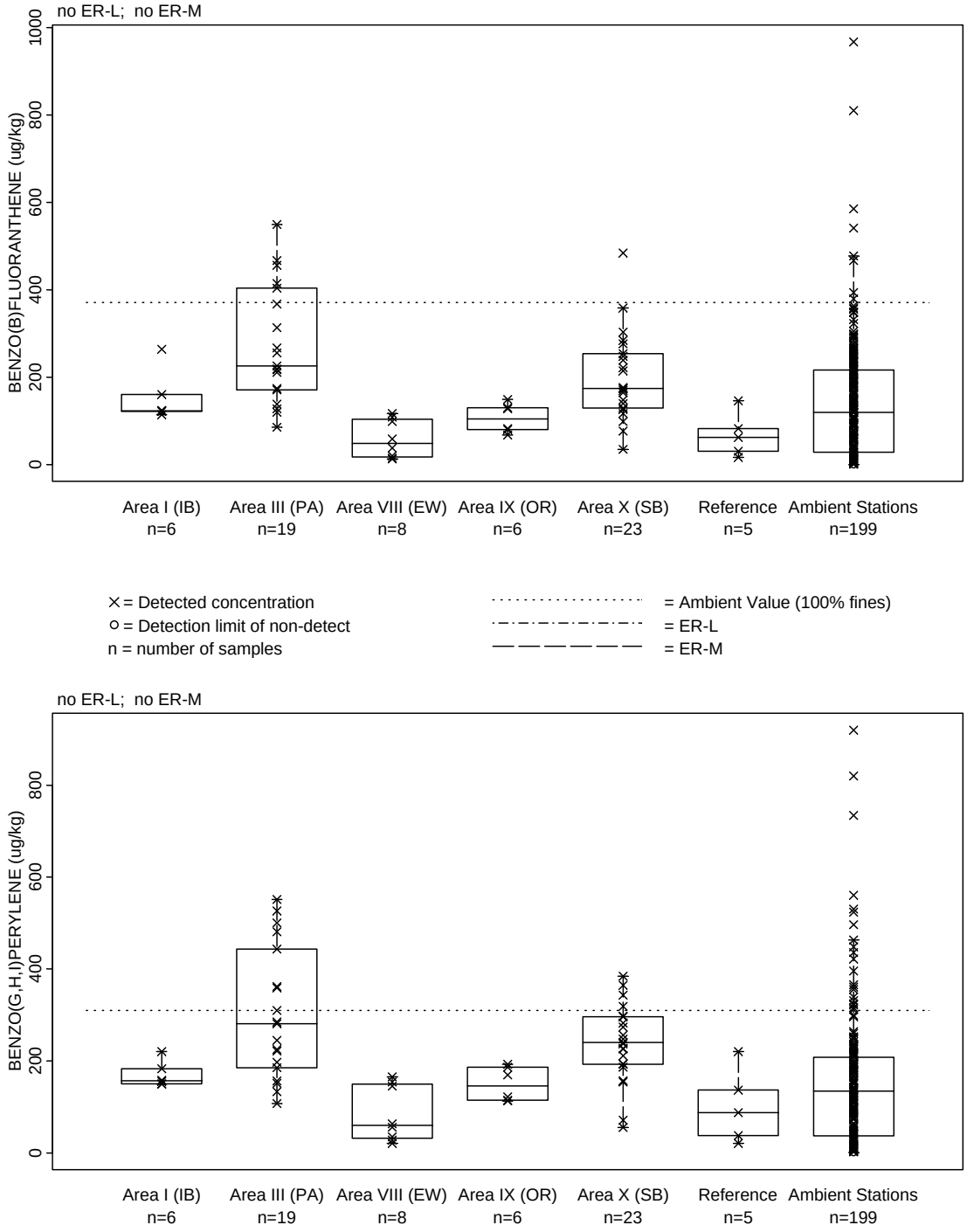

Figure F-20. COPEC concentrations in HPS and Reference sediments: Benzo(b)fluoranthene and Benzo(g,h,i)perylene

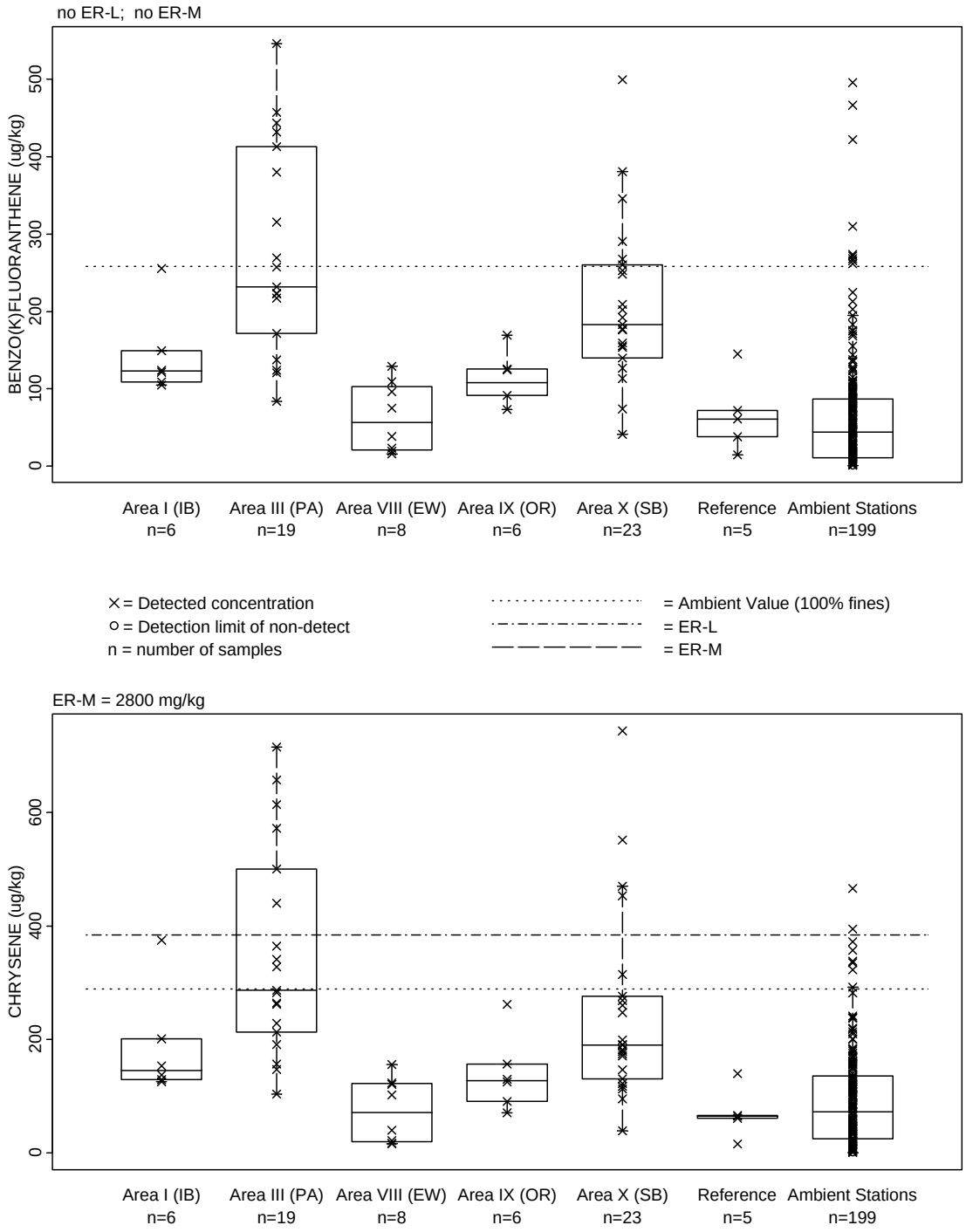

Figure F-21. COPEC concentrations in HPS and Reference sediments: Benzo(k)fluoranthene and Chrysene

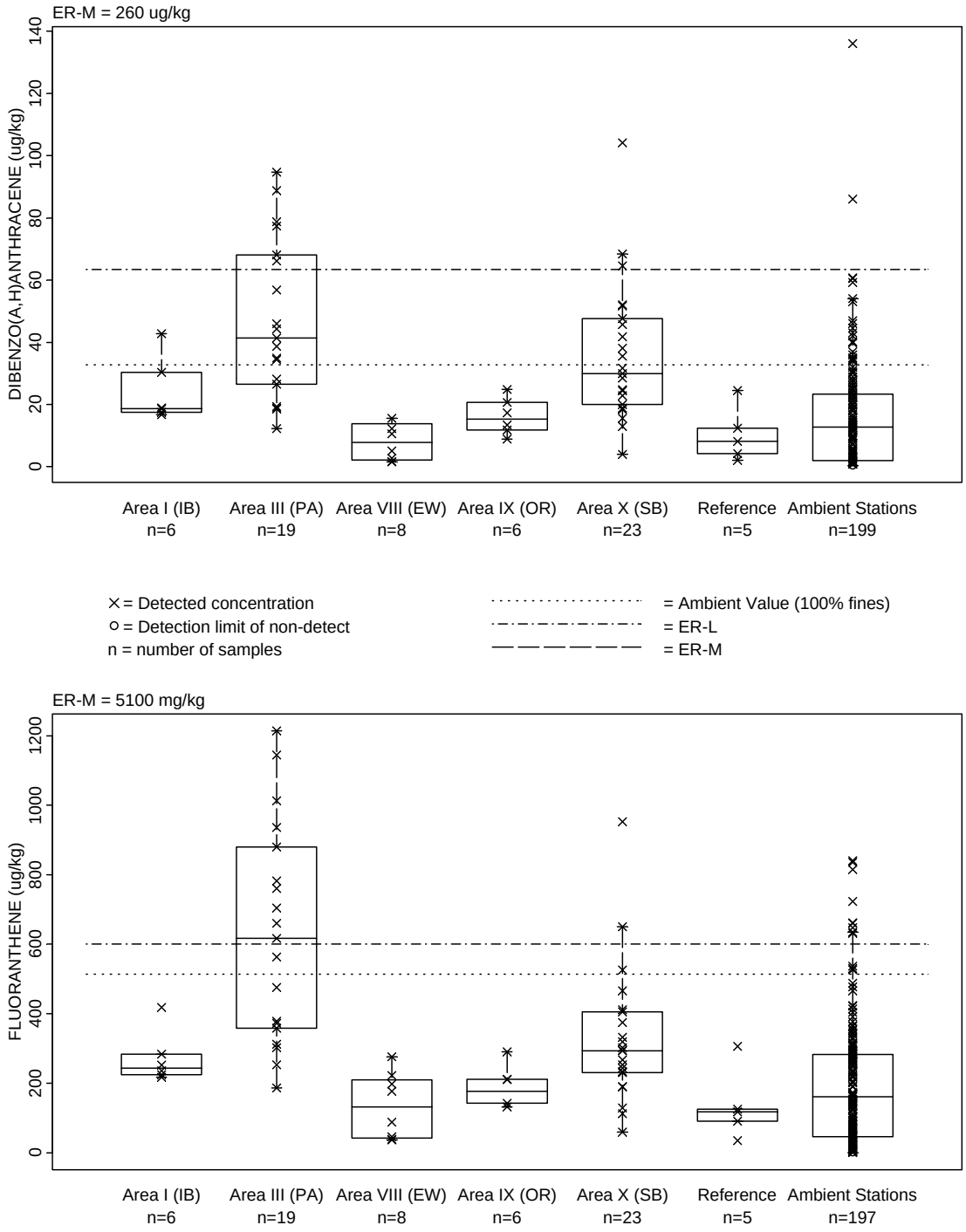

Figure F-22. COPEC concentrations in HPS and Reference sediments: Dibenzo(a,h)anthracene and Fluoranthene

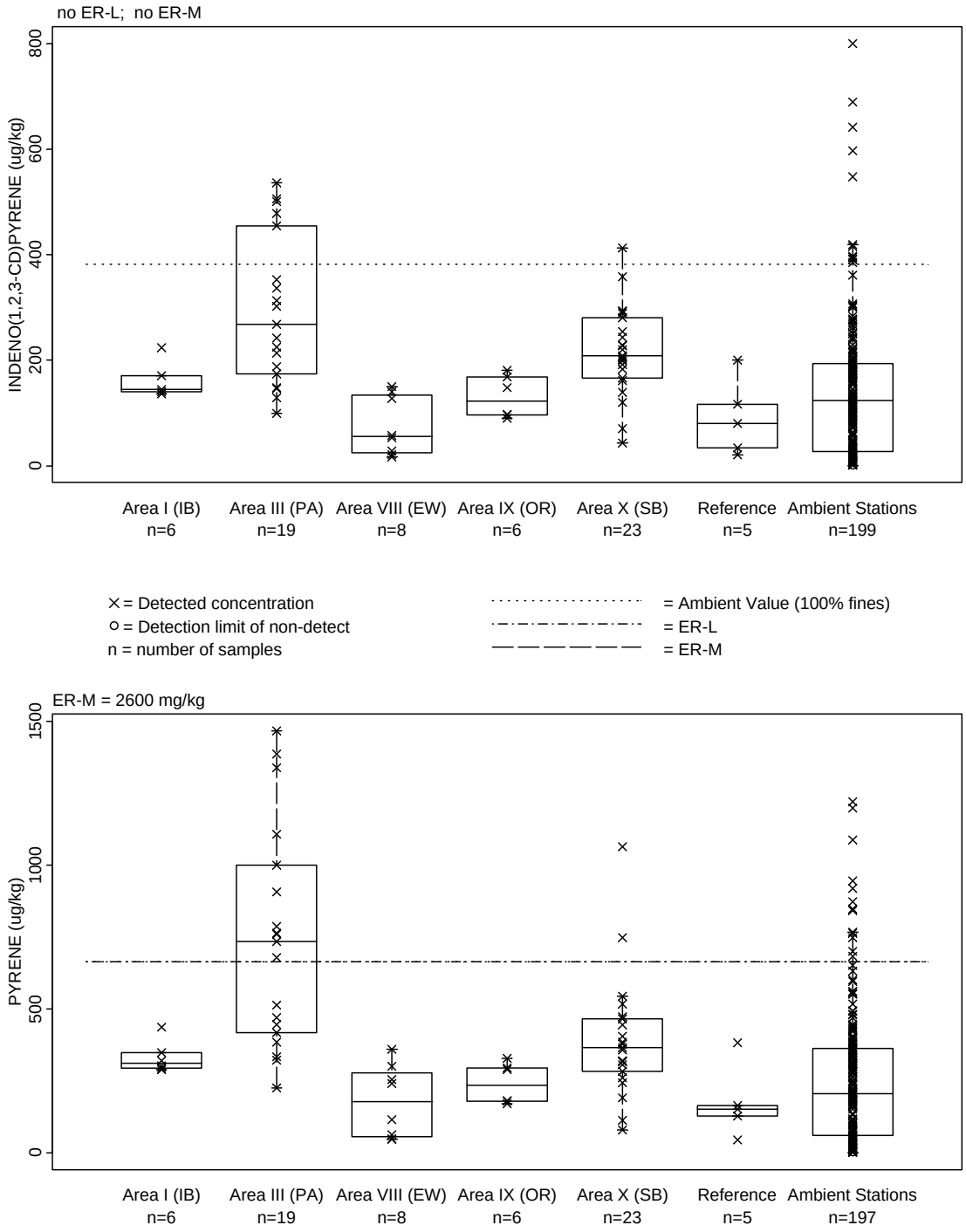

Figure F-23. COPEC concentrations in HPS and Reference sediments: Indeno(1,2,3-cd)pyrene and Pyrene

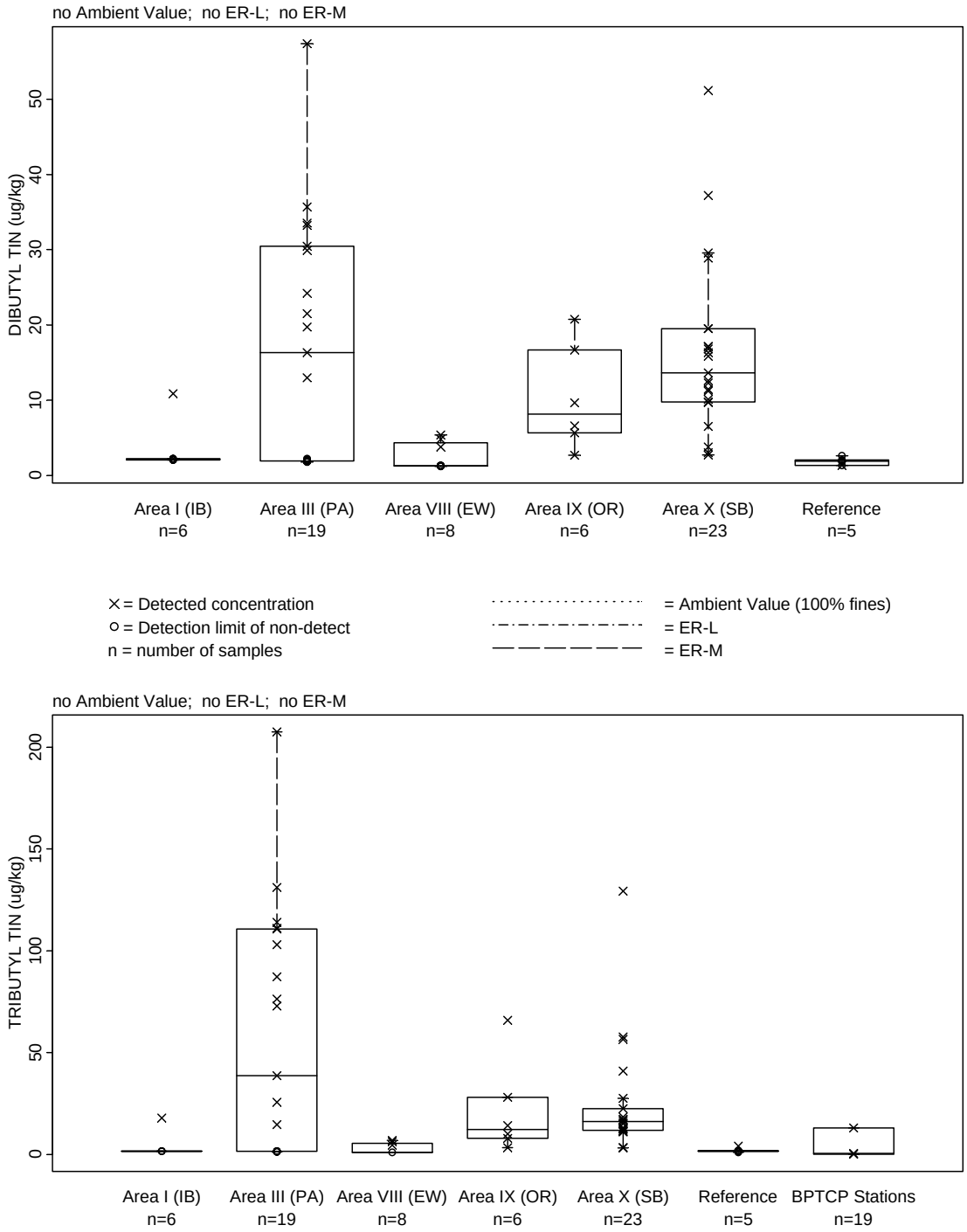

Figure F-24. COPEC concentrations in HPS and Reference sediments: Dibutyltin and Tributyltin

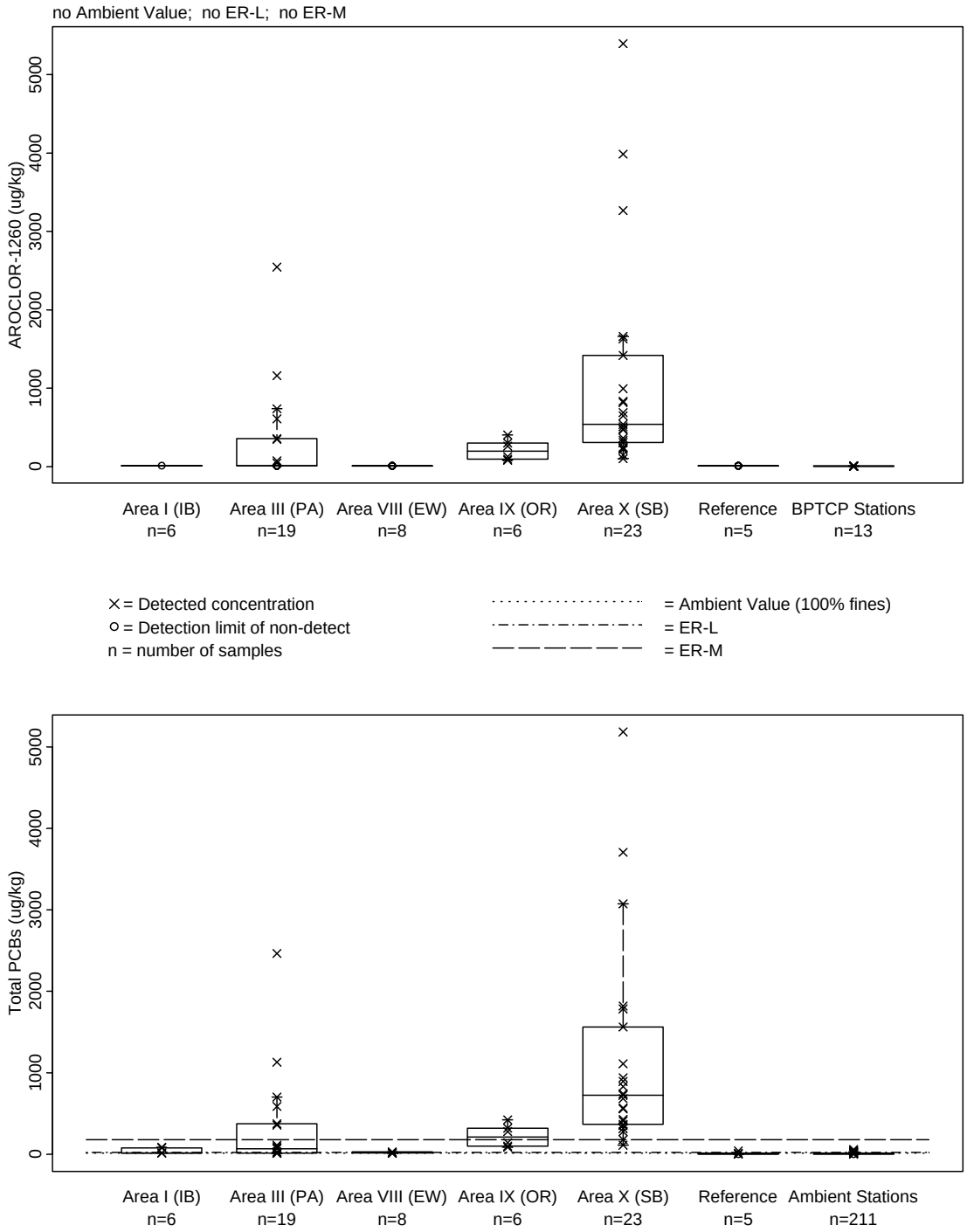

Figure F-25. COPEC concentrations in HPS and Reference sediments: Aroclor 1260 and Total PCBs (two times the sum of 22 congeners)

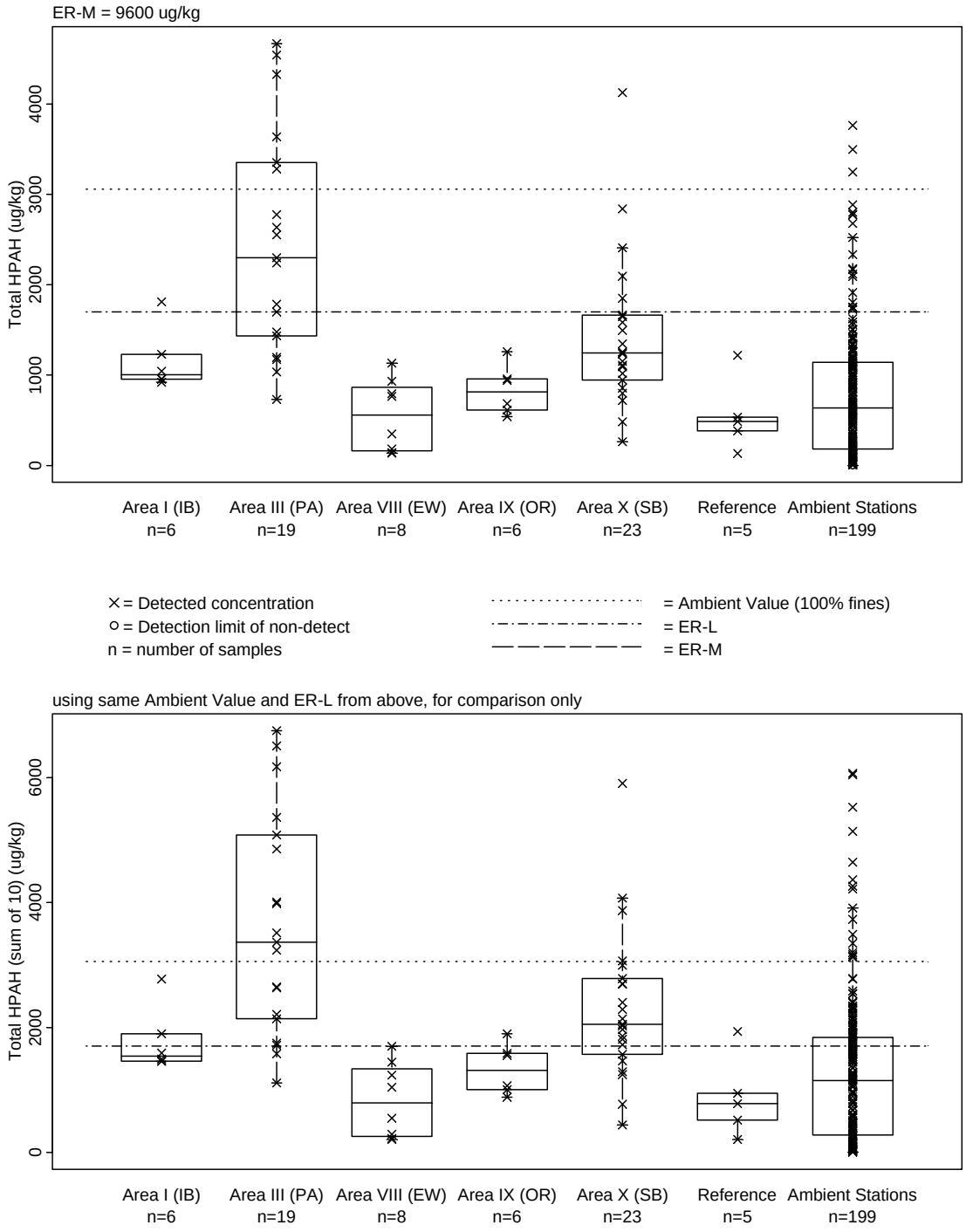

Figure F-26. COPEC concentrations in HPS and Reference sediments: Total HPAH (Long Definition, sum of 6 constituents) and Total HPAH (sum of 10 constituents)

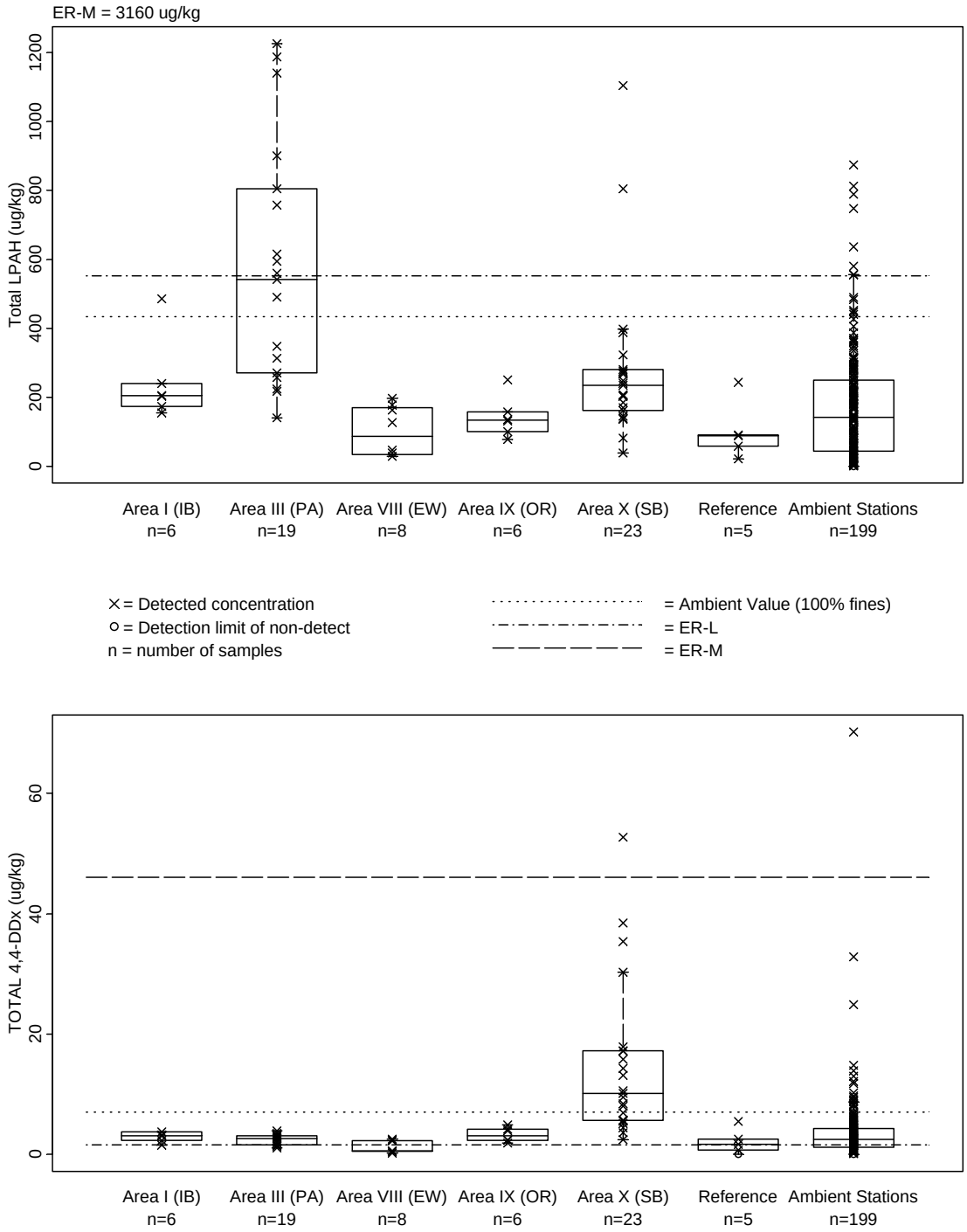

Figure F-27. COPEC concentrations in HPS and Reference sediments: Total LPAH (sum of 7 constituents) and Total 4,4'-DDx

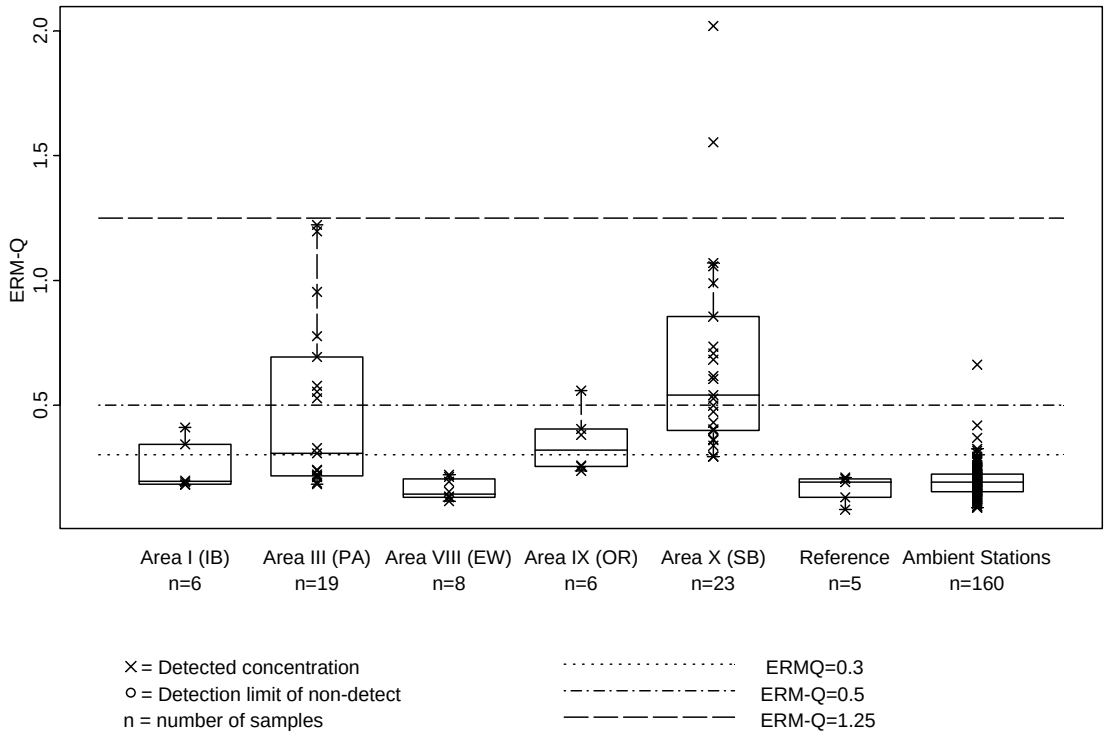

Figure F-28. ERM-Q results from HPS and Reference sediment concentrations

Table F-1. Statistical Summary of Surface Sediment Sample Data for Area I (India Basin)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	6	6	11.65	12.83	0	-	-	-	-	-	-
Aroclor-1221	6	6	11.65	12.83	0	-	-	-	-	-	-
Aroclor-1232	6	6	11.65	12.83	0	-	-	-	-	-	-
Aroclor-1242	6	6	11.65	12.83	0	-	-	-	-	-	-
Aroclor-1248	6	6	11.65	12.83	0	-	-	-	-	-	-
Aroclor-1254	6	6	11.65	12.83	0	-	-	-	-	-	-
Aroclor-1260	6	6	11.65	12.83	0	-	-	-	-	-	-
PCB101	6	0	-	-	6	0.42	1.103	0.715	2.75	0.9047	IB-55
PCB105	6	0	-	-	6	0.17	0.3817	0.23	0.79	0.2848	IB-55
PCB110	6	0	-	-	6	0.62	1.467	0.825	3.38	1.142	IB-55
PCB118	6	0	-	-	6	0.4	0.8583	0.58	1.92	0.5885	IB-55
PCB126	6	6	0.15	0.17	0	-	-	-	-	-	-
PCB128	6	4	0.2	0.22	2	0.34	0.455	0.455	0.57	0.1626	IB-55
PCB129	6	6	0.09	0.09	0	-	-	-	-	-	-
PCB138	6	0	-	-	6	0.86	2.595	1.165	6.12	2.413	IB-55
PCB153	6	0	-	-	6	1.08	3.932	1.465	9.81	4.045	IB-55
PCB170	6	0	-	-	6	0.12	1.157	0.385	3.15	1.353	IB-59
PCB18	6	3	0.08	0.09	3	0.08	0.13	0.14	0.17	0.04583	IB-55
PCB180	6	0	-	-	6	0.95	2.728	1.17	6.37	2.583	IB-59
PCB187	6	0	-	-	6	0.47	1.752	0.615	4.17	1.839	IB-59
PCB195	6	0	-	-	6	0.1	0.3183	0.145	0.71	0.2963	IB-59
PCB206	6	1	0.09	0.09	5	0.13	0.474	0.29	0.97	0.3653	IB-59
PCB209	6	1	0.1	0.1	5	0.24	1.192	0.62	3.05	1.192	IB-55
PCB28	6	0	-	-	6	0.12	0.1933	0.19	0.3	0.07118	IB-59
PCB44	6	0	-	-	6	0.1	0.2467	0.165	0.6	0.1897	IB-55
PCB52	6	0	-	-	6	0.24	0.485	0.345	1.08	0.3206	IB-55
PCB66	6	3	0.12	0.14	3	0.17	0.2033	0.19	0.25	0.04163	IB-55
PCB77	6	6	0.17	0.19	0	-	-	-	-	-	-
PCB8	6	6	0.17	0.19	0	-	-	-	-	-	-
2,4'-DDD	6	6	0.11	0.12	0	-	-	-	-	-	-
2,4'-DDE	6	6	0.14	0.15	0	-	-	-	-	-	-
2,4'-DDT	6	6	0.13	0.14	0	-	-	-	-	-	-
4,4'-DDD	6	0	-	-	6	0.66	1.187	1.1	1.92	0.4441	IB-55
4,4'-DDE	6	0	-	-	6	0.89	1.273	1.24	1.84	0.329	IB-59
4,4'-DDT	6	1	0.1	0.1	5	0.28	0.556	0.49	0.83	0.2286	IB-56
Diesel Range Organics	6	0	-	-	6	22	45	44.5	81	21.69	IB-55

Table F-1. Statistical Summary of Surface Sediment Sample Data for Area I (India Basin) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	6	0	-	-	6	63500	69220	70750	72500	3506	IB-54
Antimony	6	0	-	-	6	0.7	0.909	0.859	1.24	0.2112	IB-59
Arsenic	6	0	-	-	6	9.69	10.5	10.45	11.4	0.5824	IB-59
Barium	6	0	-	-	6	438	469.3	460.5	533	32.79	IB-55
Cadmium	6	0	-	-	6	0.2	0.2252	0.223	0.264	0.02451	IB-55
Chromium	6	0	-	-	6	156	205.8	163	319	70.77	IB-55
Cobalt	6	0	-	-	6	15.3	16.8	15.85	21.4	2.32	IB-59
Copper	6	0	-	-	6	40	58.85	44.5	117	30	IB-59
Iron	6	0	-	-	6	39800	41830	41850	43700	1357	IB-59
Lead	6	0	-	-	6	21.6	41.12	24.25	126	41.65	IB-55
Manganese	6	0	-	-	6	411	428	422.5	450	14.53	IB-59
Mercury	6	0	-	-	6	0.241	0.3115	0.315	0.407	0.061	IB-55
Molybdenum	6	0	-	-	6	0.763	1.028	0.8915	1.63	0.3231	IB-56
Nickel	6	0	-	-	6	83.6	126.4	91.7	232	61.68	IB-59
Selenium	6	0	-	-	6	0.273	0.3368	0.3195	0.43	0.06102	IB-59
Silver	6	0	-	-	6	0.253	0.2793	0.277	0.321	0.02545	IB-59
Vanadium	6	0	-	-	6	121	136.2	139	141	7.679	IB-59
Zinc	6	0	-	-	6	111	122.3	121	136	9.309	IB-59
Benzo(a)anthracene	6	0	-	-	6	97.76	134.3	110.9	236.4	53.4	IB-59
Benzo(a)pyrene	6	0	-	-	6	170.2	203.9	181.1	299.1	49.92	IB-59
Benzo(b)fluoranthene	6	0	-	-	6	114.2	151.5	123.8	264.6	57.71	IB-59
Benzo(g,h,i)perylene	6	0	-	-	6	149.9	169.9	157.2	220.9	27.86	IB-59
Benzo(k)fluoranthene	6	0	-	-	6	104.5	143.9	122.8	255.4	56.8	IB-59
Chrysene	6	0	-	-	6	125.8	186.9	145.5	375.2	96.19	IB-59
Dibenzo(a,h)anthracene	6	0	-	-	6	16.74	24.14	18.71	42.79	10.43	IB-59
Fluoranthene	6	0	-	-	6	217.5	272.2	243.7	418.9	75.67	IB-59
Indeno(1,2,3-cd)pyrene	6	0	-	-	6	136.4	160.3	144.9	223.8	33.44	IB-59
Pyrene	6	0	-	-	6	288.6	331.7	311.3	436.7	55.71	IB-59
2-Methylnaphthalene	6	0	-	-	6	6.17	8.003	6.69	12.98	2.666	IB-59
Acenaphthene	6	0	-	-	6	4.92	7.682	7.08	11.82	2.473	IB-59
Acenaphthylene	6	0	-	-	6	7.36	10.32	9.985	13.18	2.291	IB-59
Anthracene	6	0	-	-	6	34.47	77.88	52.86	228.2	74.06	IB-59
Fluorene	6	0	-	-	6	8.45	14.55	11.97	32.71	9.117	IB-59
Naphthalene	6	0	-	-	6	12.24	14.22	12.86	19.27	2.753	IB-59
Phenanthrene	6	0	-	-	6	78.77	111.1	104.3	167.2	31.85	IB-59

Table F-1. Statistical Summary of Surface Sediment Sample Data for Area I (India Basin) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	6	0	-	-	6	0.07	0.1817	0.09	0.5	0.1716	IB-55
Dieldrin	6	6	0.1	0.11	0	-	-	-	-	-	-
Endosulfan II	6	6	0.1	0.11	0	-	-	-	-	-	-
Endrin	6	6	0.09	0.1	0	-	-	-	-	-	-
Gamma-chlordane	6	5	0.08	0.09	1	0.14	0.14	0.14	0.14	-	IB-59
Heptachlor	6	6	0.09	0.09	0	-	-	-	-	-	-
Dibutyltin	6	5	2.029	2.227	1	10.86	10.86	10.86	10.86	-	IB-59
Monobutyltin	6	6	1.073	1.178	0	-	-	-	-	-	-
Tetrabutyltin	6	6	2.543	2.791	0	-	-	-	-	-	-
Tributyltin	6	5	1.446	1.587	1	17.73	17.73	17.73	17.73	0	IB-59
Total organic carbon	6	0	-	-	6	9640	11570	11150	14100	1661	IB-59

Table F-2. Statistical Summary of Surface Sediment Sample Data for Area III (Point Avisadero)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	19	19	9.67	13.2	0	-	-	-	-	-	-
Aroclor-1221	19	19	9.67	13.2	0	-	-	-	-	-	-
Aroclor-1232	19	19	9.67	13.2	0	-	-	-	-	-	-
Aroclor-1242	19	19	9.67	13.2	0	-	-	-	-	-	-
Aroclor-1248	19	19	9.67	13.2	0	-	-	-	-	-	-
Aroclor-1254	19	18	9.67	13.2	1	79.12	79.12	79.12	79.12	0	PA-53
Aroclor-1260	19	11	10.11	13.2	8	47.22	482.2	734.8	2544	816.9	PA-45
PCB101	19	0	-	-	19	0.45	3.38	9.857	70.14	16.68	PA-45
PCB105	19	4	0.08	0.09	15	0.14	0.25	0.5787	2.06	0.6401	PA-53
PCB110	19	0	-	-	19	0.55	1.65	5.083	33.21	7.791	PA-45
PCB118	19	0	-	-	19	0.33	1.15	3.074	17.79	4.273	PA-45
PCB126	19	19	0.12	0.17	0	-	-	-	-	-	-
PCB128	19	8	0.17	0.22	11	0.31	1.54	3.25	15.09	4.417	PA-45
PCB129	19	18	0.07	0.1	1	4.2	4.2	4.2	4.2	0	PA-45
PCB138	19	0	-	-	19	0.35	3.06	27.14	226.6	55.04	PA-45
PCB153	19	0	-	-	19	0.96	6.1	39.85	310.7	77.14	PA-45
PCB170	19	0	-	-	19	0.09	1.39	16.58	133.3	32.62	PA-45
PCB18	19	4	0.07	0.07	15	0.05	0.21	0.3927	1.4	0.4231	PA-39
PCB180	19	1	0.1	0.1	18	0.84	2.675	33.41	257.4	64.34	PA-45
PCB187	19	0	-	-	19	0.44	1.52	15.89	122.5	30.37	PA-45
PCB195	19	3	0.08	0.08	16	0.08	0.57	3.329	22.22	5.824	PA-45
PCB206	19	5	0.08	0.09	14	0.12	0.725	1.896	8.66	2.632	PA-45
PCB209	19	11	0.08	0.11	8	0.15	0.545	0.63	1.44	0.4153	PA-42
PCB28	19	1	0.1	0.1	18	0.11	0.245	0.4694	1.77	0.4419	PA-39
PCB44	19	3	0.09	0.12	16	0.14	0.51	0.7781	2.2	0.6454	PA-53
PCB52	19	2	0.1	0.1	17	0.25	3.47	3.461	10.59	3.317	PA-46
PCB66	19	15	0.1	0.14	4	0.24	0.325	0.535	1.25	0.4788	PA-39
PCB77	19	19	0.14	0.2	0	-	-	-	-	-	-
PCB8	19	11	0.15	0.19	8	0.27	0.625	0.6113	1.07	0.2901	PA-41
2,4'-DDD	19	18	0.09	0.13	1	0.84	0.84	0.84	0.84	0	PA-49
2,4'-DDE	19	19	0.12	0.16	0	-	-	-	-	-	-
2,4'-DDT	19	19	0.11	0.15	0	-	-	-	-	-	-
4,4'-DDD	19	0	-	-	19	0.57	1.11	1.133	1.74	0.3538	PA-41
4,4'-DDE	19	0	-	-	19	0.48	1.11	1.065	1.54	0.3374	PA-50
4,4'-DDT	19	8	0.08	0.11	11	0.14	0.32	0.3927	0.84	0.2261	PA-44
Diesel Range Organics	19	1	13	13	18	28	47	54.11	130	25.2	PA-47

Table F-2. Statistical Summary of Surface Sediment Sample Data for Area III (Point Avisadero) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	19	0	-	-	19	59100	66500	66910	72000	3887	PA-40
Antimony	19	0	-	-	19	0.554	0.779	1.775	16.8	3.662	PA-44
Arsenic	19	0	-	-	19	8.74	11.3	11.71	18.2	1.893	PA-47
Barium	19	0	-	-	19	404	469	463	568	36.93	PA-41
Cadmium	19	0	-	-	19	0.185	0.238	0.2756	0.76	0.1262	PA-47
Chromium	19	0	-	-	19	162	189	226.4	391	73.98	PA-46
Cobalt	19	0	-	-	19	14	17.1	17.4	21.6	1.646	PA-45
Copper	19	0	-	-	19	32.7	57.7	171.6	1050	252.9	PA-47
Iron	19	0	-	-	19	38700	40700	41170	46500	1858	PA-46
Lead	19	0	-	-	19	18.1	25.9	43.83	275	59.66	PA-47
Manganese	19	0	-	-	19	423	501	498.7	615	46.08	PA-48
Mercury	19	0	-	-	19	0.145	0.425	0.9037	7.47	1.628	PA-47
Molybdenum	19	0	-	-	19	0.611	0.897	0.95	1.47	0.1986	PA-42
Nickel	19	0	-	-	19	84	89.6	109.1	250	49.21	PA-46
Selenium	19	0	-	-	19	0.222	0.337	0.3703	0.855	0.1388	PA-70
Silver	19	0	-	-	19	0.177	0.274	0.2742	0.434	0.05359	PA-47
Vanadium	19	0	-	-	19	108	130	133.2	157	11.54	PA-50
Zinc	19	0	-	-	19	90.8	109	125.3	322	54.46	PA-47
Benzo(a)anthracene	19	0	-	-	19	81.25	253.3	300.1	600.9	159.6	PA-41
Benzo(a)pyrene	19	0	-	-	19	124.4	370.1	402.8	754.2	200.3	PA-53
Benzo(b)fluoranthene	19	0	-	-	19	85.76	225.6	273	549.9	134.4	PA-41
Benzo(g,h,i)perylene	19	0	-	-	19	107.3	280.6	301.2	551.6	141.8	PA-53
Benzo(k)fluoranthene	19	0	-	-	19	83.35	231.4	274.6	546.2	134.7	PA-41
Chrysene	19	0	-	-	19	103.8	286.7	350.9	715.3	182.6	PA-41
Dibenzo(a,h)anthracene	19	0	-	-	19	12.24	41.4	47.06	94.77	25.42	PA-41
Fluoranthene	19	0	-	-	19	186.2	617	627	1214	310.3	PA-41
Indeno(1,2,3-cd)pyrene	19	0	-	-	19	99.82	268.2	295.6	536.3	141.5	PA-53
Pyrene	19	0	-	-	19	224.8	734.4	739.4	1468	379.3	PA-53
2-Methylnaphthalene	19	0	-	-	19	4.13	8.21	10.16	20.36	4.833	PA-41
Acenaphthene	19	0	-	-	19	4.44	21.18	29.5	181.8	39.03	PA-41
Acenaphthylene	19	0	-	-	19	6.98	14.05	22.28	58.06	15.33	PA-53
Anthracene	19	0	-	-	19	36.25	100.6	132.4	489.3	105.4	PA-42
Fluorene	19	0	-	-	19	8.2	22.38	30.89	92.42	22.35	PA-41
Naphthalene	19	0	-	-	19	7.72	18.54	21.06	45.73	10.09	PA-52
Phenanthrene	19	0	-	-	19	72.75	305.3	325.2	763.1	215.2	PA-52

Table F-2. Statistical Summary of Surface Sediment Sample Data for Area III (Point Avisadero) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	19	6	0.06	0.07	13	0.03	0.12	0.1492	0.37	0.08665	PA-44
Dieldrin	19	19	0.08	0.11	0	-	-	-	-	-	-
Endosulfan II	19	19	0.09	0.12	0	-	-	-	-	-	-
Endrin	19	19	0.08	0.1	0	-	-	-	-	-	-
Gamma-chlordane	19	19	0.07	0.09	0	-	-	-	-	-	-
Heptachlor	19	19	0.07	0.1	0	-	-	-	-	-	-
Dibutyltin	19	8	1.772	2.217	11	12.98	29.89	28.63	57.38	12.14	PA-41
Monobutyltin	19	19	0.8598	1.173	0	-	-	-	-	-	-
Tetrabutyltin	19	19	2.037	2.779	0	-	-	-	-	-	-
Tributyltin	19	7	1.262	1.58	12	14.7	95.21	91.06	207.6	52.3	PA-41
Total organic carbon	19	0	-	-	19	7770	10400	10090	12500	1392	PA-72

Table F-3. Statistical Summary of Surface Sediment Sample Data for Area VIII (Eastern Wetland)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	8	8	7.07	13.82	0	-	-	-	-	-	-
Aroclor-1221	8	8	7.07	13.82	0	-	-	-	-	-	-
Aroclor-1232	8	8	7.07	13.82	0	-	-	-	-	-	-
Aroclor-1242	8	8	7.07	13.82	0	-	-	-	-	-	-
Aroclor-1248	8	8	7.07	13.82	0	-	-	-	-	-	-
Aroclor-1254	8	8	7.07	13.82	0	-	-	-	-	-	-
Aroclor-1260	8	8	7.07	13.82	0	-	-	-	-	-	-
PCB101	8	0	-	-	8	0.31	0.665	0.7238	1.2	0.3119	EW-32
PCB105	8	0	-	-	8	0.08	0.14	0.1662	0.29	0.08158	EW-32
PCB110	8	0	-	-	8	0.25	0.65	0.6375	0.95	0.2626	EW-32
PCB118	8	0	-	-	8	0.14	0.46	0.4562	0.78	0.2179	EW-32
PCB126	8	8	0.09	0.18	0	-	-	-	-	-	-
PCB128	8	5	0.12	0.23	3	0.13	0.16	0.17	0.22	0.04583	EW-33
PCB129	8	8	0.05	0.1	0	-	-	-	-	-	-
PCB138	8	0	-	-	8	0.97	1.78	1.741	2.69	0.561	EW-36
PCB153	8	0	-	-	8	1.36	2.505	2.458	3.6	0.7051	EW-36
PCB170	8	0	-	-	8	0.56	0.985	0.9675	1.46	0.3372	EW-35
PCB18	8	5	0.05	0.05	3	0.05	0.06	0.05667	0.06	0.005774	EW-35
PCB180	8	0	-	-	8	0.92	1.81	1.801	2.57	0.5804	EW-36
PCB187	8	0	-	-	8	0.62	1.08	1.112	1.64	0.3094	EW-36
PCB195	8	0	-	-	8	0.13	0.195	0.205	0.32	0.06211	EW-36
PCB206	8	0	-	-	8	0.13	0.18	0.2088	0.49	0.1168	EW-36
PCB209	8	0	-	-	8	0.07	0.15	0.2762	1.31	0.4196	EW-36
PCB28	8	5	0.07	0.08	3	0.14	0.15	0.15	0.16	0.01	EW-32
PCB44	8	5	0.06	0.07	3	0.21	0.26	0.2533	0.29	0.04041	EW-32
PCB52	8	1	0.07	0.07	7	0.08	0.13	0.2214	0.43	0.1437	EW-32
PCB66	8	8	0.08	0.15	0	-	-	-	-	-	-
PCB77	8	8	0.11	0.21	0	-	-	-	-	-	-
PCB8	8	6	0.1	0.2	2	0.16	0.165	0.165	0.17	0.007071	EW-35
2,4'-DDD	8	8	0.07	0.13	0	-	-	-	-	-	-
2,4'-DDE	8	8	0.08	0.16	0	-	-	-	-	-	-
2,4'-DDT	8	8	0.08	0.15	0	-	-	-	-	-	-
4,4'-DDD	8	2	0.06	0.07	6	0.21	0.58	0.6033	1.03	0.37	EW-32
4,4'-DDE	8	0	-	-	8	0.2	0.41	0.5887	1.19	0.4236	EW-32
4,4'-DDT	8	5	0.06	0.06	3	0.12	0.32	0.3233	0.53	0.205	EW-37
Diesel Range Organics	8	6	8.6	17	2	11	13.5	13.5	16	3.536	EW-31

Table F-3. Statistical Summary of Surface Sediment Sample Data for Area VIII (Eastern Wetland) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	8	0	-	-	8	42000	48900	55050	74900	13430	EW-32
Antimony	8	0	-	-	8	0.642	0.844	1.214	3.64	1.01	EW-33
Arsenic	8	0	-	-	8	5.18	7.655	8.12	11.1	2.342	EW-32
Barium	8	0	-	-	8	332	378	391.5	458	49.08	EW-32
Cadmium	8	0	-	-	8	0.184	0.252	0.2338	0.271	0.03752	EW-32
Chromium	8	0	-	-	8	158	221	235.6	400	81.51	EW-30
Cobalt	8	0	-	-	8	12.7	14.95	15.51	18.8	2.811	EW-31
Copper	8	0	-	-	8	12	27.2	31.06	52.8	14.96	EW-32
Iron	8	0	-	-	8	22100	29850	33350	46500	8964	EW-32
Lead	8	0	-	-	8	15.7	20.05	21.36	29.8	4.962	EW-32
Manganese	8	0	-	-	8	428	478.5	494.6	579	59.47	EW-33
Mercury	8	0	-	-	8	0.0808	0.1204	0.1605	0.286	0.08619	EW-32
Molybdenum	8	0	-	-	8	0.381	0.667	0.7381	1.17	0.3118	EW-32
Nickel	8	0	-	-	8	59.6	64.15	74.06	97.5	16.31	EW-32
Selenium	8	5	0.126	0.126	3	0.305	0.407	0.3943	0.471	0.08372	EW-35
Silver	8	1	0.066	0.066	7	0.0732	0.235	0.2086	0.397	0.1342	EW-32
Vanadium	8	0	-	-	8	81.4	107.6	114.7	162	35.3	EW-32
Zinc	8	0	-	-	8	47	87.25	90.54	127	26.91	EW-32
Benzo(a)anthracene	8	0	-	-	8	10.89	57.47	61.18	127.5	47.87	EW-37
Benzo(a)pyrene	8	0	-	-	8	21.6	86.21	96.41	197.4	69.86	EW-37
Benzo(b)fluoranthene	8	0	-	-	8	13.63	48.52	59.01	117.7	43.84	EW-37
Benzo(g,h,i)perylene	8	0	-	-	8	21.05	59.64	83.55	165.6	60.92	EW-37
Benzo(k)fluoranthene	8	0	-	-	8	15.62	56.38	63.04	129	44.89	EW-37
Chrysene	8	0	-	-	8	16.39	70.94	74.71	156	56.87	EW-37
Dibenzo(a,h)anthracene	8	0	-	-	8	1.486	7.82	8.094	15.58	6.082	EW-37
Fluoranthene	8	0	-	-	8	37.09	132.4	135.4	276.4	94.37	EW-37
Indeno(1,2,3-cd)pyrene	8	0	-	-	8	17.23	55.64	74.5	149.9	55.9	EW-37
Pyrene	8	0	-	-	8	46.44	178	178.6	359.3	124.6	EW-37
2-Methylnaphthalene	8	0	-	-	8	1.591	3.304	3.591	6.39	1.942	EW-32
Acenaphthene	8	0	-	-	8	0.68	1.388	2.769	6.24	2.411	EW-32
Acenaphthylene	8	0	-	-	8	1.092	4.015	4.565	8.54	2.996	EW-30
Anthracene	8	0	-	-	8	2.91	15.18	20.47	43.16	17.03	EW-37
Fluorene	8	0	-	-	8	1.289	3.945	4.324	8.61	3.035	EW-32
Naphthalene	8	2	3.512	4.103	6	4.63	11.24	10.1	15.95	4.569	EW-34
Phenanthrene	8	0	-	-	8	11.84	48.03	57.67	132.9	46.12	EW-30

Table F-3. Statistical Summary of Surface Sediment Sample Data for Area VIII (Eastern Wetland) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	8	5	0.05	0.05	3	0.11	0.15	0.1367	0.15	0.02309	EW-35
Dieldrin	8	8	0.06	0.12	0	-	-	-	-	-	-
Endosulfan II	8	8	0.06	0.12	0	-	-	-	-	-	-
Endrin	8	8	0.06	0.11	0	-	-	-	-	-	-
Gamma-chlordane	8	7	0.05	0.1	1	0.02	0.02	0.02	0.02	0	EW-31
Heptachlor	8	8	0.05	0.1	0	-	-	-	-	-	-
Dibutyltin	8	5	1.2	1.31	3	3.801	4.818	4.659	5.359	0.7911	EW-35
Monobutyltin	8	8	0.6346	1.294	0	-	-	-	-	-	-
Tetrabutyltin	8	8	1.503	3.065	0	-	-	-	-	-	-
Tributyltin	8	5	0.8546	0.9332	3	4.519	6.271	5.869	6.816	1.2	EW-32
Total organic carbon	8	0	-	-	8	2030	8695	8048	12800	3909	EW-32

Table F-4. Statistical Summary of Surface Sediment Sample Data for Area IX (Oil Reclamation)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	6	6	9.06	13.14	0	-	-	-	-	-	-
Aroclor-1221	6	6	9.06	13.14	0	-	-	-	-	-	-
Aroclor-1232	6	6	9.06	13.14	0	-	-	-	-	-	-
Aroclor-1242	6	6	9.06	13.14	0	-	-	-	-	-	-
Aroclor-1248	6	6	9.06	13.14	0	-	-	-	-	-	-
Aroclor-1254	6	6	9.06	13.14	0	-	-	-	-	-	-
Aroclor-1260	6	0	-	-	6	82.08	211.4	195	402.8	129.8	OR-24
PCB101	6	0	-	-	6	3.03	6.615	5.55	12.93	3.993	OR-24
PCB105	6	0	-	-	6	0.52	0.8467	0.87	1.11	0.2678	OR-26
PCB110	6	0	-	-	6	2.05	4.108	3.845	6.75	1.989	OR-24
PCB118	6	0	-	-	6	1.63	3.213	3.125	4.78	1.438	OR-26
PCB126	6	6	0.12	0.17	0	-	-	-	-	-	-
PCB128	6	0	-	-	6	0.64	1.46	1.36	2.61	0.8494	OR-24
PCB129	6	6	0.07	0.1	0	-	-	-	-	-	-
PCB138	6	0	-	-	6	6.95	18.68	17.2	34.87	11.46	OR-24
PCB153	6	0	-	-	6	9.84	30.3	28.35	59.15	19.93	OR-24
PCB170	6	0	-	-	6	4.27	9.868	9.555	17.55	5.486	OR-24
PCB18	6	1	0.09	0.09	5	0.08	0.106	0.09	0.16	0.03209	OR-27
PCB180	6	0	-	-	6	7.48	20.98	19.59	42.6	13.81	OR-24
PCB187	6	0	-	-	6	4.14	11.87	11.14	23.1	7.53	OR-24
PCB195	6	0	-	-	6	0.78	1.657	1.695	2.7	0.8169	OR-24
PCB206	6	0	-	-	6	0.4	0.825	0.86	1.12	0.2641	OR-26
PCB209	6	0	-	-	6	0.18	0.3867	0.41	0.57	0.1425	OR-27
PCB28	6	0	-	-	6	0.11	0.2283	0.245	0.29	0.06463	OR-24
PCB44	6	0	-	-	6	0.3	0.5717	0.565	0.88	0.2579	OR-27
PCB52	6	0	-	-	6	0.7	1.218	1.09	1.97	0.5481	OR-24
PCB66	6	6	0.1	0.14	0	-	-	-	-	-	-
PCB77	6	6	0.13	0.2	0	-	-	-	-	-	-
PCB8	6	5	0.13	0.19	1	0.21	0.21	0.21	0.21	0	OR-28
2,4'-DDD	6	6	0.09	0.12	0	-	-	-	-	-	-
2,4'-DDE	6	6	0.11	0.16	0	-	-	-	-	-	-
2,4'-DDT	6	6	0.1	0.15	0	-	-	-	-	-	-
4,4'-DDD	6	0	-	-	6	0.91	1.885	1.76	3.08	0.9426	OR-24
4,4'-DDE	6	0	-	-	6	0.33	0.9817	1.045	1.5	0.3999	OR-26
4,4'-DDT	6	1	0.11	0.11	5	0.12	0.462	0.57	0.78	0.2993	OR-24
Diesel Range Organics	6	4	12	15	2	36	42.5	42.5	49	9.192	OR-25

Table F-4. Statistical Summary of Surface Sediment Sample Data for Area IX (Oil Reclamation) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	6	0	-	-	6	52000	64820	67350	73000	8397	OR-25
Antimony	6	0	-	-	6	0.587	2.016	2.3	3.17	0.9059	OR-27
Arsenic	6	0	-	-	6	8.9	11.32	11.05	13.6	1.653	OR-26
Barium	6	0	-	-	6	293	392.3	388.5	458	59.86	OR-28
Cadmium	6	0	-	-	6	0.223	0.3338	0.35	0.399	0.06494	OR-26
Chromium	6	0	-	-	6	167	320	334	464	132.7	OR-27
Cobalt	6	0	-	-	6	17.5	19.33	18.9	22.6	1.8	OR-25
Copper	6	0	-	-	6	55.1	69.4	61.15	97.5	18.14	OR-24
Iron	6	0	-	-	6	41200	44920	44900	48700	2885	OR-26
Lead	6	0	-	-	6	11.9	40.53	43.45	60.1	16.96	OR-24
Manganese	6	0	-	-	6	386	494.5	495	624	92.66	OR-24
Mercury	6	0	-	-	6	0.303	0.4318	0.4155	0.602	0.1049	OR-26
Molybdenum	6	0	-	-	6	0.83	1.35	1.4	1.71	0.3426	OR-27
Nickel	6	0	-	-	6	94.9	115.3	108	160	24.15	OR-24
Selenium	6	0	-	-	6	0.233	0.3207	0.3445	0.406	0.06945	OR-28
Silver	6	0	-	-	6	0.12	0.3253	0.3765	0.435	0.1246	OR-28
Vanadium	6	0	-	-	6	134	151.7	151.5	171	14.05	OR-25
Zinc	6	0	-	-	6	114	142.5	139	179	23.75	OR-24
Benzo(a)anthracene	6	0	-	-	6	51.3	90.98	87.76	151.5	35.53	OR-24
Benzo(a)pyrene	6	0	-	-	6	109.2	157.6	157.6	203.6	46.27	OR-25
Benzo(b)fluoranthene	6	0	-	-	6	68.26	106.5	105.3	149.3	33.33	OR-24
Benzo(g,h,i)perylene	6	0	-	-	6	113.1	149.8	145.8	193.2	37.33	OR-25
Benzo(k)fluoranthene	6	0	-	-	6	72.97	112.3	107.7	169.1	34.55	OR-24
Chrysene	6	0	-	-	6	70.65	139.1	127.3	262	67.4	OR-24
Dibenzo(a,h)anthracene	6	0	-	-	6	8.82	16.13	15.36	24.81	5.948	OR-24
Fluoranthene	6	0	-	-	6	132	188.6	176.9	291.2	61.42	OR-24
Indeno(1,2,3-cd)pyrene	6	0	-	-	6	89.9	130.3	122.8	181	40.38	OR-25
Pyrene	6	0	-	-	6	170.6	240.6	234.8	328	71.14	OR-24
2-Methylnaphthalene	6	0	-	-	6	5.23	7.323	7.245	9.85	1.616	OR-24
Acenaphthene	6	0	-	-	6	2.13	4.058	3.515	7.62	2.07	OR-24
Acenaphthylene	6	0	-	-	6	4.71	7.278	6.595	10.17	2.176	OR-24
Anthracene	6	0	-	-	6	11.38	28.14	25.92	60.85	17.28	OR-24
Fluorene	6	0	-	-	6	3.27	6.653	6.745	11.34	2.768	OR-24
Naphthalene	6	0	-	-	6	10.37	13.35	14.11	15.85	2.276	OR-25
Phenanthrene	6	0	-	-	6	40.37	75.4	69.14	135.2	33.05	OR-24

Table F-4. Statistical Summary of Surface Sediment Sample Data for Area IX (Oil Reclamation) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	6	0	-	-	6	0.14	0.27	0.265	0.41	0.1114	OR-24
Dieldrin	6	5	0.08	0.11	1	0.44	0.44	0.44	0.44	0	OR-24
Endosulfan II	6	6	0.08	0.12	0	-	-	-	-	-	-
Endrin	6	6	0.07	0.1	0	-	-	-	-	-	-
Gamma-chlordane	6	1	0.09	0.09	5	0.08	0.27	0.34	0.42	0.1673	OR-27
Heptachlor	6	6	0.07	0.1	0	-	-	-	-	-	-
Dibutyltin	6	0	-	-	6	2.686	10.32	8.112	20.75	6.987	OR-24
Monobutyltin	6	5	0.8002	1.262	1	2.688	2.688	2.688	2.688	0	OR-24
Tetrabutyltin	6	6	1.895	2.99	0	-	-	-	-	-	-
Tributyltin	6	0	-	-	6	3.298	21.55	12.13	65.91	23.3	OR-24
Total organic carbon	6	0	-	-	6	11900	15750	13750	24600	4741	OR-29

Table F-5. Statistical Summary of Surface Sediment Sample Data for Area X (South Basin)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	22	22	7.12	152.8	0	-	-	-	-	-	-
Aroclor-1221	22	22	7.12	152.8	0	-	-	-	-	-	-
Aroclor-1232	22	22	7.12	152.8	0	-	-	-	-	-	-
Aroclor-1242	22	22	7.12	152.8	0	-	-	-	-	-	-
Aroclor-1248	22	22	7.12	152.8	0	-	-	-	-	-	-
Aroclor-1254	22	22	7.12	152.8	0	-	-	-	-	-	-
Aroclor-1260	23	0	-	-	23	102.2	1101	541	5394	1349	SB-21
PCB101	23	0	-	-	23	3.83	33.6	24.16	124.9	28.49	SB-21
PCB105	23	2	0.06	1.2	21	0.9	4.452	4.07	14.12	2.898	SB-21
PCB110	23	0	-	-	23	2.98	21.93	16.98	65.87	14.6	SB-21
PCB118	23	0	-	-	23	2.72	16.15	13.68	33.85	8.418	SB-21
PCB126	22	22	0.09	2	0	-	-	-	-	-	-
PCB128	23	0	-	-	23	1.03	7.986	5.96	28.65	6.661	SB-21
PCB129	22	21	0.05	0.1	1	4.17	4.17	4.17	4.17	0	SB-23
PCB138	23	0	-	-	23	9.46	96.89	59.34	441.8	105.6	SB-21
PCB153	23	0	-	-	23	13.17	143.8	78.98	637.9	161.3	SB-21
PCB170	23	0	-	-	23	5	55.23	27.65	291.6	70.91	SB-21
PCB18	23	1	0.1	0.1	22	0.09	0.3482	0.32	0.96	0.1886	SB-02
PCB180	23	0	-	-	23	8.91	110.1	51.21	569.3	140.5	SB-21
PCB187	23	0	-	-	23	5.11	60.57	29.09	288	75.04	SB-21
PCB195	23	0	-	-	23	0.85	10.86	4.11	59.62	15.03	SB-21
PCB206	23	0	-	-	23	0.47	5.237	1.91	23.42	6.653	SB-23
PCB209	23	0	-	-	23	0.17	1.598	0.73	7.01	1.667	SB-10
PCB28	23	1	0.14	0.14	22	0.15	0.7736	0.735	1.74	0.402	SB-02
PCB44	23	0	-	-	23	0.47	2.574	1.88	8.3	1.902	SB-02
PCB52	23	0	-	-	23	0.93	5.206	5.11	11.21	2.642	SB-02
PCB66	23	11	0.08	1.6	12	1.04	2.038	1.91	3.35	0.7487	SB-11
PCB77	22	22	0.11	2.2	0	-	-	-	-	-	-
PCB8	23	3	0.12	0.21	20	0.12	0.6075	0.545	1.29	0.3204	SB-01
2,4'-DDD	22	22	0.07	1.4	0	-	-	-	-	-	-
2,4'-DDE	22	22	0.08	1.8	0	-	-	-	-	-	-
2,4'-DDT	22	22	0.08	1.8	0	-	-	-	-	-	-
4,4'-DDD	23	0	-	-	23	0.97	8.161	4.19	43.61	10.95	SB-21
4,4'-DDE	22	1	1.2	1.2	21	1.06	6.1	5.25	18.4	4.104	SB-02
4,4'-DDT	23	3	0.06	0.07	20	0.26	1.132	0.915	3.6	0.842	SB-21
Diesel Range Organics	23	8	14	18	15	17	59.93	49	150	36.99	SB-21

Table F-5. Statistical Summary of Surface Sediment Sample Data for Area X (South Basin) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	23	0	-	-	23	39100	64430	69600	74100	10430	SB-08
Antimony	23	0	-	-	23	0.485	3.164	2.2	10.6	2.516	SB-16
Arsenic	23	0	-	-	23	5.86	10.69	11.3	14.3	1.964	SB-10
Barium	23	0	-	-	23	400	512	472	893	120.2	SB-19
Cadmium	23	0	-	-	23	0.219	0.4546	0.413	0.845	0.169	SB-01
Chromium	23	0	-	-	23	167	228	207	451	63.55	SB-16
Cobalt	23	0	-	-	23	10.5	16.93	17.6	21.9	2.973	SB-21
Copper	23	0	-	-	23	66.1	121.4	89.1	319	73.92	SB-21
Iron	23	0	-	-	23	15700	40150	43600	47800	8956	SB-15
Lead	23	0	-	-	23	11	85.21	86.3	142	35.6	SB-22
Manganese	23	0	-	-	23	271	431.6	439	580	60.82	SB-16
Mercury	23	0	-	-	23	0.232	0.7069	0.617	1.47	0.3201	SB-21
Molybdenum	23	0	-	-	23	0.704	1.136	1.12	1.83	0.2558	SB-09
Nickel	23	0	-	-	23	72.5	113.3	107	199	28.65	SB-16
Selenium	23	1	0.126	0.126	22	0.151	0.334	0.3515	0.457	0.0873	SB-20
Silver	23	0	-	-	23	0.139	0.4829	0.521	0.709	0.1578	SB-11
Vanadium	23	0	-	-	23	50.9	132.1	141	172	28.11	SB-21
Zinc	23	0	-	-	23	164	202.3	195	297	30.26	SB-21
Benzo(a)anthracene	23	0	-	-	23	25.84	180.8	132.4	628.9	132.9	SB-21
Benzo(a)pyrene	23	0	-	-	23	53.23	269	244.2	631.9	124.8	SB-21
Benzo(b)fluoranthene	23	0	-	-	23	34.72	200.7	174	484.5	99.53	SB-21
Benzo(g,h,i)perylene	23	0	-	-	23	55.35	239.2	240.6	384.4	82.64	SB-21
Benzo(k)fluoranthene	23	0	-	-	23	40.84	206.9	182.8	499.6	103.8	SB-21
Chrysene	23	0	-	-	23	39.44	245	189.9	743.9	166.1	SB-21
Dibenzo(a,h)anthracene	23	0	-	-	23	4.03	36.16	29.93	104.2	22.06	SB-21
Fluoranthene	23	0	-	-	23	59.71	325	294.2	952.6	191.9	SB-21
Indeno(1,2,3-cd)pyrene	23	0	-	-	23	43.92	217.1	208.4	412.8	84.34	SB-21
Pyrene	23	0	-	-	23	79.82	389.7	365.9	1065	205.2	SB-21
2-Methylnaphthalene	23	0	-	-	23	3.7	18.15	16.32	49.04	9.28	SB-02
Acenaphthene	23	0	-	-	23	1.08	7.586	6.893	21.31	4.218	SB-21
Acenaphthylene	23	0	-	-	23	2.26	11.9	10.65	43.71	8.798	SB-23
Anthracene	23	0	-	-	23	6.99	51.75	34.8	234.3	54.26	SB-21
Fluorene	23	0	-	-	23	2.02	14.69	10.07	81.46	17.13	SB-21
Naphthalene	23	1	7.7	7.7	22	8.27	30.66	27.24	58.7	12.96	SB-10
Phenanthrene	23	0	-	-	23	22.01	149.5	103.8	668	141.8	SB-21

Table F-5. Statistical Summary of Surface Sediment Sample Data for Area X (South Basin) (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	23	0	-	-	23	0.2	1.433	0.94	5.47	1.452	SB-14
Dieldrin	22	7	0.07	1.4	15	0.75	2.467	1.7	10.41	2.443	SB-02
Endosulfan II	22	22	0.06	1.4	0	-	-	-	-	-	-
Endrin	22	22	0.06	1.2	0	-	-	-	-	-	-
Gamma-chlordane	23	0	-	-	23	0.17	2.266	1.25	10.53	2.524	SB-02
Heptachlor	22	21	0.05	1.2	1	2.13	2.13	2.13	2.13	0	SB-14
Dibutyltin	23	0	-	-	23	2.724	16.33	13.63	51.17	11.35	SB-23
Monobutyltin	22	19	0.653	1.305	3	1.172	2.184	2.083	3.295	1.065	SB-19
Tetrabutyltin	23	23	1.547	3.09	0	-	-	-	-	-	-
Tributyltin	23	0	-	-	23	3.081	23.84	16.07	129.3	27.13	SB-23
Total organic carbon	23	0	-	-	23	3260	13250	15200	18700	4371	SB-03

Table F-6. Statistical Summary of Surface Sediment Sample Data for Reference Sites

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	5	5	6.96	14.42	0	-	-	-	-	-	-
Aroclor-1221	5	5	6.96	14.42	0	-	-	-	-	-	-
Aroclor-1232	5	5	6.96	14.42	0	-	-	-	-	-	-
Aroclor-1242	5	5	6.96	14.42	0	-	-	-	-	-	-
Aroclor-1248	5	5	6.96	14.42	0	-	-	-	-	-	-
Aroclor-1254	5	5	6.96	14.42	0	-	-	-	-	-	-
Aroclor-1260	5	5	6.96	14.42	0	-	-	-	-	-	-
PCB101	5	1	0.06	0.06	4	0.16	0.63	0.345	1.67	0.7002	AB-67
PCB105	5	2	0.06	0.06	3	0.11	0.2233	0.15	0.41	0.1629	AB-67
PCB110	5	1	0.07	0.07	4	0.13	0.745	0.55	1.75	0.7175	AB-67
PCB118	5	1	0.07	0.07	4	0.08	0.5775	0.44	1.35	0.5496	AB-67
PCB126	5	5	0.09	0.19	0	-	-	-	-	-	-
PCB128	5	5	0.12	0.24	0	-	-	-	-	-	-
PCB129	5	5	0.05	0.11	0	-	-	-	-	-	-
PCB138	5	1	0.06	0.06	4	0.21	1.302	0.865	3.27	1.37	AB-67
PCB153	5	1	0.09	0.09	4	0.25	1.498	0.84	4.06	1.743	AB-67
PCB170	5	2	0.06	0.07	3	0.14	0.5067	0.22	1.16	0.5672	AB-67
PCB18	5	4	0.05	0.1	1	0.21	0.21	0.21	0.21	0	AB-67
PCB180	5	2	0.06	0.07	3	0.42	1.423	1.54	2.31	0.9504	AB-67
PCB187	5	2	0.06	0.07	3	0.17	0.6967	0.38	1.54	0.7379	AB-67
PCB195	5	4	0.06	0.11	1	0.23	0.23	0.23	0.23	0	AB-67
PCB206	5	4	0.05	0.11	1	0.84	0.84	0.84	0.84	0	AB-67
PCB209	5	4	0.06	0.12	1	0.81	0.81	0.81	0.81	0	AB-67
PCB28	5	3	0.07	0.12	2	0.2	0.305	0.305	0.41	0.1485	AB-67
PCB44	5	3	0.06	0.11	2	0.15	0.29	0.29	0.43	0.198	AB-67
PCB52	5	2	0.07	0.11	3	0.19	0.36	0.25	0.64	0.2443	AB-67
PCB66	5	4	0.07	0.15	1	0.14	0.14	0.14	0.14	0	AB-67
PCB77	5	5	0.1	0.21	0	-	-	-	-	-	-
PCB8	5	5	0.1	0.21	0	-	-	-	-	-	-
2,4'-DDD	5	5	0.07	0.14	0	-	-	-	-	-	-
2,4'-DDE	5	5	0.08	0.17	0	-	-	-	-	-	-
2,4'-DDT	5	5	0.08	0.16	0	-	-	-	-	-	-
4,4'-DDD	5	1	0.06	0.06	4	0.41	1.505	1.25	3.11	1.182	PC-63
4,4'-DDE	5	1	0.06	0.06	4	0.31	0.6825	0.745	0.93	0.2647	AB-67
4,4'-DDT	5	4	0.06	0.12	1	1.65	1.65	1.65	1.65	-	PC-63
Diesel Range Organics	5	3	8.5	15	2	32	41.5	41.5	51	13.44	BF-66

Table F-6. Statistical Summary of Surface Sediment Sample Data for Reference Sites (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	5	0	-	-	5	44300	64340	69700	75900	12710	BF-66
Antimony	5	0	-	-	5	0.361	0.663	0.773	0.929	0.2649	AB-67
Arsenic	5	0	-	-	5	6.69	10.15	10.8	12.1	2.137	BF-66
Barium	5	0	-	-	5	405	444.6	428	501	40.43	AL-64
Cadmium	5	0	-	-	5	0.156	0.3632	0.192	0.841	0.292	AL-64
Chromium	5	0	-	-	5	103	154	161	176	29.19	AB-67
Cobalt	5	0	-	-	5	10.3	17.26	17.8	22.6	4.431	RR-65
Copper	5	0	-	-	5	16.5	33.28	40.1	47.9	14.39	BF-66
Iron	5	0	-	-	5	20600	38860	41200	49500	10800	BF-66
Lead	5	0	-	-	5	12.3	21.46	21.6	29.7	7.465	AB-67
Manganese	5	0	-	-	5	390	520.6	554	634	99.35	RR-65
Mercury	5	0	-	-	5	0.0252	0.2146	0.289	0.384	0.1568	AB-67
Molybdenum	5	0	-	-	5	0.293	0.6416	0.782	0.851	0.2499	AB-67
Nickel	5	0	-	-	5	39.8	78.36	85.8	101	23.06	BF-66
Selenium	5	1	0.126	0.126	4	0.124	0.3315	0.352	0.498	0.1621	BF-66
Silver	5	1	0.066	0.066	4	0.123	0.3113	0.292	0.538	0.1757	AB-67
Vanadium	5	0	-	-	5	62.7	130.1	142	159	38.47	BF-66
Zinc	5	0	-	-	5	42.5	94.76	105	130	34.16	BF-66
Benzo(a)anthracene	5	0	-	-	5	12.47	54.82	46.02	125.4	42.02	AB-67
Benzo(a)pyrene	5	0	-	-	5	23.31	106.8	97.2	239.9	83.11	AB-67
Benzo(b)fluoranthene	5	0	-	-	5	16.7	67.83	62.3	146.9	51.2	AB-67
Benzo(g,h,i)perylene	5	0	-	-	5	20.93	100.7	87.7	221.1	81.09	AB-67
Benzo(k)fluoranthene	5	0	-	-	5	14.52	65.99	60.81	145.1	49.4	AB-67
Chrysene	5	0	-	-	5	15.38	69.28	64.67	139.7	44.62	AB-67
Dibenzo(a,h)anthracene	5	0	-	-	5	2.06	10.26	8.09	24.52	8.893	AB-67
Fluoranthene	5	0	-	-	5	34.24	135	117.5	306.4	102.3	AB-67
Indeno(1,2,3-cd)pyrene	5	0	-	-	5	21	90.45	80.41	200	72.13	AB-67
Pyrene	5	0	-	-	5	44.9	174.7	152.1	383.3	125.6	AB-67
2-Methylnaphthalene	5	0	-	-	5	1.17	3.85	3.88	7.15	2.701	AB-67
Acenaphthene	5	0	-	-	5	1.04	4.04	2.51	12.37	4.716	AB-67
Acenaphthylene	5	0	-	-	5	1.02	5.488	4.97	12.03	4.013	AB-67
Anthracene	5	0	-	-	5	2.73	16.98	12.49	42.47	15.05	AB-67
Fluorene	5	0	-	-	5	1.06	4.764	4.11	10.93	3.774	AB-67
Naphthalene	5	1	3.17	3.17	4	3.68	10.14	10.19	16.5	5.448	AB-67
Phenanthrene	5	0	-	-	5	14.22	57.37	47.15	142.4	49.67	AB-67

Table F-6. Statistical Summary of Surface Sediment Sample Data for Reference Sites (continued)

Analyte	No. Samples	Non-detects			Detects						
		N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	5	4	0.05	0.08	1	0.12	0.12	0.12	0.12	0	BF-66
Dieldrin	5	5	0.06	0.12	0	-	-	-	-	-	-
Endosulfan II	5	5	0.06	0.13	0	-	-	--	-	-	-
Endrin	5	5	0.05	0.11	0	-	-	-	-	-	-
Gamma-chlordane	5	5	0.05	0.1	0	-	-	-	-	-	-
Heptachlor	5	5	0.05	0.11	0	-	-	-	-	-	-
Dibutyltin	5	4	1.342	2.595	1	1.315	1.315	1.315	1.315	0	AL-64
Monobutyltin	5	5	0.6246	1.373	0	-	-	-	-	-	-
Tetrabutyltin	5	5	1.48	3.252	0	-	-	-	-	-	-
Tributyltin	5	4	0.9561	1.849	1	4.038	4.038	4.038	4.038	0	AL-64
Total organic carbon	5	0	-	-	5	650	7580	8880	14700	5498	BF-66

Table F-7. Statistical Summary of Sediment Core Sample Data for Area I (India Basin)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	2	6	6	10.08	12.73	0	-	-	-	-	-	-
Aroclor-1221	2	6	6	10.08	12.73	0	-	-	-	-	-	-
Aroclor-1232	2	6	6	10.08	12.73	0	-	-	-	-	-	-
Aroclor-1242	2	6	6	10.08	12.73	0	-	-	-	-	-	-
Aroclor-1248	2	6	6	10.08	12.73	0	-	-	-	-	-	-
Aroclor-1254	2	6	6	10.08	12.73	0	-	-	-	-	-	-
Aroclor-1260	2	6	4	10.75	12.73	2	93.29	100	100	106.8	9.539	IB-59 4-6
PCB101	2	6	1	0.1	0.1	5	0.91	3.468	4.93	5.4	2.265	IB-56 2-4
PCB105	2	6	1	0.09	0.09	5	0.34	0.72	0.9	1.03	0.3322	IB-56 2-4
PCB110	2	6	1	0.11	0.11	5	1.25	3.102	3.58	4.81	1.726	IB-59 4-6
PCB118	2	6	1	0.11	0.11	5	0.81	2.024	2.23	3.3	1.134	IB-59 4-6
PCB126	2	6	6	0.13	0.16	0	-	-	-	-	-	-
PCB128	2	6	4	0.18	0.22	2	0.45	0.625	0.625	0.8	0.2475	IB-59 4-6
PCB129	2	6	6	0.07	0.09	0	-	-	-	-	-	-
PCB138	2	6	1	0.09	0.09	5	1.76	5.444	6.74	8.85	3.317	IB-59 4-6
PCB153	2	6	1	0.14	0.14	5	2.38	8.214	10.5	13.46	5.139	IB-59 4-6
PCB170	2	6	1	0.09	0.09	5	0.35	2.094	2.3	4.02	1.655	IB-59 4-6
PCB18	2	6	3	0.08	0.09	3	0.41	0.4767	0.47	0.55	0.07024	IB-56 2-4
PCB180	2	6	0	-	-	6	0.18	4.232	3.73	8.33	3.623	IB-59 4-6
PCB187	2	6	1	0.09	0.09	5	0.83	3.276	4.04	5.48	2.214	IB-59 4-6
PCB195	2	6	1	0.09	0.09	5	0.14	0.648	0.86	1.04	0.4287	IB-59 4-6
PCB206	2	6	1	0.08	0.08	5	0.37	0.762	0.85	1.17	0.3541	IB-59 4-6
PCB209	2	6	1	0.09	0.09	5	0.45	1.098	1.04	2.37	0.7746	IB-56 2-4
PCB28	2	6	2	0.11	0.13	4	0.23	0.6375	0.725	0.87	0.2851	IB-59 4-6
PCB44	2	6	1	0.1	0.1	5	0.19	0.8	0.94	1.54	0.5573	IB-56 2-4
PCB52	2	6	1	0.1	0.1	5	0.41	1.456	1.66	2.68	0.9964	IB-56 2-4
PCB66	2	6	3	0.12	0.14	3	0.2	0.3767	0.33	0.6	0.204	IB-59 4-6
PCB77	2	6	6	0.15	0.19	0	-	-	-	-	-	-
PCB8	2	6	3	0.16	0.19	3	0.35	0.4733	0.41	0.66	0.1644	IB-56 2-4
2,4'-DDD	2	6	6	0.1	0.12	0	-	-	-	-	-	-
2,4'-DDE	2	6	6	0.12	0.15	0	-	-	-	-	-	-
2,4'-DDT	2	6	6	0.11	0.14	0	-	-	-	-	-	-
4,4'-DDD	2	6	1	0.1	0.1	5	0.96	1.656	1.64	2.32	0.5547	IB-56 0-2
4,4'-DDE	2	6	2	0.09	0.09	4	0.43	0.9025	0.72	1.74	0.5913	IB-59 2-4
4,4'-DDT	2	6	5	0.09	0.1	1	0.16	0.16	0.16	0.16	0	IB-56 0-2

Table F-7. Statistical Summary of Sediment Core Sample Data for Area I (India Basin) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	2	6	0	-	-	6	72200	76800	77650	79200	2590	IB-59 2-4
Antimony	2	6	0	-	-	6	0.842	1.338	1.305	1.96	0.438	IB-56 2-4
Arsenic	2	6	0	-	-	6	12.7	13.68	13	16.5	1.488	IB-56 2-4
Barium	2	6	0	-	-	6	428	449.3	451.5	462	12.68	IB-56 0-2
Cadmium	2	6	0	-	-	6	0.165	0.3995	0.359	0.764	0.2182	IB-56 2-4
Chromium	2	6	0	-	-	6	151	174.2	174.5	191	16.04	IB-56 0-2
Cobalt	2	6	0	-	-	6	18.4	19.27	19.1	20.8	0.8892	IB-59 2-4
Copper	2	6	0	-	-	6	46	62.47	64.45	77.5	11.14	IB-59 4-6
Iron	2	6	0	-	-	6	42500	44900	45150	48200	2141	IB-59 2-4
Lead	2	6	0	-	-	6	34.4	60.93	53.8	106	30.25	IB-59 4-6
Manganese	2	6	0	-	-	6	389	453.8	431.5	576	66.76	IB-56 4-6
Mercury	2	6	0	-	-	6	0.324	0.447	0.3715	0.719	0.1563	IB-56 2-4
Molybdenum	2	6	0	-	-	6	1.31	1.48	1.44	1.76	0.1626	IB-56 2-4
Nickel	2	6	0	-	-	6	90.5	111.1	114	125	12.06	IB-59 4-6
Selenium	2	6	0	-	-	6	0.377	0.4613	0.42	0.628	0.09805	IB-59 4-6
Silver	2	6	0	-	-	6	0.165	0.5338	0.563	0.804	0.2169	IB-59 4-6
Vanadium	2	6	0	-	-	6	146	162.2	164	176	10.03	IB-59 2-4
Zinc	2	6	0	-	-	6	88.4	128.2	134	149	20.91	IB-59 4-6
Benzo(a)anthracene	2	6	0	-	-	6	87.33	212.4	164.7	452.9	143.9	IB-56 2-4
Benzo(a)pyrene	2	6	0	-	-	6	147.6	390.8	341.7	799.8	251.4	IB-56 2-4
Benzo(b)fluoranthene	2	6	0	-	-	6	91.41	257.2	247.3	478.8	145	IB-56 2-4
Benzo(g,h,i)perylene	2	6	0	-	-	6	94.62	319.1	287.5	649.5	208.1	IB-56 2-4
Benzo(k)fluoranthene	2	6	0	-	-	6	110.7	258.1	241.8	476.1	146.7	IB-56 2-4
Chrysene	2	6	0	-	-	6	110.5	248.8	199.2	501.7	159.4	IB-56 2-4
Dibenzo(a,h)anthracene	2	6	0	-	-	6	19.35	41.86	37.04	81.8	25.25	IB-56 2-4
Fluoranthene	2	6	0	-	-	6	170.7	398.7	311.6	805.2	266	IB-56 2-4
Indeno(1,2,3-cd)pyrene	2	6	0	-	-	6	98.89	314.3	278.6	643.6	206.9	IB-56 2-4
Pyrene	2	6	0	-	-	6	224.9	565.1	473.3	1121	362.8	IB-56 2-4
2-Methylnaphthalene	2	6	0	-	-	6	5.624	10.21	10.27	14.29	3.822	IB-56 0-2
Acenaphthene	2	6	0	-	-	6	3.017	9.825	9.535	17.04	5.627	IB-56 0-2
Acenaphthylene	2	6	0	-	-	6	6.834	18.88	14.98	42.22	14.2	IB-56 2-4
Anthracene	2	6	0	-	-	6	26.83	64.84	49.52	135.1	44.25	IB-56 2-4
Fluorene	2	6	0	-	-	6	7.181	13.83	11.84	24.54	7.564	IB-56 2-4
Naphthalene	2	6	0	-	-	6	13.47	27.19	25.61	47.97	14.02	IB-56 2-4
Phenanthrene	2	6	0	-	-	6	39.04	164.9	138.3	330.7	118.4	IB-56 2-4

Table F-7. Statistical Summary of Sediment Core Sample Data for Area I (India Basin) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	2	6	4	0.07	0.08	2	0.31	0.395	0.395	0.48	0.1202	IB-59 4-6
Dieldrin	2	6	6	0.09	0.11	0	-	-	-	-	-	-
Endosulfan II	2	6	6	0.09	0.11	0	-	-	-	-	-	-
Endrin	2	6	6	0.08	0.1	0	-	-	-	-	-	-
Gamma-chlordane	2	6	4	0.07	0.09	2	0.38	0.39	0.39	0.4	0.01414	IB-59 4-6
Heptachlor	2	6	6	0.07	0.09	0	-	-	-	-	-	-
Dibutyltin	2	6	4	1.826	2.169	2	3.329	4.191	4.191	5.053	1.219	IB-56 0-2
Monobutyltin	2	6	6	0.949	1.155	0	-	-	-	-	-	-
Tetrabutyltin	2	6	6	2.248	2.735	0	-	-	-	-	-	-
Tributyltin	2	6	6	1.278	1.555	0	-	-	-	-	-	-
Total organic carbon	2	6	0	-	-	6	8270	10190	10260	11700	1270	IB-59 4-6

Table F-8. Statistical Summary of Sediment Core Sample Data for Area III (Point Avisadero)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	6	17	17	7.28	11.75	0	-	-	-	-	-	-
Aroclor-1221	6	17	17	7.28	11.75	0	-	-	-	-	-	-
Aroclor-1232	6	17	17	7.28	11.75	0	-	-	-	-	-	-
Aroclor-1242	6	17	17	7.28	11.75	0	-	-	-	-	-	-
Aroclor-1248	6	17	17	7.28	11.75	0	-	-	-	-	-	-
Aroclor-1254	6	17	17	7.28	11.75	0	-	-	-	-	-	-
Aroclor-1260	6	17	14	7.28	11.75	3	34.05	184.8	182.2	338	152	PA-41 2-4
PCB101	6	17	6	0.09	0.11	11	0.23	3.985	1.76	12.38	4.429	PA-41 0-2
PCB105	6	17	8	0.07	0.09	9	0.11	0.8	0.58	2.14	0.6888	PA-41 0-2
PCB110	6	17	6	0.1	0.12	11	0.04	2.98	1.7	9.68	2.971	PA-41 0-2
PCB118	6	17	7	0.1	0.12	10	0.13	1.778	1.06	5.61	1.737	PA-41 0-2
PCB126	6	17	17	0.09	0.15	0	-	-	-	-	-	-
PCB128	6	17	15	0.15	0.2	2	0.52	0.59	0.59	0.66	0.09899	PA-40 2-4
PCB129	6	17	17	0.05	0.09	0	-	-	-	-	-	-
PCB138	6	17	6	0.08	0.1	11	0.35	4.51	1.44	18.27	6.033	PA-41 2-4
PCB153	6	17	6	0.12	0.15	11	0.55	5.735	3.04	24.05	6.792	PA-41 0-2
PCB170	6	17	6	0.08	0.1	11	0.18	2.416	0.77	11.87	3.627	PA-41 2-4
PCB18	6	17	11	0.06	0.08	6	0.1	1.107	0.84	2.52	1.006	PA-40 2-4
PCB180	6	17	6	0.09	0.11	11	0.38	3.551	2.1	12.49	3.803	PA-41 0-2
PCB187	6	17	6	0.08	0.1	11	0.23	2.468	1.62	8.93	2.664	PA-41 0-2
PCB195	6	17	9	0.07	0.09	8	0.14	1.472	0.62	7.5	2.462	PA-41 2-4
PCB206	6	17	10	0.07	0.09	7	0.23	1.823	0.62	9.68	3.474	PA-41 2-4
PCB209	6	17	9	0.08	0.1	8	0.2	0.7687	0.545	2.46	0.7405	PA-41 2-4
PCB28	6	17	11	0.09	0.12	6	0.18	1.442	0.895	3.21	1.314	PA-40 2-4
PCB44	6	17	9	0.08	0.11	8	0.14	1.757	1.175	4.74	1.868	PA-41 0-2
PCB52	6	17	10	0.08	0.11	7	0.42	10.7	2.86	47.8	16.89	PA-41 0-2
PCB66	6	17	15	0.09	0.12	2	0.92	2.175	2.175	3.43	1.775	PA-40 2-4
PCB77	6	17	17	0.11	0.18	0	-	-	-	-	-	-
PCB8	6	17	13	0.13	0.17	4	0.57	1	0.865	1.7	0.5149	PA-41 0-2
2,4'-DDD	6	17	17	0.07	0.11	0	-	-	-	-	-	-
2,4'-DDE	6	17	17	0.09	0.14	0	-	-	-	-	-	-
2,4'-DDT	6	17	17	0.08	0.13	0	-	-	-	-	-	-
4,4'-DDD	6	17	8	0.09	0.1	9	0.76	1.781	1.03	5.05	1.506	PA-41 0-2
4,4'-DDE	6	17	7	0.08	0.09	10	0.14	0.932	0.635	2.87	0.8902	PA-41 0-2
4,4'-DDT	6	17	15	0.06	0.1	2	0.22	0.595	0.595	0.97	0.5303	PA-41 0-2

Table F-8. Statistical Summary of Sediment Core Sample Data for Area III (Point Avisadero) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	6	17	0	-	-	17	45500	69490	70800	82400	9275	PA-44 4-6
Antimony	6	17	0	-	-	17	0.444	3.536	1.64	18.8	4.722	PA-44 4-6
Arsenic	6	17	0	-	-	17	6.05	13.38	12.3	32	5.981	PA-47 0-2
Barium	6	17	0	-	-	17	410	512.1	457	941	148.7	PA-40 0-2
Cadmium	6	17	0	-	-	17	0.176	0.4385	0.421	0.768	0.1942	PA-41 2-4
Chromium	6	17	0	-	-	17	149	245	167	913	192.4	PA-40 2-4
Cobalt	6	17	0	-	-	17	8.51	17.57	17.3	23	3.604	PA-40 2-4
Copper	6	17	0	-	-	17	29	378.7	50.8	2150	667.6	PA-41 2-4
Iron	6	17	0	-	-	17	36300	44140	44500	50700	3963	PA-44 4-6
Lead	6	17	0	-	-	17	11.1	103.8	56.6	583	140.9	PA-40 2-4
Manganese	6	17	0	-	-	17	442	616.6	541	1090	184	PA-44 4-6
Mercury	6	17	0	-	-	17	0.0709	3.104	0.369	43.1	10.33	PA-47 0-2
Molybdenum	6	17	0	-	-	17	0.398	1.943	1.27	6.94	1.683	PA-40 0-2
Nickel	6	17	0	-	-	17	90.6	119.7	106	223	32.84	PA-40 2-4
Selenium	6	17	0	-	-	17	0.155	0.38	0.413	0.509	0.1087	PA-49 0-2
Silver	6	17	0	-	-	17	0.0708	0.3038	0.295	0.607	0.1675	PA-41 2-4
Vanadium	6	17	0	-	-	17	45.8	122.7	137	169	35.74	PA-44 2-4
Zinc	6	17	0	-	-	17	79.7	175.8	96.5	557	143.9	PA-41 0-2
Benzo(a)anthracene	6	17	3	0.52	1.02	14	0.48	353	284.2	1147	359.3	PA-52 4-6
Benzo(a)pyrene	6	17	3	0.41	1.24	14	0.47	498.1	376.5	1624	499.3	PA-52 4-6
Benzo(b)fluoranthene	6	17	1	1.42	1.42	16	1.54	274.1	169.6	884.7	282.2	PA-52 4-6
Benzo(g,h,i)perylene	6	17	2	1.28	1.5	15	1.11	364.5	235.4	1243	384.8	PA-52 4-6
Benzo(k)fluoranthene	6	17	3	0.45	1	14	0.31	318	253	954.8	296.5	PA-52 4-6
Chrysene	6	17	1	1.79	1.79	16	1.8	347.5	200.4	1194	377.9	PA-52 4-6
Dibenzo(a,h)anthracene	6	17	3	0.2	0.37	14	0.18	56.75	45.83	166.1	52.8	PA-52 4-6
Fluoranthene	6	17	0	-	-	17	1.71	617.3	309.9	2604	785.3	PA-52 4-6
Indeno(1,2,3-cd)pyrene	6	17	2	0.54	0.68	15	0.49	353.5	219.7	1213	373.5	PA-52 4-6
Pyrene	6	17	2	2.56	2.64	15	1.98	929.9	536.3	3292	1025	PA-52 4-6
2-Methylnaphthalene	6	17	0			17	1.64	13.03	5.851	33.2	12.1	PA-52 2-4
Acenaphthene	6	17	3	0.19	0.3	14	0.16	36.2	31.54	110.1	34.88	PA-41 2-4
Acenaphthylene	6	17	3	0.06	0.08	14	0.06	38.67	19.42	164.8	55.36	PA-52 4-6
Anthracene	6	17	2	0.63	0.74	15	0.53	144.7	71.4	591.8	195.8	PA-52 2-4
Fluorene	6	17	0	-	-	17	1.75	36.02	16.66	131.6	44.01	PA-52 2-4
Naphthalene	6	17	6	1.87	2.67	11	5.73	49.6	40.33	94.55	36	PA-52 4-6
Phenanthrene	6	17	0	-	-	17	3.77	381.7	162.6	1651	526.8	PA-52 4-6

Table F-8. Statistical Summary of Sediment Core Sample Data for Area III (Point Avisadero) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	6	17	14	0.05	0.08	3	0.06	0.11	0.12	0.15	0.04583	PA-47 0-2
Dieldrin	6	17	17	0.06	0.1	0	-	-	-	-	-	-
Endosulfan II	6	17	17	0.06	0.1	0	-	-	-	-	-	-
Endrin	6	17	17	0.06	0.09	0	-	-	-	-	-	-
Gamma-chlordane	6	17	16	0.05	0.08	1	3.31	3.31	3.31	3.31	0	PA-41 0-2
Heptachlor	6	17	17	0.05	0.09	0	-	-	-	-	-	-
Dibutyltin	6	17	9	1.686	2.075	8	4.228	63.99	13.49	169.2	77.21	PA-41 0-2
Monobutyltin	6	17	15	0.8421	1.098	2	4.557	6.459	6.459	8.361	2.69	PA-40 2-4
Tetrabutyltin	6	17	14	1.995	2.601	3	8.726	12.34	10.98	17.33	4.459	PA-41 0-2
Tributyltin	6	17	8	1.23	1.479	9	5.17	351	67.12	1024	461.7	PA-41 0-2
Total organic carbon	6	17	0	-	-	17	6940	11190	11200	15400	2340	PA-47 2-4

Table F-9. Statistical Summary of Sediment Core Sample Data for Area VIII (Eastern Wetland)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	2	6	6	6.71	7.5	0	-	-	-	-	-	-
Aroclor-1221	2	6	6	6.71	7.5	0	-	-	-	-	-	-
Aroclor-1232	2	6	6	6.71	7.5	0	-	-	-	-	-	-
Aroclor-1242	2	6	6	6.71	7.5	0	-	-	-	-	-	-
Aroclor-1248	2	6	6	6.71	7.5	0	-	-	-	-	-	-
Aroclor-1254	2	6	6	6.71	7.5	0	-	-	-	-	-	-
Aroclor-1260	2	6	6	6.71	7.5	0	-	-	-	-	-	-
PCB101	2	6	3	0.06	0.07	3	0.13	0.5	0.21	1.16	0.573	EW-31 0-2
PCB105	2	6	4	0.06	0.06	2	0.15	0.27	0.27	0.39	0.1697	EW-36 0-2
PCB110	2	6	4	0.07	0.07	2	0.53	0.755	0.755	0.98	0.3182	EW-31 0-2
PCB118	2	6	4	0.07	0.08	2	0.36	0.44	0.44	0.52	0.1131	EW-31 0-2
PCB126	2	6	6	0.09	0.1	0	-	-	-	-	-	-
PCB128	2	6	6	0.11	0.13	0	-	-	-	-	-	-
PCB129	2	6	6	0.05	0.05	0	-	-	-	-	-	-
PCB138	2	6	4	0.06	0.06	2	1.59	1.69	1.69	1.79	0.1414	EW-31 0-2
PCB153	2	6	4	0.09	0.1	2	2.84	3.14	3.14	3.44	0.4243	EW-31 0-2
PCB170	2	6	3	0.06	0.06	3	0.47	0.85	0.81	1.27	0.4015	EW-36 0-2
PCB18	2	6	6	0.05	0.05	0	-	-	-	-	-	-
PCB180	2	6	1	0.07	0.07	5	0.19	0.95	0.46	1.99	0.8879	EW-31 0-2
PCB187	2	6	2	0.06	0.06	4	0.04	0.76	0.615	1.77	0.8308	EW-31 0-2
PCB195	2	6	4	0.06	0.06	2	0.18	0.225	0.225	0.27	0.06364	EW-31 0-2
PCB206	2	6	4	0.05	0.06	2	0.11	0.195	0.195	0.28	0.1202	EW-36 0-2
PCB209	2	6	4	0.06	0.06	2	0.09	0.105	0.105	0.12	0.02121	EW-31 0-2
PCB28	2	6	5	0.07	0.08	1	0.17	0.17	0.17	0.17	0	EW-36 2-4
PCB44	2	6	6	0.06	0.07	0	-	-	-	-	-	-
PCB52	2	6	6	0.06	0.07	0	-	-	-	-	-	-
PCB66	2	6	6	0.07	0.08	0	-	-	-	-	-	-
PCB77	2	6	6	0.1	0.11	0	-	-	-	-	-	-
PCB8	2	6	6	0.1	0.11	0	-	-	-	-	-	-
2,4'-DDD	2	6	6	0.06	0.07	0	-	-	-	-	-	-
2,4'-DDE	2	6	6	0.08	0.09	0	-	-	-	-	-	-
2,4'-DDT	2	6	6	0.07	0.08	0	-	-	-	-	-	-
4,4'-DDD	2	6	6	0.06	0.07	0	-	-	-	-	-	-
4,4'-DDE	2	6	5	0.05	0.06	1	0.19	0.19	0.19	0.19	0	EW-31 0-2
4,4'-DDT	2	6	6	0.06	0.06	0	-	-	-	-	-	-

Table F-9. Statistical Summary of Sediment Core Sample Data for Area VIII (Eastern Wetland) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	2	6	0	-	-	6	42300	46000	45350	50200	3313	EW-31 2-4
Antimony	2	6	0	-	-	6	0.3	1.842	0.384	9.26	3.634	EW-36 0-2
Arsenic	2	6	0	-	-	6	5.8	7.53	7.085	10.1	1.59	EW-36 2-4
Barium	2	6	0	-	-	6	319	368.3	373	407	34.87	EW-36 4-6
Cadmium	2	6	0	-	-	6	0.104	0.141	0.131	0.204	0.03743	EW-36 2-4
Chromium	2	6	0	-	-	6	145	189.3	187	236	35.51	EW-36 0-2
Cobalt	2	6	0	-	-	6	12.4	14.53	14.75	17.3	1.805	EW-36 2-4
Copper	2	6	0	-	-	6	9.82	15.92	12.35	31	8.342	EW-36 0-2
Iron	2	6	0	-	-	6	23100	24680	24450	27000	1566	EW-36 0-2
Lead	2	6	0	-	-	6	5.73	10.93	9.15	20.2	5.781	EW-36 0-2
Manganese	2	6	0	-	-	6	510	560	560	630	44.1	EW-36 0-2
Mercury	2	6	0	-	-	6	0.0547	0.1484	0.1365	0.292	0.079	EW-31 4-6
Molybdenum	2	6	0	-	-	6	0.423	0.5353	0.521	0.666	0.09961	EW-31 4-6
Nickel	2	6	0	-	-	6	68.7	75.05	74.75	82	6.27	EW-36 0-2
Selenium	2	6	4	0.126	0.126	2	0.134	0.1435	0.1435	0.153	0.01344	EW-31 2-4
Silver	2	6	4	0.066	0.066	2	0.0826	0.3248	0.3248	0.567	0.3425	EW-36 4-6
Vanadium	2	6	0	-	-	6	69.3	78.1	78.6	87.1	6.44	EW-36 4-6
Zinc	2	6	0	-	-	6	38.5	51.25	45.2	84.7	17.13	EW-36 0-2
Benzo(a)anthracene	2	6	0	-	-	6	36.95	860	332	3634	1375	EW-31 4-6
Benzo(a)pyrene	2	6	0	-	-	6	56.79	984.7	387.3	4201	1591	EW-31 4-6
Benzo(b)fluoranthene	2	6	0	-	-	6	31.9	462.1	195.9	1934	728.9	EW-31 4-6
Benzo(g,h,i)perylene	2	6	0	-	-	6	43.77	565.3	233.9	2433	921	EW-31 4-6
Benzo(k)fluoranthene	2	6	0	-	-	6	36.28	611.7	254.4	2581	974.8	EW-31 4-6
Chrysene	2	6	0	-	-	6	40.35	893.9	327.6	3741	1414	EW-31 4-6
Dibenzo(a,h)anthracene	2	6	0	-	-	6	5.041	97.57	39.08	398.6	149.9	EW-31 4-6
Fluoranthene	2	6	0	-	-	6	86.7	2063	595.1	9735	3772	EW-31 4-6
Indeno(1,2,3-cd)pyrene	2	6	0	-	-	6	43.36	563.3	232.8	2377	896.8	EW-31 4-6
Pyrene	2	6	0	-	-	6	110.3	2532	766.6	11750	4534	EW-31 4-6
2-Methylnaphthalene	2	6	0	-	-	6	2.229	22.42	12.68	71.55	25.91	EW-31 4-6
Acenaphthene	2	6	0	-	-	6	3.287	24.41	7.719	100.9	38.03	EW-31 4-6
Acenaphthylene	2	6	0	-	-	6	3.689	162.7	32.92	753.2	292.7	EW-31 4-6
Anthracene	2	6	0	-	-	6	19.34	890	126.9	4512	1781	EW-31 4-6
Fluorene	2	6	0	-	-	6	5.122	227.1	33.28	1082	424	EW-31 4-6
Naphthalene	2	6	0	-	-	6	4.14	44.34	30.44	141.2	50.65	EW-31 4-6
Phenanthrene	2	6	0			6	55.83	2306	385.1	11410	4481	EW-31 4-6

Table F-9. Statistical Summary of Sediment Core Sample Data for Area VIII (Eastern Wetland) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	2	6	6	0.04	0.05	0	-	-	-	-	-	-
Dieldrin	2	6	6	0.06	0.06	0	-	-	-	-	-	-
Endosulfan II	2	6	6	0.06	0.07	0	-	-	-	-	-	-
Endrin	2	6	6	0.05	0.06	0	-	-	-	-	-	-
Gamma-chlordane	2	6	6	0.05	0.05	0	-	-	-	-	-	-
Heptachlor	2	6	6	0.05	0.05	0	-	-	-	-	-	-
Dibutyltin	2	6	6	1.157	1.27	0	-	-	-	-	-	-
Monobutyltin	2	6	6	0.6121	0.6716	0	-	-	-	-	-	-
Tetrabutyltin	2	6	6	1.45	1.591	0	-	-	-	-	-	-
Tributyltin	2	6	6	0.8243	0.9045	0	-	-	-	-	-	-
Total organic carbon	2	6	1	3660	3660	5	2310	5012	3970	9360	2720	EW-36 2-4

Table F-10. Statistical Summary of Sediment Core Sample Data for Area IX (Oil Reclamation)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	2	6	6	9.06	11.53	0	-	-	-	-	-	-
Aroclor-1221	2	6	6	9.06	11.53	0	-	-	-	-	-	-
Aroclor-1232	2	6	6	9.06	11.53	0	-	-	-	-	-	-
Aroclor-1242	2	6	6	9.06	11.53	0	-	-	-	-	-	-
Aroclor-1248	2	6	6	9.06	11.53	0	-	-	-	-	-	-
Aroclor-1254	2	6	6	9.06	11.53	0	-	-	-	-	-	-
Aroclor-1260	2	6	5	9.06	11.53	1	96.46	96.46	96.46	96.46	0	OR-28 0-2
PCB101	2	6	2	0.08	0.1	4	0.19	1.58	1.025	4.08	1.713	OR-28 0-2
PCB105	2	6	4	0.07	0.09	2	0.11	0.41	0.41	0.71	0.4243	OR-28 0-2
PCB110	2	6	2	0.09	0.11	4	0.17	1.072	0.76	2.6	1.056	OR-28 0-2
PCB118	2	6	3	0.09	0.11	3	0.21	0.8933	0.41	2.06	1.015	OR-28 0-2
PCB126	2	6	6	0.12	0.15	0	-	-	-	-	-	-
PCB128	2	6	6	0.15	0.2	0	-	-	-	-	-	-
PCB129	2	6	6	0.07	0.08	0	-	-	-	-	-	-
PCB138	2	6	2	0.08	0.09	4	0.56	2.863	1.215	8.46	3.765	OR-28 0-2
PCB153	2	6	2	0.12	0.14	4	0.82	4.995	2.82	13.52	5.788	OR-28 0-2
PCB170	2	6	2	0.08	0.09	4	0.19	1.415	0.435	4.6	2.132	OR-28 0-2
PCB18	2	6	5	0.06	0.08	1	0.06	0.06	0.06	0.06	0	OR-28 0-2
PCB180	2	6	2	0.08	0.1	4	0.52	3.13	1.85	8.3	3.508	OR-28 0-2
PCB187	2	6	2	0.08	0.09	4	0.25	2.002	1.405	4.95	2.04	OR-28 0-2
PCB195	2	6	3	0.07	0.08	3	0.15	0.46	0.35	0.88	0.3772	OR-28 0-2
PCB206	2	6	3	0.07	0.08	3	0.07	0.2567	0.24	0.46	0.1955	OR-28 0-2
PCB209	2	6	3	0.08	0.09	3	0.1	0.3467	0.31	0.63	0.2669	OR-24 4-6
PCB28	2	6	5	0.09	0.12	1	0.25	0.25	0.25	0.25	0	OR-28 0-2
PCB44	2	6	5	0.08	0.1	1	0.51	0.51	0.51	0.51	0	OR-28 0-2
PCB52	2	6	5	0.09	0.11	1	0.91	0.91	0.91	0.91	0	OR-28 0-2
PCB66	2	6	6	0.1	0.12	0	-	-	-	-	-	-
PCB77	2	6	6	0.14	0.17	0	-	-	-	-	-	-
PCB8	2	6	5	0.13	0.17	1	0.26	0.26	0.26	0.26	0	OR-28 0-2
2,4'-DDD	2	6	6	0.09	0.11	0	-	-	-	-	-	-
2,4'-DDE	2	6	6	0.11	0.14	0	-	-	-	-	-	-
2,4'-DDT	2	6	6	0.1	0.13	0	-	-	-	-	-	-
4,4'-DDD	2	6	4	0.08	0.09	2	0.77	0.975	0.975	1.18	0.2899	OR-28 0-2
4,4'-DDE	2	6	5	0.07	0.09	1	0.9	0.9	0.9	0.9	0	OR-28 0-2
4,4'-DDT	2	6	4	0.07	0.09	2	0.12	0.555	0.555	0.99	0.6152	OR-28 2-4

Table F-10. Statistical Summary of Sediment Core Sample Data for Area IX (Oil Reclamation) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	2	6	0	-	-	6	68900	72830	72150	78100	3680	OR-28 2-4
Antimony	2	6	0	-	-	6	0.427	0.7577	0.615	1.33	0.3748	OR-28 0-2
Arsenic	2	6	0	-	-	6	11.2	13.2	13.2	15.3	1.367	OR-28 2-4
Barium	2	6	0	-	-	6	385	426.3	419	472	31.83	OR-28 2-4
Cadmium	2	6	0	-	-	6	0.341	0.3663	0.3675	0.4	0.02313	OR-28 0-2
Chromium	2	6	0	-	-	6	151	172.5	169	210	21.46	OR-28 0-2
Cobalt	2	6	0	-	-	6	16.1	18.52	18.7	20.8	1.777	OR-28 0-2
Copper	2	6	0	-	-	6	30.5	40.85	36.95	60.6	12.2	OR-28 0-2
Iron	2	6	0	-	-	6	46400	46780	46600	47800	545.6	OR-24 4-6
Lead	2	6	0	-	-	6	9.66	20.96	15.8	43.8	13.5	OR-28 0-2
Manganese	2	6	0	-	-	6	425	459.5	461	484	21.63	OR-24 0-2
Mercury	2	6	0	-	-	6	0.0555	0.27	0.181	0.589	0.2299	OR-28 2-4
Molybdenum	2	6	0	-	-	6	1.28	2.125	2.21	3.07	0.7523	OR-24 0-2
Nickel	2	6	0	-	-	6	84.8	96.22	95.75	116	11.28	OR-28 0-2
Selenium	2	6	0	-	-	6	0.429	0.486	0.481	0.581	0.0563	OR-28 4-6
Silver	2	6	0	-	-	6	0.13	0.2418	0.204	0.445	0.1189	OR-28 0-2
Vanadium	2	6	0	-	-	6	132	149.7	152	164	14.49	OR-28 2-4
Zinc	2	6	0	-	-	6	81.7	101.2	93.2	138	22.91	OR-28 0-2
Benzo(a)anthracene	2	6	0	-	-	6	1.512	199.4	73.23	727.4	284.4	OR-28 2-4
Benzo(a)pyrene	2	6	0	-	-	6	1.893	467.7	139	1749	689.9	OR-28 2-4
Benzo(b)fluoranthene	2	6	0	-	-	6	2.851	284.7	84.2	1067	420.2	OR-28 2-4
Benzo(g,h,i)perylene	2	6	0	-	-	6	2.875	464.5	132.3	1796	704.6	OR-28 2-4
Benzo(k)fluoranthene	2	6	0	-	-	6	1.316	264.2	86.39	958.5	379.1	OR-28 2-4
Chrysene	2	6	0	-	-	6	3.304	244.5	84.53	900.1	351.8	OR-28 2-4
Dibenzo(a,h)anthracene	2	6	0	-	-	6	0.4255	45.66	11.71	172.2	68.3	OR-28 2-4
Fluoranthene	2	6	0	-	-	6	3.449	406.6	153.9	1530	593.3	OR-28 2-4
Indeno(1,2,3-cd)pyrene	2	6	0	-	-	6	1.463	434	116	1686	663.8	OR-28 2-4
Pyrene	2	6	0	-	-	6	4.553	591.9	208.5	2224	866.2	OR-28 2-4
2-Methylnaphthalene	2	6	0	-	-	6	1.955	8.047	5.84	22	7.519	OR-28 2-4
Acenaphthene	2	6	1	0.34	0.34	5	0.1514	6.941	6.19	21.06	8.455	OR-28 2-4
Acenaphthylene	2	6	1	0.63	0.63	5	0.1601	18.1	8.68	58.08	23.82	OR-28 2-4
Anthracene	2	6	0	-	-	6	1.077	41.67	19.23	147.7	56.67	OR-28 2-4
Fluorene	2	6	0	-	-	6	1.467	10.23	5.615	32.92	12.06	OR-28 2-4
Naphthalene	2	6	1	1.842	1.842	5	3.454	40.59	16.84	129.6	52.72	OR-28 2-4
Phenanthrene	2	6	0	-	-	6	7.187	143.8	68.93	519.3	196.6	OR-28 2-4

Table F-10. Statistical Summary of Sediment Core Sample Data for Area IX (Oil Reclamation) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	2	6	5	0.06	0.07	1	0.12	0.12	0.12	0.12	0	OR-28 0-2
Dieldrin	2	6	6	0.08	0.1	0	-	-	-	-	-	-
Endosulfan II	2	6	6	0.08	0.1	0	-	-	-	-	-	-
Endrin	2	6	6	0.07	0.09	0	-	-	-	-	-	-
Gamma-chlordane	2	6	5	0.06	0.08	1	0.09	0.09	0.09	0.09	0	OR-28 0-2
Heptachlor	2	6	6	0.07	0.08	0	-	-	-	-	-	-
Dibutyltin	2	6	5	1.618	1.996	1	6.21	6.21	6.21	6.21	0	OR-28 0-2
Monobutyltin	2	6	6	0.8559	1.056	0	-	-	-	-	-	-
Tetrabutyltin	2	6	6	2.027	2.502	0	-	-	-	-	-	-
Tributyltin	2	6	5	1.153	1.422	1	6.677	6.677	6.677	6.677	0	OR-28 0-2
Total organic carbon	2	6	0	-	-	6	9340	10210	10180	10900	598.1	OR-28 0-2

Table F-11. Statistical Summary of Sediment Core Sample Data for Area X (South Basin)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aroclor-1016	8	24	24	9.02	13.7	0	-	-	-	-	-	-
Aroclor-1221	8	24	24	9.02	13.7	0	-	-	-	-	-	-
Aroclor-1232	8	24	24	9.02	13.7	0	-	-	-	-	-	-
Aroclor-1242	8	24	24	9.02	13.7	0	-	-	-	-	-	-
Aroclor-1248	8	24	24	9.02	13.7	0	-	-	-	-	-	-
Aroclor-1254	8	24	23	9.02	12.84	1	576.1	576.1	576.1	576.1	0	SB-20 2-4
Aroclor-1260	8	24	10	9.48	13.7	14	41.52	1250	909	4607	1463	SB-01 0-2
PCB101	8	24	3	0.09	0.09	21	0.07	55.27	16.42	346.7	93.12	SB-01 0-2
PCB105	8	24	9	0.07	0.1	15	0.08	16.91	10.5	68.4	20.76	SB-20 0-2
PCB110	8	24	3	0.1	0.1	21	0.1	48.34	12.82	229.1	70.03	SB-20 0-2
PCB118	8	24	3	0.1	0.1	21	0.09	38.03	8.47	217.8	62.54	SB-01 0-2
PCB126	8	24	24	0.12	0.18	0	-	-	-	-	-	-
PCB128	8	24	8	0.16	0.19	16	0.19	14.16	7.405	57.56	18.24	SB-20 0-2
PCB129	8	24	24	0.07	0.1	0	-	-	-	-	-	-
PCB138	8	24	3	0.08	0.09	21	0.22	82.88	25.46	445.1	130.8	SB-01 0-2
PCB153	8	24	3	0.12	0.13	21	0.22	119.5	31.67	736.9	200.7	SB-01 0-2
PCB170	8	24	3	0.08	0.08	21	0.12	31.51	6.83	184.1	52.96	SB-20 0-2
PCB18	8	24	10	0.06	0.08	14	0.07	1.049	0.77	2.56	0.8429	SB-20 0-2
PCB180	8	24	3	0.09	0.09	21	0.15	49.44	15.02	364	82.74	SB-01 0-2
PCB187	8	24	4	0.08	0.08	20	0.14	37.06	13.44	210.5	56.78	SB-01 0-2
PCB195	8	24	4	0.07	0.08	20	0.04	4.074	1.975	12.97	4.584	SB-01 0-2
PCB206	8	24	4	0.07	0.08	20	0.03	2.3	1.645	8.17	2.471	SB-12 0-2
PCB209	8	24	5	0.08	0.08	19	0.06	1.843	1.27	8.06	2.023	SB-12 0-2
PCB28	8	24	11	0.09	0.13	13	0.07	1.381	0.73	3.8	1.312	SB-12 0-2
PCB44	8	24	8	0.08	0.09	16	0.07	13.4	3.845	73.11	20.68	SB-01 0-2
PCB52	8	24	7	0.09	0.1	17	0.24	26.25	9.97	131.7	39.48	SB-01 0-2
PCB66	8	24	14	0.1	0.15	10	0.18	8.856	5.32	40.51	11.82	SB-01 0-2
PCB77	8	24	24	0.13	0.2	0	-	-	-	-	-	-
PCB8	8	24	16	0.13	0.2	8	0.22	1.112	1.11	1.95	0.7288	SB-03 0-2
2,4'-DDD	8	24	24	0.09	0.13	0	-	-	-	-	-	-
2,4'-DDE	8	24	24	0.11	0.16	0	-	-	-	-	-	-
2,4'-DDT	8	24	24	0.1	0.15	0	-	-	-	-	-	-
4,4'-DDD	8	24	10	0.08	0.11	14	0.57	12.01	6.83	65.35	16.95	SB-01 0-2
4,4'-DDE	8	24	6	0.07	0.08	18	0.04	26.82	13.62	146.3	37.52	SB-01 0-2
4,4'-DDT	8	24	15	0.07	0.11	9	0.4	16	0.74	135.3	44.76	SB-01 0-2

Table F-11. Statistical Summary of Sediment Core Sample Data for Area X (South Basin) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Aluminum	8	24	0	-	-	24	63100	72520	73350	79400	3950	SB-12 2-4
Antimony	8	24	0	-	-	24	0.409	2.454	2.13	9.16	2.274	SB-20 0-2
Arsenic	8	24	0	-	-	24	11.3	15.03	15.2	17.5	1.656	SB-01 2-4
Barium	8	24	0	-	-	24	383	460.5	442.5	675	65.84	SB-01 0-2
Cadmium	8	24	0	-	-	24	0.223	1.643	1.45	4.69	1.298	SB-01 0-2
Chromium	8	24	0	-	-	24	154	305.1	248	792	165.8	SB-12 0-2
Cobalt	8	24	0	-	-	24	15.9	18.24	18.2	20.2	1.134	SB-20 0-2
Copper	8	24	0	-	-	24	28.8	87.67	76.9	242	60.44	SB-20 0-2
Iron	8	24	0	-	-	24	38900	49220	50000	53300	2924	SB-22 2-4
Lead	8	24	0	-	-	24	10.5	111.2	70.65	408	114.2	SB-01 0-2
Manganese	8	24	0	-	-	24	404	451.6	441.5	556	41.88	SB-16 0-2
Mercury	8	24	0	-	-	24	0.0734	0.611	0.5355	1.64	0.5054	SB-20 0-2
Molybdenum	8	24	0	-	-	24	0.805	2.691	2.675	3.4	0.5375	SB-20 4-6
Nickel	8	24	0	-	-	24	79.7	105.8	103.5	140	17.65	SB-12 0-2
Selenium	8	24	0	-	-	24	0.42	0.6188	0.5445	1.15	0.186	SB-01 0-2
Silver	8	24	0	-	-	24	0.113	0.5346	0.475	1.35	0.391	SB-20 2-4
Vanadium	8	24	0	-	-	24	125	153.5	154.5	180	14.08	SB-07 0-2
Zinc	8	24	0	-	-	24	77.3	224.1	185	481	143.1	SB-01 0-2
Benzo(a)anthracene	8	24	0	-	-	24	0.8043	118.9	119.9	278.2	97.07	SB-20 0-2
Benzo(a)pyrene	8	24	1	0.8595	0.8595	23	1.408	281.8	368.5	609.9	208.2	SB-22 4-6
Benzo(b)fluoranthene	8	24	0	-	-	24	2.273	181.9	219.3	385.1	140.4	SB-20 0-2
Benzo(g,h,i)perylene	8	24	0	-	-	24	2.287	270.4	307.5	671.6	208.5	SB-22 4-6
Benzo(k)fluoranthene	8	24	0	-	-	24	0.7565	164.7	186.2	370.2	129	SB-20 0-2
Chrysene	8	24	0	-	-	24	2.455	147.1	143.9	361.6	121.1	SB-20 0-2
Dibenzo(a,h)anthracene	8	24	0	-	-	24	0.2673	31.4	32.93	78.81	25.71	SB-20 0-2
Fluoranthene	8	24	0	-	-	24	1.764	217.4	231	504.6	178.8	SB-20 2-4
Indeno(1,2,3-cd)pyrene	8	24	0	-	-	24	0.9176	244.2	285.4	592.8	190.9	SB-22 4-6
Pyrene	8	24	0	-	-	24	2.633	402.9	395	885.1	332.4	SB-20 0-2
2-Methylnaphthalene	8	24	0	-	-	24	2.474	20.49	8.424	111.4	24.9	SB-01 0-2
Acenaphthene	8	24	0	-	-	24	0.1574	6.573	5.492	30.89	7.173	SB-20 2-4
Acenaphthylene	8	24	1	0.04449	0.04449	23	0.05954	13.67	14.03	28.53	10.52	SB-20 0-2
Anthracene	8	24	0	-	-	24	0.6198	35.57	28.75	138.6	36.54	SB-01 0-2
Fluorene	8	24	0	-	-	24	1.466	10.32	8.688	40.03	9.489	SB-20 2-4
Naphthalene	8	24	4	1.802	2.861	20	2.5	62.49	54.16	281.9	64.24	SB-20 2-4
Phenanthrene	8	24	0	-	-	24	6.048	76.69	74.71	230.4	62.56	SB-20 2-4

Table F-11. Statistical Summary of Sediment Core Sample Data for Area X (South Basin) (continued)

Analyte	No. Cores	No. Samples	Non-detects			Detects						
			N	Minimum	Maximum	N	Minimum	Mean	Median	Maximum	Standard Deviation	Location of Max.
Alpha-chlordane	8	24	15	0.06	0.09	9	0.03	4.072	0.92	24.15	7.65	SB-01 0-2
Dieldrin	8	24	18	0.08	0.12	6	1.49	26.19	4.55	128.5	50.38	SB-01 0-2
Endosulfan II	8	24	24	0.08	0.12	0	-	-	-	-	-	-
Endrin	8	24	24	0.07	0.11	0	-	-	-	-	-	-
Gamma-chlordane	8	24	15	0.06	0.09	9	0.08	8.52	3.14	40.35	12.62	SB-01 0-2
Heptachlor	8	24	24	0.07	0.1	0						
Dibutyltin	8	24	18	1.587	2.435	6	3.001	10.58	10.75	16.63	5.269	SB-20 0-2
Monobutyltin	8	24	24	0.8395	1.288	0	-	-	-	-	-	-
Tetrabutyltin	8	24	24	1.989	3.051	0	-	-	-	-	-	-
Tributyltin	8	24	18	1.131	1.735	6	1.784	9.185	8.936	19.46	6.637	SB-20 0-2
Total organic carbon	8	24	0	-	-	24	9160	13640	12050	24200	4418	SB-20 2-4

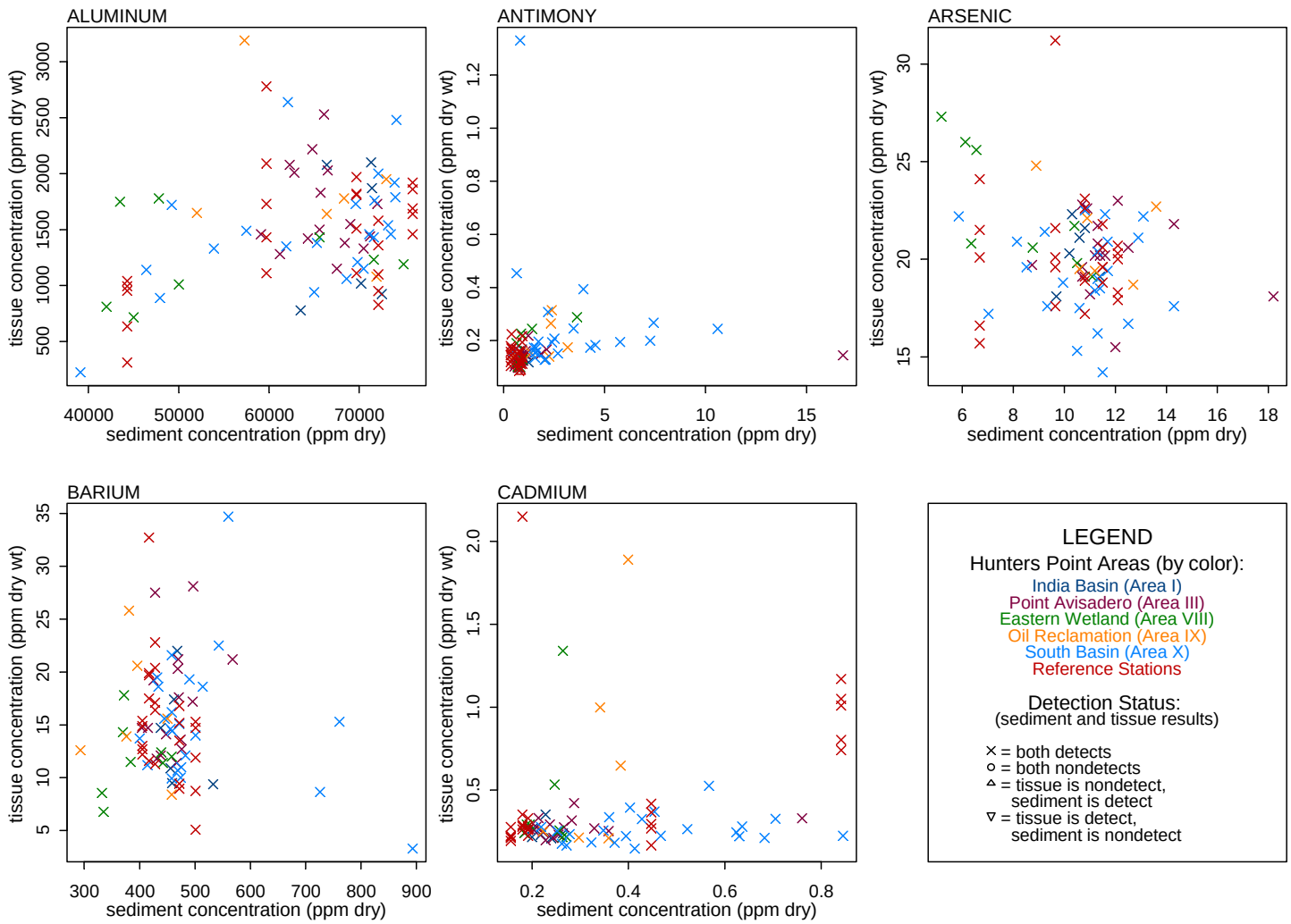

Figure F-29. Sediment and Depurated *M. nastua* Tissue Concentrations of Aluminum, Antimony, Arsenic, Barium, and Cadmium

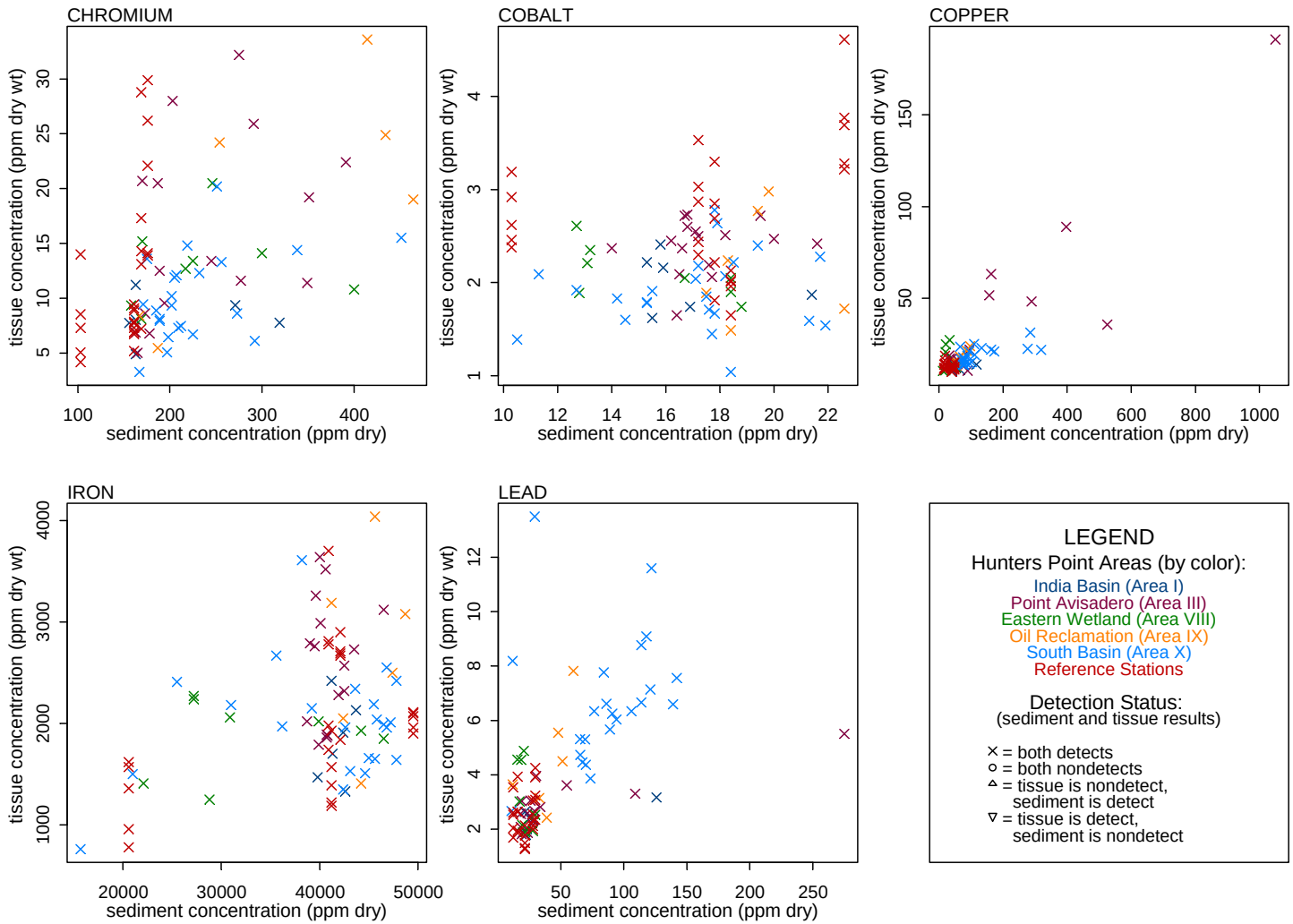

Figure F-30. Sediment and Depurated *M. nastua* Tissue Concentrations of Chromium, Cobalt, Copper, Iron, and Lead

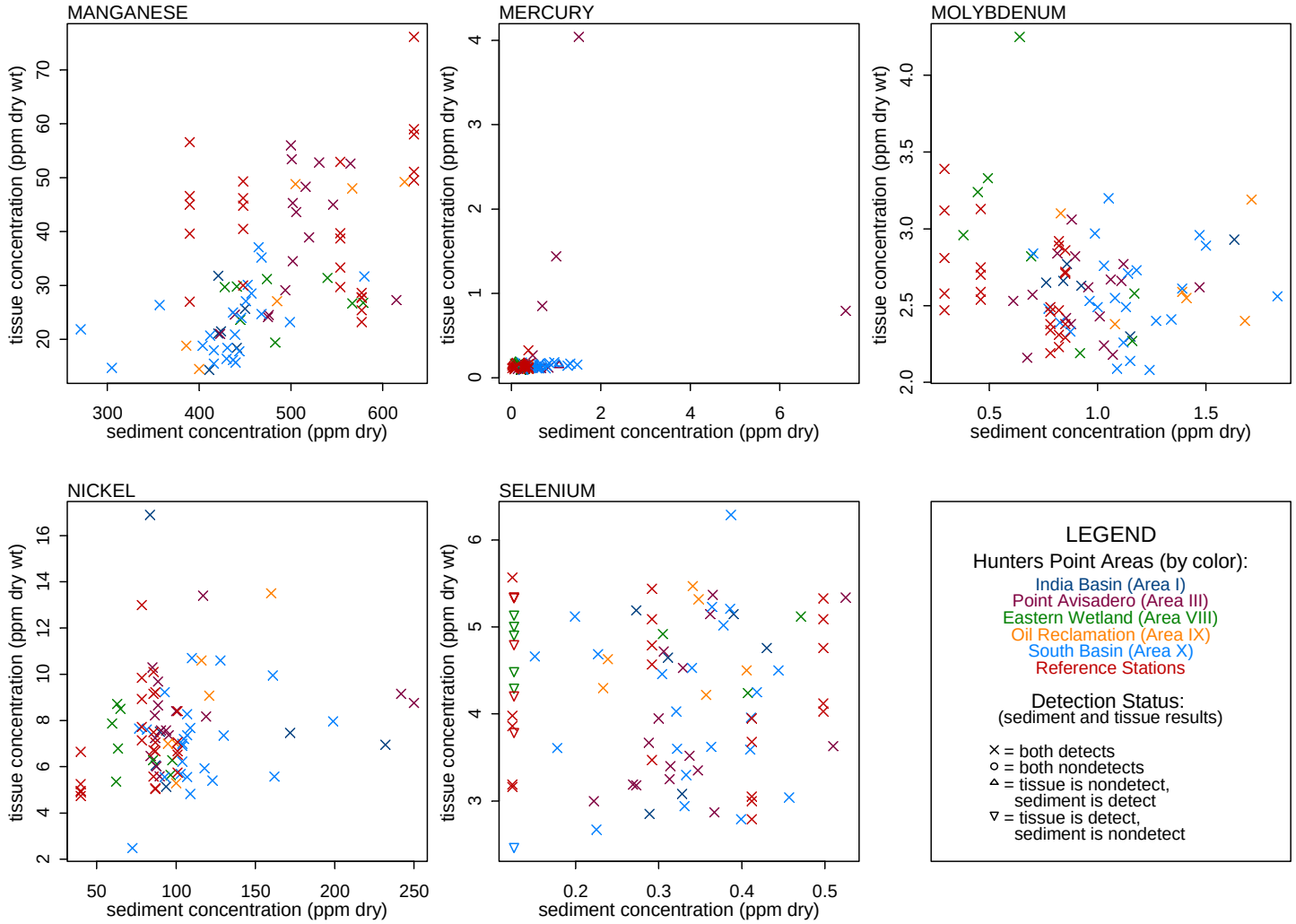

Figure F-31. Sediment and Depurated *M. nastua* Tissue Concentrations of Manganese, Mercury, Molybdenum, Nickel, and Selenium

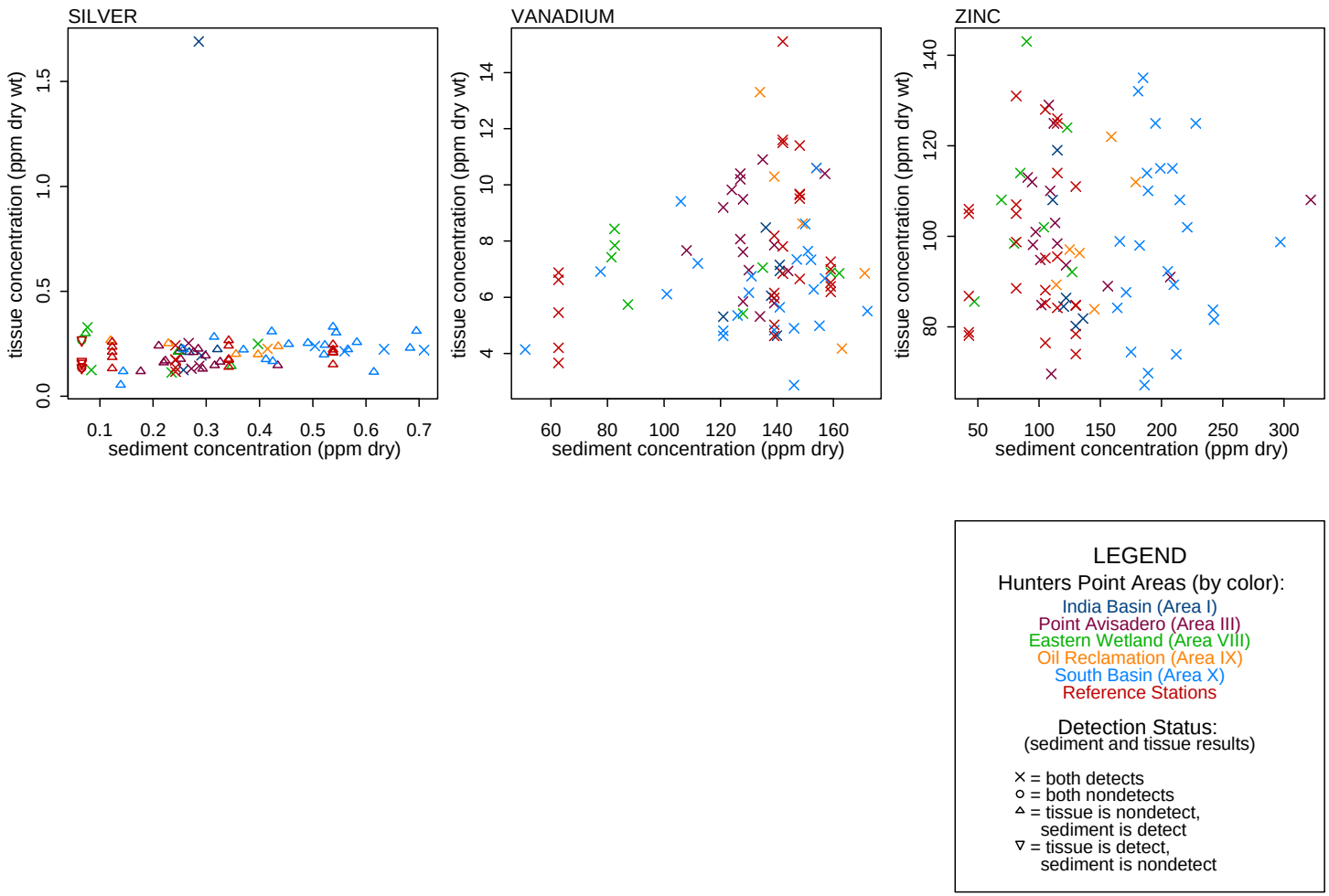

Figure F-32. Sediment and Depurated *M. nastua* Tissue Concentrations of Silver, Vanadium, and Zinc

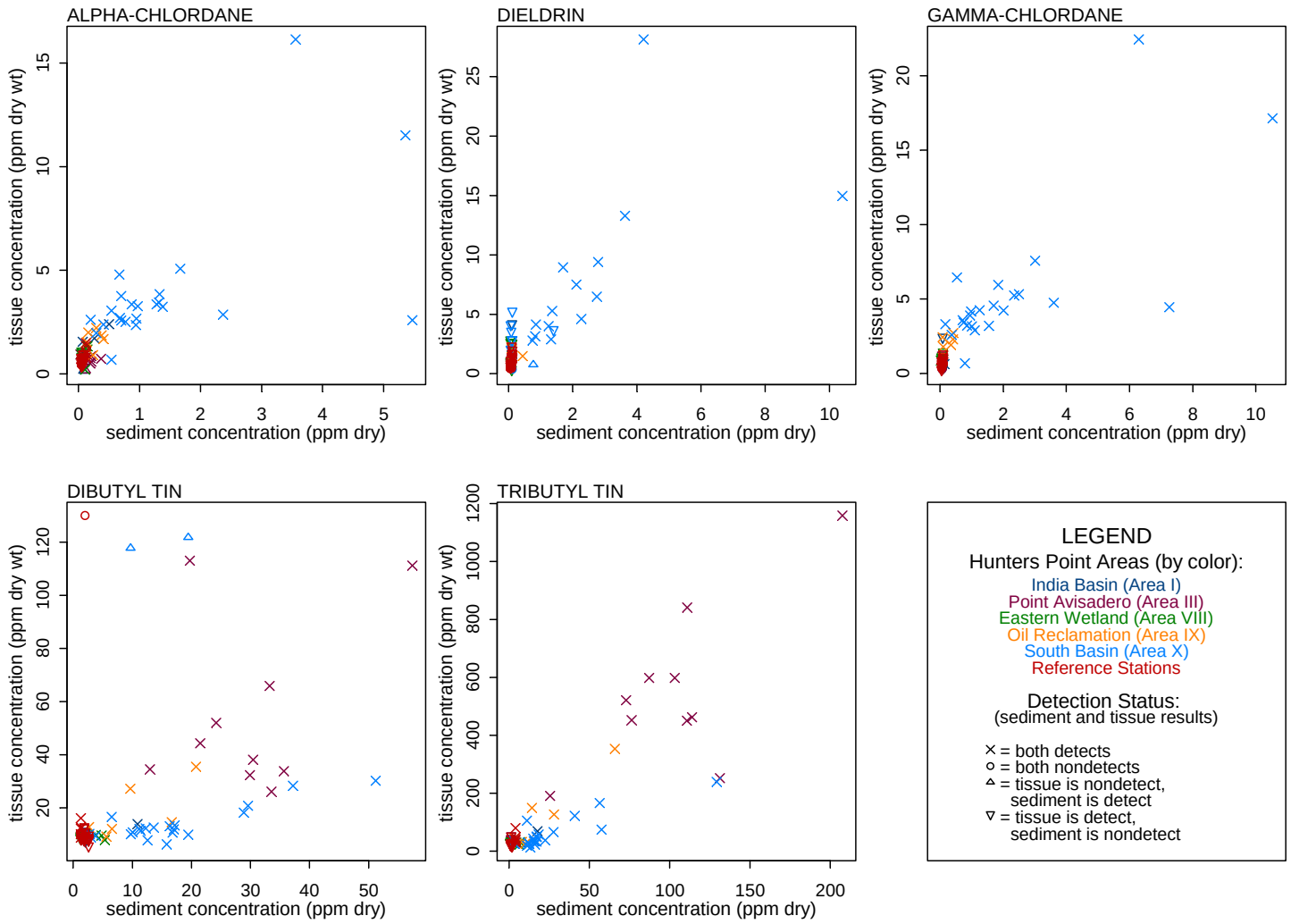

Figure F-33. Sediment and Depurated *M. nastua* Tissue Concentrations of *alpha*-Chlordane, Dieldrin, *gamma*-Chlordane, Dibutyltin, and Tributyltin

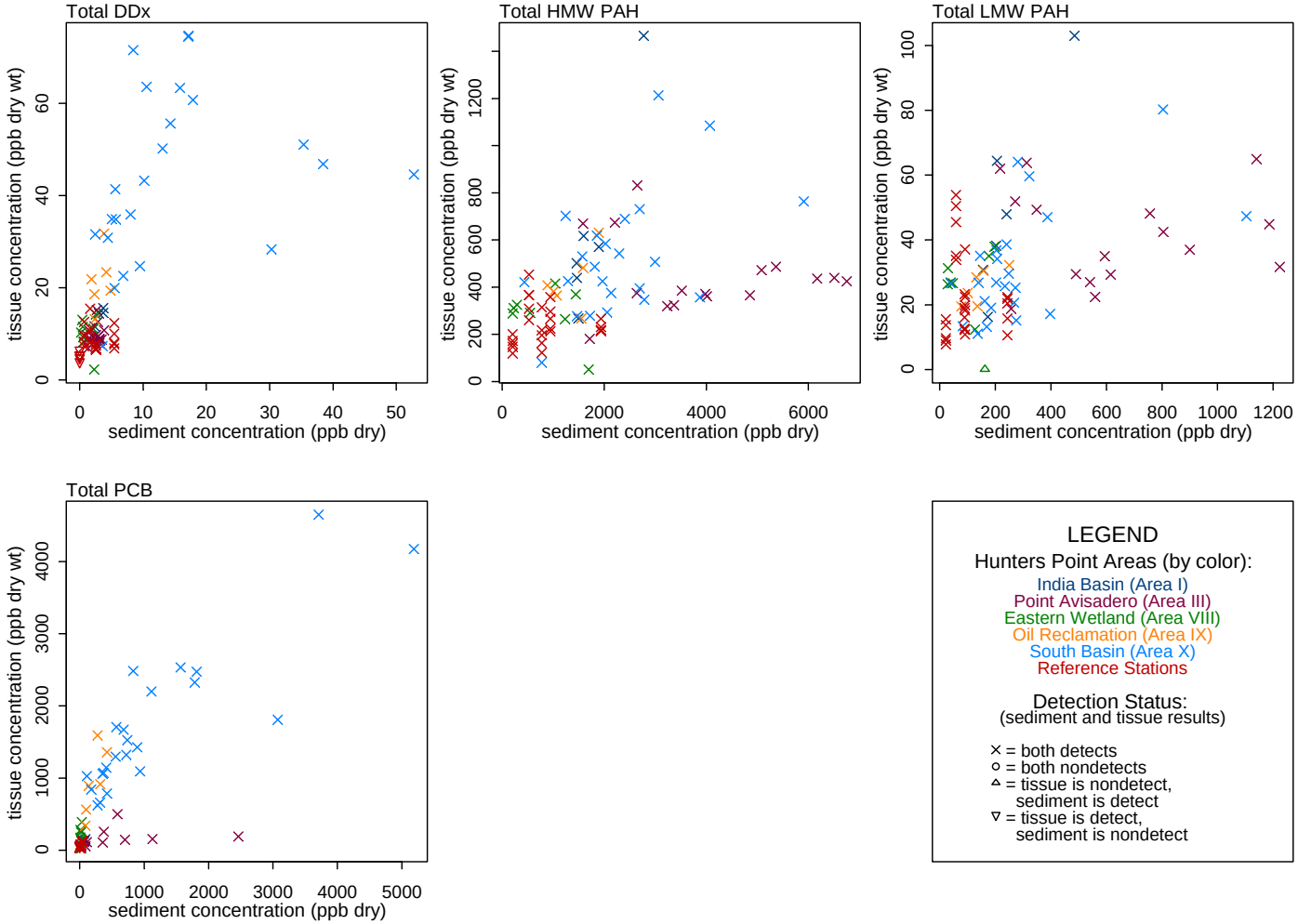

Figure F-34. Sediment and Depurated *M. nastua* Tissue Concentrations of Total DDx, Total HPAH, Total LPAH, and Total PCB

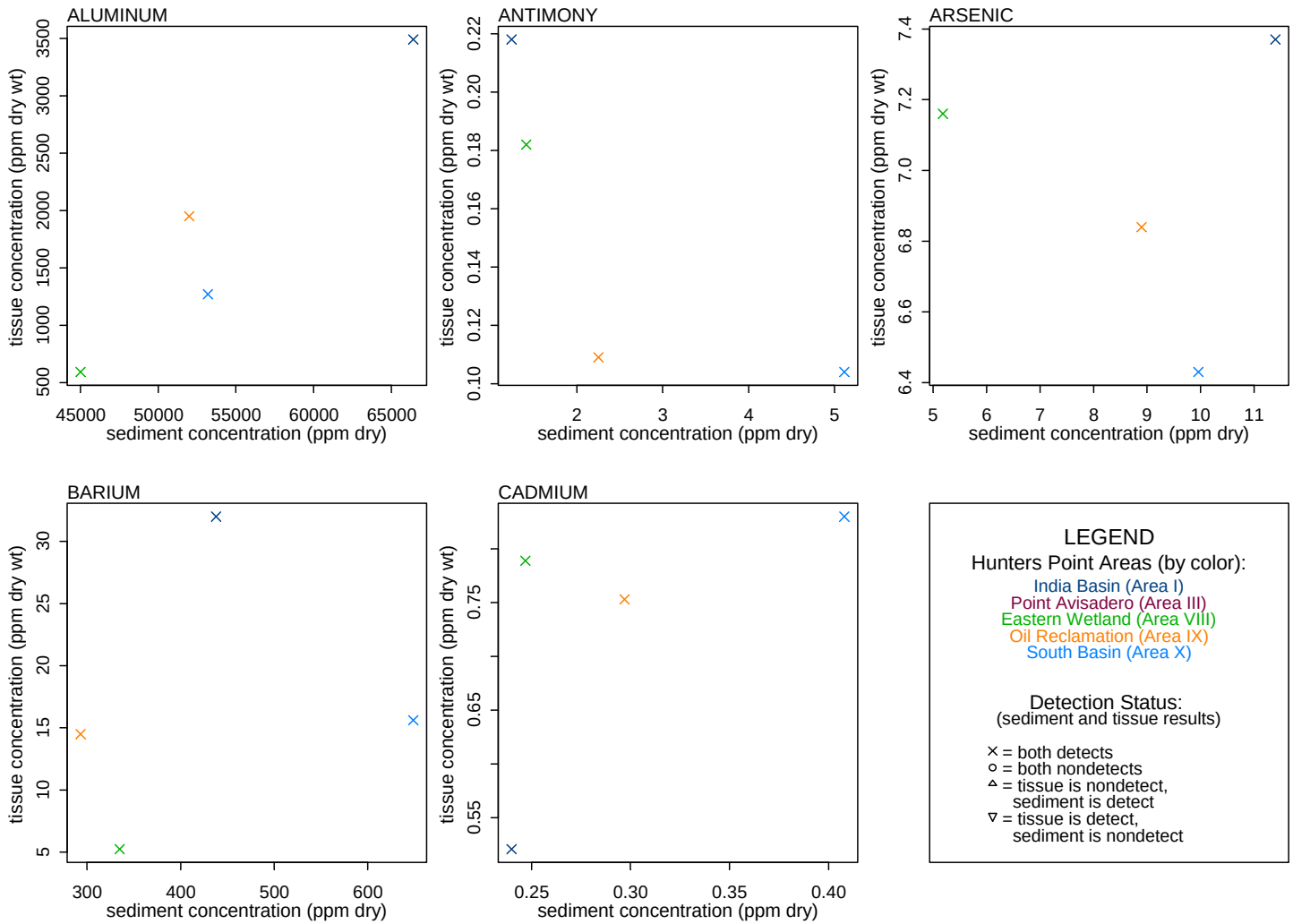

Figure F-35. Sediment and Hard-Bodied Invertebrate Tissue Concentrations of Aluminum, Antimony, Arsenic, Barium, and Cadmium (samples are not collocated)

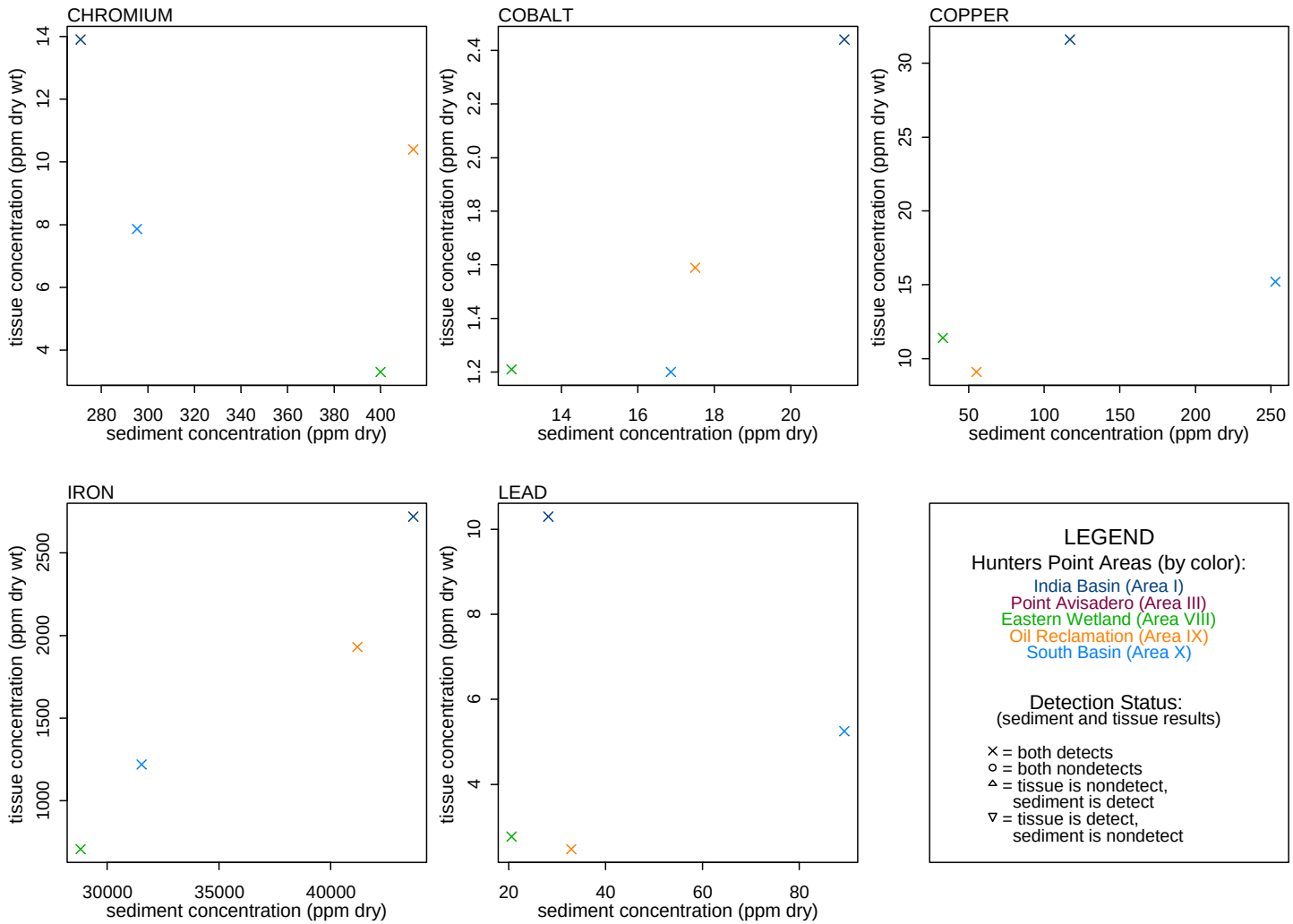

Figure F-36. Sediment and Hard-Bodied Invertebrate Tissue Concentrations of Chromium, Cobalt, Copper, Iron, and Lead (samples are not collocated).

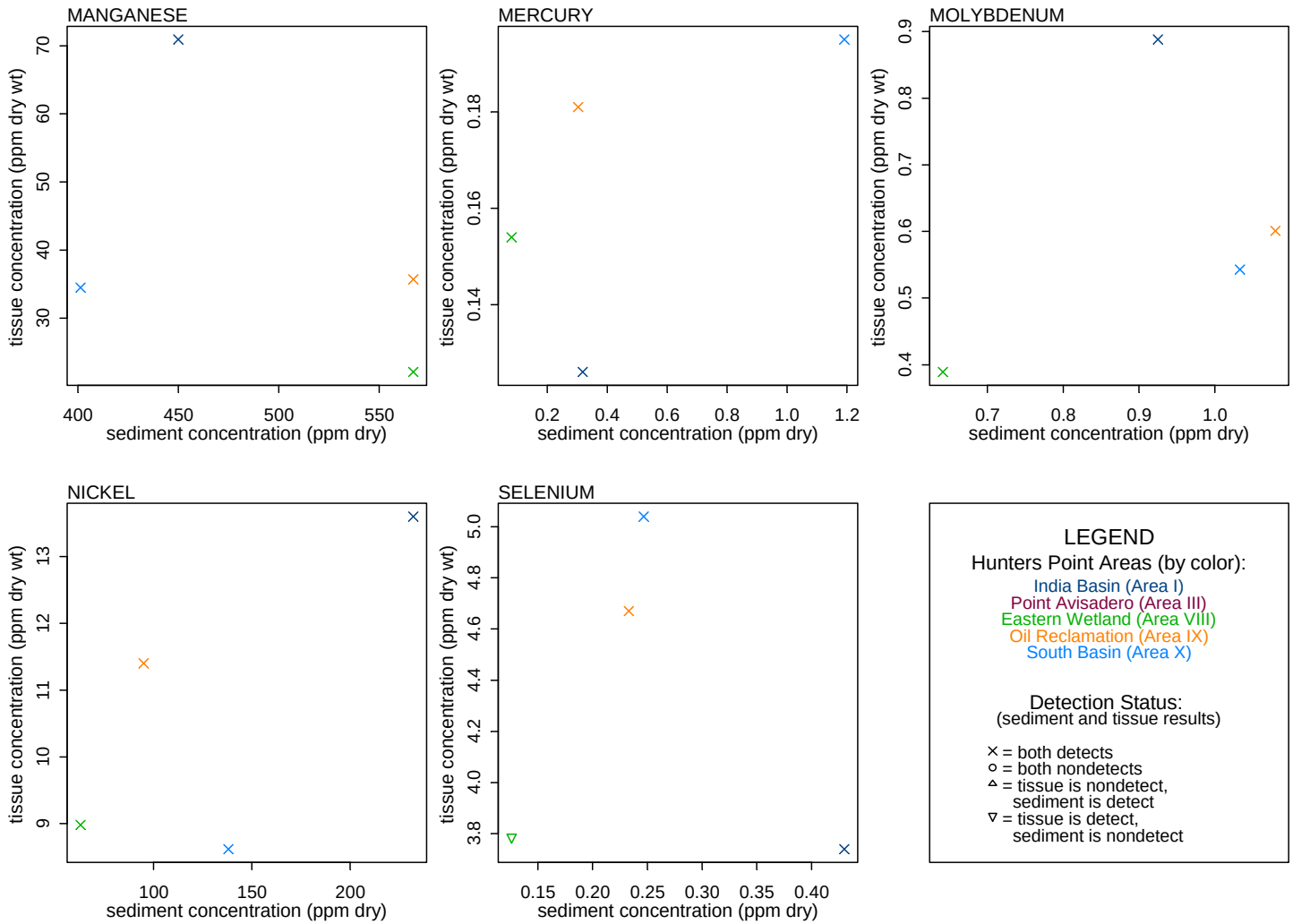

Figure F-37. Sediment and Hard-Bodied Invertebrate Tissue Concentrations of Manganese, Mercury, Molybdenum, Nickel and Selenium (samples are not collocated).

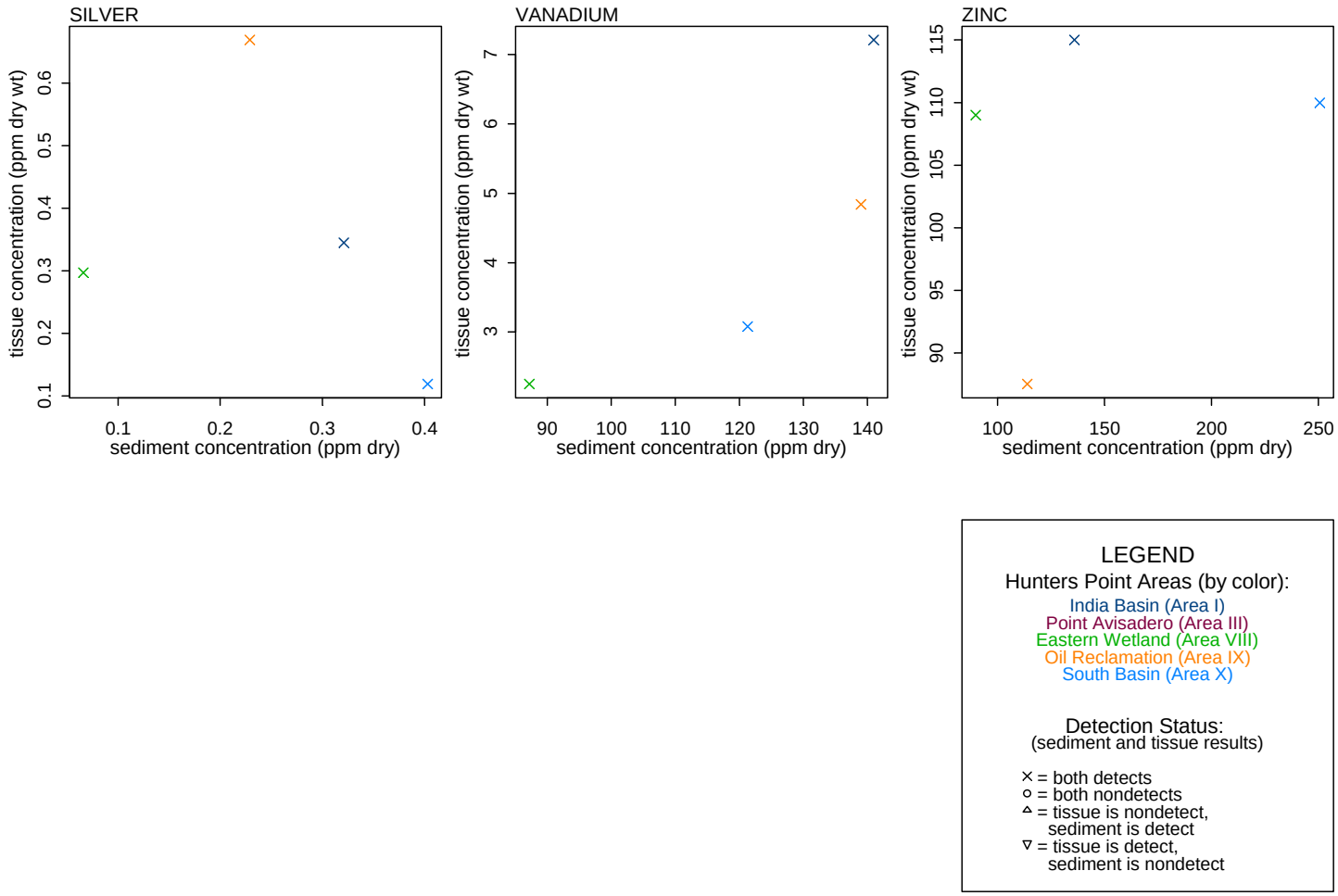

Figure F-38. Sediment and Hard-Bodied Invertebrate Tissue Concentrations of Silver, Vanadium and Zinc (samples are not collocated).

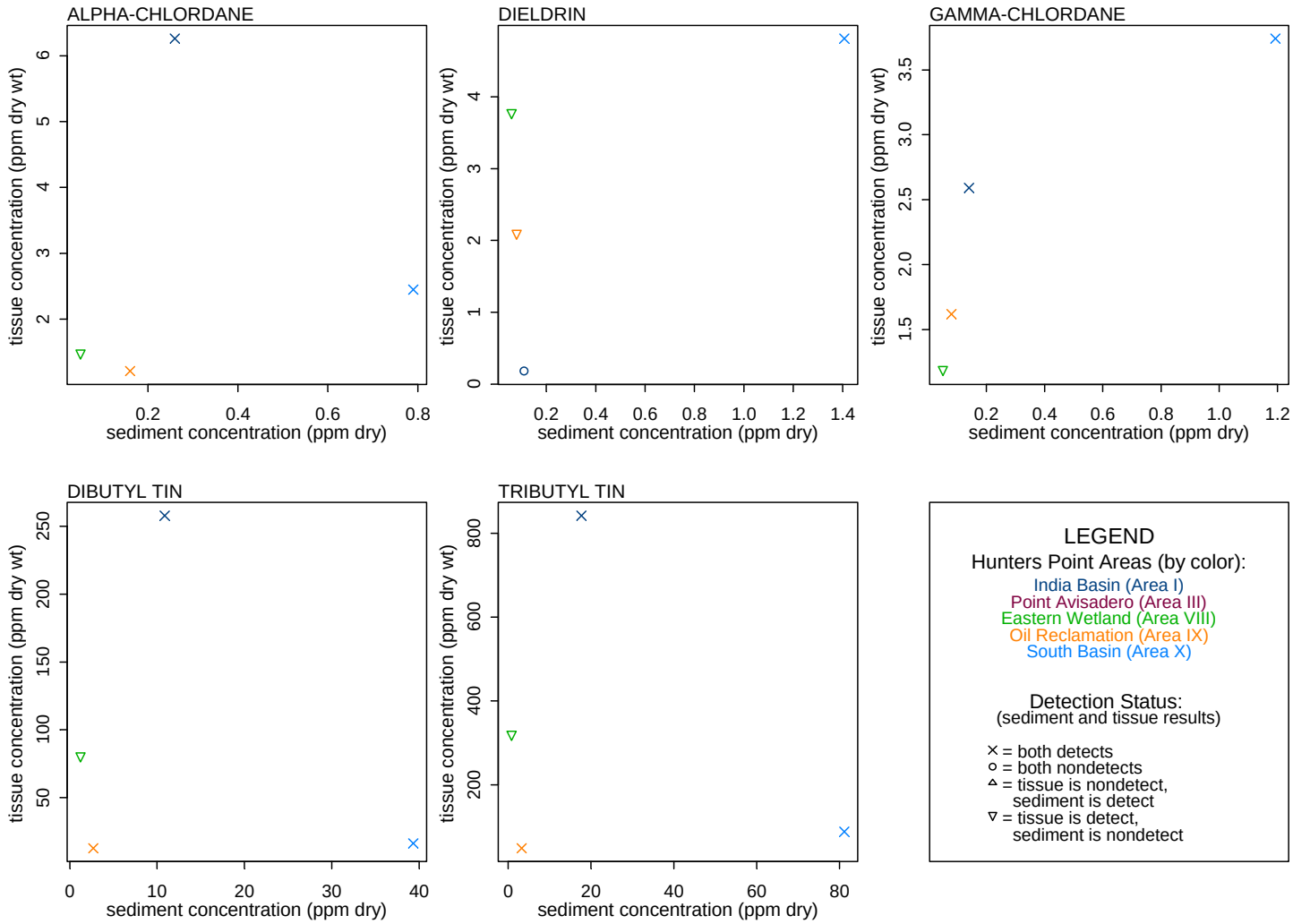

Figure F-39. Sediment and Hard-Bodied Invertebrate Tissue Concentrations of *alpha*-Chlordane, Dieldrin, *gamma*-Chlordane, Dibutyl Tin and Tributyl Tin (samples are not collocated).

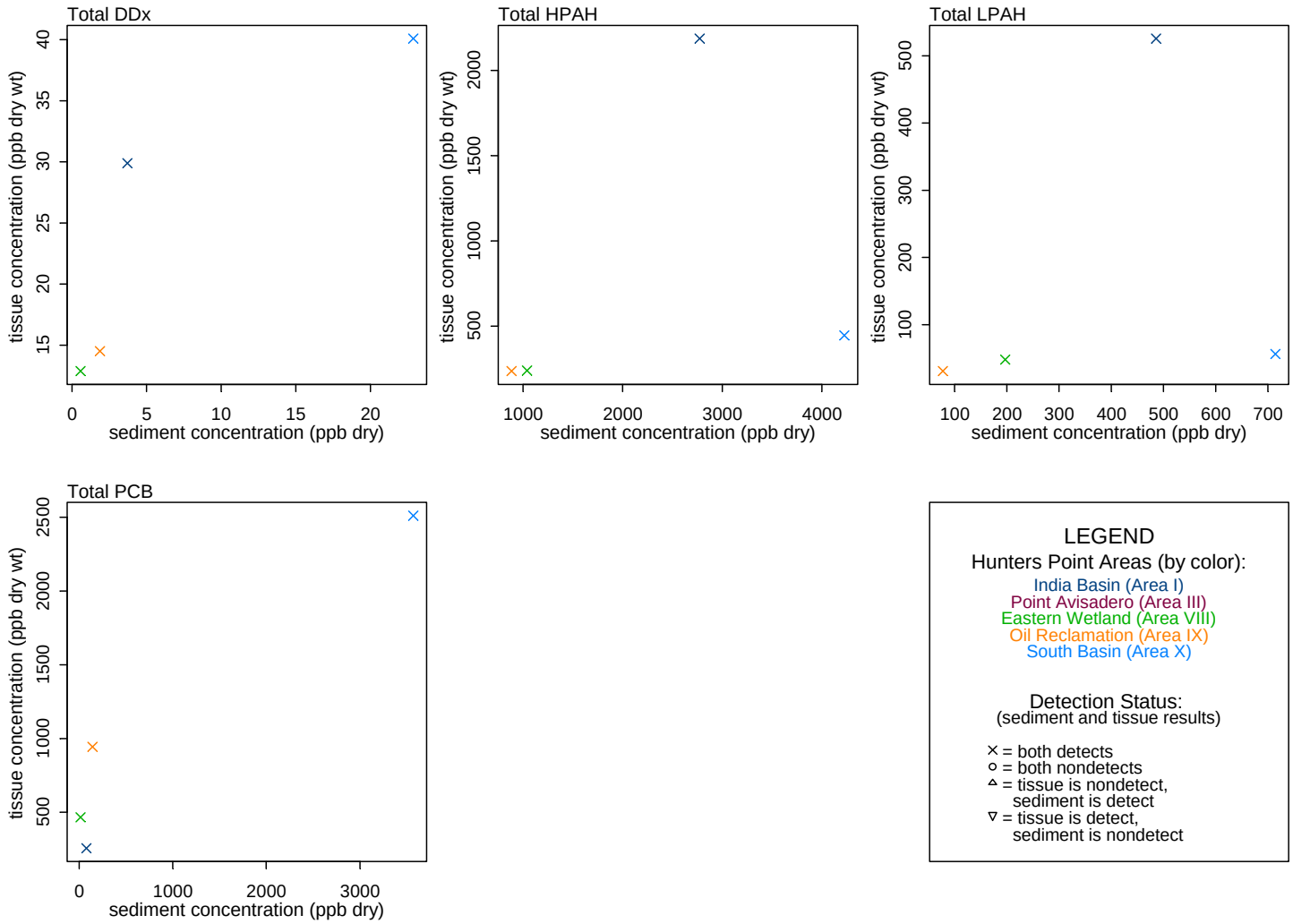

Figure F-40. Sediment and Hard-Bodied Invertebrate Tissue Concentrations of Total DDx, Total HPAH, Total LPAH, and Total PCB (samples are not collocated)

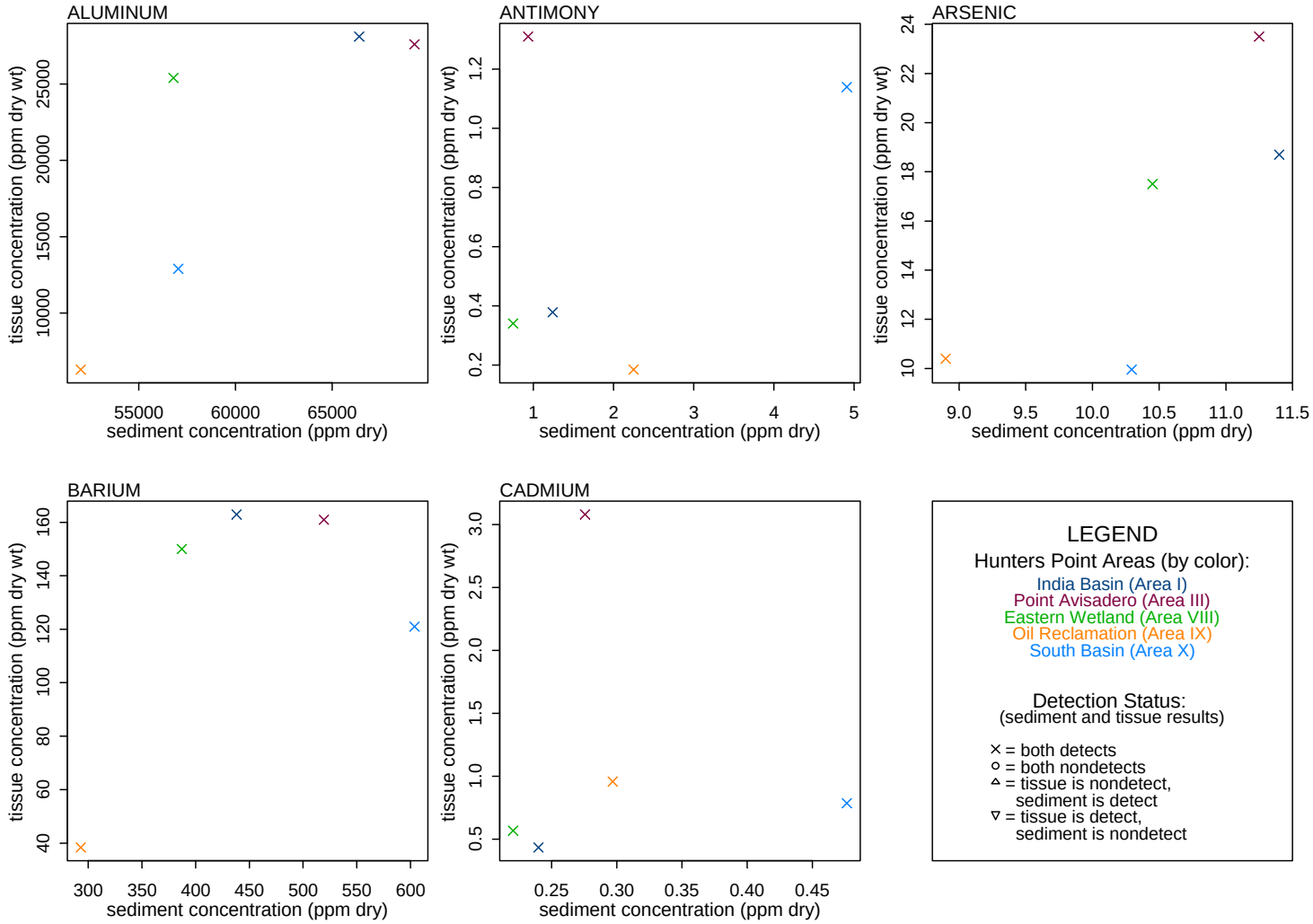

Figure F-41. Sediment and Soft-Bodied Invertebrate Tissue Concentrations of Aluminum, Antimony, Arsenic, Barium, and Cadmium (samples are not collocated).

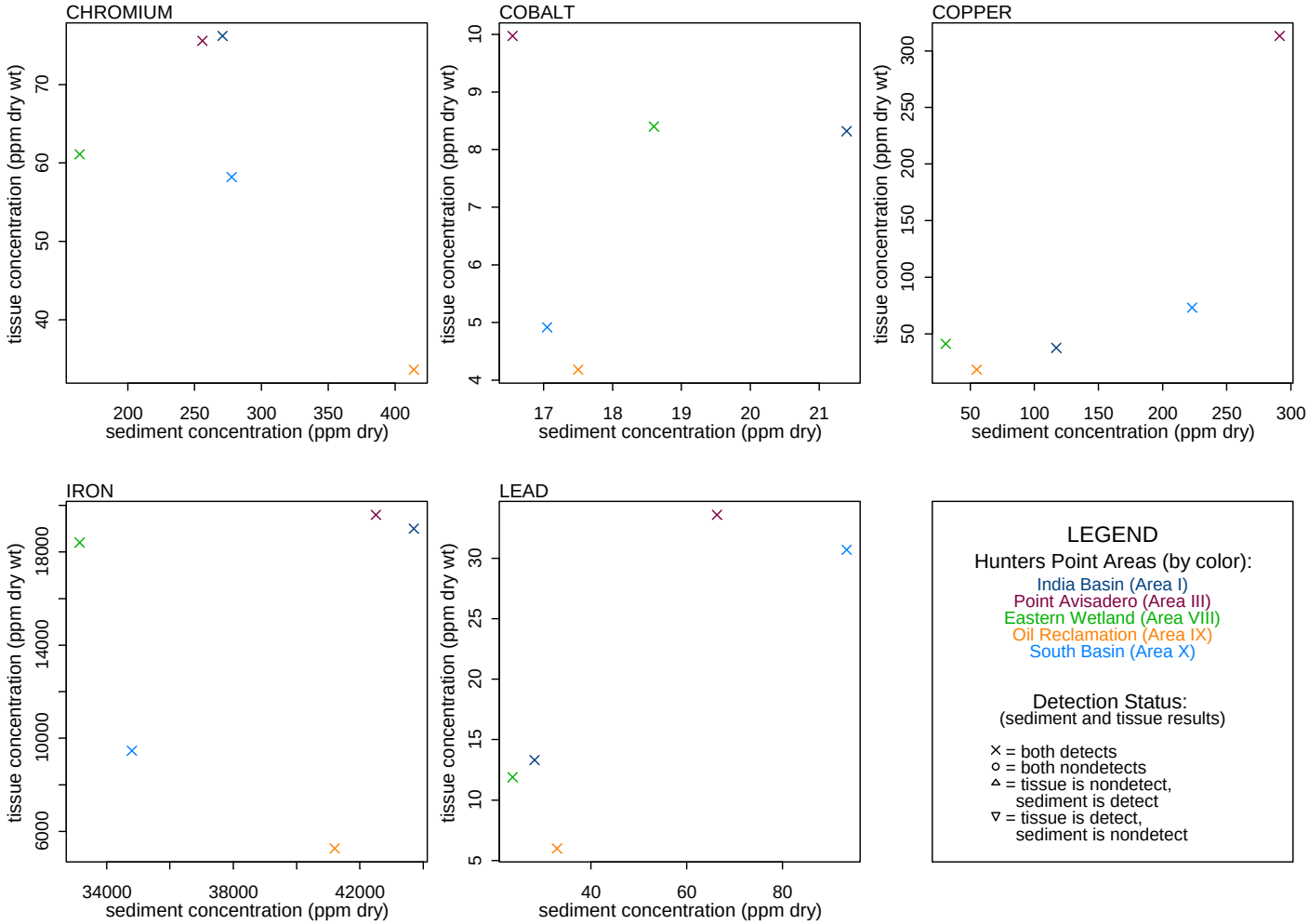

Figure F-42. Sediment and Soft-Bodied Invertebrate Tissue Concentrations of Chromium, Cobalt, Copper, Iron, and Lead (samples are not collocated).

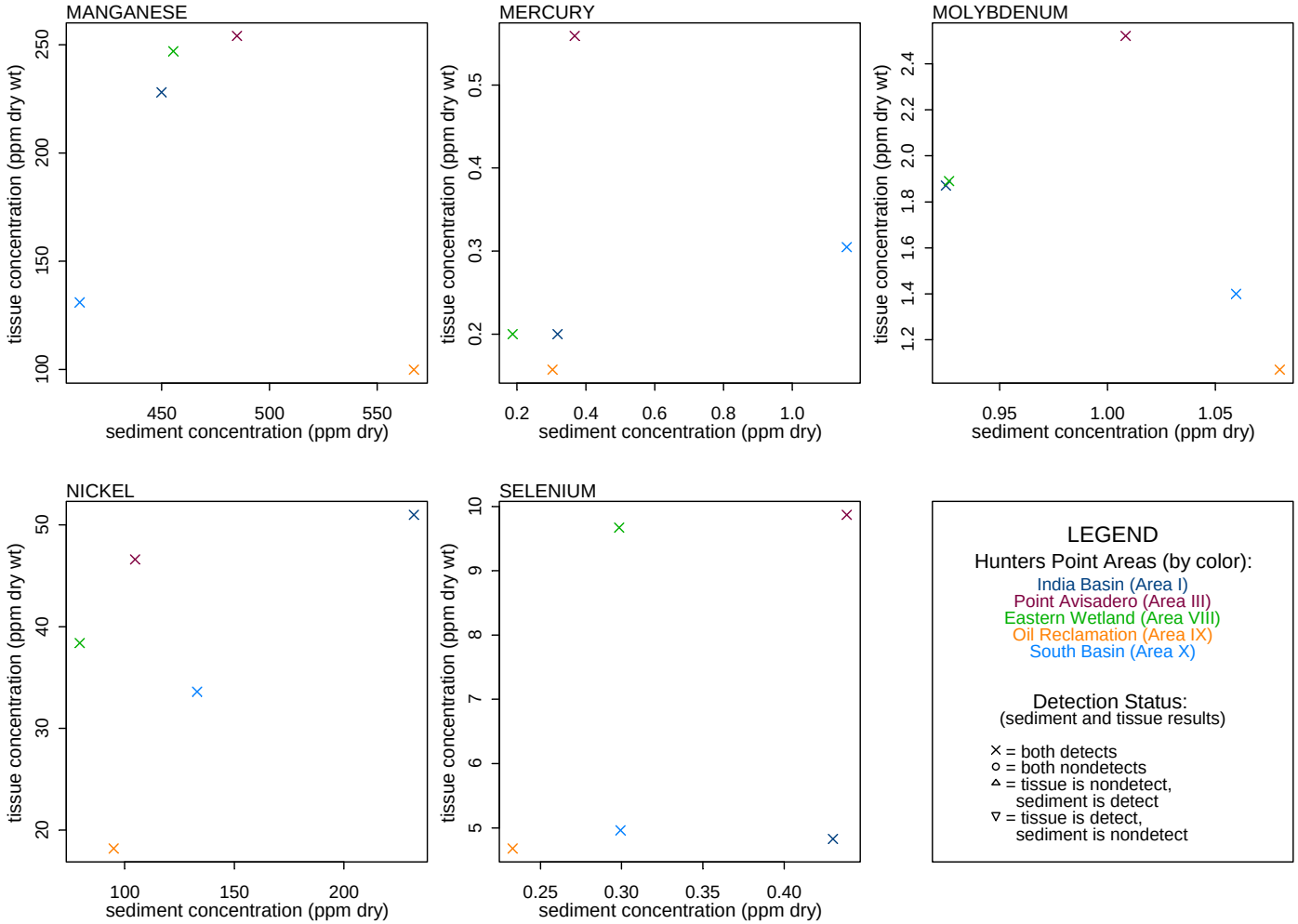

Figure F-43. Sediment and Soft-Bodied Invertebrate Tissue Concentrations of Manganese, Mercury, Molybdenum, Nickel and Selenium (samples are not collocated).

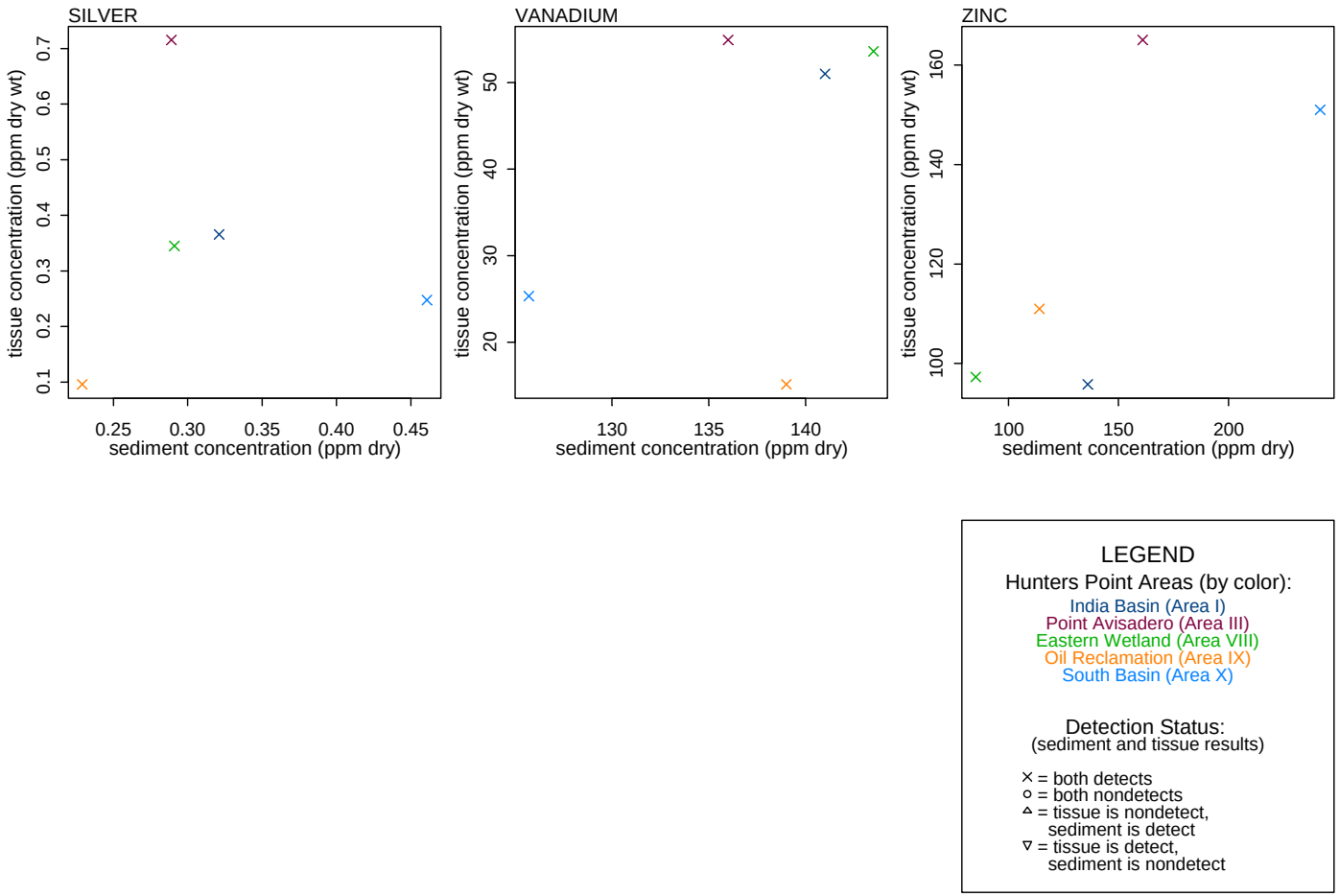

Figure F-44. Sediment and Soft-Bodied Invertebrate Tissue Concentrations of Silver, Vanadium and Zinc (samples are not collocated).

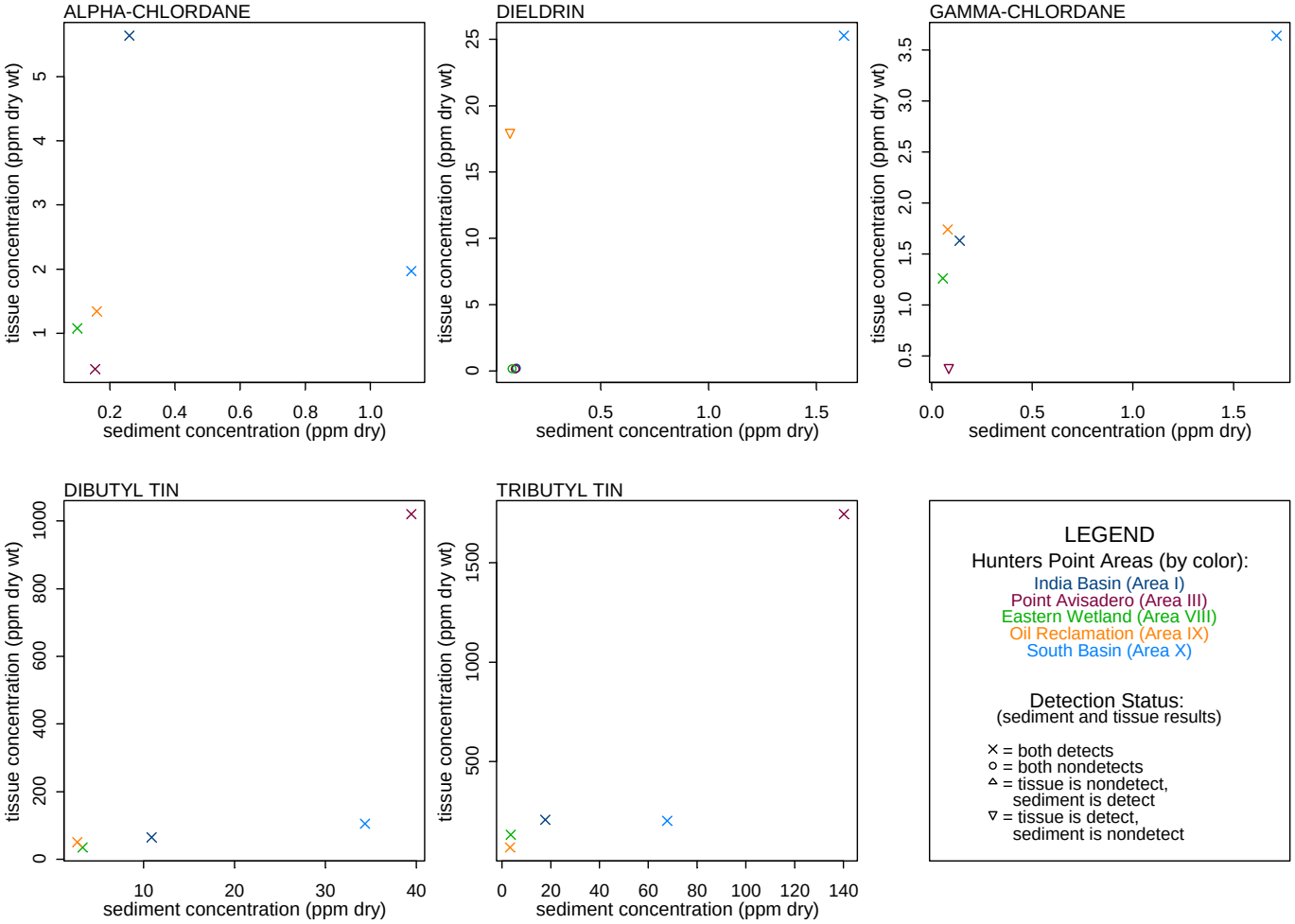

Figure F-45. Sediment and Soft-Bodied Invertebrate Tissue Concentrations of *alpha*-Chlordane, Dieldrin, *gamma*-Chlordane, Dibutyl Tin and Tributyl Tin (samples are not collocated).

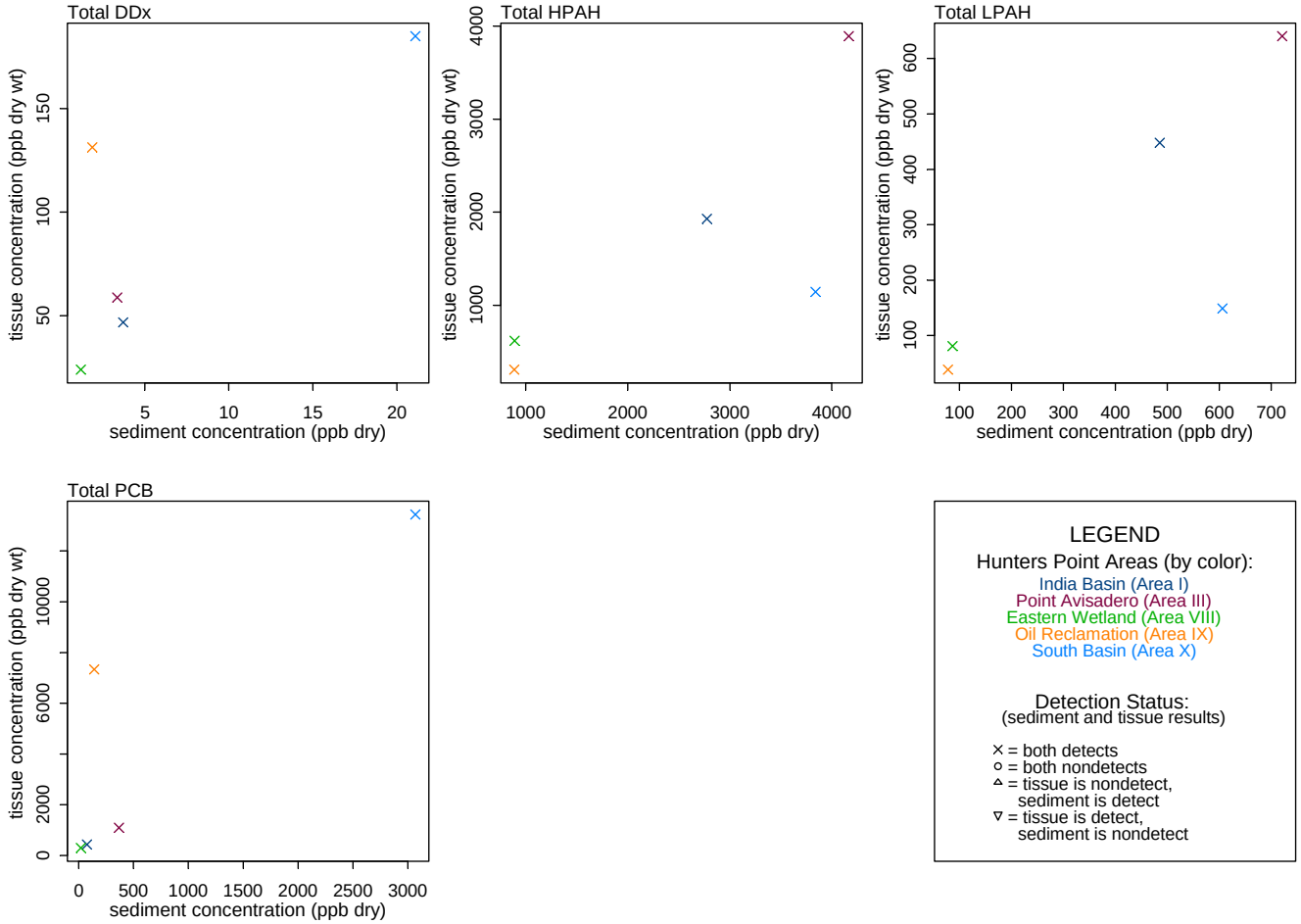

Figure F-46. Sediment and Soft-Bodied Invertebrate Tissue Concentrations of Total DDx, Total HPAH, Total LPAH, and Total PCB (samples are not collocated).

APPENDIX G

Validation Study Position Papers

Appendix G-1. Draft Validation Study Reference Threshold Proposal

1.0 BACKGROUND

Laboratory bioaccumulation tests using *Macoma nasuta* were performed as part of the Hunters Point Shipyard (HPS) Parcel F Validation Study (Battelle et al., 2001). Tissue chemistry results from HPS stations will be compared to results from San Francisco Bay reference stations to determine if chemical concentrations in the HPS tissue samples are elevated. Appropriate San Francisco Bay reference threshold values (based on the reference station tissue chemistry results) are required to perform these comparisons.

To develop reference threshold values, sediment samples were collected from five San Francisco Bay reference stations during the Validation Study. Three fine-grained stations (Alameda Buoy, Bay Farm, and Paradise Cove) and two coarse-grained stations (Alcatraz Environs and Red Rocks) were sampled. Sediment and *M. nasuta* tissue samples from the laboratory bioaccumulation test were analyzed for all Parcel F COPECs.

The Parcel F Validation Study Work Plan (Battelle et al., 2001) indicated that if differences in tissue concentrations associated with fine-grained and coarse-grained reference sediments were observed, then the tissue chemistry results would be used to establish two reference distributions (fine-grained and coarse-grained). Additionally, it was proposed that the reference threshold values for *M. nasuta* tissue would be represented by either a specified percentile of the reference distribution or as an upper tolerance limit (UTL) (see page B-24 of the Work Plan). The Navy/ agency technical group agreed to defer adoption of a specific approach until the suitability of the data to support a specific calculation could be assessed.

The objective of this paper is to present proposed reference threshold values for use in the Validation Study. It includes the following:

- An evaluation of the suitability of the reference stations based on sediment chemistry results;
- An analysis of chemical concentrations in *M. nasuta* tissue and a comparison of tissue concentrations associated with fine-grained versus coarse-grained sediments; and
- Proposed reference threshold values for the Validation Study.

2.0 ANALYSIS OF REFERENCE SITE SEDIMENT CHEMISTRY DATA

Sediment chemistry results for the samples collected from the five Validation Study reference stations were plotted side by side with San Francisco Bay ambient station data collected from 1993 -1997 as part of the Regional Monitoring Program (RMP) and Bay Protection and Toxic Hotspot Cleanup Program (BPTCP) to ensure that the reference stations reflect ambient conditions. Results are shown in the left-hand panels of Figures 1-16. Chemical concentrations in samples from the Validation Study reference stations were in the same range as the RMP/BPTCP ambient concentrations with the exception of cadmium in the sample from Alcatraz Environs (AE) and total PCBs in the sample from Alameda Buoy (AB), which were clearly elevated. These results confirm that the reference station sediment samples are representative of ambient sediment conditions within San Francisco Bay with the exceptions noted above. Therefore, it is expected that the *M. nasuta* exposed to these sediments will represent ambient *M. nasuta* tissue concentrations. The Navy proposes that Alcatraz Environs data be excluded when calculating reference threshold values for cadmium, and Alameda Buoy data excluded when calculating reference threshold values for total PCBs (however, both data points are included in all plots in the attached figures).

Figure 17 presents grain size and total organic carbon (TOC) results for samples from the 5 reference and 59 HPS stations. Samples from Red Rocks (RR) and Alactraz Environs (AE) are clearly coarse-grained, while the samples from the other three reference sites are fine-grained (>40% fines). Five of 8 samples from Area VIII Eastern Wetland (EW) and 4 of 23 samples from Area X South Basin (SB) are coarse-grained (<40% fines). The rest of the HPS samples are fine-grained. The grain size distribution in reference station samples spans the range observed in samples from HPS. TOC concentrations in some samples from HPS Areas IX and X (Oil Reclamation and South Basin) are higher than the maximum measured in samples from the Validation Study reference sites.

3.0 ANALYSIS OF REFERENCE SITE *M. nasuta* TISSUE CHEMISTRY DATA

For each of the five Validation Study reference site samples, five replicate test chambers containing *M. nasuta* were exposed for 28 days to the sediment, resulting in 25 reference site tissue samples. Tissue chemistry results are shown in the center panels of Figures 1-16. Chemical concentrations varied both across replicates from a single station, and across stations for all COPECs.

Based on the physico-chemical properties of contaminants, it is possible that organisms exposed to contaminants in coarse-grained sediments will have higher body burdens that organisms exposed to the same concentrations of contaminants in fine-grained sediments. If significant differences in the body burdens of organisms exposed to fine-grained versus coarse-grained reference sediments are found, it may be appropriate to develop separate reference thresholds for each distribution. To test this, a series of statistical tests were performed to compare the tissue results from coarse- and fine-grained reference stations. Two tests of central tendency (the t-test and Wilcoxon Rank Sum test with Gehan ranking when non-detects were reported) were performed. These tests were not run in cases where there were fewer than 50% detected concentrations in either group. In addition, an upper quantile test was performed to evaluate whether the 80th percentiles of the tissue concentrations from coarse-grained sites were significantly larger or smaller than the tissue concentrations from fine-grained sites. Table 1 presents the results of these tests. P-values of less than 0.05 are considered significant, while values greater than 0.05 are not considered significant. No significant differences in either the mean or median concentrations were observed except for a few chemicals: cobalt, manganese, molybdenum, alpha-chlordane, dieldrin and possibly total DDX (due to a single high DDT value in the Bay Farm sample that is likely to be an outlier). In no case was the 80th percentile value determined to be significantly different (although results for a few chemicals were close to significant).

4.0 DEVELOPMENT OF REFERENCE THRESHOLD VALUES

Reference threshold values will be used in the weight-of-evidence (WOE) evaluation to identify HPS stations where *M. nasuta* tissue concentrations are elevated above reference. Because the WOE is conducted on a station-by-station basis, statistical distributional tests cannot be used for reference comparisons. Therefore, station tissue data must be directly compared to threshold values that represent reference conditions. Two commonly used approaches include (1) the development of a UTL, and (2) the selection of a percentile from the reference tissue distribution. The advantages and disadvantages of each approach are as follows:

Approach	Advantages	Disadvantages
Upper Tolerance Limit (95% confidence interval on the 95th percentile)	• Uses the entire distribution of the reference dataset to develop a threshold representative of reference conditions • Constructs a confidence interval around a percentile allowing one to predict the 95th percentile, 95% of the time.	• With small sample sizes or variable datasets, the UTL can exceed the maximum concentration detected. • Outliers can greatly impact the UTL because they increase variability in the dataset. • Requires knowledge of the distribution of the dataset so that the appropriate calculation is used.
Percentile	• The effect of one or two outliers is greatly diminished • *M. nasuta* tissue samples from HPS stations that are potentially elevated above reference will not be missed (e.g., the 90th percentile will be a relatively conservative threshold value) • Distributional assumptions are not required • Ease of calculation.	• There is no defined statistical confidence in the threshold.

To select the appropriate approach, the characteristics of the reference tissue dataset were assessed in the following way. UTLs were calculated based on the 25 reference station tissue sample results utilizing the appropriate statistical formula for the underlying distribution (i.e., normal, lognormal or non-parametric). Results are presented in Tables 2a and 2b. UTLs were generally greater than or equal to the maximum observed concentration, presumably because of the variability observed within and between stations and the occurence of one or two high values (outliers). While it is common practice to default the maximum value when the UTL exceeds the maximum, in many cases the maximum observed concentration for each COPEC was an outlier. Tables 2a and 2b also list the 90th percentile of the distribution of HPS reference tissue values. The Navy proposes to use the 90th percentile because it removes the effect of the few outlier values while retaining a representative value for the entire reference distribution.

The potential use of separate thresholds for coarse- and fine-grained samples was further evaluated. Tables 2a and 2b present three possible threshold values for fine- and coarse-grained samples for inorganic (a) and organic (b) chemicals. As observed for the combined data, the UTLs were generally higher than the maximum values. The lack of statistical significance in comparisons of most chemical concentrations in tissue samples associated with fine- versus coarse-grained samples provides evidence that tissue concentrations are not strongly affected by grain size, and supports the generation of a single threshold value.

To further evaluate the grain size differences, the center panel of Figures 1-16 presents the 90th percentile for the combined data (solid line), as well as the fine-grained (dotted line) and coarse-grained (dashed line). These percentiles are then shown with the HPS tissue data for each of the five study areas in the right-hand panel of each figure. These plots demonstrate that the identification of stations that are elevated relative to the 90th percentile of reference concentrations is with few exceptions not very sensitive to the use of the fine-grained, coarse-grained or combined threshold. This evaluation further supports the use of a single tissue threshold value, rather than generating separate coarse- and fine-grained threshold values. Additionally, the general lack of statistical difference for most chemicals discussed

previously, supports the use of a single reference threshold value using the pooled results from all reference stations.

5.0 CONCLUSION

The 90th percentile of the pooled reference distribution is proposed as the reference threshold value for each chemical. Table 3 summarizes these proposed threshold values. Percentiles are considered to be more appropriate than UTLs or maximum values because the UTLs are generally greater than the maximum observed value, and for many chemicals the maximum is a single outlier. The use of a pooled reference distribution (combined fine- and coarse-grained results) is also proposed because few differences were observed between thresholds generated from coarse- and fine-grained distributions.

6.0 REFERENCE

Battelle, ENTRIX Inc. and Neptune and Company. 2001. *Final Hunters Point Shipyard Parcel F Validation Study Work Plan*. Prepared for Southwest Division Naval Facilities Engineering Command. April 23.

Table 1. Statistical Comparisons of Chemical Concentrations in *M. nasuta* Tissue Samples from Fine- and Coarse-Grained Reference Stations

Analyte	Coarse		Fine		P-values (standard)				
	N[1]	D[2]	N	D	pass	Wilcoxon Rank Sum Test	Upper 80th Quantile Test (f>c)[3]	Upper 80th Quantile Test (c>f)[4]	t-test
ALUMINUM	10	10	15	15	TRUE	0.2672	0.6988	0.6866	0.4366
ANTIMONY	10	10	15	14	TRUE	0.1202	0.936	0.3012	0.1377
ARSENIC	10	10	15	15	TRUE	0.8027	0.6988	0.6866	0.5476
BARIUM	10	10	15	15	TRUE	0.9779	0.936	0.3012	0.6954
CADMIUM (no AE)	5	5	15	15	TRUE	0.1061	0.968	0.2487	0.3417
CHROMIUM	10	10	15	15	TRUE	0.8897	0.6988	0.6866	0.9407
COBALT	10	10	15	15	FALSE	0.0099	0.936	0.3012	0.0097
COPPER	10	10	15	15	TRUE	0.6569	0.9834	0.1589	0.3355
IRON	10	10	15	15	TRUE	0.579	0.936	0.3012	0.7909
LEAD	10	10	15	15	TRUE	0.7184	0.6988	0.6866	0.7907
MANGANESE	10	10	15	15	FALSE	0.0071	0.9953	0.06403	0.0068
MERCURY	10	6	15	10	TRUE	0.2787	0.05652	1	0.516
MOLYBDENUM	10	10	15	15	FALSE	0.01977	0.936	0.3012	0.01981
NICKEL	10	10	15	15	TRUE	0.7603	0.6988	0.6866	0.8203
SELENIUM	10	10	15	15	TRUE	0.6772	0.936	0.3012	0.7654
SILVER	10	4	15	5	TRUE	NA	0.6988	0.6866	NA
VANADIUM	10	10	15	15	TRUE	0.8029	0.936	0.3012	0.6306
ZINC	10	10	15	15	TRUE	0.5981	0.3134	0.9435	0.8028
4,4'-DDD	10	10	15	15	TRUE	0.2329	0.3134	0.9435	0.2039
4,4'-DDE	10	10	15	15	TRUE	0.1139	0.3134	0.9435	0.1315
4,4'-DDT	10	0	15	1	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	10	8	15	14	FALSE	0.0099	0.05652	1	0.04224
DIELDRIN	10	6	15	13	FALSE	0.0262	0.05652	1	0.02726
ENDOSULFAN II	10	0	15	0	NA	NA	NA	NA	0.6552
ENDRIN	10	0	15	0	NA	NA	NA	NA	0.5006
GAMMA-CHLORDANE	10	7	15	14	TRUE	0.05207	0.05652	1	0.05045
HEPTACHLOR	10	0	15	0	NA	NA	NA	NA	NA
TOTAL 4,4-DDx	10	10	10	10	FALSE	0.06402	0.291	0.9567	0.04208
TOTAL PAH HIGH (sum of 10)	10	10	10	10	TRUE	0.9698	0.9567	0.291	0.6722
TOTAL PAH LOW	10	10	10	10	TRUE	0.7913	0.9567	0.291	0.2122
TOTAL PCB (no AB)	10	10	10	10	TRUE	1	0.709	0.709	1

[1] Number of samples
[2] Number of detects
[3] Test to determine if fine-grained 80th percentile is greater than coarse-grained 80th percentile
[4] Test to determine if coarse-grained 80th percentile is greater than fine-grained 80th percentile
Shaded cells indicate statistically significant results

Table 2a. Alternative Reference Threshold Values for Metals in *M. nasuta* Tissue Samples

COPEC	Combined Stations		90th percentile	Fine Grained Stations (AB,BF,PC)			Coarse Grained Stations (AE, RR)		
	UTL	max		UTL	max	90th percentile	UTL	max	90th percentile
INORGANIC (mg/kg dry weight)									
ALUMINUM	2650	2780	1950	2450	1970	1896	6820	2780	2159
ANTIMONY	0.251	0.224	0.1874	0.263	0.217	0.1798	0.287	0.224	0.1835
ARSENIC	27.5	31.2	22.9	24.6	23.1	22.28	36.3	31.2	24.81
BARIUM	33	32.7	20.2	27.6	22.8	19.08	62	32.7	21.18
CADMIUM (excluding AE)	2.15	2.15	0.3694	0.484	0.418	0.35	5.42	2.15	1.4304
CHROMIUM	36.4	29.9	24.56	29.9	29.9	24.56	57.8	28.8	18.45
COBALT	4.8	4.61	3.626	4.29	3.53	3.192	5.75	4.61	3.854
COPPER	17.7	18.8	14.8	16.1	15	14	22.2	18.8	16.37
IRON	4350	3700	2798	3410	2900	2702	7130	3700	2899
LEAD	5.03	4.25	3.762	5.95	4.25	3.638	5.46	3.93	3.579
MANGANESE	82	76.1	57.44	67.7	52.9	48.06	88.9	76.1	60.71
MERCURY	0.326	0.326	0.1744	0.326	0.326	0.1774	0.197	0.176	0.1436
MOLYBDENUM	3.38	3.39	3.04	3.2	2.92	2.878	3.8	3.39	3.156
NICKEL	12.7	13	9.598	12	10.1	9.192	18.7	13	10.165
SELENIUM	6.24	5.57	5.336	6.47	5.44	5.234	7.76	5.57	5.363
SILVER	0.328	0.265	0.2522	0.308	0.265	0.2438	0.402	0.259	0.2572
VANADIUM	15.6	15.1	11.46	13.7	11.4	9.668	27.1	15.1	11.95
ZINC	144	131	125.6	155	128	125.6	155	131	109.4

Table 2b. Alternative Reference Threshold Values for Organics in *M. nasuta* Tissue Samples

COPEC	Combined Stations			Fine Grained Stations (AB,BF,PC)			Coarse Grained Stations (AE, RR)		
	UTL	max	90th percentile	UTL	max	90th percentile	UTL	max	90th percentile
ORGANIC (g/kg dry weight)									
4,4'-DDD	5.15	4.98	4.19	5.3	4.55	4.19	9.61	4.98	3.828
4,4'-DDE	10.1	8.37	7.502	10.5	8.37	7.646	12.1	7.59	6.204
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND	ND
ALPHA-CHLORDANE	1.6	1.48	1.034	1.99	1.48	1.246	1.13	0.73	0.694
DIELDRIN	2.36	2.19	1.572	3.4	2.19	1.742	1.33	1	0.811
ENDOSULFAN II	ND	ND	ND	ND	ND	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND	ND	ND	ND	ND	ND
GAMMA-CHLORDANE	1.43	1.19	0.856	1.72	1.19	0.966	0.87	0.71	0.557
HEPTACHLOR	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBUTYL TIN	130	129.96	12.648	130	129.96	12.232	19.9	16.18	13.12
TRIBUTYL TIN	79.7	79.71	44.798	46.2	46.25	21.415	130	79.71	50.82
TOTAL 4,4-DDx	16.9	15.48	11.944	16.6	15.48	11.944	21.3	12.57	9.996
TOTAL PAH HIGH (sum of 10)	505	453.3	362.438	386	357.8	307.358	878	453.3	375.081
TOTAL PAH LOW	67.1	53.81	42.14	42.5	37.1	22.91	202	53.81	50.786
TOTAL PCB (excluding AB)	91.4	129.22	68.566	131	78.44	74.786	62.5	50.32	49.474

Table 3. Proposed *M. nasuta* Tissue Reference Threshold Values

COPEC	90th percentile	COPEC	90th percentile
INORGANIC (mg/kg dry weight)		**ORGANIC (ug/kg dry weight)**	
ALUMINUM	1950	4,4'-DDD	4.19
ANTIMONY	0.1874	4,4'-DDE	7.502
ARSENIC	22.9	4,4'-DDT	ND
BARIUM	20.2	ALPHA-CHLORDANE	1.034
CADMIUM (excluding AE)	0.3694	DIELDRIN	1.572
CHROMIUM	24.56	ENDOSULFAN II	ND
COBALT	3.626	ENDRIN	ND
COPPER	14.8	GAMMA-CHLORDANE	0.856
IRON	2798	HEPTACHLOR	ND
LEAD	3.762	DIBUTYL TIN	12.648
MANGANESE	57.44	TRIBUTYL TIN	44.798
MERCURY	0.1744	TOTAL 4,4-DDx	11.944
MOLYBDENUM	3.04	TOTAL PAH HIGH (sum of 10)	362.438
NICKEL	9.598	TOTAL PAH LOW	42.14
SELENIUM	5.336	TOTAL PCB (excluding AB)	68.566
SILVER	0.2522		
VANADIUM	11.46		
ZINC	125.6		

Legend for Figures 1 – 16

Left-hand panel: chemical concentrations in sediment samples from the five Validation Study reference stations to the San Francisco Bay ambient data from the BPTCP, RMP, or a combination of both as available.

Middle panel: concentrations in *M. nasuta* tissue samples from the five Validation Study reference locations. The combined 90th percentile is indicated by a solid line, the 90th percentile for coarse grained (<40% fines) sites is indicated by a dashed line and the 90th percentile for fine grained sites (>40% fines) is indicated by a dotted line.

Right-hand panel: concentrations in *M. nasuta* tissue samples from HPS stations by area, side by side with the combined Validation Study reference site data. In addition, the 90th percentile lines from the middle panel are added, illustrating chemicals in excess of the reference sites and areas of HPS that are elevated.

In all three panels, the grain size (Coarse: <40% fines, Fine: =>40% fines) of the sediment is indicated by plotting Fine site results to the left and Coarse site results to the Right.

All Plots:

X	detected concentration
O	non-detected value plotted at the method detection limit.
AB	Alameda Buoy
AE	Alcatraz Environs
BF	Bay Farm
PC	Paradise Cove
RR	Red Rocks
IB	India Basin (Area I)
PA	Point Avisadero (Area III)
EW	Eastern Wetland (Area VIII)
OR	Oil Reclamation (Area IX)
SB	South Basin (Area X)
Ref	Validation Study Reference Sites (combined)
Pre	Background tissue concentrations (unexposed organisms)

_____ = 90th percentile for combined (Fine and Coarse) Reference Sites

---------- = 90th percentile for Coarse Reference Sites (AE and RR)

……. = 90th percentile for Fine Reference Sites (AB, BF and PC)

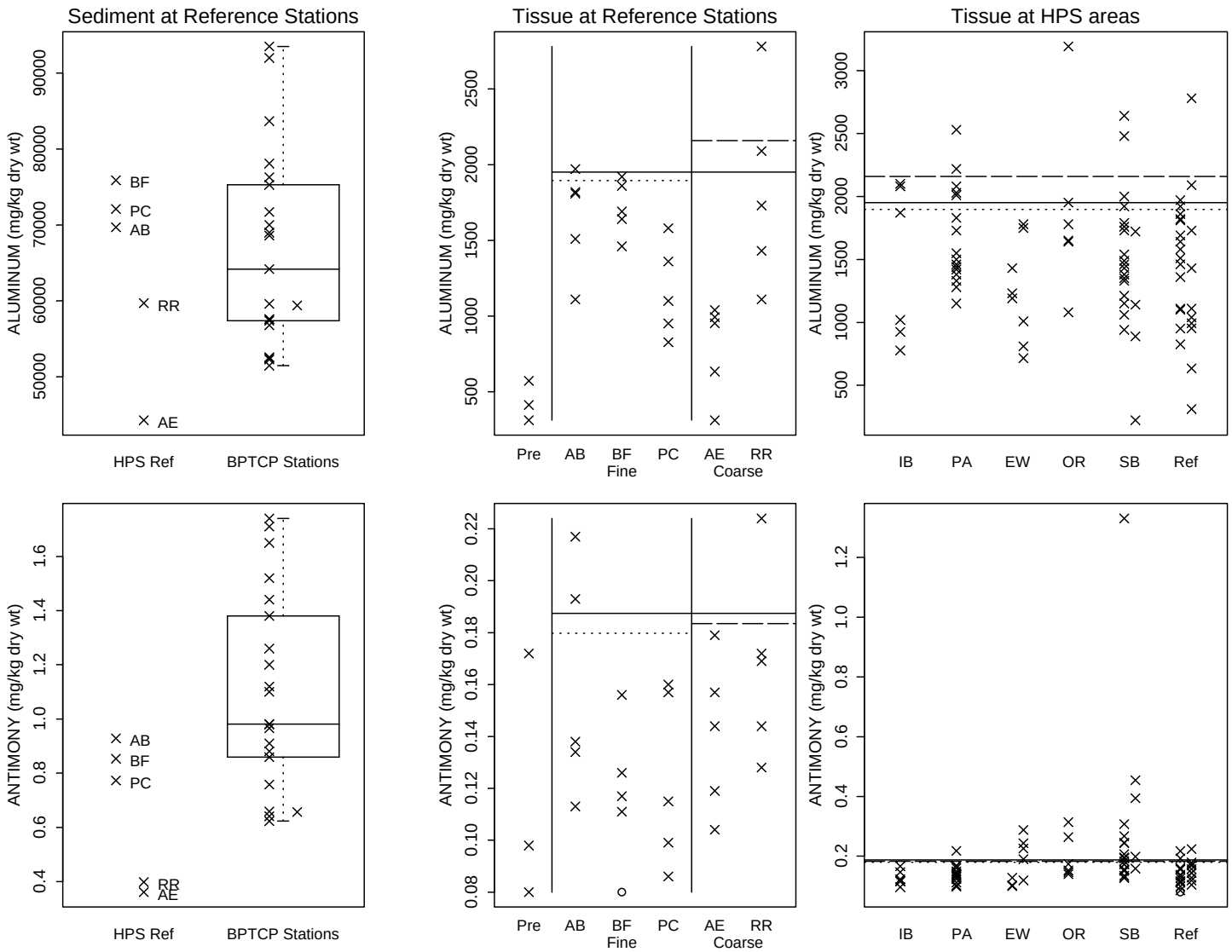

Figure 1. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Aluminum and Antimony

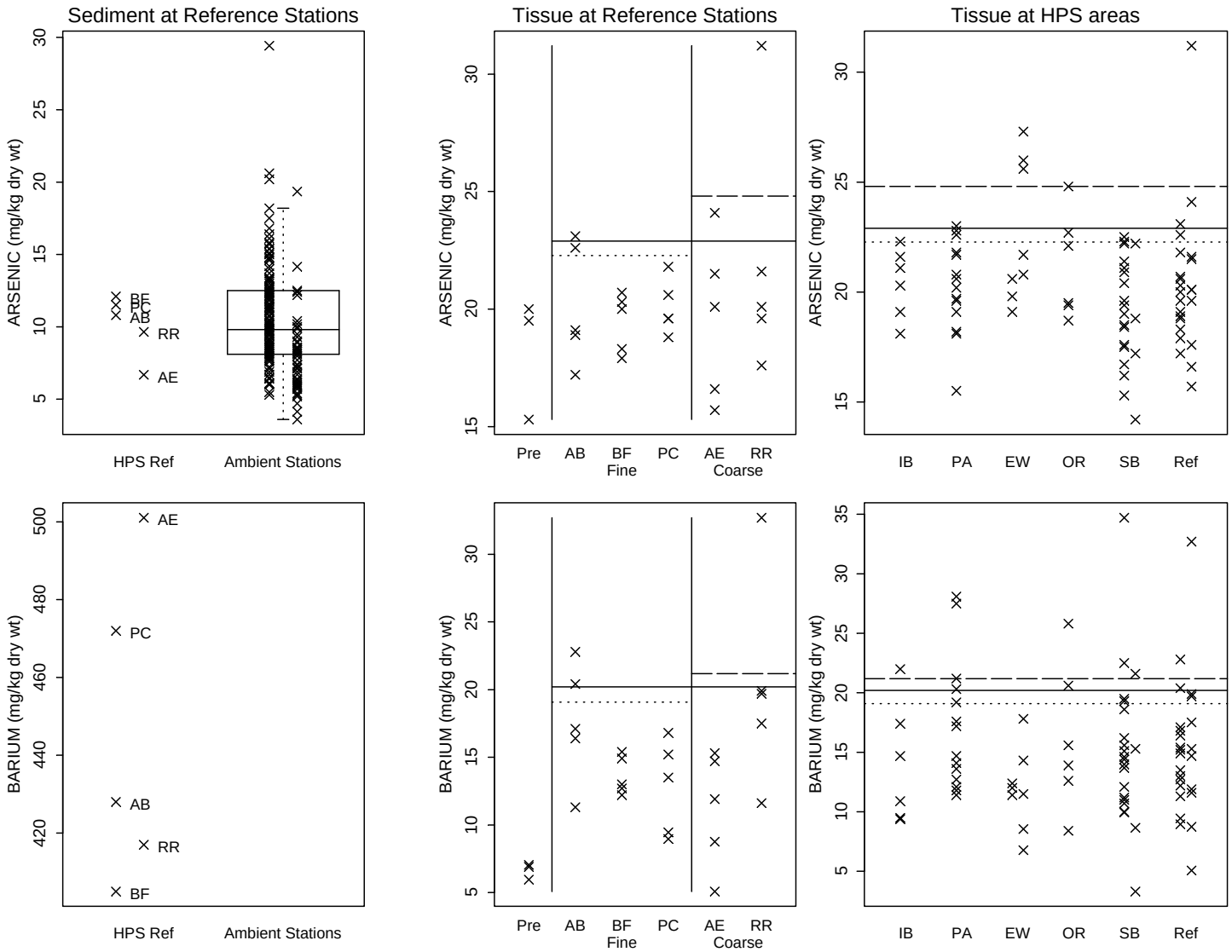

Figure 2. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Arsenic and Barium

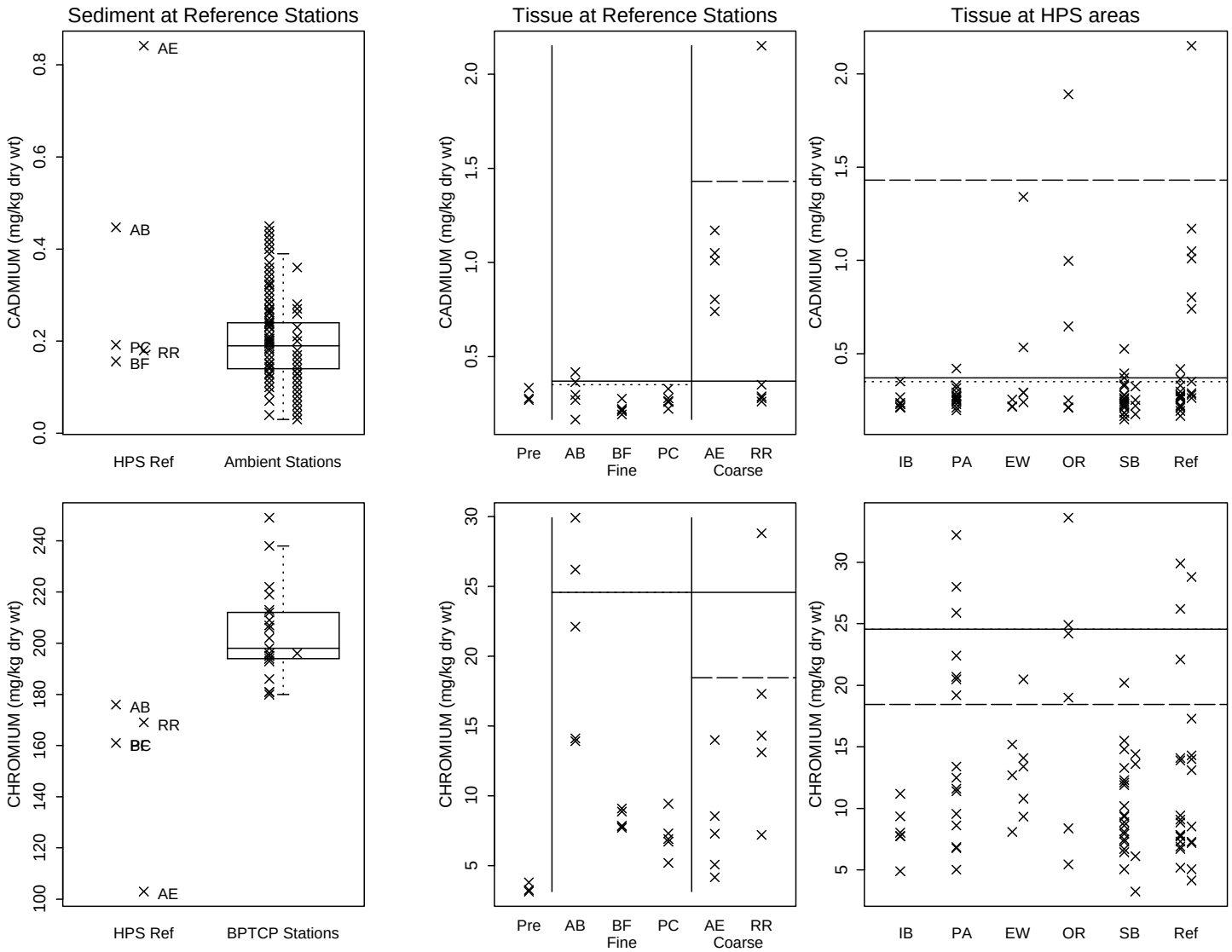

Figure 3. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Cadmium and Chromium

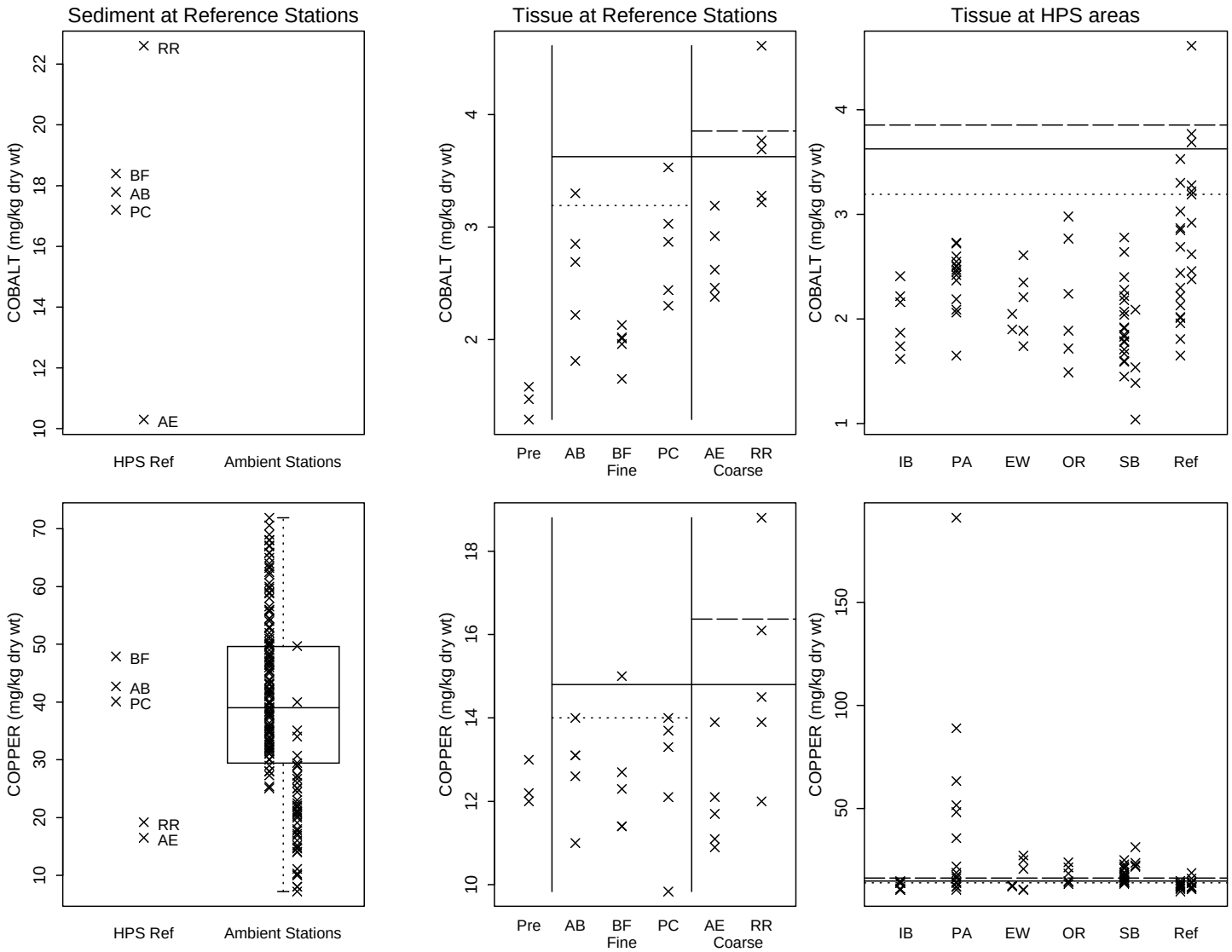

Figure 4. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Cobalt and Copper

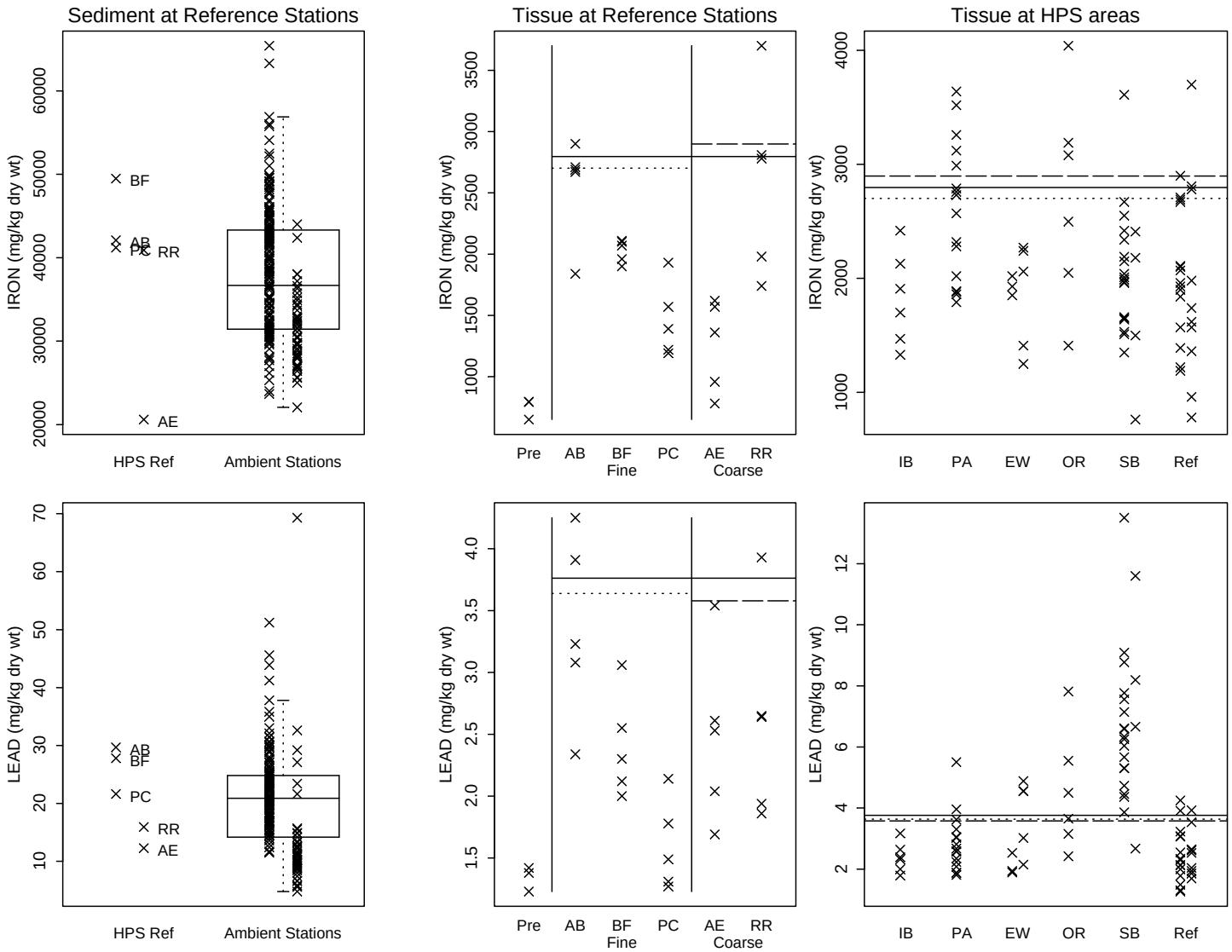

Figure 5. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Iron and Lead

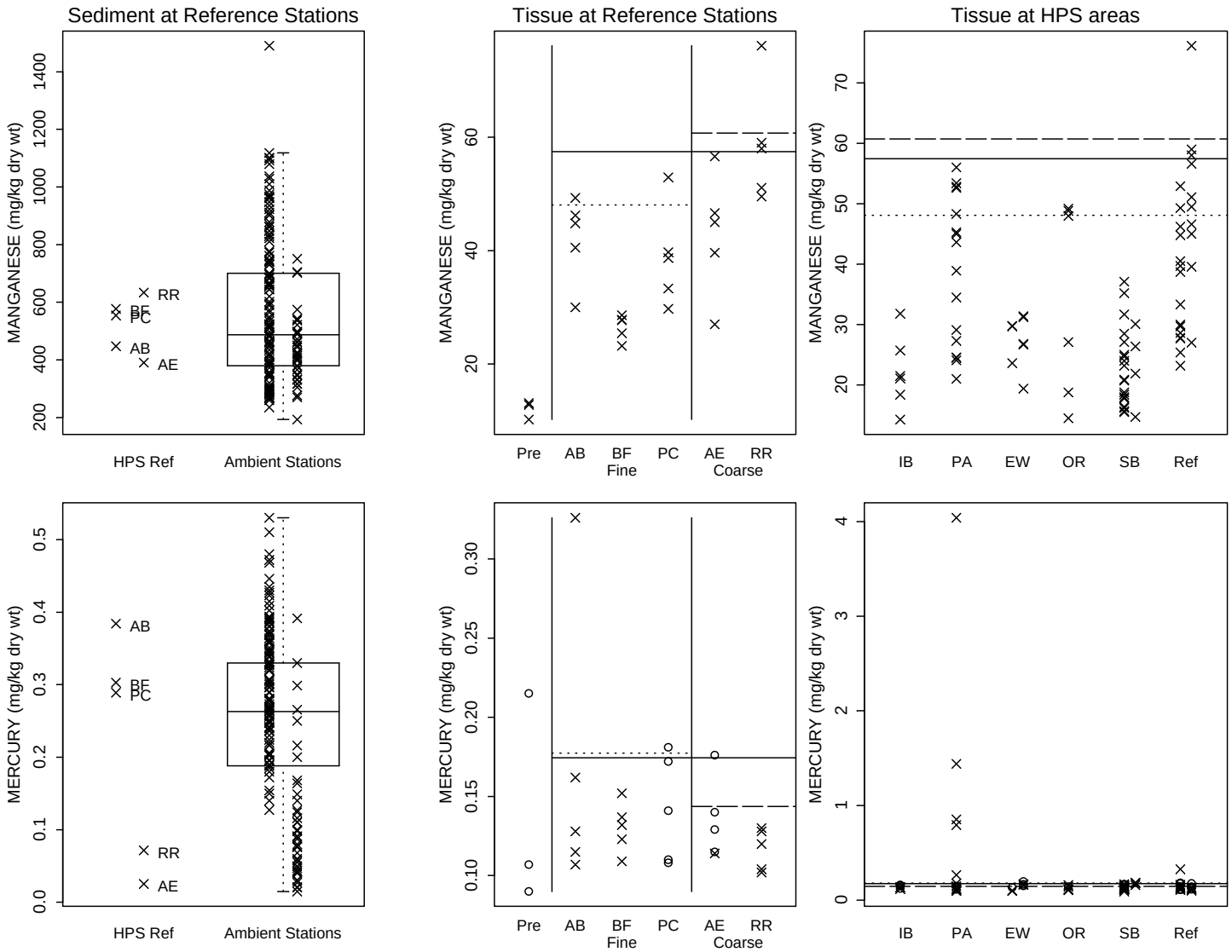

Figure 6. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Manganese and Mercury

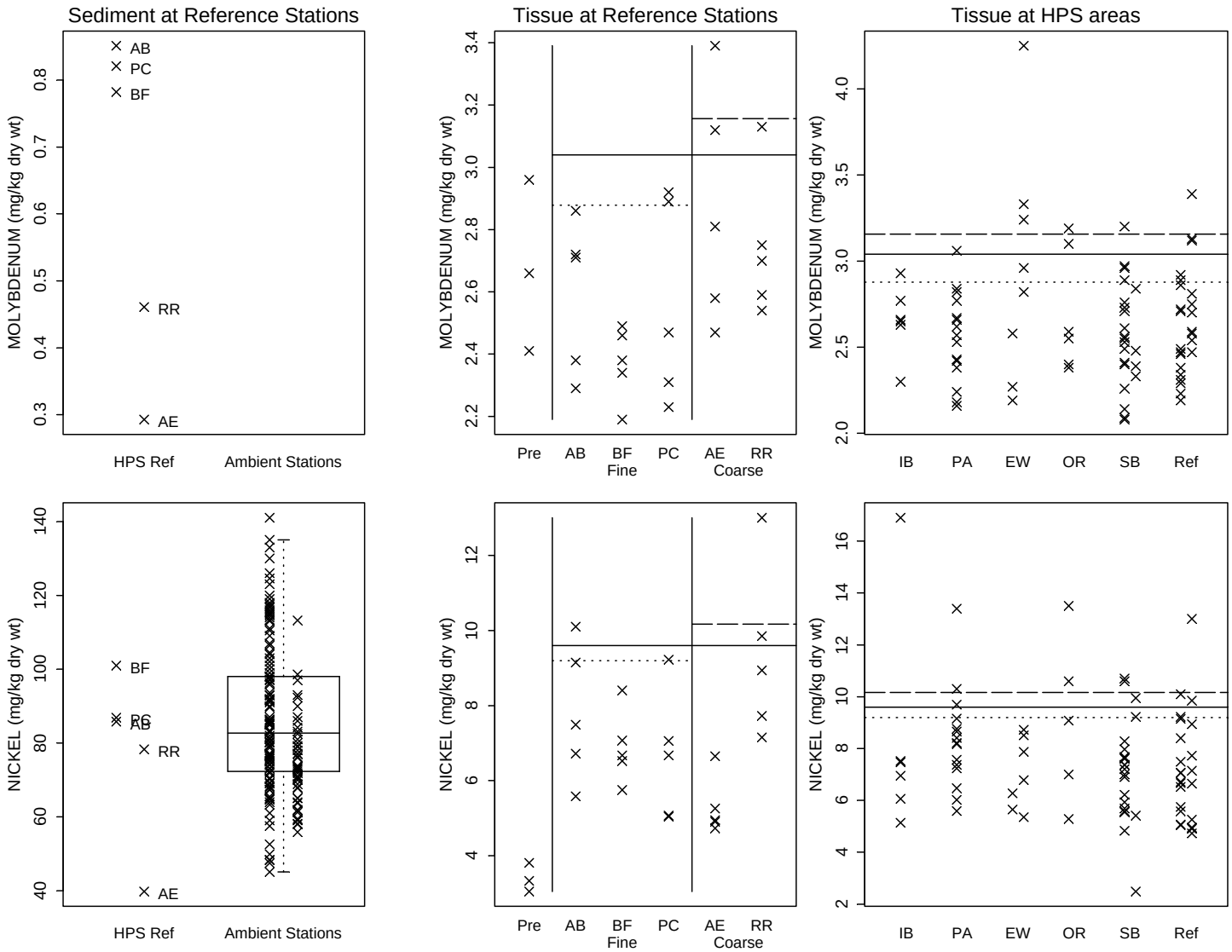

Figure 7. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Molybdenum and Nickel

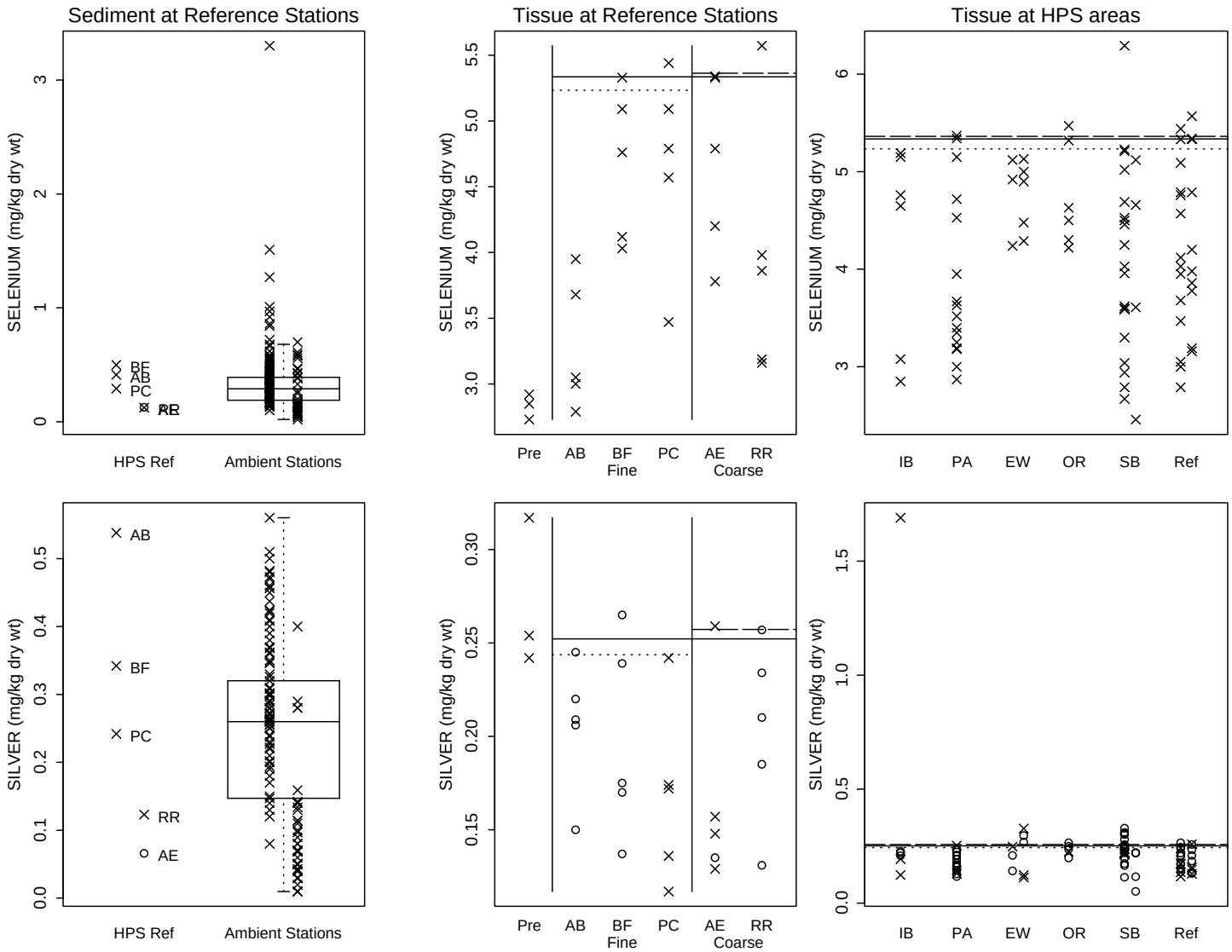

Figure 8. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Selenium and Silver

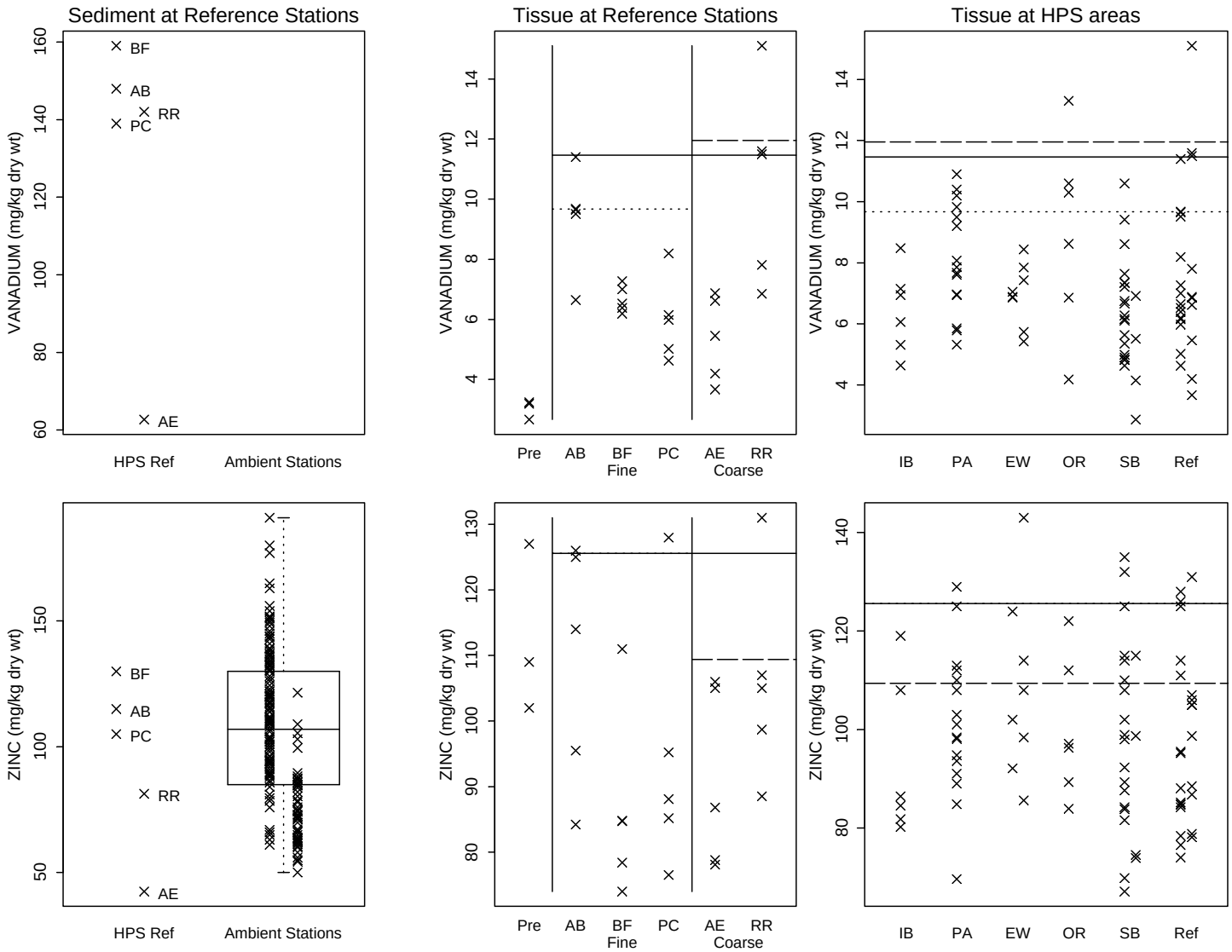

Figure 9. Metals in Reference Site Sediment and *M. nasuta* Tissue Samples: Vanadium and Zinc

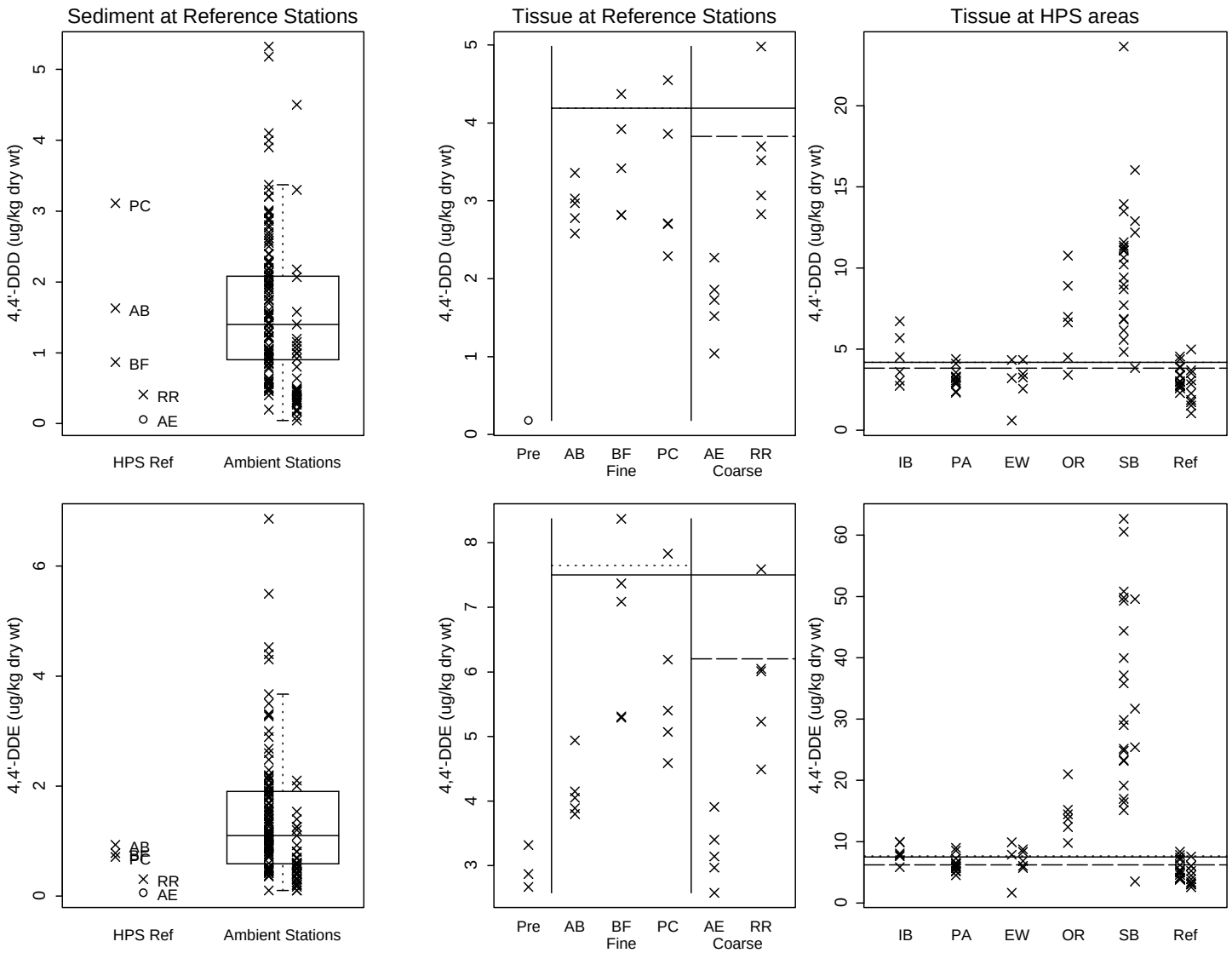

Figure 10. Pesticides in Reference Site Sediment and *M. nasuta* Tissue Samples: 4,4'-DDD and 4,4'-DDE

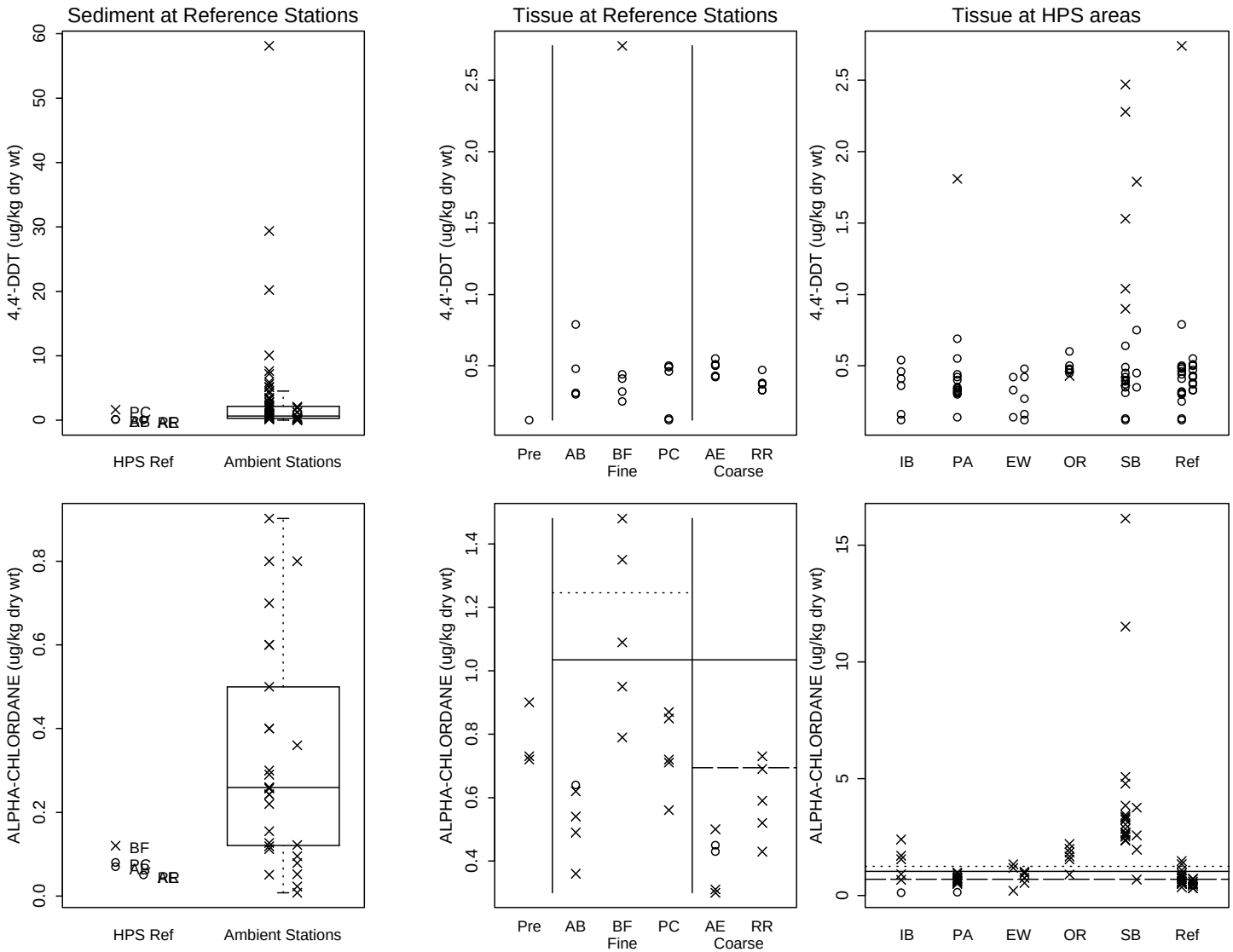

Figure 11. Pesticides in Reference Site Sediment and *M. nasuta* Tissue Samples: 4,4'-DDT and *alpha*-Chlordane

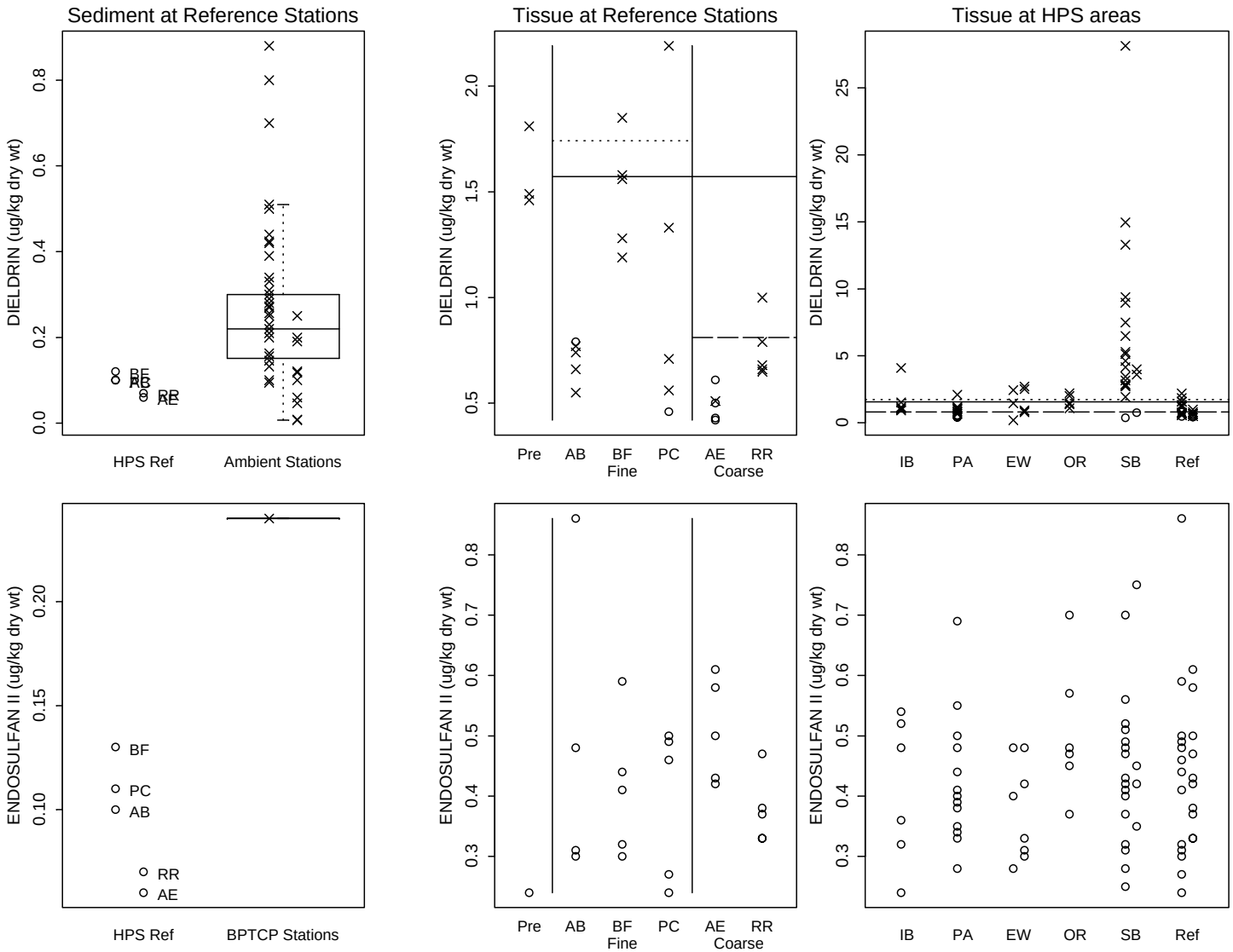

Figure 12. Pesticides in Reference Site Sediment and *M. nasuta* Tissue Samples: Dieldrin and Endosulfan II

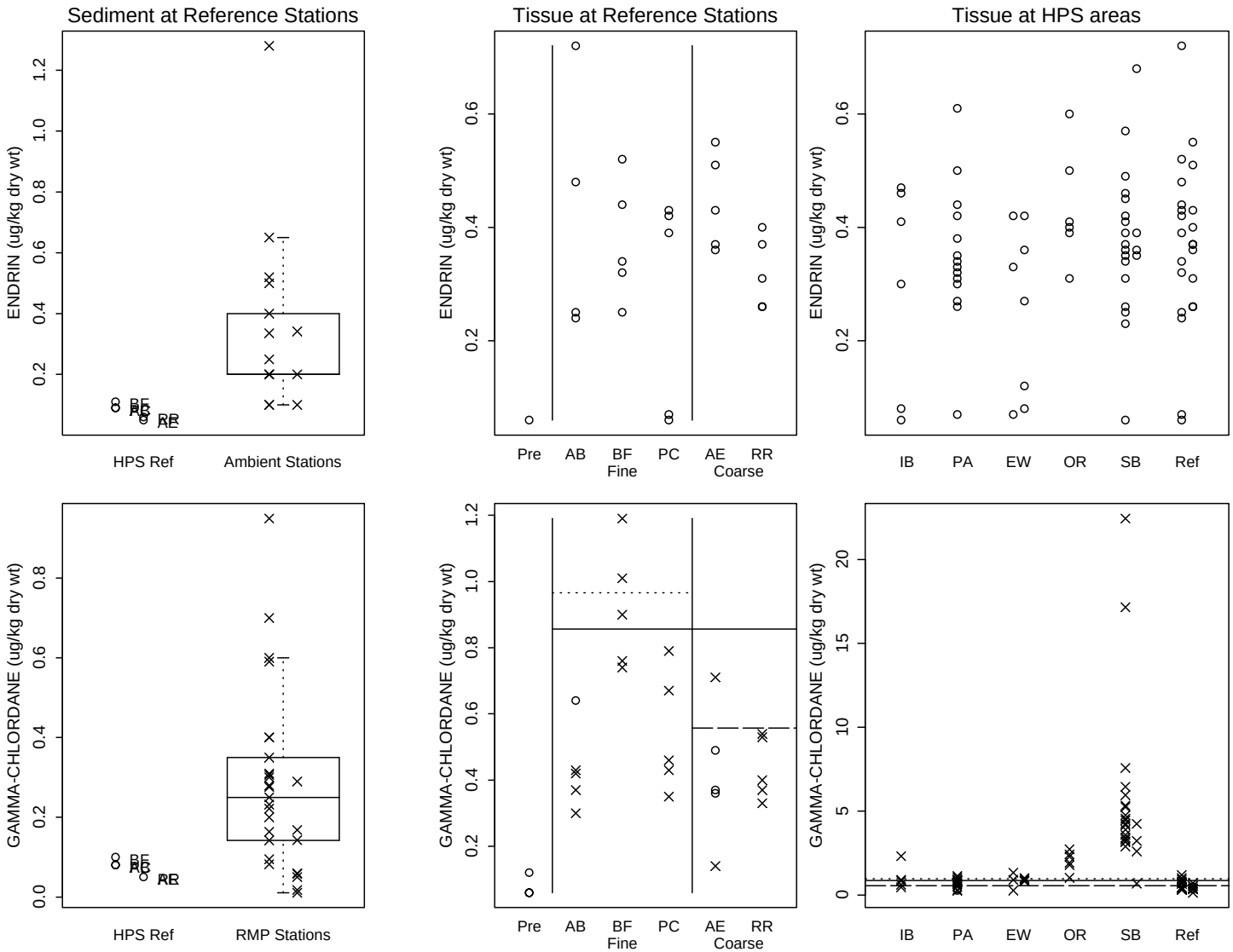

Figure 13. Pesticides in Reference Site Sediment and *M. nasuta* Tissue Samples: Endrin and *gamma*-Chlordane

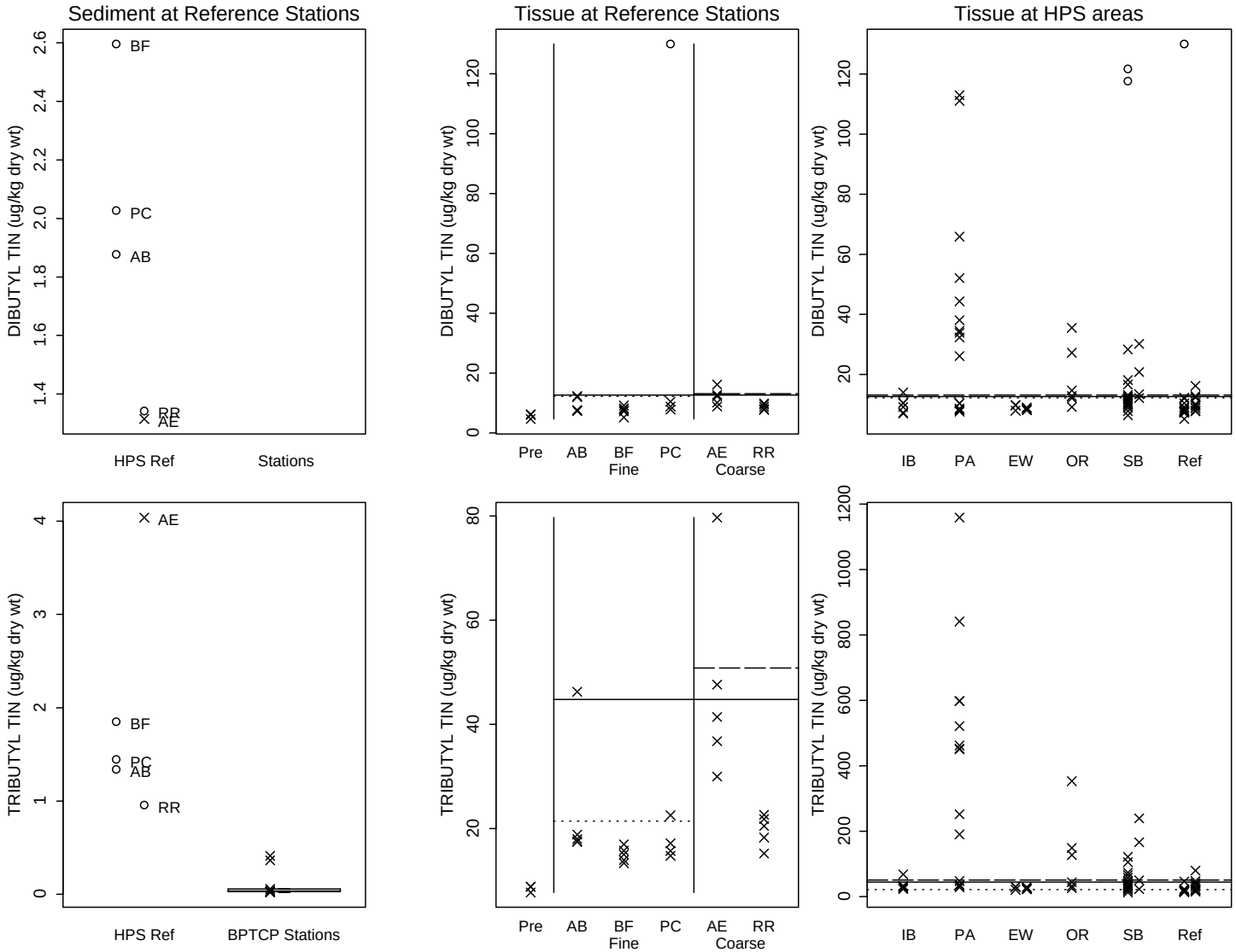

Figure 14. Organotins in Reference Site Sediment and *M. nasuta* Tissue Samples: Dibutyltin and Tributyltin

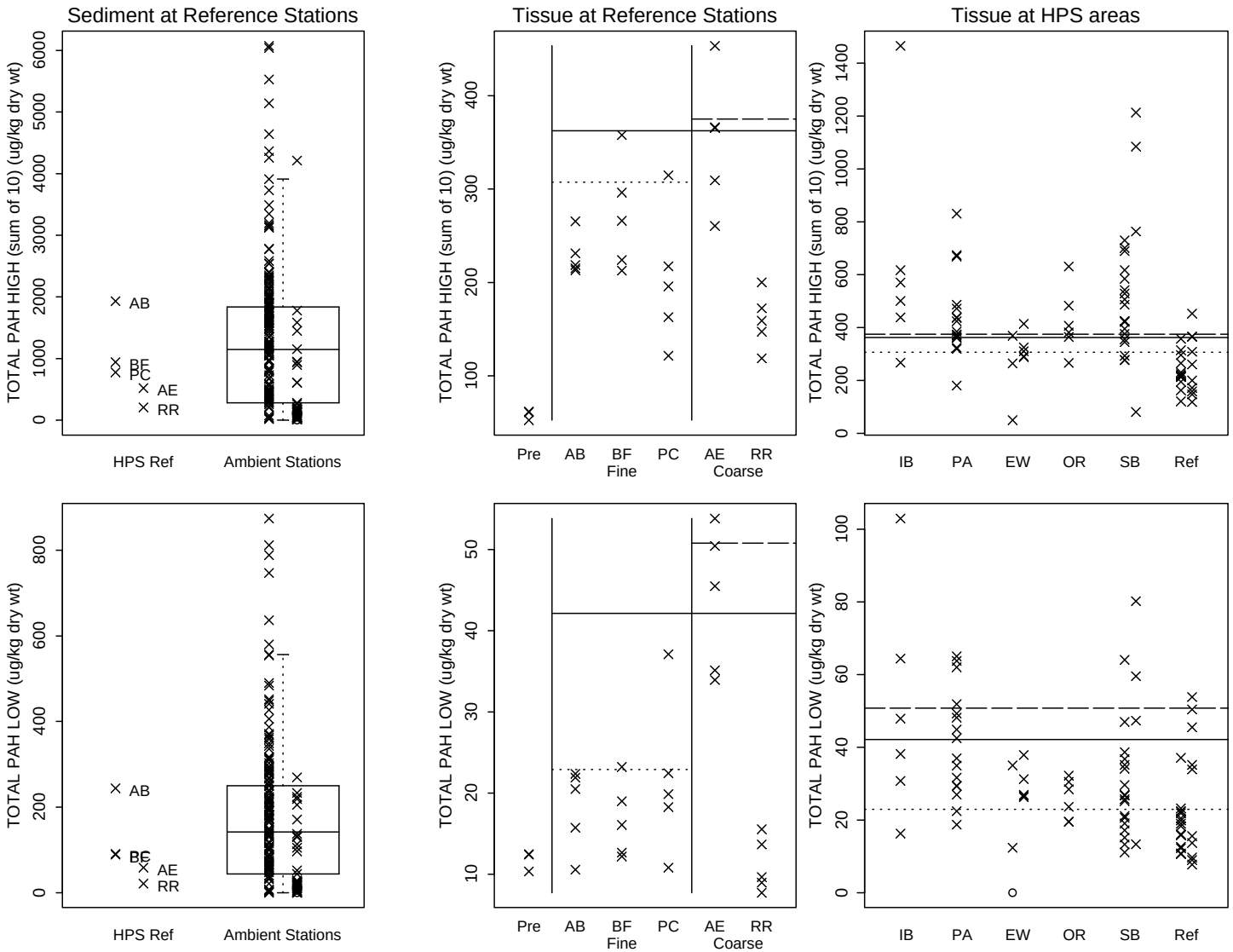

Figure 15. Total PAHs in Reference Site Sediment and *M. nasuta* Tissue Samples: Total HPAH (sum of 10 analytes) and Total LPAH (sum of 7 analytes) with non-detected values =0

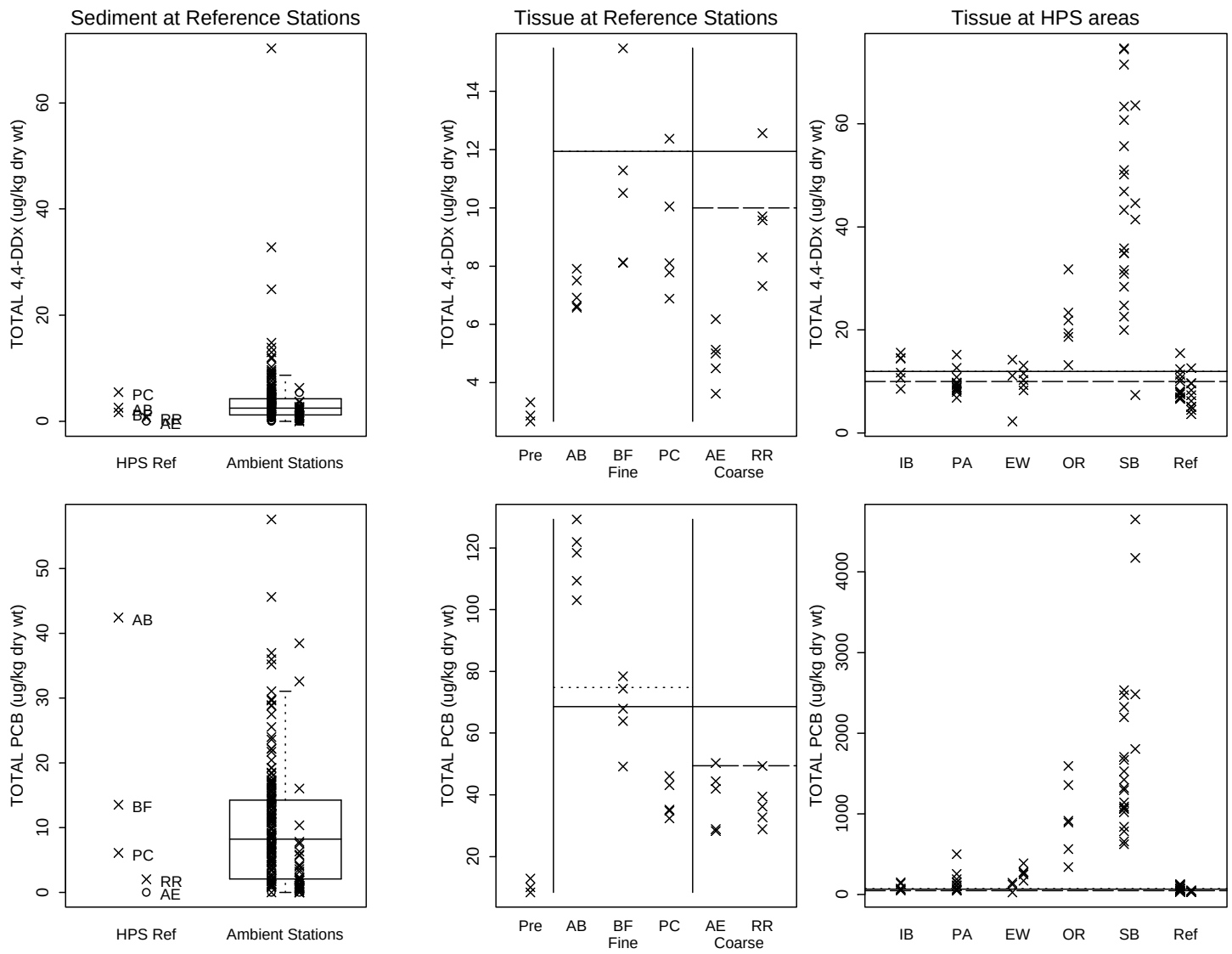

Figure 16. Total PCBs and DDT in Reference Site Sediment and *M. nasuta* Tissue Samples: Total PCB (2x sum of 22 congeners) and Total DDT (sum of 3 isomers); non-detected values =0

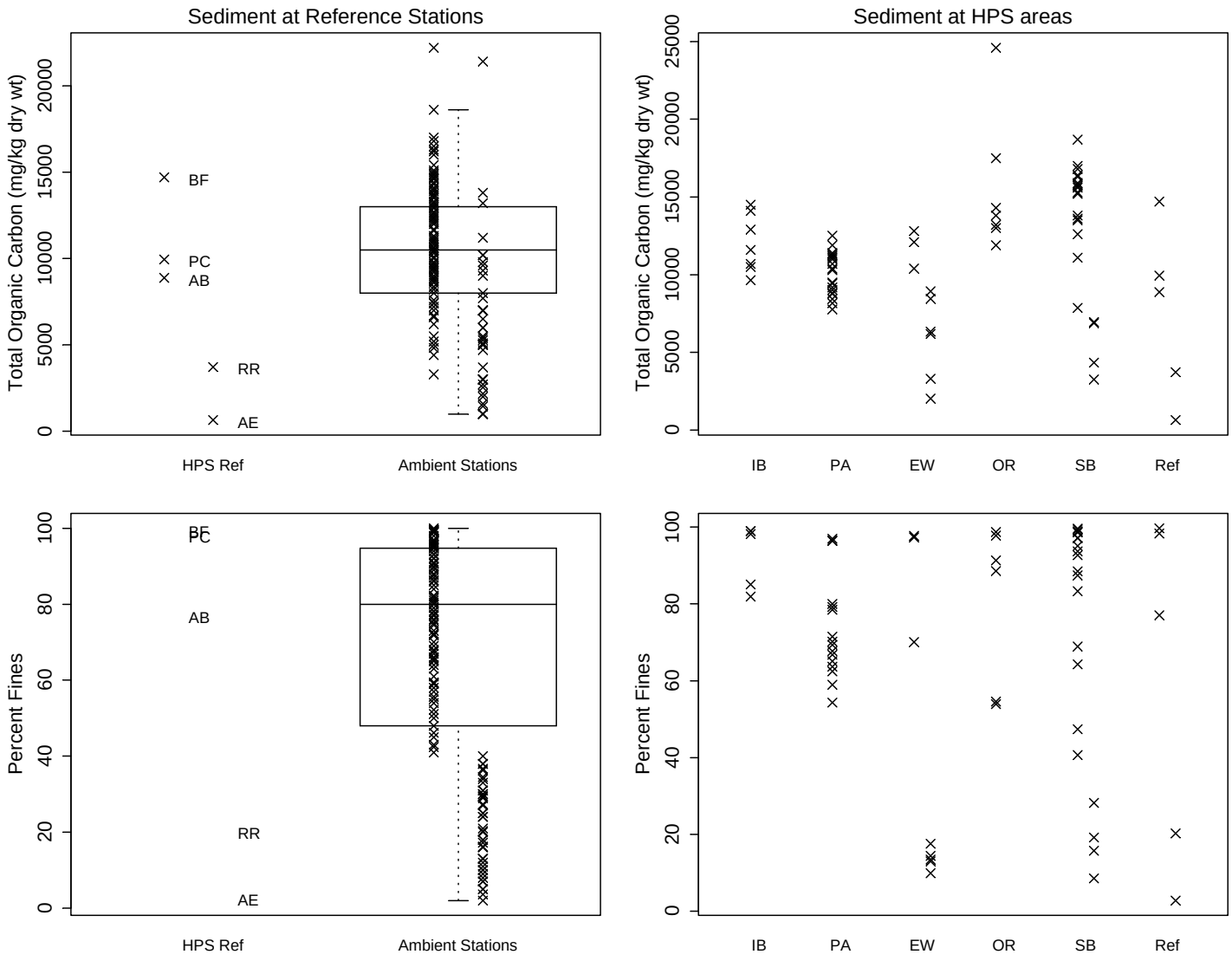

Figure 17. Grain Size and Total Organic Carbon Results in Sediment Samples from HPS and Reference Stations

Appendix G-2. Exposure Parameters Proposal

1.0 INTRODUCTION

The *Draft Final Hunters Point Shipyard Parcel F Validation Study Work Plan Response to Comments* (Battelle et al., 2001) identified three types of unresolved issues associated with the Proposal for the Bioaccumulation Line of Evidence (Appendix B.7 of the Final Validation Study Work Plan): (1) those associated with incorporating the bioaccumulation line of evidence into the weight-of-evidence (WOE) evaluation, (2) those associated with the evaluation of ancillary data, and (3) decisions regarding the use of data collected from the field. The objective of this proposal is to present the Navy's recommendations for resolving the issues associated with the WOE evaluation and the ancillary data evaluation. The proposed use of field data will be addressed after sediment and tissue chemistry data are finalized and before the Validation Study Report is prepared. Specifically, this proposal discusses the following topics:

<u>WOE Evaluation:</u>
The proposed exposure parameters for the incidental sediment ingestion rate and foraging range for the surf scoter (*Mellanitta perspicillata*) dose assessment model.
<u>Ancillary Data Evaluation</u>
Identification of an appropriate piscivorous avian receptor of concern.
Proposed exposure parameters for the piscivorous bird dose assessment (including body weight, ingestion rate, incidental sediment ingestion rate, and foraging range).

2.0 WOE EVALUATION

In this section, recommendations regarding the bioaccumulation line of evidence for the WOE are presented. The discussion includes information previously presented in documents prepared for Hunters Point Shipyard (HPS) (Battelle et al., 2001), and Alameda Point (Battelle et al., 2000).

To assess bioaccumulation, a benthic feeding bird with direct exposure to contaminated sediments was selected as a conservative surrogate. Based on discussions with ornithologists familiar with the HPS environs (Carol Bach, Port of San Francisco; Joelle Buffa, USFWS; David Hayes, California Coastal Conservancy; Paul Jones, U.S. EPA; Louis Vincencio, USFWS), the Navy proposes using the surf scoter, a diving duck, as the receptor. The reasons for proposing the scoter are:

The scoter is present in large numbers from late fall through winter at HPS.
The scoter is a benthic-feeding bird that forages primarily on mollusks (Vermeer & Bourne, 1984, Ohlendorf et al., 1986). As such, it has direct exposure to contaminated sediment. Additionally, since scoters feed primarily on bivalves, food-chain modeling using *M. nasuta* body burdens can be used in the exposure models.

- The scoter can feed in the intertidal zone during high tide and forages in the subtidal to depths in excess of 20 feet. Thus, it can represent species potentially exposed to both intertidal and subtidal habitats. Many other species are only appropriate for one habitat or the other.
- There is a substantial body of relevant literature for scoter. Trace metal analyses of scoter tissue and scoter prey items have been reported from British Columbia (Vermeer and Peakall, 1979), and trace element and organochlorine residues in scoters have been reported from San Francisco Bay (Ohlendorf et al., 1991).

2.1 Natural History Summary of the Surf Scoter

Activity Patterns: Yearlong, diurnal activity. *Seasonal Movement/Migration:* Surf scoters breed in Alaska and Canada and winter along the Pacific and Atlantic coasts; they are present in the San Francisco Bay from mid-October/November through late April (Savard et al., 1998). *Home Range:* No specific information found on home range in San Francisco Bay. However, a radiotelemetry study conducted in the Commencement Bay area of Puget Sound found that wintering birds stayed within 9 to 11 km of their capture location. Most birds used between 2 to 7 locations (defined as 1 km diameter areas) 76% to 87 % of the time studied (Mahaffy et al., 1995). *Territory:* Not territorial. *Reproduction:* Pairs form at wintering grounds (Morrier et al., 1997 as cited in Savard et al., 1998). Females have single broods and begin laying their clutch in concealed nests constructed in the ground. Clutch size ranged from 6 to 9 eggs (Morrier at al., 1997 as cited in Savard et al., 1998). Incubation by the female only. Precocial young follow female. Young can fly by 55 days (Lesage et al., 1997 as cited in Savard et al., 1998). *Feeding:* Feeds on mollusks on wintering grounds, herring eggs when available during spring migration, and freshwater invertebrates while breeding (Savard et al., 1998). On wintering grounds, dives down and preys on stationary invertebrates such as mussels, barnacles and clams (Ohlendorf et al., 1986; Savard et al., 1998). *Conservation and Management:* Long-lived species with low reproductive output (Savard et al., 1998). Vulnerable to hunting, oil spills and contaminants. Heavy metals such as selenium and organochlorine compounds such as DDE and PCBs have been measured in scoter tissue in San Francisco Bay (Ohlendorf et al., 1986 and 1991).

2.2 Evaluation of Exposure

Potential risk to the scoter through the food chain pathway will be assessed in the following way. First, potential exposure will be estimated by modeling a dose to the scoter via exposure to station-specific sediment and depurated *M. nasuta* tissue exposed to sediment in the laboratory. The basic dose equation that will be used to characterize exposure to the scoter is as follows:
Eq: 1

$$\text{Dose} = \{[(C_{sed} \text{ X } IR_{sed}) + (C_{prey} \text{ x } IR_{prey})] \text{ X SUF}\}/\text{BW}$$

where:

Dose	=	Daily dose resulting from ingestion of sediment and prey (milligrams COPEC per kilograms body weight per day)
C_{sed}	=	COPEC-specific concentration in surface sediments (milligrams COPEC per kilograms sediment)
C_{prey}	=	COPEC-specific concentration in depurated, laboratory *M. nasuta* tissue (milligrams COPEC per kilograms tissue)
IR_{prey}	=	Estimate of daily ingestion rate of prey (kilograms prey per day)
IR_{sed}	=	Estimate of daily incidental ingestion rate of surface sediments (kilograms sediment per day)
SUF	=	site use factor (unitless)
BW	=	body weight.

The parameters used to calculate a dose to the surf scoter are summarized in Table 1. The rationale for the selected values are presented below and are based on natural history information from the scientific literature.

C_{prey}: The prey concentration will be estimated by using the concentration of a COPEC in depurated *M. nasuta* tissue based on a 28-day laboratory exposure. If more than one replicate is analyzed at a station, then the mean tissue concentration will be used as C_{prey}.

IR_{prey}: No empirical data were found that measured prey ingestion rates in scoters. However, field studies have been conducted that looked at stomach contents in birds (Vermeer, 1981; Vermeer & Bourne, 1984), stomach content data are unreliable indicators of a bird's daily intake (Vermeer, 1981). Therefore, the following allometric equation was used to model a daily prey ingestion rate for the scoter (Nagy, 1999):

Eq 2:

$$\text{Field Metabolic Rate (FMR) kJ/day} = a(g)^b$$

where:

a = 14.25 (marine birds)
b = 0.659 (marine birds)
g = body mass for the scoter (1,100 g).

This resulted in a field metabolic rate of 1,439.11 kJ/day. The FMR was then converted into a daily intake rate by dividing the FMR by a conversion factor that converts kJ/day into a g/day dry weight (DW) ration of food. No benthic-invertebrate eating avian conversion factors were listed in Nagy (1999). Therefore, the mean of the insectivore (18.0 kJ/g DW) and the piscivore (16.2 kJ/day DW) avian conversion factors was used for the scoter: 17.1 kJ/day DW. This resulted in a modeled IR_{prey} of 84.16 g/day DW or 0.084 kg/day DW.

C_{sed}: The sediment concentration will be the concentration of a COPEC in sediment collected at each individual sampling station at HPS.

IR_{sed}: Scoters may incidentally ingest sediment while foraging for mollusks in sediment or through the small quantities of sediment that may be in the guts of the prey on which they feed. Additionally, many scoter species ingest gravel to use as grit in their muscular gizzard to help crush the shells of the bivalves they eat. Where gravel is not present, they may substitute barnacle and mollusk shells for grit (Vermeer & Bourne, 1984).

Species-specific information on the rate of incidental sediment ingestion was lacking for the surf scoter. However, a field study on the closely related white-winged scoter (*Melanitta fusca deglandi*) measured grit in the stomach contents of birds from four locations in British Columbia (Vermeer & Bourne, 1984). In this study, birds in three of the four stations had between 1.5 and 3.2 grams of grit in their guts, with a mean of 2.3 g. A fourth station measured 20.8 g of grit composed mostly of gravel. The station with scoters with the most grit (Cumshewa Inlet) also was the station that had a gravel substrate.

An incidental sediment ingestion rate for the scoter of 2.3 g/day is proposed for the exposure model. This value is assumed to be a conservative and appropriate value for the surf scoter for the following reasons:

- White-winged scoters and surf scoters forage in similar manners, thus their exposure is likely to be similar (Vermeer & Bourne, 1984).
- The substrate at the stations where grit was measured in scoter guts between 1.5 and 3.2 g (means = 2.3 g) are likely to be more similar to HPS than the station with 20.8 g of gravel, since the sand-gravel-mud-shell hash substrate of those stations is more like the substrate off of HPS than the cobble and gravel substrate of Cumshewa Inlet.
- The assumption that the mean value of 2.3 g of grit is composed solely of sediment rather than shells is a conservative assumption of sediment exposure.
- The assumption that the scoters eat 2.3 g of sediment every day (the daily sediment ingestion rate) is a conservative assumption since grit is likely to stay in the gizzard for more than a day before it needs to be replenished.

- This is approximately 2.5% of the proposed IR_{prey}, which is similar to values estimated for other diving ducks (Beyer et al, 1994).

Foraging Range: No San Francisco Bay-specific home range studies have been conducted for the scoter (J. Takekawa, pers.comm. 2001). However, a two-year radiotelemetry study conducted in the Commencement Bay Area of Puget Sound found that wintering birds stayed within 9 to 11 km of their capture location. Most birds used between 2 to 7 locations (defined as 1 km in diameter areas) 76% to 87 % of the time studied (Mahaffy et al., 1995). If one assumes that on average, 3 locations are visited the majority of the time by scoters (the mean number of locations visited during the first tracking season was 2.5 and for the second year, 3.9), the average diameter for a foraging area would be 3 km. This would result in a foraging area (assuming that it is round) of 7 km^2. This assumes that the foraging area within this 7 km^2 area is similar to habitat near HPS. The Navy is currently awaiting confirmation from the USFWS (M. Mahaffy) that this is so. Assuming that the areas are similar, then a foraging area of 7 km^2 will be proposed.

SUF: As discussed in the Draft Final Validation Study Work Plan Response to Comments (Battelle et al. 2001), a SUF of one will be used in the initial dose assessment calculations. If further refinement of the SUF is required, the Navy proposes to use the foraging range for the scoter (as discussed above) and to divide it by the area evaluated in the Validation Study (approximately 0.17 km^2).

Body Weight: Males are generally slightly heavier than females (Savard et al. 1998). To develop a reasonable average body weight, data from wintering birds measured between 1986 and 1990 were evaluated (White et al., 1987, 1988, 1989; and Urquhart and Regalado, 1991; as cited in Savard et al., 1998). The average body weight of adult males was 1,148 g $\pm$ 7 SE (n=22) and adult females 1,047 g $\pm$ 22 SE (n=21), resulting in an average body weight of 1.1 kg. This is the same as the average body weight measured in scoters from British Columbia (Vermeer, 1981).

3.0 ANCILLARY DATA EVALUATIONS

As part of the evaluation of ancillary data, the Navy will evaluate the potential risk to piscivorous birds foraging in the offshore area of HPS. In this section the Navy will present the proposed receptor of concern that will be the surrogate for the piscivorous bird evaluation. Exposure parameters for this receptor of concern will also be presented.

3.1 Piscivorous Receptor of Concern

For the evaluation of the piscivorous bird evaluation, a species that feeds over the range of water depths measured in the Validation Study (0 to 20 m; average depth about 4 m) was selected. Based on a review of piscivorous bird species in San Francisco Bay, the Navy proposes to use the double-crested cormorant (DCCO) (*Phalocrocorax auritus*) for the following reasons:

- The species is widespread in San Francisco Bay with nesting colonies potentially within foraging distance of HPS (located on the Bay Bridge and the Dumbarton Bridge; Ainley et al., 2000); as such, they are found year round in San Francisco Bay.

- DCCO have been observed at HPS (HLA, 1991).

- Because the DCCO forage in shallow waters overlying bottoms of flat relief (<8 m deep) (Hatch and Weseloh, 1999; Ainley, 2000), they could be exposed to most areas addressed in the Validation Study. This is contrasted with piscivorous wading birds [e.g., the great blue heron (*Ardea herodias*)

or the snowy egret (*Egretta thula*)] that are restricted to the shallow intertidal zone, which makes up only a proportion of the area addressed in the Validation Study.

3.2 Natural History Summary of the Double-Crested Cormorant

Activity Patterns: Yearlong, diurnal activity. *Seasonal Movement/Migration*: Species most prevalent in San Francisco Bay and the Delta in the winter; however, there is a large breeding population in the summer (Ainley, 2000). *Home Range*: In San Francisco Bay, birds were found to forage within 5 km of the Richmond-San Rafael Bridge (Stenzel et al. 1995). Birds from the Farallon Islands frequently travel to mainland estuaries to feed (over 70 km). In Wisconsin, birds flew <3 km on average (maximum distance 40 km) from the breeding colony to the first foraging site (Custer and Bunck, 1992). In Mississippi, the average distance flown was 15.7 km (in King et al., 1995 as cited in Cal/EPA, 1999). *Territory*: Very small area used for courtship and nesting. *Reproduction*: Breeds April through August. Twelve colonies are located in the San Francisco Bay Area, with the largest colonies on the Oakland-San Francisco Bay Bridge and the Richmond-San Rafael Bridge (Ainley, 2000). Clutch size is usually three to four eggs (Zeiner et al., 1990). *Feeding*: Forage in water usually <8m deep (Hatch and Weseloh, 1999). Around the Richmond-San Rafael Bridge, the diet consisted mainly of midshipman (*Porichthys notatus*), smelt sp. (Osmeridae) and yellowfin gobies (*Acanthogobius flavimanus*) (Stenzel et al. 1995). Other studies on the West Coast found that atherinids (topsmelt), embiotocids (surfperch), engraulids (herring), scaenids (rockfish) and midshipman are commonly eaten by DCCO (Ainley et al., 1981). Ainley et al. (1981) also found that the DCCO preferred foraging on schooling prey from the surface to near, but not on, bottoms having no relief. Fish are commonly < 15 cm in length (Hatch and Weseloh, 1999). *Conservation and Management*: A California Species of Special Concern. Extensive studies have been conducted on DCCO and contaminants, especially on the Great Lakes (Hatch & Weseloh, 1999; USGS, 2001). Contaminant data also exist for San Francisco Bay (e.g., Davis et al., 1997). In California, DCCO also are sensitive to the effects of El Nino (Ainley & Boekelheide, 1990).

3.3 Proposed Exposure Parameters

Exposure to the DCCO will be estimated in a similar way to the scoter (see Section 2.2, Equation 1). The parameters proposed for the DCCO are summarized in Table 1. The rationale for the selected values are presented below and are based on natural history information from the literature. As with the scoter, a conservative screening evaluation will conducted first. If need be, further refinement of the exposure parameters will de conducted. The information below includes proposals for both the initial conservative screen, as well as parameters for a more refined screen.

C_{prey}: The prey concentration will be estimated by using the concentration of a COPEC as measured in field-collected fish tissue. A composite sample of ecologically relevant fish species (primarily sculpin and goby) were collected at each of the five areas sampled in May 2001. For the initial screen, each of the five areas will be evaluated separately. Additionally, C_{prey} may be estimated by integrating the data for all five areas (e.g. the 95% UCL or the mean for the five composite samples).

IR_{prey}: Prey ingestion rate is affected by numerous factors including foraging effort, reproductive state of the bird, palatability and the nutrient content of the prey species (Brugger, 1993). A variety of studies have estimated DCCO ingestion rates in the field (e.g., Schramm et al., 1984; Brugger, 1993). Hatch and Weseloh (1999) report a range of ingestion rates from 208 to 537 g/day wet weight with an average of about 320 g/day wet weight for adult birds. Brugger (1993) measured an average intake of 283 g/day wet weight when adult birds (approximately weighing 1.6 kg) were fed *ad libitum*. Brugger found that this was nearly identical to the modeled prediction derived from Nagy's (1987) allometric model for 1.5 kg seabirds. The Navy is proposing to use Brugger's empirical estimate of 283 g/day wet weight. This can

be converted into a dry weight IR_{prey} of 0.091 kg/day DW by assuming 68 % water in pacific herring (EPA, 1993).

C_{sed}: C_{sed} will be estimated by taking the 95% upper confidence level (UCL) of the concentration of a COPEC measured at the sediment stations in the area where the fish were sampled. As described under C_{prey}, this would begin with a separate evaluation of each of the five areas. Additionally, exposure to the entire study area may be evaluated. In this case the 95%UCL or the mean COPEC concentration of all the sediment stations may be estimated for C_{sed}.

IR_{sed}: No species-specific information on incidental sediment ingestion was found. Based on the work conducted by Ainley et al. (1981), DCCO observed in California are likely to feed on schooling prey located from the surface to near, but not on the bottom. Therefore their potential for exposure is likely to be limited. As such, the Navy is proposing an incidental sediment ingestion rate of 2% (a value commonly used for birds unlikely to ingest significant sediment; see EPA, 1993). This would correspond to 0.0018 kg/day dry weight sediment ingestion.

Foraging Range: DCCO breeding at the Richmond-San Rafael Bridge foraged within 5 km of the bridge (Stenzel et al. 1995). No information on foraging range was found for birds that nest at the San Francisco-Oakland Bay Bridge. Birds from the Farallon Islands frequently travel over 70 km to mainland estuaries to feed (Ainley and Boekelheide, 1990). In Wisconsin, birds flew <3 km on average (maximum distance 40 km) from the breeding colony to the first foraging site (Custer and Bunck, 1992). In Mississippi, the average distance flown was 15.7 km (in King et al., 1995 as cited in Cal/EPA, 1999). Since there is large variation in the foraging ranges estimated by these studies, and since there is no known DCCO rookery within 5 km of HPS, the Navy proposes to estimate the foraging range in the following way. The Navy assumes that birds from the closest rookery will be visiting HPS and that the foraging range should be based on the distance from the rookery to HPS. The foraging distance covered by DCCO nesting at the San Francisco-Oakland Bay Bridge was calculated as the distance from the mid point of the bridge (Yerba Buena Island) to approximately the tip of Candlestick Point. This area encompasses all of South Basin (foraging distance of approximately 11 km). Therefore, it was assumed that DCCO nesting at the San Francisco-Oakland Bay Bridge will forage 11 km in either direction. The total water surface area in the Bay within a circle of a radius of 11 km was then estimated using GIS. This estimate of the foraging range is 227 km^2.

SUF: As previously noted, the initial evaluation will be conservative. Therefore, a SUF of 1 will be used. If further evaluation is required, the Validation Study area will be divided into the foraging range estimate developed above.

Body Weight: Weseloh and Hatch (1999) state that regional differences in DCCO body mass are large (range of 1 to 3 kg), and that the mean mass of southeastern birds are half that of northern and western birds. DCCO are also sexually dimorphic with males being slightly heavier than females. Dunning (1993) lists a mean body weight (for both males and females) of approximately 1.67 kg. The Navy proposes to use a the mean body weight given by Dunning (1.67 kg) for the following reasons: (1) no San Francisco Bay specific studies were found, (2) the study used to develop IR_{prey} was based on a body weight of 1.6 kg, and (3) this is consistent with the body weight used at other Navy sites such as Mare Island.

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Table 1. Proposed Exposure Parameters for the Surf Scoter and Double-Crested Cormorant

Parameter	Surf Scoter	Double-Crested Cormorant	Units
IR_{prey}	0.084	0.091	kg/day dry weight
Prey Concentration Screen Refined	 • Depurated *Macoma* tissue COPEC concentration at each station • Same as above	 • COPEC concentration in field collected fish composite for each low volume footprint subarea • 95% UCL or mean COPEC concentration for all 5 composites collected in the low volume footprint	mg/kg dry weight
$IR_{sediment}$	0.0023	0.0018	kg/day dry weight
Sediment Concentration Screen Refined	 • Sediment COPEC concentration at each station • Same as above	 • 95 UCL or mean of sediment stations in each low volume footprint subarea • 95 UCL or mean of all sediment stations in the low volume footprint	mg/kg dry weight
Foraging Range	7	227.139	Km^2
SUF Screen Refined	 • 1 • To be developed from foraging range if necessary	 • 1 • To be developed from foraging range if necessary	Unit less
Body Weight	1.1	1.67	kg

APPENDIX H

Dose Assessment

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Depurated *M. nasuta* Tissue

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Table H-4. Dose Assessment Results for Station IB-57 Using Depurated *M. nasuta* Data H-4
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Depurated *M. nasuta* Tissue

Table H-1. Dose Assessment Results for Station IB-54 Using Depurated M. nasuta Data

STATION ID = IB-54

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-54	Aluminum	NP	7.25E+04	9.25E+02	NA	NA	2.22E+02	NA	NA	1.95E+03
IB-54	Antimony	NP	7.26E-01	9.70E-02	NA	NA	8.93E-03	NA	NA	1.87E-01
IB-54	Arsenic	NP	9.69E+00	1.81E+01	5.43E+00	2.17E+01	1.40E+00	2.58E-01	6.45E-02	2.29E+01
IB-54	Barium	NP	4.59E+02	9.49E+00	NA	NA	1.68E+00	NA	NA	2.02E+01
IB-54	Cadmium	NP	2.18E-01	2.29E-01	8.53E-02	1.74E+01	1.79E-02	2.10E-01	1.03E-03	3.69E-01
IB-54	Chromium	NP	1.63E+02	4.90E+00	NA	NA	7.15E-01	NA	NA	2.46E+01
IB-54	Cobalt	NP	1.55E+01	1.62E+00	NA	NA	1.56E-01	NA	NA	3.63E+00
IB-54	Copper	NP	4.53E+01	1.38E+01	2.56E+00	6.37E+01	1.15E+00	4.48E-01	1.80E-02	1.48E+01
IB-54	Iron	NP	4.26E+04	1.33E+03	NA	NA	1.91E+02	NA	NA	2.80E+03
IB-54	Lead	NP	2.31E+01	2.00E+00	2.34E-02	9.33E+00	2.01E-01	8.58E+00	2.16E-02	3.76E+00
IB-54	Manganese	NP	4.11E+02	1.43E+01	NA	NA	1.95E+00	NA	NA	5.74E+01
IB-54	Mercury	P	2.41E-01	8.15E-04	3.98E-02	1.83E-01	5.66E-04	1.42E-02	3.09E-03	1.74E-01
IB-54	Molybdenum	NP	1.15E+00	2.30E+00	NA	NA	1.78E-01	NA	NA	3.04E+00
IB-54	Nickel	NP	9.36E+01	5.14E+00	1.55E+00	6.28E+01	5.88E-01	3.79E-01	9.37E-03	9.60E+00
IB-54	Selenium	NP	3.28E-01	3.08E+00	2.30E-01	9.29E-01	2.36E-01	1.03E+00	2.54E-01	5.34E+00
IB-54	Silver	NP	2.91E-01	1.94E-01	NA	NA	1.54E-02	NA	NA	2.52E-01
IB-54	Vanadium	NP	1.40E+02	4.64E+00	NA	NA	6.47E-01	NA	NA	1.15E+01
IB-54	Zinc	NP	1.22E+02	8.64E+01	1.77E+01	1.77E+02	6.85E+00	3.87E-01	3.87E-02	1.26E+02
IB-54	HMW PAH	NP	9.20E-01	5.02E-01	NA	NA	4.02E-02	NA	NA	3.62E-01
IB-54	LMW PAH	NP	1.55E-01	3.08E-02	NA	NA	2.68E-03	NA	NA	4.21E-02
IB-54	Total PCBs	P	1.73E-02	7.31E-02	9.59E-02	1.16E+00	5.62E-03	5.86E-02	4.83E-03	6.86E-02
IB-54	Total 4,4'-DDx	P	3.03E-03	1.45E-02	7.14E-03	6.12E-01	1.11E-03	1.56E-01	1.82E-03	1.19E-02
IB-54	alpha-Chlordane	NP	7.00E-05	1.55E-03	NA	NA	1.19E-04	NA	NA	1.03E-03
IB-54	Dieldrin	NP	5.50E-05	1.01E-03	NA	NA	7.72E-05	NA	NA	1.57E-03
IB-54	Endosulfan II	NP	5.50E-05	2.72E-04	NA	NA	2.09E-05	NA	NA	ND
IB-54	Endrin	NP	5.00E-05	2.33E-04	NA	NA	1.79E-05	NA	NA	ND
IB-54	gamma-Chlordane	NP	4.50E-05	4.70E-04	NA	NA	3.60E-05	NA	NA	8.56E-04
IB-54	Heptachlor	NP	4.50E-05	2.33E-04	NA	NA	1.79E-05	NA	NA	ND
IB-54	Dibutyltin	NP	1.11E-03	9.14E-03	1.19E+00	7.46E+01	7.00E-04	5.90E-04	9.39E-06	1.26E-02
IB-54	Monobutyltin	NP	5.89E-04	2.18E-02	NA	NA	1.67E-03	NA	NA	NA
IB-54	Tetrabutyltin	NP	1.40E-03	4.97E-02	NA	NA	3.80E-03	NA	NA	NA
IB-54	Tributyltin	NP	7.93E-04	2.96E-02	1.19E+00	7.46E+01	2.26E-03	1.90E-03	3.03E-05	4.48E-02

Table H-2. Dose Assessment Results for Station IB-55 Using Depurated M. nasuta Data

STATION ID = IB-55

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-55	Aluminum	NP	6.35E+04	7.77E+02	NA	NA	1.92E+02	NA	NA	1.95E+03
IB-55	Antimony	NP	1.07E+00	1.47E-01	NA	NA	1.35E-02	NA	NA	1.87E-01
IB-55	Arsenic	NP	1.03E+01	2.23E+01	5.43E+00	2.17E+01	1.72E+00	3.18E-01	7.94E-02	2.29E+01
IB-55	Barium	NP	5.33E+02	9.38E+00	NA	NA	1.83E+00	NA	NA	2.02E+01
IB-55	Cadmium	NP	2.64E-01	2.37E-01	8.53E-02	1.74E+01	1.87E-02	2.19E-01	1.07E-03	3.69E-01
IB-55	Chromium	NP	3.19E+02	7.77E+00	NA	NA	1.26E+00	NA	NA	2.46E+01
IB-55	Cobalt	NP	1.69E+01	1.74E+00	NA	NA	1.68E-01	NA	NA	3.63E+00
IB-55	Copper	NP	6.57E+01	1.12E+01	2.56E+00	6.37E+01	9.93E-01	3.87E-01	1.56E-02	1.48E+01
IB-55	Iron	NP	3.98E+04	1.47E+03	NA	NA	1.95E+02	NA	NA	2.80E+03
IB-55	Lead	NP	1.26E+02	3.17E+00	2.34E-02	9.33E+00	5.06E-01	2.16E+01	5.42E-02	3.76E+00
IB-55	Manganese	NP	4.41E+02	1.84E+01	NA	NA	2.33E+00	NA	NA	5.74E+01
IB-55	Mercury	P	4.07E-01	8.15E-04	3.98E-02	1.83E-01	9.13E-04	2.30E-02	4.98E-03	1.74E-01
IB-55	Molybdenum	NP	8.58E-01	2.77E+00	NA	NA	2.13E-01	NA	NA	3.04E+00
IB-55	Nickel	NP	1.72E+02	7.47E+00	1.55E+00	6.28E+01	9.30E-01	6.00E-01	1.48E-02	9.60E+00
IB-55	Selenium	NP	2.73E-01	5.19E+00	2.30E-01	9.29E-01	3.97E-01	1.73E+00	4.27E-01	5.34E+00
IB-55	Silver	NP	2.86E-01	1.69E+00	NA	NA	1.30E-01	NA	NA	2.52E-01
IB-55	Vanadium	NP	1.21E+02	5.31E+00	NA	NA	6.58E-01	NA	NA	1.15E+01
IB-55	Zinc	NP	1.30E+02	8.02E+01	1.77E+01	1.77E+02	6.40E+00	3.62E-01	3.62E-02	1.26E+02
IB-55	HMW PAH	NP	1.23E+00	5.71E-01	NA	NA	4.61E-02	NA	NA	3.62E-01
IB-55	LMW PAH	NP	2.40E-01	4.79E-02	NA	NA	4.16E-03	NA	NA	4.21E-02
IB-55	Total PCBs	P	8.92E-02	1.53E-01	9.59E-02	1.16E+00	1.19E-02	1.24E-01	1.02E-02	6.86E-02
IB-55	Total 4,4'-DDx	P	3.73E-03	1.46E-02	7.14E-03	6.12E-01	1.12E-03	1.57E-01	1.83E-03	1.19E-02
IB-55	alpha-Chlordane	NP	5.00E-04	2.40E-03	NA	NA	1.84E-04	NA	NA	1.03E-03
IB-55	Dieldrin	NP	5.50E-05	4.08E-03	NA	NA	3.12E-04	NA	NA	1.57E-03
IB-55	Endosulfan II	NP	5.50E-05	1.60E-04	NA	NA	1.23E-05	NA	NA	ND
IB-55	Endrin	NP	5.00E-05	4.00E-05	NA	NA	3.16E-06	NA	NA	ND
IB-55	gamma-Chlordane	NP	4.00E-05	2.32E-03	NA	NA	1.77E-04	NA	NA	8.56E-04
IB-55	Heptachlor	NP	4.50E-05	8.00E-05	NA	NA	6.20E-06	NA	NA	ND
IB-55	Dibutyltin	NP	1.02E-03	7.35E-03	1.19E+00	7.46E+01	5.63E-04	4.74E-04	7.55E-06	1.26E-02
IB-55	Monobutyltin	NP	5.41E-04	2.07E-02	NA	NA	1.58E-03	NA	NA	NA
IB-55	Tetrabutyltin	NP	1.28E-03	4.71E-02	NA	NA	3.60E-03	NA	NA	NA
IB-55	Tributyltin	NP	7.29E-04	2.31E-02	1.19E+00	7.46E+01	1.76E-03	1.49E-03	2.37E-05	4.48E-02

Table H-3. Dose Assessment Results for Station IB-56 Using Depurated M. nasuta Data

STATION ID = IB-56

WOE FINAL SCORE= -2

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-56	Aluminum	NP	7.14E+04	1.87E+03	NA	NA	2.92E+02	NA	NA	1.95E+03
IB-56	Antimony	NP	8.07E-01	1.23E-01	NA	NA	1.11E-02	NA	NA	1.87E-01
IB-56	Arsenic	NP	1.06E+01	2.11E+01	5.43E+00	2.17E+01	1.63E+00	3.01E-01	7.52E-02	2.29E+01
IB-56	Barium	NP	4.62E+02	1.74E+01	NA	NA	2.29E+00	NA	NA	2.02E+01
IB-56	Cadmium	NP	2.28E-01	3.51E-01	8.53E-02	1.74E+01	2.73E-02	3.20E-01	1.56E-03	3.69E-01
IB-56	Chromium	NP	1.63E+02	8.03E+00	NA	NA	9.54E-01	NA	NA	2.46E+01
IB-56	Cobalt	NP	1.58E+01	2.41E+00	NA	NA	2.17E-01	NA	NA	3.63E+00
IB-56	Copper	NP	4.37E+01	1.46E+01	2.56E+00	6.37E+01	1.21E+00	4.70E-01	1.89E-02	1.48E+01
IB-56	Iron	NP	4.24E+04	1.91E+03	NA	NA	2.35E+02	NA	NA	2.80E+03
IB-56	Lead	NP	2.54E+01	2.39E+00	2.34E-02	9.33E+00	2.36E-01	1.01E+01	2.53E-02	3.76E+00
IB-56	Manganese	NP	4.21E+02	2.11E+01	NA	NA	2.49E+00	NA	NA	5.74E+01
IB-56	Mercury	P	3.12E-01	1.17E-01	3.98E-02	1.83E-01	9.59E-03	2.41E-01	5.23E-02	1.74E-01
IB-56	Molybdenum	NP	1.63E+00	2.93E+00	NA	NA	2.27E-01	NA	NA	3.04E+00
IB-56	Nickel	NP	8.98E+01	7.52E+00	1.55E+00	6.28E+01	7.62E-01	4.91E-01	1.21E-02	9.60E+00
IB-56	Selenium	NP	3.90E-01	5.15E+00	2.30E-01	9.29E-01	3.94E-01	1.72E+00	4.24E-01	5.34E+00
IB-56	Silver	NP	2.68E-01	2.60E-02	NA	NA	2.55E-03	NA	NA	2.52E-01
IB-56	Vanadium	NP	1.41E+02	6.94E+00	NA	NA	8.25E-01	NA	NA	1.15E+01
IB-56	Zinc	NP	1.11E+02	1.08E+02	1.77E+01	1.77E+02	8.48E+00	4.79E-01	4.79E-02	1.26E+02
IB-56	HMW PAH	NP	9.58E-01	2.67E-01	NA	NA	2.24E-02	NA	NA	3.62E-01
IB-56	LMW PAH	NP	1.73E-01	1.63E-02	NA	NA	1.61E-03	NA	NA	4.21E-02
IB-56	Total PCBs	P	1.67E-02	5.30E-02	9.59E-02	1.16E+00	4.09E-03	4.26E-02	3.52E-03	6.86E-02
IB-56	Total 4,4'-DDx	P	3.19E-03	8.58E-03	7.14E-03	6.12E-01	6.62E-04	9.27E-02	1.08E-03	1.19E-02
IB-56	alpha-Chlordane	NP	8.00E-05	6.70E-04	NA	NA	5.13E-05	NA	NA	1.03E-03
IB-56	Dieldrin	NP	5.50E-05	1.16E-03	NA	NA	8.87E-05	NA	NA	1.57E-03
IB-56	Endosulfan II	NP	5.50E-05	1.82E-04	NA	NA	1.40E-05	NA	NA	ND
IB-56	Endrin	NP	5.00E-05	1.52E-04	NA	NA	1.17E-05	NA	NA	ND
IB-56	gamma-Chlordane	NP	4.50E-05	8.50E-04	NA	NA	6.50E-05	NA	NA	8.56E-04
IB-56	Heptachlor	NP	4.50E-05	1.52E-04	NA	NA	1.17E-05	NA	NA	ND
IB-56	Dibutyltin	NP	1.09E-03	1.05E-02	1.19E+00	7.46E+01	8.03E-04	6.76E-04	1.08E-05	1.26E-02
IB-56	Monobutyltin	NP	5.78E-04	1.43E-02	NA	NA	1.09E-03	NA	NA	NA
IB-56	Tetrabutyltin	NP	1.37E-03	3.26E-02	NA	NA	2.49E-03	NA	NA	NA
IB-56	Tributyltin	NP	7.79E-04	2.69E-02	1.19E+00	7.46E+01	2.06E-03	1.73E-03	2.75E-05	4.48E-02

STATION ID = IB-57

WOE FINAL SCORE= -1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-57	Aluminum	NP	7.13E+04	2.10E+03	NA	NA	3.09E+02	NA	NA	1.95E+03
IB-57	Antimony	NP	9.11E-01	1.66E-01	NA	NA	1.46E-02	NA	NA	1.87E-01
IB-57	Arsenic	NP	1.02E+01	2.03E+01	5.43E+00	2.17E+01	1.57E+00	2.89E-01	7.23E-02	2.29E+01
IB-57	Barium	NP	4.68E+02	2.20E+01	NA	NA	2.66E+00	NA	NA	2.02E+01
IB-57	Cadmium	NP	2.00E-01	2.15E-01	8.53E-02	1.74E+01	1.68E-02	1.97E-01	9.65E-04	3.69E-01
IB-57	Chromium	NP	1.63E+02	1.12E+01	NA	NA	1.20E+00	NA	NA	2.46E+01
IB-57	Cobalt	NP	1.53E+01	2.22E+00	NA	NA	2.02E-01	NA	NA	3.63E+00
IB-57	Copper	NP	4.00E+01	1.48E+01	2.56E+00	6.37E+01	1.21E+00	4.73E-01	1.91E-02	1.48E+01
IB-57	Iron	NP	4.12E+04	2.42E+03	NA	NA	2.71E+02	NA	NA	2.80E+03
IB-57	Lead	NP	2.16E+01	2.64E+00	2.34E-02	9.33E+00	2.47E-01	1.05E+01	2.65E-02	3.76E+00
IB-57	Manganese	NP	4.21E+02	3.18E+01	NA	NA	3.31E+00	NA	NA	5.74E+01
IB-57	Mercury	P	3.40E-01	1.16E-01	3.98E-02	1.83E-01	9.57E-03	2.41E-01	5.22E-02	1.74E-01
IB-57	Molybdenum	NP	8.41E-01	2.66E+00	NA	NA	2.05E-01	NA	NA	3.04E+00
IB-57	Nickel	NP	8.36E+01	1.69E+01	1.55E+00	6.28E+01	1.47E+00	9.45E-01	2.33E-02	9.60E+00
IB-57	Selenium	NP	2.89E-01	2.85E+00	2.30E-01	9.29E-01	2.18E-01	9.50E-01	2.35E-01	5.34E+00
IB-57	Silver	NP	2.53E-01	2.60E-02	NA	NA	2.51E-03	NA	NA	2.52E-01
IB-57	Vanadium	NP	1.36E+02	8.48E+00	NA	NA	9.32E-01	NA	NA	1.15E+01
IB-57	Zinc	NP	1.20E+02	8.45E+01	1.77E+01	1.77E+02	6.70E+00	3.79E-01	3.79E-02	1.26E+02
IB-57	HMW PAH	NP	9.56E-01	4.39E-01	NA	NA	3.55E-02	NA	NA	3.62E-01
IB-57	LMW PAH	NP	2.03E-01	3.82E-02	NA	NA	3.34E-03	NA	NA	4.21E-02
IB-57	Total PCBs	P	1.20E-02	6.66E-02	9.59E-02	1.16E+00	5.11E-03	5.33E-02	4.40E-03	6.86E-02
IB-57	Total 4,4'-DDx	P	1.55E-03	1.07E-02	7.14E-03	6.12E-01	8.18E-04	1.15E-01	1.34E-03	1.19E-02
IB-57	alpha-Chlordane	NP	1.00E-04	9.10E-04	NA	NA	6.97E-05	NA	NA	1.03E-03
IB-57	Dieldrin	NP	5.00E-05	9.10E-04	NA	NA	6.96E-05	NA	NA	1.57E-03
IB-57	Endosulfan II	NP	5.00E-05	2.60E-04	NA	NA	2.00E-05	NA	NA	ND
IB-57	Endrin	NP	4.50E-05	2.28E-04	NA	NA	1.75E-05	NA	NA	ND
IB-57	gamma-Chlordane	NP	4.00E-05	9.10E-04	NA	NA	6.96E-05	NA	NA	8.56E-04
IB-57	Heptachlor	NP	4.50E-05	2.28E-04	NA	NA	1.75E-05	NA	NA	ND
IB-57	Dibutyltin	NP	1.01E-03	1.05E-02	1.19E+00	7.46E+01	8.07E-04	6.79E-04	1.08E-05	1.26E-02
IB-57	Monobutyltin	NP	5.37E-04	1.91E-02	NA	NA	1.46E-03	NA	NA	NA
IB-57	Tetrabutyltin	NP	1.27E-03	4.36E-02	NA	NA	3.33E-03	NA	NA	NA
IB-57	Tributyltin	NP	7.23E-04	2.94E-02	1.19E+00	7.46E+01	2.25E-03	1.89E-03	3.02E-05	4.48E-02

STATION ID = IB-58

WOE FINAL SCORE= -2

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-58	Aluminum	NP	7.02E+04	1.02E+03	NA	NA	2.25E+02	NA	NA	1.95E+03
IB-58	Antimony	NP	7.00E-01	1.15E-01	NA	NA	1.02E-02	NA	NA	1.87E-01
IB-58	Arsenic	NP	1.08E+01	2.16E+01	5.43E+00	2.17E+01	1.67E+00	3.08E-01	7.69E-02	2.29E+01
IB-58	Barium	NP	4.56E+02	1.09E+01	NA	NA	1.79E+00	NA	NA	2.02E+01
IB-58	Cadmium	NP	2.01E-01	2.66E-01	8.53E-02	1.74E+01	2.07E-02	2.43E-01	1.19E-03	3.69E-01
IB-58	Chromium	NP	1.56E+02	7.73E+00	NA	NA	9.16E-01	NA	NA	2.46E+01
IB-58	Cobalt	NP	1.59E+01	2.16E+00	NA	NA	1.98E-01	NA	NA	3.63E+00
IB-58	Copper	NP	4.14E+01	1.05E+01	2.56E+00	6.37E+01	8.88E-01	3.46E-01	1.39E-02	1.48E+01
IB-58	Iron	NP	4.13E+04	1.70E+03	NA	NA	2.16E+02	NA	NA	2.80E+03
IB-58	Lead	NP	2.24E+01	1.79E+00	2.34E-02	9.33E+00	1.84E-01	7.84E+00	1.97E-02	3.76E+00
IB-58	Manganese	NP	4.24E+02	2.15E+01	NA	NA	2.53E+00	NA	NA	5.74E+01
IB-58	Mercury	P	2.51E-01	8.15E-04	3.98E-02	1.83E-01	5.87E-04	1.48E-02	3.20E-03	1.74E-01
IB-58	Molybdenum	NP	7.63E-01	2.65E+00	NA	NA	2.04E-01	NA	NA	3.04E+00
IB-58	Nickel	NP	8.71E+01	6.06E+00	1.55E+00	6.28E+01	6.45E-01	4.16E-01	1.03E-02	9.60E+00
IB-58	Selenium	NP	3.11E-01	4.65E+00	2.30E-01	9.29E-01	3.56E-01	1.55E+00	3.83E-01	5.34E+00
IB-58	Silver	NP	2.57E-01	1.24E-01	NA	NA	1.00E-02	NA	NA	2.52E-01
IB-58	Vanadium	NP	1.38E+02	6.06E+00	NA	NA	7.51E-01	NA	NA	1.15E+01
IB-58	Zinc	NP	1.15E+02	1.19E+02	1.77E+01	1.77E+02	9.33E+00	5.27E-01	5.27E-02	1.26E+02
IB-58	HMW PAH	NP	1.05E+00	6.17E-01	NA	NA	4.93E-02	NA	NA	3.62E-01
IB-58	LMW PAH	NP	2.06E-01	6.44E-02	NA	NA	5.35E-03	NA	NA	4.21E-02
IB-58	Total PCBs	P	1.50E-02	5.53E-02	9.59E-02	1.16E+00	4.26E-03	4.44E-02	3.66E-03	6.86E-02
IB-58	Total 4,4'-DDx	P	2.33E-03	1.17E-02	7.14E-03	6.12E-01	8.97E-04	1.26E-01	1.47E-03	1.19E-02
IB-58	alpha-Chlordane	NP	8.00E-05	6.08E-05	NA	NA	4.81E-06	NA	NA	1.03E-03
IB-58	Dieldrin	NP	5.00E-05	1.52E-03	NA	NA	1.16E-04	NA	NA	1.57E-03
IB-58	Endosulfan II	NP	5.00E-05	1.22E-04	NA	NA	9.39E-06	NA	NA	ND
IB-58	Endrin	NP	4.50E-05	3.04E-05	NA	NA	2.42E-06	NA	NA	ND
IB-58	gamma-Chlordane	NP	4.00E-05	9.10E-04	NA	NA	6.96E-05	NA	NA	8.56E-04
IB-58	Heptachlor	NP	4.50E-05	6.08E-05	NA	NA	4.74E-06	NA	NA	ND
IB-58	Dibutyltin	NP	1.04E-03	6.96E-03	1.19E+00	7.46E+01	5.34E-04	4.49E-04	7.15E-06	1.26E-02
IB-58	Monobutyltin	NP	5.48E-04	1.63E-02	NA	NA	1.25E-03	NA	NA	NA
IB-58	Tetrabutyltin	NP	1.30E-03	3.72E-02	NA	NA	2.84E-03	NA	NA	NA
IB-58	Tributyltin	NP	7.38E-04	3.32E-02	1.19E+00	7.46E+01	2.54E-03	2.14E-03	3.40E-05	4.48E-02

STATION ID = IB-59

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-59	Aluminum	NP	6.64E+04	2.08E+03	NA	NA	2.98E+02	NA	NA	1.95E+03
IB-59	Antimony	NP	1.24E+00	1.18E-01	NA	NA	1.16E-02	NA	NA	1.87E-01
IB-59	Arsenic	NP	1.14E+01	1.91E+01	5.43E+00	2.17E+01	1.48E+00	2.73E-01	6.82E-02	2.29E+01
IB-59	Barium	NP	4.38E+02	1.47E+01	NA	NA	2.04E+00	NA	NA	2.02E+01
IB-59	Cadmium	NP	2.40E-01	2.09E-01	8.53E-02	1.74E+01	1.65E-02	1.93E-01	9.44E-04	3.69E-01
IB-59	Chromium	NP	2.71E+02	9.36E+00	NA	NA	1.28E+00	NA	NA	2.46E+01
IB-59	Cobalt	NP	2.14E+01	1.87E+00	NA	NA	1.88E-01	NA	NA	3.63E+00
IB-59	Copper	NP	1.17E+02	1.40E+01	2.56E+00	6.37E+01	1.31E+00	5.12E-01	2.06E-02	1.48E+01
IB-59	Iron	NP	4.37E+04	2.13E+03	NA	NA	2.54E+02	NA	NA	2.80E+03
IB-59	Lead	NP	2.82E+01	2.32E+00	2.34E-02	9.33E+00	2.36E-01	1.01E+01	2.53E-02	3.76E+00
IB-59	Manganese	NP	4.50E+02	2.57E+01	NA	NA	2.90E+00	NA	NA	5.74E+01
IB-59	Mercury	P	3.18E-01	1.35E-01	3.98E-02	1.83E-01	1.10E-02	2.76E-01	5.98E-02	1.74E-01
IB-59	Molybdenum	NP	9.25E-01	2.63E+00	NA	NA	2.03E-01	NA	NA	3.04E+00
IB-59	Nickel	NP	2.32E+02	6.95E+00	1.55E+00	6.28E+01	1.02E+00	6.55E-01	1.62E-02	9.60E+00
IB-59	Selenium	NP	4.30E-01	4.76E+00	2.30E-01	9.29E-01	3.64E-01	1.59E+00	3.92E-01	5.34E+00
IB-59	Silver	NP	3.21E-01	2.60E-02	NA	NA	2.66E-03	NA	NA	2.52E-01
IB-59	Vanadium	NP	1.41E+02	7.15E+00	NA	NA	8.41E-01	NA	NA	1.15E+01
IB-59	Zinc	NP	1.36E+02	8.18E+01	1.77E+01	1.77E+02	6.53E+00	3.69E-01	3.69E-02	1.26E+02
IB-59	HMW PAH	NP	1.81E+00	1.47E+00	NA	NA	1.16E-01	NA	NA	3.62E-01
IB-59	LMW PAH	NP	4.85E-01	1.03E-01	NA	NA	8.88E-03	NA	NA	4.21E-02
IB-59	Total PCBs	P	7.69E-02	1.37E-01	9.59E-02	1.16E+00	1.06E-02	1.11E-01	9.15E-03	6.86E-02
IB-59	Total 4,4'-DDx	P	3.71E-03	1.56E-02	7.14E-03	6.12E-01	1.20E-03	1.68E-01	1.96E-03	1.19E-02
IB-59	alpha-Chlordane	NP	2.60E-04	1.71E-03	NA	NA	1.31E-04	NA	NA	1.03E-03
IB-59	Dieldrin	NP	5.50E-05	1.09E-03	NA	NA	8.34E-05	NA	NA	1.57E-03
IB-59	Endosulfan II	NP	5.50E-05	2.39E-04	NA	NA	1.84E-05	NA	NA	ND
IB-59	Endrin	NP	5.00E-05	2.05E-04	NA	NA	1.58E-05	NA	NA	ND
IB-59	gamma-Chlordane	NP	1.40E-04	6.20E-04	NA	NA	4.76E-05	NA	NA	8.56E-04
IB-59	Heptachlor	NP	4.50E-05	2.05E-04	NA	NA	1.58E-05	NA	NA	ND
IB-59	Dibutyltin	NP	1.09E-02	1.40E-02	1.19E+00	7.46E+01	1.09E-03	9.17E-04	1.46E-05	1.26E-02
IB-59	Monobutyltin	NP	5.82E-04	1.69E-02	NA	NA	1.29E-03	NA	NA	NA
IB-59	Tetrabutyltin	NP	1.38E-03	3.85E-02	NA	NA	2.94E-03	NA	NA	NA
IB-59	Tributyltin	NP	1.77E-02	6.82E-02	1.19E+00	7.46E+01	5.25E-03	4.42E-03	7.03E-05	4.48E-02

Table H-7. Dose Assessment Results for Station PA-38 Using Depurated M. nasuta Data

STATION ID = PA-38

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-38	Aluminum	NP	7.05E+04	1.33E+03	NA	NA	2.49E+02	NA	NA	1.95E+03
PA-38	Antimony	NP	9.64E-01	1.24E-01	NA	NA	1.15E-02	NA	NA	1.87E-01
PA-38	Arsenic	NP	1.09E+01	2.26E+01	5.43E+00	2.17E+01	1.75E+00	3.22E-01	8.05E-02	2.29E+01
PA-38	Barium	NP	4.96E+02	1.72E+01	NA	NA	2.35E+00	NA	NA	2.02E+01
PA-38	Cadmium	NP	2.87E-01	4.20E-01	8.53E-02	1.74E+01	3.27E-02	3.83E-01	1.87E-03	3.69E-01
PA-38	Chromium	NP	1.94E+02	9.56E+00	NA	NA	1.14E+00	NA	NA	2.46E+01
PA-38	Cobalt	NP	1.67E+01	2.72E+00	NA	NA	2.43E-01	NA	NA	3.63E+00
PA-38	Copper	NP	9.54E+01	2.20E+01	2.56E+00	6.37E+01	1.88E+00	7.33E-01	2.95E-02	1.48E+01
PA-38	Iron	NP	4.07E+04	1.89E+03	NA	NA	2.29E+02	NA	NA	2.80E+03
PA-38	Lead	NP	2.92E+01	2.67E+00	2.34E-02	9.33E+00	2.65E-01	1.13E+01	2.84E-02	3.76E+00
PA-38	Manganese	NP	4.39E+02	2.46E+01	NA	NA	2.80E+00	NA	NA	5.74E+01
PA-38	Mercury	P	4.41E-01	8.15E-04	3.98E-02	1.83E-01	9.84E-04	2.48E-02	5.37E-03	1.74E-01
PA-38	Molybdenum	NP	9.57E-01	2.62E+00	NA	NA	2.02E-01	NA	NA	3.04E+00
PA-38	Nickel	NP	8.87E+01	8.66E+00	1.55E+00	6.28E+01	8.47E-01	5.46E-01	1.35E-02	9.60E+00
PA-38	Selenium	NP	5.25E-01	5.34E+00	2.30E-01	9.29E-01	4.09E-01	1.78E+00	4.40E-01	5.34E+00
PA-38	Silver	NP	2.87E-01	1.44E-01	NA	NA	1.16E-02	NA	NA	2.52E-01
PA-38	Vanadium	NP	1.39E+02	7.86E+00	NA	NA	8.91E-01	NA	NA	1.15E+01
PA-38	Zinc	NP	1.22E+02	9.36E+01	1.77E+01	1.77E+02	7.40E+00	4.18E-01	4.18E-02	1.26E+02
PA-38	HMW PAH	NP	1.79E+00	8.31E-01	NA	NA	6.72E-02	NA	NA	3.62E-01
PA-38	LMW PAH	NP	3.13E-01	6.38E-02	NA	NA	5.53E-03	NA	NA	4.21E-02
PA-38	Total PCBs	P	5.87E-01	5.01E-01	9.59E-02	1.16E+00	3.95E-02	4.12E-01	3.40E-02	6.86E-02
PA-38	Total 4,4'-DDx	P	2.97E-03	9.51E-03	7.14E-03	6.12E-01	7.32E-04	1.03E-01	1.20E-03	1.19E-02
PA-38	alpha-Chlordane	NP	9.00E-05	6.10E-04	NA	NA	4.68E-05	NA	NA	1.03E-03
PA-38	Dieldrin	NP	5.00E-05	1.90E-04	NA	NA	1.46E-05	NA	NA	1.57E-03
PA-38	Endosulfan II	NP	5.00E-05	1.90E-04	NA	NA	1.46E-05	NA	NA	ND
PA-38	Endrin	NP	4.50E-05	1.52E-04	NA	NA	1.17E-05	NA	NA	ND
PA-38	gamma-Chlordane	NP	4.00E-05	3.00E-04	NA	NA	2.30E-05	NA	NA	8.56E-04
PA-38	Heptachlor	NP	4.50E-05	1.52E-04	NA	NA	1.17E-05	NA	NA	ND
PA-38	Dibutyltin	NP	1.97E-02	1.13E-01	1.19E+00	7.46E+01	8.66E-03	7.30E-03	1.16E-04	1.26E-02
PA-38	Monobutyltin	NP	5.27E-04	1.22E-02	NA	NA	9.31E-04	NA	NA	NA
PA-38	Tetrabutyltin	NP	1.25E-03	4.13E-02	NA	NA	3.16E-03	NA	NA	NA
PA-38	Tributyltin	NP	8.73E-02	5.98E-01	1.19E+00	7.46E+01	4.58E-02	3.86E-02	6.14E-04	4.48E-02

STATION ID = PA-39

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-39	Aluminum	NP	6.84E+04	1.38E+03	NA	NA	2.48E+02	NA	NA	1.95E+03
PA-39	Antimony	NP	1.09E+00	1.49E-01	NA	NA	1.37E-02	NA	NA	1.87E-01
PA-39	Arsenic	NP	1.07E+01	2.28E+01	5.43E+00	2.17E+01	1.76E+00	3.25E-01	8.11E-02	2.29E+01
PA-39	Barium	NP	4.38E+02	1.21E+01	NA	NA	1.84E+00	NA	NA	2.02E+01
PA-39	Cadmium	NP	2.44E-01	2.11E-01	8.53E-02	1.74E+01	1.66E-02	1.95E-01	9.53E-04	3.69E-01
PA-39	Chromium	NP	1.65E+02	5.02E+00	NA	NA	7.28E-01	NA	NA	2.46E+01
PA-39	Cobalt	NP	1.77E+01	2.06E+00	NA	NA	1.94E-01	NA	NA	3.63E+00
PA-39	Copper	NP	5.77E+01	1.43E+01	2.56E+00	6.37E+01	1.21E+00	4.73E-01	1.90E-02	1.48E+01
PA-39	Iron	NP	3.99E+04	1.79E+03	NA	NA	2.20E+02	NA	NA	2.80E+03
PA-39	Lead	NP	2.71E+01	2.23E+00	2.34E-02	9.33E+00	2.27E-01	9.69E+00	2.43E-02	3.76E+00
PA-39	Manganese	NP	4.23E+02	2.10E+01	NA	NA	2.49E+00	NA	NA	5.74E+01
PA-39	Mercury	P	1.00E+00	1.44E+00	3.98E-02	1.83E-01	1.12E-01	2.82E+00	6.11E-01	1.74E-01
PA-39	Molybdenum	NP	1.01E+00	2.43E+00	NA	NA	1.88E-01	NA	NA	3.04E+00
PA-39	Nickel	NP	9.54E+01	7.37E+00	1.55E+00	6.28E+01	7.62E-01	4.92E-01	1.21E-02	9.60E+00
PA-39	Selenium	NP	3.37E-01	3.52E+00	2.30E-01	9.29E-01	2.70E-01	1.17E+00	2.90E-01	5.34E+00
PA-39	Silver	NP	3.16E-01	2.60E-02	NA	NA	2.65E-03	NA	NA	2.52E-01
PA-39	Vanadium	NP	1.34E+02	5.32E+00	NA	NA	6.86E-01	NA	NA	1.15E+01
PA-39	Zinc	NP	1.12E+02	1.25E+02	1.77E+01	1.77E+02	9.78E+00	5.53E-01	5.53E-02	1.26E+02
PA-39	HMW PAH	NP	1.48E+00	6.74E-01	NA	NA	5.46E-02	NA	NA	3.62E-01
PA-39	LMW PAH	NP	2.71E-01	5.19E-02	NA	NA	4.53E-03	NA	NA	4.21E-02
PA-39	Total PCBs	P	3.74E-01	2.55E-01	9.59E-02	1.16E+00	2.03E-02	2.11E-01	1.74E-02	6.86E-02
PA-39	Total 4,4'-DDx	P	3.13E-03	8.95E-03	7.14E-03	6.12E-01	6.90E-04	9.66E-02	1.13E-03	1.19E-02
PA-39	alpha-Chlordane	NP	3.50E-05	7.80E-04	NA	NA	5.96E-05	NA	NA	1.03E-03
PA-39	Dieldrin	NP	5.00E-05	2.09E-04	NA	NA	1.61E-05	NA	NA	1.57E-03
PA-39	Endosulfan II	NP	5.00E-05	2.39E-04	NA	NA	1.83E-05	NA	NA	ND
PA-39	Endrin	NP	4.50E-05	2.09E-04	NA	NA	1.60E-05	NA	NA	ND
PA-39	gamma-Chlordane	NP	4.00E-05	1.79E-04	NA	NA	1.38E-05	NA	NA	8.56E-04
PA-39	Heptachlor	NP	4.00E-05	1.79E-04	NA	NA	1.38E-05	NA	NA	ND
PA-39	Dibutyltin	NP	3.36E-02	2.61E-02	1.19E+00	7.46E+01	2.06E-03	1.74E-03	2.77E-05	1.26E-02
PA-39	Monobutyltin	NP	5.01E-04	1.47E-02	NA	NA	1.13E-03	NA	NA	NA
PA-39	Tetrabutyltin	NP	1.19E-03	3.36E-02	NA	NA	2.57E-03	NA	NA	NA
PA-39	Tributyltin	NP	1.31E-01	2.52E-01	1.19E+00	7.46E+01	1.95E-02	1.64E-02	2.62E-04	4.48E-02

Table H-9. Dose Assessment Results for Station PA-40 Using Depurated M. nasuta Data

STATION ID = PA-40

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-40	Aluminum	NP	7.20E+04	1.73E+03	NA	NA	2.83E+02	NA	NA	1.95E+03
PA-40	Antimony	NP	7.79E-01	1.37E-01	NA	NA	1.21E-02	NA	NA	1.87E-01
PA-40	Arsenic	NP	1.12E+01	2.02E+01	5.43E+00	2.17E+01	1.57E+00	2.88E-01	7.21E-02	2.29E+01
PA-40	Barium	NP	4.71E+02	1.76E+01	NA	NA	2.33E+00	NA	NA	2.02E+01
PA-40	Cadmium	NP	2.22E-01	2.47E-01	8.53E-02	1.74E+01	1.93E-02	2.27E-01	1.11E-03	3.69E-01
PA-40	Chromium	NP	1.63E+02	6.87E+00	NA	NA	8.65E-01	NA	NA	2.46E+01
PA-40	Cobalt	NP	1.66E+01	2.37E+00	NA	NA	2.16E-01	NA	NA	3.63E+00
PA-40	Copper	NP	5.77E+01	1.62E+01	2.56E+00	6.37E+01	1.36E+00	5.30E-01	2.13E-02	1.48E+01
PA-40	Iron	NP	4.25E+04	2.32E+03	NA	NA	2.66E+02	NA	NA	2.80E+03
PA-40	Lead	NP	2.36E+01	2.59E+00	2.34E-02	9.33E+00	2.47E-01	1.06E+01	2.65E-02	3.76E+00
PA-40	Manganese	NP	4.76E+02	2.45E+01	NA	NA	2.87E+00	NA	NA	5.74E+01
PA-40	Mercury	P	2.57E-01	1.46E-01	3.98E-02	1.83E-01	1.17E-02	2.94E-01	6.37E-02	1.74E-01
PA-40	Molybdenum	NP	8.97E-01	2.82E+00	NA	NA	2.17E-01	NA	NA	3.04E+00
PA-40	Nickel	NP	9.05E+01	7.57E+00	1.55E+00	6.28E+01	7.67E-01	4.95E-01	1.22E-02	9.60E+00
PA-40	Selenium	NP	3.67E-01	2.87E+00	2.30E-01	9.29E-01	2.20E-01	9.58E-01	2.37E-01	5.34E+00
PA-40	Silver	NP	2.85E-01	2.60E-02	NA	NA	2.58E-03	NA	NA	2.52E-01
PA-40	Vanadium	NP	1.44E+02	6.94E+00	NA	NA	8.31E-01	NA	NA	1.15E+01
PA-40	Zinc	NP	1.15E+02	9.84E+01	1.77E+01	1.77E+02	7.75E+00	4.38E-01	4.38E-02	1.26E+02
PA-40	HMW PAH	NP	1.04E+00	6.70E-01	NA	NA	5.33E-02	NA	NA	3.62E-01
PA-40	LMW PAH	NP	2.17E-01	6.20E-02	NA	NA	5.19E-03	NA	NA	4.21E-02
PA-40	Total PCBs	P	2.97E-02	7.43E-02	9.59E-02	1.16E+00	5.73E-03	5.98E-02	4.93E-03	6.86E-02
PA-40	Total 4,4'-DDx	P	2.86E-03	1.26E-02	7.14E-03	6.12E-01	9.70E-04	1.36E-01	1.59E-03	1.19E-02
PA-40	alpha-Chlordane	NP	1.20E-04	9.90E-04	NA	NA	7.59E-05	NA	NA	1.03E-03
PA-40	Dieldrin	NP	5.50E-05	9.90E-04	NA	NA	7.57E-05	NA	NA	1.57E-03
PA-40	Endosulfan II	NP	5.50E-05	1.65E-04	NA	NA	1.27E-05	NA	NA	ND
PA-40	Endrin	NP	5.00E-05	1.32E-04	NA	NA	1.02E-05	NA	NA	ND
PA-40	gamma-Chlordane	NP	4.50E-05	2.60E-04	NA	NA	1.99E-05	NA	NA	8.56E-04
PA-40	Heptachlor	NP	4.50E-05	1.32E-04	NA	NA	1.02E-05	NA	NA	ND
PA-40	Dibutyltin	NP	2.15E-02	4.44E-02	1.19E+00	7.46E+01	3.43E-03	2.89E-03	4.60E-05	1.26E-02
PA-40	Monobutyltin	NP	5.69E-04	1.63E-02	NA	NA	1.25E-03	NA	NA	NA
PA-40	Tetrabutyltin	NP	1.35E-03	3.72E-02	NA	NA	2.85E-03	NA	NA	NA
PA-40	Tributyltin	NP	7.29E-02	5.21E-01	1.19E+00	7.46E+01	3.99E-02	3.36E-02	5.35E-04	4.48E-02

STATION ID = PA-41

WOE FINAL SCORE = +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-41	Aluminum	NP	6.65E+04	2.03E+03	NA	NA	2.94E+02	NA	NA	1.95E+03
PA-41	Antimony	NP	1.09E+00	1.60E-01	NA	NA	1.45E-02	NA	NA	1.87E-01
PA-41	Arsenic	NP	1.13E+01	2.08E+01	5.43E+00	2.17E+01	1.61E+00	2.97E-01	7.42E-02	2.29E+01
PA-41	Barium	NP	5.68E+02	2.12E+01	NA	NA	2.81E+00	NA	NA	2.02E+01
PA-41	Cadmium	NP	3.29E-01	2.68E-01	8.53E-02	1.74E+01	2.12E-02	2.48E-01	1.21E-03	3.69E-01
PA-41	Chromium	NP	3.49E+02	1.14E+01	NA	NA	1.60E+00	NA	NA	2.46E+01
PA-41	Cobalt	NP	1.65E+01	2.09E+00	NA	NA	1.94E-01	NA	NA	3.63E+00
PA-41	Copper	NP	5.25E+02	3.57E+01	2.56E+00	6.37E+01	3.82E+00	1.49E+00	6.00E-02	1.48E+01
PA-41	Iron	NP	4.25E+04	2.57E+03	NA	NA	2.85E+02	NA	NA	2.80E+03
PA-41	Lead	NP	1.09E+02	3.30E+00	2.34E-02	9.33E+00	4.80E-01	2.05E+01	5.15E-02	3.76E+00
PA-41	Manganese	NP	4.94E+02	2.91E+01	NA	NA	3.26E+00	NA	NA	5.74E+01
PA-41	Mercury	P	4.78E-01	2.65E-01	3.98E-02	1.83E-01	2.12E-02	5.34E-01	1.16E-01	1.74E-01
PA-41	Molybdenum	NP	1.12E+00	2.77E+00	NA	NA	2.14E-01	NA	NA	3.04E+00
PA-41	Nickel	NP	1.19E+02	8.18E+00	1.55E+00	6.28E+01	8.73E-01	5.63E-01	1.39E-02	9.60E+00
PA-41	Selenium	NP	5.10E-01	3.63E+00	2.30E-01	9.29E-01	2.78E-01	1.21E+00	3.00E-01	5.34E+00
PA-41	Silver	NP	2.93E-01	2.60E-02	NA	NA	2.60E-03	NA	NA	2.52E-01
PA-41	Vanadium	NP	1.28E+02	7.61E+00	NA	NA	8.49E-01	NA	NA	1.15E+01
PA-41	Zinc	NP	2.07E+02	9.10E+01	1.77E+01	1.77E+02	7.38E+00	4.17E-01	4.17E-02	1.26E+02
PA-41	HMW PAH	NP	4.67E+00	4.24E-01	NA	NA	4.22E-02	NA	NA	3.62E-01
PA-41	LMW PAH	NP	1.22E+00	3.17E-02	NA	NA	4.98E-03	NA	NA	4.21E-02
PA-41	Total PCBs	P	7.04E-01	1.46E-01	9.59E-02	1.16E+00	1.26E-02	1.32E-01	1.09E-02	6.86E-02
PA-41	Total 4,4'-DDx	P	3.86E-03	1.08E-02	7.14E-03	6.12E-01	8.34E-04	1.17E-01	1.36E-03	1.19E-02
PA-41	alpha-Chlordane	NP	1.90E-04	7.80E-04	NA	NA	6.00E-05	NA	NA	1.03E-03
PA-41	Dieldrin	NP	5.00E-05	2.77E-04	NA	NA	2.13E-05	NA	NA	1.57E-03
PA-41	Endosulfan II	NP	5.00E-05	2.77E-04	NA	NA	2.13E-05	NA	NA	ND
PA-41	Endrin	NP	4.50E-05	2.50E-04	NA	NA	1.92E-05	NA	NA	ND
PA-41	gamma-Chlordane	NP	4.00E-05	1.05E-03	NA	NA	8.03E-05	NA	NA	8.56E-04
PA-41	Heptachlor	NP	4.00E-05	2.50E-04	NA	NA	1.91E-05	NA	NA	ND
PA-41	Dibutyltin	NP	5.74E-02	1.11E-01	1.19E+00	7.46E+01	8.61E-03	7.25E-03	1.15E-04	1.26E-02
PA-41	Monobutyltin	NP	4.99E-04	3.04E-02	NA	NA	2.33E-03	NA	NA	NA
PA-41	Tetrabutyltin	NP	1.18E-03	6.94E-02	NA	NA	5.30E-03	NA	NA	NA
PA-41	Tributyltin	NP	2.08E-01	1.16E+00	1.19E+00	7.46E+01	8.89E-02	7.49E-02	1.19E-03	4.48E-02

Table H-11. Dose Assessment Results for Station PA-42 Using Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-42	Aluminum	NP	6.28E+04	2.01E+03	NA	NA	2.85E+02	NA	NA	1.95E+03
PA-42	Antimony	NP	1.23E+00	2.18E-01	NA	NA	1.92E-02	NA	NA	1.87E-01
PA-42	Arsenic	NP	1.07E+01	1.91E+01	5.43E+00	2.17E+01	1.48E+00	2.73E-01	6.81E-02	2.29E+01
PA-42	Barium	NP	4.69E+02	2.03E+01	NA	NA	2.53E+00	NA	NA	2.02E+01
PA-42	Cadmium	NP	2.09E-01	2.76E-01	8.53E-02	1.74E+01	2.15E-02	2.52E-01	1.23E-03	3.69E-01
PA-42	Chromium	NP	2.77E+02	1.16E+01	NA	NA	1.47E+00	NA	NA	2.46E+01
PA-42	Cobalt	NP	1.62E+01	2.45E+00	NA	NA	2.21E-01	NA	NA	3.63E+00
PA-42	Copper	NP	3.97E+02	8.90E+01	2.56E+00	6.37E+01	7.63E+00	2.97E+00	1.20E-01	1.48E+01
PA-42	Iron	NP	4.00E+04	3.64E+03	NA	NA	3.62E+02	NA	NA	2.80E+03
PA-42	Lead	NP	3.04E+01	3.96E+00	2.34E-02	9.33E+00	3.66E-01	1.56E+01	3.92E-02	3.76E+00
PA-42	Manganese	NP	5.02E+02	4.53E+01	NA	NA	4.51E+00	NA	NA	5.74E+01
PA-42	Mercury	P	4.25E-01	1.75E-01	3.98E-02	1.83E-01	1.43E-02	3.59E-01	7.77E-02	1.74E-01
PA-42	Molybdenum	NP	1.47E+00	2.62E+00	NA	NA	2.03E-01	NA	NA	3.04E+00
PA-42	Nickel	NP	8.87E+01	9.69E+00	1.55E+00	6.28E+01	9.25E-01	5.97E-01	1.47E-02	9.60E+00
PA-42	Selenium	NP	3.47E-01	3.35E+00	2.30E-01	9.29E-01	2.57E-01	1.12E+00	2.76E-01	5.34E+00
PA-42	Silver	NP	2.76E-01	2.60E-02	NA	NA	2.56E-03	NA	NA	2.52E-01
PA-42	Vanadium	NP	1.21E+02	9.20E+00	NA	NA	9.56E-01	NA	NA	1.15E+01
PA-42	Zinc	NP	1.10E+02	6.96E+01	1.77E+01	1.77E+02	5.54E+00	3.13E-01	3.13E-02	1.26E+02
PA-42	HMW PAH	NP	3.36E+00	3.66E-01	NA	NA	3.49E-02	NA	NA	3.62E-01
PA-42	LMW PAH	NP	9.00E-01	3.70E-02	NA	NA	4.70E-03	NA	NA	4.21E-02
PA-42	Total PCBs	P	1.13E+00	1.54E-01	9.59E-02	1.16E+00	1.41E-02	1.47E-01	1.22E-02	6.86E-02
PA-42	Total 4,4'-DDx	P	2.90E-03	8.50E-03	7.14E-03	6.12E-01	6.55E-04	9.18E-02	1.07E-03	1.19E-02
PA-42	alpha-Chlordane	NP	1.90E-04	5.00E-04	NA	NA	3.86E-05	NA	NA	1.03E-03
PA-42	Dieldrin	NP	4.50E-05	2.50E-04	NA	NA	1.92E-05	NA	NA	1.57E-03
PA-42	Endosulfan II	NP	4.50E-05	2.50E-04	NA	NA	1.92E-05	NA	NA	ND
PA-42	Endrin	NP	4.00E-05	2.19E-04	NA	NA	1.68E-05	NA	NA	ND
PA-42	gamma-Chlordane	NP	3.50E-05	1.13E-03	NA	NA	8.64E-05	NA	NA	8.56E-04
PA-42	Heptachlor	NP	3.50E-05	2.19E-04	NA	NA	1.68E-05	NA	NA	ND
PA-42	Dibutyltin	NP	3.32E-02	6.59E-02	1.19E+00	7.46E+01	5.10E-03	4.29E-03	6.84E-05	1.26E-02
PA-42	Monobutyltin	NP	4.74E-04	1.52E-02	NA	NA	1.16E-03	NA	NA	NA
PA-42	Tetrabutyltin	NP	1.12E-03	3.45E-02	NA	NA	2.64E-03	NA	NA	NA
PA-42	Tributyltin	NP	1.11E-01	8.41E-01	1.19E+00	7.46E+01	6.45E-02	5.43E-02	8.64E-04	4.48E-02

STATION ID = PA-43

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-43	Aluminum	NP	6.56E+04	1.50E+03	NA	NA	2.52E+02	NA	NA	1.95E+03
PA-43	Antimony	NP	5.54E-01	1.03E-01	NA	NA	9.02E-03	NA	NA	1.87E-01
PA-43	Arsenic	NP	8.74E+00	1.97E+01	5.43E+00	2.17E+01	1.52E+00	2.80E-01	7.01E-02	2.29E+01
PA-43	Barium	NP	4.48E+02	1.41E+01	NA	NA	2.01E+00	NA	NA	2.02E+01
PA-43	Cadmium	NP	1.85E-01	2.43E-01	8.53E-02	1.74E+01	1.89E-02	2.22E-01	1.09E-03	3.69E-01
PA-43	Chromium	NP	1.89E+02	1.25E+01	NA	NA	1.35E+00	NA	NA	2.46E+01
PA-43	Cobalt	NP	1.40E+01	2.37E+00	NA	NA	2.10E-01	NA	NA	3.63E+00
PA-43	Copper	NP	8.94E+01	1.06E+01	2.56E+00	6.37E+01	9.96E-01	3.89E-01	1.56E-02	1.48E+01
PA-43	Iron	NP	3.95E+04	2.76E+03	NA	NA	2.93E+02	NA	NA	2.80E+03
PA-43	Lead	NP	1.89E+01	1.81E+00	2.34E-02	9.33E+00	1.78E-01	7.59E+00	1.91E-02	3.76E+00
PA-43	Manganese	NP	5.16E+02	4.83E+01	NA	NA	4.77E+00	NA	NA	5.74E+01
PA-43	Mercury	P	1.45E-01	1.05E-01	3.98E-02	1.83E-01	8.32E-03	2.09E-01	4.54E-02	1.74E-01
PA-43	Molybdenum	NP	8.77E-01	2.38E+00	NA	NA	1.84E-01	NA	NA	3.04E+00
PA-43	Nickel	NP	8.40E+01	6.47E+00	1.55E+00	6.28E+01	6.70E-01	4.32E-01	1.07E-02	9.60E+00
PA-43	Selenium	NP	3.00E-01	3.95E+00	2.30E-01	9.29E-01	3.02E-01	1.32E+00	3.25E-01	5.34E+00
PA-43	Silver	NP	1.77E-01	2.60E-02	NA	NA	2.36E-03	NA	NA	2.52E-01
PA-43	Vanadium	NP	1.08E+02	7.67E+00	NA	NA	8.12E-01	NA	NA	1.15E+01
PA-43	Zinc	NP	9.71E+01	1.01E+02	1.77E+01	1.77E+02	7.92E+00	4.47E-01	4.47E-02	1.26E+02
PA-43	HMW PAH	NP	1.20E+00	1.81E-01	NA	NA	1.63E-02	NA	NA	3.62E-01
PA-43	LMW PAH	NP	2.57E-01	1.87E-02	NA	NA	1.97E-03	NA	NA	4.21E-02
PA-43	Total PCBs	P	2.18E-02	5.02E-02	9.59E-02	1.16E+00	3.88E-03	4.05E-02	3.34E-03	6.86E-02
PA-43	Total 4,4'-DDx	P	1.34E-03	6.84E-03	7.14E-03	6.12E-01	5.25E-04	7.35E-02	8.59E-04	1.19E-02
PA-43	alpha-Chlordane	NP	8.00E-05	6.30E-04	NA	NA	4.83E-05	NA	NA	1.03E-03
PA-43	Dieldrin	NP	4.50E-05	1.01E-03	NA	NA	7.72E-05	NA	NA	1.57E-03
PA-43	Endosulfan II	NP	5.00E-05	1.88E-04	NA	NA	1.45E-05	NA	NA	ND
PA-43	Endrin	NP	4.50E-05	1.57E-04	NA	NA	1.21E-05	NA	NA	ND
PA-43	gamma-Chlordane	NP	4.00E-05	5.00E-04	NA	NA	3.83E-05	NA	NA	8.56E-04
PA-43	Heptachlor	NP	4.00E-05	1.57E-04	NA	NA	1.21E-05	NA	NA	ND
PA-43	Dibutyltin	NP	1.30E-02	3.46E-02	1.19E+00	7.46E+01	2.67E-03	2.24E-03	3.57E-05	1.26E-02
PA-43	Monobutyltin	NP	4.93E-04	8.44E-03	NA	NA	6.46E-04	NA	NA	NA
PA-43	Tetrabutyltin	NP	1.17E-03	3.53E-02	NA	NA	2.70E-03	NA	NA	NA
PA-43	Tributyltin	NP	2.55E-02	1.91E-01	1.19E+00	7.46E+01	1.46E-02	1.23E-02	1.96E-04	4.48E-02

Table H-13. Dose Assessment Results for Station PA-44 Using Depurated M. nasuta Data

STATION ID = PA-44

WOE FINAL SCORE= +2

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-44	Aluminum	NP	6.48E+04	2.22E+03	NA	NA	3.05E+02	NA	NA	1.95E+03
PA-44	Antimony	NP	1.68E+01	1.44E-01	NA	NA	4.61E-02	NA	NA	1.87E-01
PA-44	Arsenic	NP	1.43E+01	2.18E+01	5.43E+00	2.17E+01	1.69E+00	3.12E-01	7.80E-02	2.29E+01
PA-44	Barium	NP	4.97E+02	2.81E+01	NA	NA	3.19E+00	NA	NA	2.02E+01
PA-44	Cadmium	NP	2.82E-01	3.16E-01	8.53E-02	1.74E+01	2.47E-02	2.90E-01	1.42E-03	3.69E-01
PA-44	Chromium	NP	2.75E+02	3.22E+01	NA	NA	3.03E+00	NA	NA	2.46E+01
PA-44	Cobalt	NP	1.68E+01	2.60E+00	NA	NA	2.34E-01	NA	NA	3.63E+00
PA-44	Copper	NP	1.63E+02	6.33E+01	2.56E+00	6.37E+01	5.17E+00	2.02E+00	8.12E-02	1.48E+01
PA-44	Iron	NP	3.96E+04	3.26E+03	NA	NA	3.32E+02	NA	NA	2.80E+03
PA-44	Lead	NP	2.59E+01	3.05E+00	2.34E-02	9.33E+00	2.87E-01	1.23E+01	3.08E-02	3.76E+00
PA-44	Manganese	NP	5.31E+02	5.28E+01	NA	NA	5.14E+00	NA	NA	5.74E+01
PA-44	Mercury	P	1.51E+00	4.04E+00	3.98E-02	1.83E-01	3.12E-01	7.84E+00	1.70E+00	1.74E-01
PA-44	Molybdenum	NP	1.07E+00	2.18E+00	NA	NA	1.69E-01	NA	NA	3.04E+00
PA-44	Nickel	NP	9.36E+01	7.57E+00	1.55E+00	6.28E+01	7.74E-01	4.99E-01	1.23E-02	9.60E+00
PA-44	Selenium	NP	3.06E-01	4.72E+00	2.30E-01	9.29E-01	3.61E-01	1.57E+00	3.89E-01	5.34E+00
PA-44	Silver	NP	3.26E-01	2.60E-02	NA	NA	2.67E-03	NA	NA	2.52E-01
PA-44	Vanadium	NP	1.27E+02	1.04E+01	NA	NA	1.06E+00	NA	NA	1.15E+01
PA-44	Zinc	NP	1.08E+02	1.29E+02	1.77E+01	1.77E+02	1.01E+01	5.70E-01	5.70E-02	1.26E+02
PA-44	HMW PAH	NP	2.55E+00	3.85E-01	NA	NA	3.48E-02	NA	NA	3.62E-01
PA-44	LMW PAH	NP	5.60E-01	2.25E-02	NA	NA	2.88E-03	NA	NA	4.21E-02
PA-44	Total PCBs	P	6.76E-02	1.14E-01	9.59E-02	1.16E+00	8.81E-03	9.19E-02	7.59E-03	6.86E-02
PA-44	Total 4,4'-DDx	P	3.09E-03	8.85E-03	7.14E-03	6.12E-01	6.82E-04	9.56E-02	1.12E-03	1.19E-02
PA-44	alpha-Chlordane	NP	3.70E-04	7.30E-04	NA	NA	5.65E-05	NA	NA	1.03E-03
PA-44	Dieldrin	NP	4.00E-05	6.70E-04	NA	NA	5.12E-05	NA	NA	1.57E-03
PA-44	Endosulfan II	NP	4.50E-05	2.00E-04	NA	NA	1.53E-05	NA	NA	ND
PA-44	Endrin	NP	4.00E-05	1.66E-04	NA	NA	1.28E-05	NA	NA	ND
PA-44	gamma-Chlordane	NP	3.50E-05	8.70E-04	NA	NA	6.65E-05	NA	NA	8.56E-04
PA-44	Heptachlor	NP	3.50E-05	1.66E-04	NA	NA	1.28E-05	NA	NA	ND
PA-44	Dibutyltin	NP	2.42E-02	5.20E-02	1.19E+00	7.46E+01	4.02E-03	3.39E-03	5.40E-05	1.26E-02
PA-44	Monobutyltin	NP	4.38E-04	1.63E-02	NA	NA	1.25E-03	NA	NA	NA
PA-44	Tetrabutyltin	NP	1.04E-03	3.71E-02	NA	NA	2.84E-03	NA	NA	NA
PA-44	Tributyltin	NP	1.03E-01	5.99E-01	1.19E+00	7.46E+01	4.59E-02	3.87E-02	6.16E-04	4.48E-02

STATION ID = PA-45

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-45	Aluminum	NP	5.91E+04	1.46E+03	NA	NA	2.35E+02	NA	NA	1.95E+03
PA-45	Antimony	NP	7.06E-01	1.35E-01	NA	NA	1.18E-02	NA	NA	1.87E-01
PA-45	Arsenic	NP	1.07E+01	1.96E+01	5.43E+00	2.17E+01	1.52E+00	2.80E-01	6.99E-02	2.29E+01
PA-45	Barium	NP	4.04E+02	1.47E+01	NA	NA	1.97E+00	NA	NA	2.02E+01
PA-45	Cadmium	NP	2.55E-01	2.29E-01	8.53E-02	1.74E+01	1.80E-02	2.11E-01	1.03E-03	3.69E-01
PA-45	Chromium	NP	3.51E+02	1.92E+01	NA	NA	2.20E+00	NA	NA	2.46E+01
PA-45	Cobalt	NP	2.16E+01	2.42E+00	NA	NA	2.30E-01	NA	NA	3.63E+00
PA-45	Copper	NP	1.57E+02	5.17E+01	2.56E+00	6.37E+01	4.28E+00	1.67E+00	6.71E-02	1.48E+01
PA-45	Iron	NP	4.19E+04	2.28E+03	NA	NA	2.62E+02	NA	NA	2.80E+03
PA-45	Lead	NP	3.38E+01	2.81E+00	2.34E-02	9.33E+00	2.85E-01	1.22E+01	3.06E-02	3.76E+00
PA-45	Manganese	NP	5.20E+02	3.89E+01	NA	NA	4.06E+00	NA	NA	5.74E+01
PA-45	Mercury	P	6.91E-01	8.52E-01	3.98E-02	1.83E-01	6.65E-02	1.67E+00	3.63E-01	1.74E-01
PA-45	Molybdenum	NP	8.55E-01	2.42E+00	NA	NA	1.87E-01	NA	NA	3.04E+00
PA-45	Nickel	NP	2.42E+02	9.16E+00	1.55E+00	6.28E+01	1.21E+00	7.77E-01	1.92E-02	9.60E+00
PA-45	Selenium	NP	3.13E-01	3.25E+00	2.30E-01	9.29E-01	2.49E-01	1.08E+00	2.68E-01	5.34E+00
PA-45	Silver	NP	2.99E-01	2.60E-02	NA	NA	2.61E-03	NA	NA	2.52E-01
PA-45	Vanadium	NP	1.27E+02	8.07E+00	NA	NA	8.82E-01	NA	NA	1.15E+01
PA-45	Zinc	NP	1.09E+02	1.10E+02	1.77E+01	1.77E+02	8.63E+00	4.88E-01	4.88E-02	1.26E+02
PA-45	HMW PAH	NP	2.64E+00	3.71E-01	NA	NA	3.38E-02	NA	NA	3.62E-01
PA-45	LMW PAH	NP	5.42E-01	2.70E-02	NA	NA	3.19E-03	NA	NA	4.21E-02
PA-45	Total PCBs	P	2.46E+00	1.91E-01	9.59E-02	1.16E+00	1.97E-02	2.06E-01	1.70E-02	6.86E-02
PA-45	Total 4,4'-DDx	P	2.57E-03	9.74E-03	7.14E-03	6.12E-01	7.49E-04	1.05E-01	1.23E-03	1.19E-02
PA-45	alpha-Chlordane	NP	3.00E-05	5.40E-04	NA	NA	4.13E-05	NA	NA	1.03E-03
PA-45	Dieldrin	NP	4.00E-05	7.70E-04	NA	NA	5.89E-05	NA	NA	1.57E-03
PA-45	Endosulfan II	NP	4.50E-05	3.45E-04	NA	NA	2.64E-05	NA	NA	ND
PA-45	Endrin	NP	4.00E-05	3.07E-04	NA	NA	2.35E-05	NA	NA	ND
PA-45	gamma-Chlordane	NP	3.50E-05	9.20E-04	NA	NA	7.03E-05	NA	NA	8.56E-04
PA-45	Heptachlor	NP	3.50E-05	3.07E-04	NA	NA	2.35E-05	NA	NA	ND
PA-45	Dibutyltin	NP	3.04E-02	3.81E-02	1.19E+00	7.46E+01	2.97E-03	2.50E-03	3.98E-05	1.26E-02
PA-45	Monobutyltin	NP	4.30E-04	2.25E-02	NA	NA	1.72E-03	NA	NA	NA
PA-45	Tetrabutyltin	NP	1.02E-03	5.12E-02	NA	NA	3.91E-03	NA	NA	NA
PA-45	Tributyltin	NP	1.11E-01	4.51E-01	1.19E+00	7.46E+01	3.46E-02	2.92E-02	4.64E-04	4.48E-02

Table H-15. Dose Assessment Results for Station PA-46 Using Depurated M. nasuta Data

STATION ID = PA-46

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-46	Aluminum	NP	6.12E+04	1.28E+03	NA	NA	2.26E+02	NA	NA	1.95E+03
PA-46	Antimony	NP	1.85E+00	1.49E-01	NA	NA	1.52E-02	NA	NA	1.87E-01
PA-46	Arsenic	NP	1.25E+01	2.06E+01	5.43E+00	2.17E+01	1.60E+00	2.94E-01	7.36E-02	2.29E+01
PA-46	Barium	NP	4.31E+02	1.18E+01	NA	NA	1.80E+00	NA	NA	2.02E+01
PA-46	Cadmium	NP	3.59E-01	2.52E-01	8.53E-02	1.74E+01	2.00E-02	2.34E-01	1.15E-03	3.69E-01
PA-46	Chromium	NP	3.91E+02	2.24E+01	NA	NA	2.53E+00	NA	NA	2.46E+01
PA-46	Cobalt	NP	2.00E+01	2.47E+00	NA	NA	2.30E-01	NA	NA	3.63E+00
PA-46	Copper	NP	2.89E+02	4.83E+01	2.56E+00	6.37E+01	4.29E+00	1.67E+00	6.74E-02	1.48E+01
PA-46	Iron	NP	4.65E+04	3.12E+03	NA	NA	3.35E+02	NA	NA	2.80E+03
PA-46	Lead	NP	5.48E+01	3.62E+00	2.34E-02	9.33E+00	3.91E-01	1.67E+01	4.19E-02	3.76E+00
PA-46	Manganese	NP	5.46E+02	4.50E+01	NA	NA	4.58E+00	NA	NA	5.74E+01
PA-46	Mercury	P	1.07E+00	8.15E-04	3.98E-02	1.83E-01	2.30E-03	5.78E-02	1.25E-02	1.74E-01
PA-46	Molybdenum	NP	1.11E+00	2.66E+00	NA	NA	2.05E-01	NA	NA	3.04E+00
PA-46	Nickel	NP	2.50E+02	8.76E+00	1.55E+00	6.28E+01	1.19E+00	7.68E-01	1.90E-02	9.60E+00
PA-46	Selenium	NP	3.29E-01	4.53E+00	2.30E-01	9.29E-01	3.47E-01	1.51E+00	3.73E-01	5.34E+00
PA-46	Silver	NP	2.72E-01	1.31E-01	NA	NA	1.06E-02	NA	NA	2.52E-01
PA-46	Vanadium	NP	1.27E+02	1.02E+01	NA	NA	1.04E+00	NA	NA	1.15E+01
PA-46	Zinc	NP	1.56E+02	8.90E+01	1.77E+01	1.77E+02	7.12E+00	4.03E-01	4.03E-02	1.26E+02
PA-46	HMW PAH	NP	1.70E+00	3.74E-01	NA	NA	3.21E-02	NA	NA	3.62E-01
PA-46	LMW PAH	NP	3.48E-01	4.93E-02	NA	NA	4.49E-03	NA	NA	4.21E-02
PA-46	Total PCBs	P	3.57E-01	1.06E-01	9.59E-02	1.16E+00	8.86E-03	9.24E-02	7.63E-03	6.86E-02
PA-46	Total 4,4'-DDx	P	2.34E-03	8.30E-03	7.14E-03	6.12E-01	6.39E-04	8.95E-02	1.04E-03	1.19E-02
PA-46	alpha-Chlordane	NP	3.00E-05	7.00E-04	NA	NA	5.35E-05	NA	NA	1.03E-03
PA-46	Dieldrin	NP	4.50E-05	1.05E-03	NA	NA	8.03E-05	NA	NA	1.57E-03
PA-46	Endosulfan II	NP	4.50E-05	1.41E-04	NA	NA	1.08E-05	NA	NA	ND
PA-46	Endrin	NP	4.00E-05	3.52E-05	NA	NA	2.77E-06	NA	NA	ND
PA-46	gamma-Chlordane	NP	3.50E-05	8.40E-04	NA	NA	6.42E-05	NA	NA	8.56E-04
PA-46	Heptachlor	NP	3.50E-05	7.03E-05	NA	NA	5.44E-06	NA	NA	ND
PA-46	Dibutyltin	NP	2.99E-02	3.24E-02	1.19E+00	7.46E+01	2.53E-03	2.13E-03	3.40E-05	1.26E-02
PA-46	Monobutyltin	NP	4.69E-04	2.00E-02	NA	NA	1.53E-03	NA	NA	NA
PA-46	Tetrabutyltin	NP	1.11E-03	4.56E-02	NA	NA	3.48E-03	NA	NA	NA
PA-46	Tributyltin	NP	7.63E-02	4.53E-01	1.19E+00	7.46E+01	3.47E-02	2.92E-02	4.65E-04	4.48E-02

Table H-16. Dose Assessment Results for Station PA-47 Using Depurated M. nasuta Data

STATION ID = PA-47

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-47	Aluminum	NP	6.23E+04	2.08E+03	NA	NA	2.89E+02	NA	NA	1.95E+03
PA-47	Antimony	NP	2.14E+00	1.66E-01	NA	NA	1.72E-02	NA	NA	1.87E-01
PA-47	Arsenic	NP	1.82E+01	1.81E+01	5.43E+00	2.17E+01	1.42E+00	2.62E-01	6.54E-02	2.29E+01
PA-47	Barium	NP	4.70E+02	2.12E+01	NA	NA	2.60E+00	NA	NA	2.02E+01
PA-47	Cadmium	NP	7.60E-01	3.30E-01	8.53E-02	1.74E+01	2.68E-02	3.14E-01	1.54E-03	3.69E-01
PA-47	Chromium	NP	2.91E+02	2.59E+01	NA	NA	2.59E+00	NA	NA	2.46E+01
PA-47	Cobalt	NP	1.82E+01	2.51E+00	NA	NA	2.30E-01	NA	NA	3.63E+00
PA-47	Copper	NP	1.05E+03	1.91E+02	2.56E+00	6.37E+01	1.68E+01	6.54E+00	2.63E-01	1.48E+01
PA-47	Iron	NP	4.06E+04	3.52E+03	NA	NA	3.54E+02	NA	NA	2.80E+03
PA-47	Lead	NP	2.75E+02	5.51E+00	2.34E-02	9.33E+00	9.96E-01	4.25E+01	1.07E-01	3.76E+00
PA-47	Manganese	NP	5.06E+02	4.36E+01	NA	NA	4.39E+00	NA	NA	5.74E+01
PA-47	Mercury	P	7.47E+00	7.94E-01	3.98E-02	1.83E-01	7.63E-02	1.92E+00	4.16E-01	1.74E-01
PA-47	Molybdenum	NP	1.03E+00	2.24E+00	NA	NA	1.73E-01	NA	NA	3.04E+00
PA-47	Nickel	NP	1.17E+02	1.34E+01	1.55E+00	6.28E+01	1.27E+00	8.18E-01	2.02E-02	9.60E+00
PA-47	Selenium	NP	3.65E-01	5.37E+00	2.30E-01	9.29E-01	4.11E-01	1.79E+00	4.42E-01	5.34E+00
PA-47	Silver	NP	4.34E-01	2.60E-02	NA	NA	2.89E-03	NA	NA	2.52E-01
PA-47	Vanadium	NP	1.28E+02	9.49E+00	NA	NA	9.92E-01	NA	NA	1.15E+01
PA-47	Zinc	NP	3.22E+02	1.08E+02	1.77E+01	1.77E+02	8.92E+00	5.04E-01	5.04E-02	1.26E+02
PA-47	HMW PAH	NP	3.28E+00	4.72E-01	NA	NA	4.29E-02	NA	NA	3.62E-01
PA-47	LMW PAH	NP	7.57E-01	4.82E-02	NA	NA	5.26E-03	NA	NA	4.21E-02
PA-47	Total PCBs	P	1.12E-01	1.11E-01	9.59E-02	1.16E+00	8.72E-03	9.09E-02	7.50E-03	6.86E-02
PA-47	Total 4,4'-DDx	P	3.13E-03	7.99E-03	7.14E-03	6.12E-01	6.17E-04	8.64E-02	1.01E-03	1.19E-02
PA-47	alpha-Chlordane	NP	2.10E-04	5.80E-04	NA	NA	4.47E-05	NA	NA	1.03E-03
PA-47	Dieldrin	NP	4.50E-05	6.50E-04	NA	NA	4.97E-05	NA	NA	1.57E-03
PA-47	Endosulfan II	NP	4.50E-05	1.95E-04	NA	NA	1.50E-05	NA	NA	ND
PA-47	Endrin	NP	4.00E-05	1.62E-04	NA	NA	1.25E-05	NA	NA	ND
PA-47	gamma-Chlordane	NP	3.50E-05	6.50E-04	NA	NA	4.97E-05	NA	NA	8.56E-04
PA-47	Heptachlor	NP	3.50E-05	1.62E-04	NA	NA	1.25E-05	NA	NA	ND
PA-47	Dibutyltin	NP	3.57E-02	3.39E-02	1.19E+00	7.46E+01	2.66E-03	2.24E-03	3.57E-05	1.26E-02
PA-47	Monobutyltin	NP	4.60E-04	1.60E-02	NA	NA	1.22E-03	NA	NA	NA
PA-47	Tetrabutyltin	NP	1.09E-03	3.63E-02	NA	NA	2.78E-03	NA	NA	NA
PA-47	Tributyltin	NP	1.14E-01	4.62E-01	1.19E+00	7.46E+01	3.55E-02	2.99E-02	4.76E-04	4.48E-02

Table H-17. Dose Assessment Results for Station PA-48 Using Depurated M. nasuta Data

STATION ID = PA-48

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-48	Aluminum	NP	6.75E+04	1.15E+03	NA	NA	2.29E+02	NA	NA	1.95E+03
PA-48	Antimony	NP	8.24E-01	9.80E-02	NA	NA	9.21E-03	NA	NA	1.87E-01
PA-48	Arsenic	NP	1.21E+01	2.30E+01	5.43E+00	2.17E+01	1.78E+00	3.28E-01	8.20E-02	2.29E+01
PA-48	Barium	NP	4.67E+02	1.14E+01	NA	NA	1.85E+00	NA	NA	2.02E+01
PA-48	Cadmium	NP	2.37E-01	2.92E-01	8.53E-02	1.74E+01	2.28E-02	2.67E-01	1.31E-03	3.69E-01
PA-48	Chromium	NP	2.45E+02	1.34E+01	NA	NA	1.54E+00	NA	NA	2.46E+01
PA-48	Cobalt	NP	1.76E+01	2.19E+00	NA	NA	2.04E-01	NA	NA	3.63E+00
PA-48	Copper	NP	4.06E+01	1.72E+01	2.56E+00	6.37E+01	1.40E+00	5.45E-01	2.20E-02	1.48E+01
PA-48	Iron	NP	4.08E+04	1.88E+03	NA	NA	2.29E+02	NA	NA	2.80E+03
PA-48	Lead	NP	2.36E+01	1.87E+00	2.34E-02	9.33E+00	1.92E-01	8.21E+00	2.06E-02	3.76E+00
PA-48	Manganese	NP	6.15E+02	2.73E+01	NA	NA	3.37E+00	NA	NA	5.74E+01
PA-48	Mercury	P	8.27E-01	1.19E-01	3.98E-02	1.83E-01	1.08E-02	2.72E-01	5.90E-02	1.74E-01
PA-48	Molybdenum	NP	1.06E+00	2.67E+00	NA	NA	2.06E-01	NA	NA	3.04E+00
PA-48	Nickel	NP	8.77E+01	6.02E+00	1.55E+00	6.28E+01	6.43E-01	4.15E-01	1.02E-02	9.60E+00
PA-48	Selenium	NP	2.69E-01	3.19E+00	2.30E-01	9.29E-01	2.44E-01	1.06E+00	2.63E-01	5.34E+00
PA-48	Silver	NP	2.23E-01	2.60E-02	NA	NA	2.45E-03	NA	NA	2.52E-01
PA-48	Vanadium	NP	1.39E+02	5.79E+00	NA	NA	7.33E-01	NA	NA	1.15E+01
PA-48	Zinc	NP	1.01E+02	9.48E+01	1.77E+01	1.77E+02	7.45E+00	4.21E-01	4.21E-02	1.26E+02
PA-48	HMW PAH	NP	2.24E+00	3.20E-01	NA	NA	2.91E-02	NA	NA	3.62E-01
PA-48	LMW PAH	NP	6.16E-01	2.93E-02	NA	NA	3.52E-03	NA	NA	4.21E-02
PA-48	Total PCBs	P	1.64E-02	5.44E-02	9.59E-02	1.16E+00	4.19E-03	4.37E-02	3.61E-03	6.86E-02
PA-48	Total 4,4'-DDx	P	1.89E-03	9.59E-03	7.14E-03	6.12E-01	7.36E-04	1.03E-01	1.20E-03	1.19E-02
PA-48	alpha-Chlordane	NP	3.00E-05	9.30E-04	NA	NA	7.11E-05	NA	NA	1.03E-03
PA-48	Dieldrin	NP	4.50E-05	8.70E-04	NA	NA	6.65E-05	NA	NA	1.57E-03
PA-48	Endosulfan II	NP	4.50E-05	2.03E-04	NA	NA	1.56E-05	NA	NA	ND
PA-48	Endrin	NP	4.00E-05	1.74E-04	NA	NA	1.34E-05	NA	NA	ND
PA-48	gamma-Chlordane	NP	3.50E-05	7.60E-04	NA	NA	5.81E-05	NA	NA	8.56E-04
PA-48	Heptachlor	NP	4.00E-05	1.74E-04	NA	NA	1.34E-05	NA	NA	ND
PA-48	Dibutyltin	NP	9.19E-04	8.08E-03	1.19E+00	7.46E+01	6.19E-04	5.21E-04	8.30E-06	1.26E-02
PA-48	Monobutyltin	NP	4.86E-04	1.41E-02	NA	NA	1.08E-03	NA	NA	NA
PA-48	Tetrabutyltin	NP	1.15E-03	3.22E-02	NA	NA	2.46E-03	NA	NA	NA
PA-48	Tributyltin	NP	6.55E-04	4.77E-02	1.19E+00	7.46E+01	3.65E-03	3.07E-03	4.89E-05	4.48E-02

Table H-18. Dose Assessment Results for Station PA-49 Using Depurated M. nasuta Data

STATION ID = PA-49

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-49	Aluminum	NP	6.57E+04	1.83E+03	NA	NA	2.77E+02	NA	NA	1.95E+03
PA-49	Antimony	NP	6.04E-01	1.69E-01	NA	NA	1.42E-02	NA	NA	1.87E-01
PA-49	Arsenic	NP	1.14E+01	2.02E+01	5.43E+00	2.17E+01	1.57E+00	2.88E-01	7.21E-02	2.29E+01
PA-49	Barium	NP	4.25E+02	1.92E+01	NA	NA	2.35E+00	NA	NA	2.02E+01
PA-49	Cadmium	NP	2.13E-01	3.31E-01	8.53E-02	1.74E+01	2.57E-02	3.02E-01	1.47E-03	3.69E-01
PA-49	Chromium	NP	1.87E+02	2.05E+01	NA	NA	1.96E+00	NA	NA	2.46E+01
PA-49	Cobalt	NP	1.71E+01	2.55E+00	NA	NA	2.30E-01	NA	NA	3.63E+00
PA-49	Copper	NP	3.27E+01	1.89E+01	2.56E+00	6.37E+01	1.51E+00	5.90E-01	2.37E-02	1.48E+01
PA-49	Iron	NP	4.01E+04	2.99E+03	NA	NA	3.12E+02	NA	NA	2.80E+03
PA-49	Lead	NP	1.89E+01	3.03E+00	2.34E-02	9.33E+00	2.71E-01	1.16E+01	2.90E-02	3.76E+00
PA-49	Manganese	NP	5.65E+02	5.26E+01	NA	NA	5.20E+00	NA	NA	5.74E+01
PA-49	Mercury	P	6.61E-01	1.15E-01	3.98E-02	1.83E-01	1.02E-02	2.56E-01	5.54E-02	1.74E-01
PA-49	Molybdenum	NP	8.14E-01	2.84E+00	NA	NA	2.19E-01	NA	NA	3.04E+00
PA-49	Nickel	NP	8.66E+01	8.22E+00	1.55E+00	6.28E+01	8.09E-01	5.22E-01	1.29E-02	9.60E+00
PA-49	Selenium	NP	3.14E-01	3.40E+00	2.30E-01	9.29E-01	2.60E-01	1.13E+00	2.80E-01	5.34E+00
PA-49	Silver	NP	2.49E-01	2.60E-02	NA	NA	2.51E-03	NA	NA	2.52E-01
PA-49	Vanadium	NP	1.35E+02	1.09E+01	NA	NA	1.11E+00	NA	NA	1.15E+01
PA-49	Zinc	NP	9.49E+01	9.81E+01	1.77E+01	1.77E+02	7.69E+00	4.35E-01	4.35E-02	1.26E+02
PA-49	HMW PAH	NP	2.78E+00	3.61E-01	NA	NA	3.34E-02	NA	NA	3.62E-01
PA-49	LMW PAH	NP	5.94E-01	3.50E-02	NA	NA	3.91E-03	NA	NA	4.21E-02
PA-49	Total PCBs	P	1.09E-02	6.00E-02	9.59E-02	1.16E+00	4.60E-03	4.80E-02	3.96E-03	6.86E-02
PA-49	Total 4,4'-DDx	P	1.36E-03	9.35E-03	7.14E-03	6.12E-01	7.17E-04	1.00E-01	1.17E-03	1.19E-02
PA-49	alpha-Chlordane	NP	3.50E-05	7.50E-04	NA	NA	5.73E-05	NA	NA	1.03E-03
PA-49	Dieldrin	NP	4.50E-05	8.20E-04	NA	NA	6.27E-05	NA	NA	1.57E-03
PA-49	Endosulfan II	NP	4.50E-05	2.20E-04	NA	NA	1.69E-05	NA	NA	ND
PA-49	Endrin	NP	4.00E-05	1.88E-04	NA	NA	1.45E-05	NA	NA	ND
PA-49	gamma-Chlordane	NP	3.50E-05	6.90E-04	NA	NA	5.28E-05	NA	NA	8.56E-04
PA-49	Heptachlor	NP	4.00E-05	1.88E-04	NA	NA	1.45E-05	NA	NA	ND
PA-49	Dibutyltin	NP	9.09E-04	1.04E-02	1.19E+00	7.46E+01	7.98E-04	6.72E-04	1.07E-05	1.26E-02
PA-49	Monobutyltin	NP	4.81E-04	1.74E-02	NA	NA	1.33E-03	NA	NA	NA
PA-49	Tetrabutyltin	NP	1.14E-03	3.97E-02	NA	NA	3.04E-03	NA	NA	NA
PA-49	Tributyltin	NP	6.47E-04	4.77E-02	1.19E+00	7.46E+01	3.64E-03	3.07E-03	4.88E-05	4.48E-02

Table H-19. Dose Assessment Results for Station PA-50 Using Depurated M. nasuta Data

STATION ID = PA-50

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-50	Aluminum	NP	7.12E+04	1.44E+03	NA	NA	2.59E+02	NA	NA	1.95E+03
PA-50	Antimony	NP	7.78E-01	1.30E-01	NA	NA	1.16E-02	NA	NA	1.87E-01
PA-50	Arsenic	NP	1.16E+01	2.02E+01	5.43E+00	2.17E+01	1.57E+00	2.89E-01	7.21E-02	2.29E+01
PA-50	Barium	NP	4.74E+02	1.36E+01	NA	NA	2.03E+00	NA	NA	2.02E+01
PA-50	Cadmium	NP	2.66E-01	2.74E-01	8.53E-02	1.74E+01	2.15E-02	2.52E-01	1.23E-03	3.69E-01
PA-50	Chromium	NP	2.03E+02	2.80E+01	NA	NA	2.56E+00	NA	NA	2.46E+01
PA-50	Cobalt	NP	1.95E+01	2.72E+00	NA	NA	2.48E-01	NA	NA	3.63E+00
PA-50	Copper	NP	4.22E+01	1.39E+01	2.56E+00	6.37E+01	1.15E+00	4.48E-01	1.81E-02	1.48E+01
PA-50	Iron	NP	4.35E+04	2.73E+03	NA	NA	2.99E+02	NA	NA	2.80E+03
PA-50	Lead	NP	2.88E+01	2.35E+00	2.34E-02	9.33E+00	2.40E-01	1.02E+01	2.57E-02	3.76E+00
PA-50	Manganese	NP	5.00E+02	5.60E+01	NA	NA	5.32E+00	NA	NA	5.74E+01
PA-50	Mercury	P	3.96E-01	8.15E-04	3.98E-02	1.83E-01	8.90E-04	2.24E-02	4.85E-03	1.74E-01
PA-50	Molybdenum	NP	8.81E-01	3.06E+00	NA	NA	2.36E-01	NA	NA	3.04E+00
PA-50	Nickel	NP	1.00E+02	8.41E+00	1.55E+00	6.28E+01	8.51E-01	5.49E-01	1.36E-02	9.60E+00
PA-50	Selenium	NP	3.62E-01	5.15E+00	2.30E-01	9.29E-01	3.94E-01	1.72E+00	4.24E-01	5.34E+00
PA-50	Silver	NP	2.67E-01	2.53E-01	NA	NA	1.99E-02	NA	NA	2.52E-01
PA-50	Vanadium	NP	1.57E+02	1.04E+01	NA	NA	1.12E+00	NA	NA	1.15E+01
PA-50	Zinc	NP	1.13E+02	1.03E+02	1.77E+01	1.77E+02	8.10E+00	4.58E-01	4.58E-02	1.26E+02
PA-50	HMW PAH	NP	2.30E+00	3.24E-01	NA	NA	2.96E-02	NA	NA	3.62E-01
PA-50	LMW PAH	NP	4.90E-01	2.95E-02	NA	NA	3.27E-03	NA	NA	4.21E-02
PA-50	Total PCBs	P	1.32E-02	4.93E-02	9.59E-02	1.16E+00	3.79E-03	3.96E-02	3.26E-03	6.86E-02
PA-50	Total 4,4'-DDx	P	2.72E-03	1.52E-02	7.14E-03	6.12E-01	1.17E-03	1.63E-01	1.91E-03	1.19E-02
PA-50	alpha-Chlordane	NP	1.20E-04	6.97E-05	NA	NA	5.57E-06	NA	NA	1.03E-03
PA-50	Dieldrin	NP	5.00E-05	2.09E-03	NA	NA	1.60E-04	NA	NA	1.57E-03
PA-50	Endosulfan II	NP	5.00E-05	1.39E-04	NA	NA	1.07E-05	NA	NA	ND
PA-50	Endrin	NP	4.50E-05	3.48E-05	NA	NA	2.75E-06	NA	NA	ND
PA-50	gamma-Chlordane	NP	4.00E-05	9.10E-04	NA	NA	6.96E-05	NA	NA	8.56E-04
PA-50	Heptachlor	NP	4.00E-05	6.97E-05	NA	NA	5.41E-06	NA	NA	ND
PA-50	Dibutyltin	NP	9.60E-04	8.33E-03	1.19E+00	7.46E+01	6.38E-04	5.37E-04	8.55E-06	1.26E-02
PA-50	Monobutyltin	NP	5.08E-04	1.69E-02	NA	NA	1.29E-03	NA	NA	NA
PA-50	Tetrabutyltin	NP	1.20E-03	3.84E-02	NA	NA	2.94E-03	NA	NA	NA
PA-50	Tributyltin	NP	6.84E-04	3.66E-02	1.19E+00	7.46E+01	2.80E-03	2.36E-03	3.75E-05	4.48E-02

Table H-20. Dose Assessment Results for Station PA-51 Using Depurated M. nasuta Data

STATION ID = PA-51

WOE FINAL SCORE= -2

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-51	Aluminum	NP	6.43E+04	1.42E+03	NA	NA	2.43E+02	NA	NA	1.95E+03
PA-51	Antimony	NP	5.86E-01	1.12E-01	NA	NA	9.78E-03	NA	NA	1.87E-01
PA-51	Arsenic	NP	1.13E+01	2.17E+01	5.43E+00	2.17E+01	1.68E+00	3.09E-01	7.73E-02	2.29E+01
PA-51	Barium	NP	4.15E+02	1.47E+01	NA	NA	1.99E+00	NA	NA	2.02E+01
PA-51	Cadmium	NP	1.94E-01	2.66E-01	8.53E-02	1.74E+01	2.07E-02	2.43E-01	1.19E-03	3.69E-01
PA-51	Chromium	NP	1.73E+02	8.61E+00	NA	NA	1.02E+00	NA	NA	2.46E+01
PA-51	Cobalt	NP	1.72E+01	2.50E+00	NA	NA	2.27E-01	NA	NA	3.63E+00
PA-51	Copper	NP	3.66E+01	1.22E+01	2.56E+00	6.37E+01	1.01E+00	3.93E-01	1.58E-02	1.48E+01
PA-51	Iron	NP	3.87E+04	2.02E+03	NA	NA	2.35E+02	NA	NA	2.80E+03
PA-51	Lead	NP	1.81E+01	2.08E+00	2.34E-02	9.33E+00	1.97E-01	8.40E+00	2.11E-02	3.76E+00
PA-51	Manganese	NP	5.02E+02	3.45E+01	NA	NA	3.68E+00	NA	NA	5.74E+01
PA-51	Mercury	P	2.14E-01	1.02E-01	3.98E-02	1.83E-01	8.24E-03	2.07E-01	4.49E-02	1.74E-01
PA-51	Molybdenum	NP	7.00E-01	2.57E+00	NA	NA	1.98E-01	NA	NA	3.04E+00
PA-51	Nickel	NP	8.68E+01	7.24E+00	1.55E+00	6.28E+01	7.34E-01	4.74E-01	1.17E-02	9.60E+00
PA-51	Selenium	NP	2.22E-01	3.00E+00	2.30E-01	9.29E-01	2.30E-01	9.99E-01	2.47E-01	5.34E+00
PA-51	Silver	NP	2.20E-01	2.60E-02	NA	NA	2.45E-03	NA	NA	2.52E-01
PA-51	Vanadium	NP	1.30E+02	6.97E+00	NA	NA	8.04E-01	NA	NA	1.15E+01
PA-51	Zinc	NP	9.08E+01	1.13E+02	1.77E+01	1.77E+02	8.82E+00	4.98E-01	4.98E-02	1.26E+02
PA-51	HMW PAH	NP	3.64E+00	4.87E-01	NA	NA	4.48E-02	NA	NA	3.62E-01
PA-51	LMW PAH	NP	8.05E-01	4.25E-02	NA	NA	4.93E-03	NA	NA	4.21E-02
PA-51	Total PCBs	P	1.37E-02	5.61E-02	9.59E-02	1.16E+00	4.31E-03	4.50E-02	3.71E-03	6.86E-02
PA-51	Total 4,4'-DDx	P	1.05E-03	9.80E-03	7.14E-03	6.12E-01	7.51E-04	1.05E-01	1.23E-03	1.19E-02
PA-51	alpha-Chlordane	NP	3.50E-05	7.40E-04	NA	NA	5.66E-05	NA	NA	1.03E-03
PA-51	Dieldrin	NP	4.50E-05	8.70E-04	NA	NA	6.65E-05	NA	NA	1.57E-03
PA-51	Endosulfan II	NP	4.50E-05	1.68E-04	NA	NA	1.29E-05	NA	NA	ND
PA-51	Endrin	NP	4.00E-05	1.34E-04	NA	NA	1.03E-05	NA	NA	ND
PA-51	gamma-Chlordane	NP	3.50E-05	1.34E-04	NA	NA	1.03E-05	NA	NA	8.56E-04
PA-51	Heptachlor	NP	4.00E-05	1.34E-04	NA	NA	1.03E-05	NA	NA	ND
PA-51	Dibutyltin	NP	9.00E-04	1.03E-02	1.19E+00	7.46E+01	7.90E-04	6.65E-04	1.06E-05	1.26E-02
PA-51	Monobutyltin	NP	4.76E-04	1.62E-02	NA	NA	1.24E-03	NA	NA	NA
PA-51	Tetrabutyltin	NP	1.13E-03	3.70E-02	NA	NA	2.83E-03	NA	NA	NA
PA-51	Tributyltin	NP	6.41E-04	3.70E-02	1.19E+00	7.46E+01	2.83E-03	2.38E-03	3.79E-05	4.48E-02

Table H-21. Dose Assessment Results for Station PA-52 Using Depurated M. nasuta Data

STATION ID = PA-52

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-52	Aluminum	NP	6.61E+04	2.53E+03	NA	NA	3.31E+02	NA	NA	1.95E+03
PA-52	Antimony	NP	7.22E-01	1.39E-01	NA	NA	1.21E-02	NA	NA	1.87E-01
PA-52	Arsenic	NP	1.10E+01	1.82E+01	5.43E+00	2.17E+01	1.41E+00	2.60E-01	6.50E-02	2.29E+01
PA-52	Barium	NP	4.28E+02	2.75E+01	NA	NA	2.99E+00	NA	NA	2.02E+01
PA-52	Cadmium	NP	2.04E-01	2.57E-01	8.53E-02	1.74E+01	2.01E-02	2.35E-01	1.15E-03	3.69E-01
PA-52	Chromium	NP	1.70E+02	2.07E+01	NA	NA	1.94E+00	NA	NA	2.46E+01
PA-52	Cobalt	NP	1.68E+01	2.73E+00	NA	NA	2.44E-01	NA	NA	3.63E+00
PA-52	Copper	NP	3.41E+01	1.73E+01	2.56E+00	6.37E+01	1.39E+00	5.43E-01	2.19E-02	1.48E+01
PA-52	Iron	NP	3.90E+04	2.79E+03	NA	NA	2.95E+02	NA	NA	2.80E+03
PA-52	Lead	NP	1.82E+01	2.57E+00	2.34E-02	9.33E+00	2.34E-01	1.00E+01	2.51E-02	3.76E+00
PA-52	Manganese	NP	5.01E+02	5.34E+01	NA	NA	5.13E+00	NA	NA	5.74E+01
PA-52	Mercury	P	4.07E-01	1.19E-01	3.98E-02	1.83E-01	9.94E-03	2.50E-01	5.42E-02	1.74E-01
PA-52	Molybdenum	NP	6.11E-01	2.53E+00	NA	NA	1.94E-01	NA	NA	3.04E+00
PA-52	Nickel	NP	8.51E+01	1.03E+01	1.55E+00	6.28E+01	9.64E-01	6.22E-01	1.54E-02	9.60E+00
PA-52	Selenium	NP	2.88E-01	3.67E+00	2.30E-01	9.29E-01	2.81E-01	1.22E+00	3.02E-01	5.34E+00
PA-52	Silver	NP	2.11E-01	2.60E-02	NA	NA	2.43E-03	NA	NA	2.52E-01
PA-52	Vanadium	NP	1.24E+02	9.83E+00	NA	NA	1.01E+00	NA	NA	1.15E+01
PA-52	Zinc	NP	9.43E+01	1.12E+02	1.77E+01	1.77E+02	8.75E+00	4.95E-01	4.95E-02	1.26E+02
PA-52	HMW PAH	NP	4.33E+00	4.36E-01	NA	NA	4.24E-02	NA	NA	3.62E-01
PA-52	LMW PAH	NP	1.19E+00	4.49E-02	NA	NA	5.91E-03	NA	NA	4.21E-02
PA-52	Total PCBs	P	1.47E-02	5.53E-02	9.59E-02	1.16E+00	4.25E-03	4.43E-02	3.66E-03	6.86E-02
PA-52	Total 4,4'-DDx	P	1.42E-03	8.93E-03	7.14E-03	6.12E-01	6.85E-04	9.59E-02	1.12E-03	1.19E-02
PA-52	alpha-Chlordane	NP	3.50E-05	6.50E-04	NA	NA	4.97E-05	NA	NA	1.03E-03
PA-52	Dieldrin	NP	4.50E-05	1.12E-03	NA	NA	8.56E-05	NA	NA	1.57E-03
PA-52	Endosulfan II	NP	4.50E-05	1.77E-04	NA	NA	1.36E-05	NA	NA	ND
PA-52	Endrin	NP	4.00E-05	1.48E-04	NA	NA	1.14E-05	NA	NA	ND
PA-52	gamma-Chlordane	NP	3.50E-05	8.30E-04	NA	NA	6.35E-05	NA	NA	8.56E-04
PA-52	Heptachlor	NP	3.50E-05	1.48E-04	NA	NA	1.14E-05	NA	NA	ND
PA-52	Dibutyltin	NP	8.86E-04	7.63E-03	1.19E+00	7.46E+01	5.85E-04	4.92E-04	7.84E-06	1.26E-02
PA-52	Monobutyltin	NP	4.69E-04	1.65E-02	NA	NA	1.26E-03	NA	NA	NA
PA-52	Tetrabutyltin	NP	1.11E-03	3.75E-02	NA	NA	2.87E-03	NA	NA	NA
PA-52	Tributyltin	NP	6.31E-04	2.83E-02	1.19E+00	7.46E+01	2.17E-03	1.82E-03	2.90E-05	4.48E-02

STATION ID = PA-53

WOE FINAL SCORE= -2

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-53	Aluminum	NP	6.90E+04	1.55E+03	NA	NA	2.63E+02	NA	NA	1.95E+03
PA-53	Antimony	NP	6.96E-01	9.90E-02	NA	NA	9.02E-03	NA	NA	1.87E-01
PA-53	Arsenic	NP	1.20E+01	1.55E+01	5.43E+00	2.17E+01	1.21E+00	2.23E-01	5.56E-02	2.29E+01
PA-53	Barium	NP	4.76E+02	1.27E+01	NA	NA	1.97E+00	NA	NA	2.02E+01
PA-53	Cadmium	NP	2.28E-01	1.96E-01	8.53E-02	1.74E+01	1.54E-02	1.81E-01	8.85E-04	3.69E-01
PA-53	Chromium	NP	1.78E+02	6.78E+00	NA	NA	8.90E-01	NA	NA	2.46E+01
PA-53	Cobalt	NP	1.64E+01	1.65E+00	NA	NA	1.60E-01	NA	NA	3.63E+00
PA-53	Copper	NP	5.35E+01	1.20E+01	2.56E+00	6.37E+01	1.03E+00	4.01E-01	1.61E-02	1.48E+01
PA-53	Iron	NP	4.07E+04	1.86E+03	NA	NA	2.27E+02	NA	NA	2.80E+03
PA-53	Lead	NP	2.00E+01	1.88E+00	2.34E-02	9.33E+00	1.85E-01	7.92E+00	1.99E-02	3.76E+00
PA-53	Manganese	NP	4.75E+02	2.41E+01	NA	NA	2.83E+00	NA	NA	5.74E+01
PA-53	Mercury	P	2.34E-01	9.60E-02	3.98E-02	1.83E-01	7.82E-03	1.97E-01	4.26E-02	1.74E-01
PA-53	Molybdenum	NP	6.75E-01	2.16E+00	NA	NA	1.66E-01	NA	NA	3.04E+00
PA-53	Nickel	NP	8.96E+01	5.59E+00	1.55E+00	6.28E+01	6.14E-01	3.96E-01	9.78E-03	9.60E+00
PA-53	Selenium	NP	2.73E-01	3.18E+00	2.30E-01	9.29E-01	2.43E-01	1.06E+00	2.62E-01	5.34E+00
PA-53	Silver	NP	2.52E-01	2.60E-02	NA	NA	2.51E-03	NA	NA	2.52E-01
PA-53	Vanadium	NP	1.28E+02	5.85E+00	NA	NA	7.14E-01	NA	NA	1.15E+01
PA-53	Zinc	NP	1.02E+02	8.48E+01	1.77E+01	1.77E+02	6.69E+00	3.78E-01	3.78E-02	1.26E+02
PA-53	HMW PAH	NP	4.55E+00	4.39E-01	NA	NA	4.30E-02	NA	NA	3.62E-01
PA-53	LMW PAH	NP	1.14E+00	6.50E-02	NA	NA	7.35E-03	NA	NA	4.21E-02
PA-53	Total PCBs	P	9.12E-02	5.72E-02	9.59E-02	1.16E+00	4.56E-03	4.76E-02	3.93E-03	6.86E-02
PA-53	Total 4,4'-DDx	P	3.48E-03	8.76E-03	7.14E-03	6.12E-01	6.76E-04	9.47E-02	1.11E-03	1.19E-02
PA-53	alpha-Chlordane	NP	2.10E-04	8.50E-04	NA	NA	6.53E-05	NA	NA	1.03E-03
PA-53	Dieldrin	NP	5.00E-05	1.19E-03	NA	NA	9.10E-05	NA	NA	1.57E-03
PA-53	Endosulfan II	NP	5.00E-05	1.99E-04	NA	NA	1.53E-05	NA	NA	ND
PA-53	Endrin	NP	4.50E-05	1.71E-04	NA	NA	1.31E-05	NA	NA	ND
PA-53	gamma-Chlordane	NP	4.00E-05	9.10E-04	NA	NA	6.96E-05	NA	NA	8.56E-04
PA-53	Heptachlor	NP	4.00E-05	1.71E-04	NA	NA	1.31E-05	NA	NA	ND
PA-53	Dibutyltin	NP	9.70E-04	8.65E-03	1.19E+00	7.46E+01	6.63E-04	5.58E-04	8.88E-06	1.26E-02
PA-53	Monobutyltin	NP	5.13E-04	1.39E-02	NA	NA	1.06E-03	NA	NA	NA
PA-53	Tetrabutyltin	NP	1.22E-03	3.17E-02	NA	NA	2.42E-03	NA	NA	NA
PA-53	Tributyltin	NP	6.91E-04	3.37E-02	1.19E+00	7.46E+01	2.57E-03	2.17E-03	3.45E-05	4.48E-02

STATION ID = EW-30

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-30	Aluminum	NP	4.50E+04	7.15E+02	NA	NA	1.49E+02	NA	NA	1.95E+03
EW-30	Antimony	NP	1.41E+00	2.44E-01	NA	NA	2.16E-02	NA	NA	1.87E-01
EW-30	Arsenic	NP	5.18E+00	2.73E+01	5.43E+00	2.17E+01	2.10E+00	3.86E-01	9.64E-02	2.29E+01
EW-30	Barium	NP	3.35E+02	6.78E+00	NA	NA	1.22E+00	NA	NA	2.02E+01
EW-30	Cadmium	NP	2.47E-01	5.33E-01	8.53E-02	1.74E+01	4.12E-02	4.83E-01	2.36E-03	3.69E-01
EW-30	Chromium	NP	4.00E+02	1.08E+01	NA	NA	1.66E+00	NA	NA	2.46E+01
EW-30	Cobalt	NP	1.27E+01	2.61E+00	NA	NA	2.26E-01	NA	NA	3.63E+00
EW-30	Copper	NP	3.29E+01	2.73E+01	2.56E+00	6.37E+01	2.15E+00	8.40E-01	3.38E-02	1.48E+01
EW-30	Iron	NP	2.88E+04	1.25E+03	NA	NA	1.56E+02	NA	NA	2.80E+03
EW-30	Lead	NP	2.06E+01	4.88E+00	2.34E-02	9.33E+00	4.16E-01	1.78E+01	4.46E-02	3.76E+00
EW-30	Manganese	NP	5.67E+02	2.67E+01	NA	NA	3.22E+00	NA	NA	5.74E+01
EW-30	Mercury	P	8.08E-02	1.69E-01	3.98E-02	1.83E-01	1.31E-02	3.29E-01	7.13E-02	1.74E-01
EW-30	Molybdenum	NP	6.41E-01	4.25E+00	NA	NA	3.26E-01	NA	NA	3.04E+00
EW-30	Nickel	NP	6.28E+01	8.72E+00	1.55E+00	6.28E+01	7.97E-01	5.14E-01	1.27E-02	9.60E+00
EW-30	Selenium	NP	6.30E-02	5.13E+00	2.30E-01	9.29E-01	3.92E-01	1.71E+00	4.22E-01	5.34E+00
EW-30	Silver	NP	3.30E-02	2.60E-02	NA	NA	2.05E-03	NA	NA	2.52E-01
EW-30	Vanadium	NP	8.72E+01	5.74E+00	NA	NA	6.21E-01	NA	NA	1.15E+01
EW-30	Zinc	NP	8.98E+01	1.43E+02	1.77E+01	1.77E+02	1.11E+01	6.28E-01	6.28E-02	1.26E+02
EW-30	HMW PAH	NP	7.97E-01	4.15E-01	NA	NA	3.34E-02	NA	NA	3.62E-01
EW-30	LMW PAH	NP	1.97E-01	3.79E-02	NA	NA	3.31E-03	NA	NA	4.21E-02
EW-30	Total PCBs	P	1.38E-02	2.82E-01	9.59E-02	1.16E+00	2.16E-02	2.25E-01	1.85E-02	6.86E-02
EW-30	Total 4,4'-DDx	P	5.70E-04	9.30E-03	7.14E-03	6.12E-01	7.11E-04	9.96E-02	1.16E-03	1.19E-02
EW-30	alpha-Chlordane	NP	2.50E-05	5.40E-04	NA	NA	4.13E-05	NA	NA	1.03E-03
EW-30	Dieldrin	NP	3.00E-05	7.80E-04	NA	NA	5.96E-05	NA	NA	1.57E-03
EW-30	Endosulfan II	NP	3.00E-05	2.40E-04	NA	NA	1.84E-05	NA	NA	ND
EW-30	Endrin	NP	3.00E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
EW-30	gamma-Chlordane	NP	2.50E-05	8.40E-04	NA	NA	6.42E-05	NA	NA	8.56E-04
EW-30	Heptachlor	NP	2.50E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
EW-30	Dibutyltin	NP	6.14E-04	8.43E-03	1.19E+00	7.46E+01	6.45E-04	5.43E-04	8.65E-06	1.26E-02
EW-30	Monobutyltin	NP	3.25E-04	1.77E-02	NA	NA	1.35E-03	NA	NA	NA
EW-30	Tetrabutyltin	NP	7.69E-04	4.03E-02	NA	NA	3.08E-03	NA	NA	NA
EW-30	Tributyltin	NP	4.37E-04	2.93E-02	1.19E+00	7.46E+01	2.24E-03	1.89E-03	3.00E-05	4.48E-02

STATION ID = EW-31

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-31	Aluminum	NP	4.20E+04	8.10E+02	NA	NA	1.50E+02	NA	NA	1.95E+03
EW-31	Antimony	NP	6.80E-01	1.20E-01	NA	NA	1.06E-02	NA	NA	1.87E-01
EW-31	Arsenic	NP	1.04E+01	2.17E+01	5.43E+00	2.17E+01	1.68E+00	3.09E-01	7.73E-02	2.29E+01
EW-31	Barium	NP	3.32E+02	8.56E+00	NA	NA	1.35E+00	NA	NA	2.02E+01
EW-31	Cadmium	NP	1.84E-01	2.39E-01	8.53E-02	1.74E+01	1.86E-02	2.18E-01	1.07E-03	3.69E-01
EW-31	Chromium	NP	1.58E+02	9.34E+00	NA	NA	1.04E+00	NA	NA	2.46E+01
EW-31	Cobalt	NP	1.88E+01	1.74E+00	NA	NA	1.72E-01	NA	NA	3.63E+00
EW-31	Copper	NP	1.20E+01	1.05E+01	2.56E+00	6.37E+01	8.27E-01	3.23E-01	1.30E-02	1.48E+01
EW-31	Iron	NP	2.21E+04	1.41E+03	NA	NA	1.54E+02	NA	NA	2.80E+03
EW-31	Lead	NP	1.95E+01	2.15E+00	2.34E-02	9.33E+00	2.05E-01	8.75E+00	2.20E-02	3.76E+00
EW-31	Manganese	NP	4.83E+02	1.94E+01	NA	NA	2.49E+00	NA	NA	5.74E+01
EW-31	Mercury	P	9.88E-02	8.15E-04	3.98E-02	1.83E-01	2.69E-04	6.76E-03	1.47E-03	1.74E-01
EW-31	Molybdenum	NP	6.93E-01	2.82E+00	NA	NA	2.17E-01	NA	NA	3.04E+00
EW-31	Nickel	NP	6.22E+01	5.36E+00	1.55E+00	6.28E+01	5.39E-01	3.48E-01	8.59E-03	9.60E+00
EW-31	Selenium	NP	6.30E-02	5.00E+00	2.30E-01	9.29E-01	3.82E-01	1.66E+00	4.11E-01	5.34E+00
EW-31	Silver	NP	2.35E-01	1.13E-01	NA	NA	9.12E-03	NA	NA	2.52E-01
EW-31	Vanadium	NP	1.28E+02	5.42E+00	NA	NA	6.82E-01	NA	NA	1.15E+01
EW-31	Zinc	NP	4.70E+01	8.56E+01	1.77E+01	1.77E+02	6.64E+00	3.75E-01	3.75E-02	1.26E+02
EW-31	HMW PAH	NP	3.47E-01	2.91E-01	NA	NA	2.30E-02	NA	NA	3.62E-01
EW-31	LMW PAH	NP	4.68E-02	2.66E-02	NA	NA	2.13E-03	NA	NA	4.21E-02
EW-31	Total PCBs	P	1.18E-02	1.72E-01	9.59E-02	1.16E+00	1.32E-02	1.38E-01	1.14E-02	6.86E-02
EW-31	Total 4,4'-DDx	P	2.00E-04	1.03E-02	7.14E-03	6.12E-01	7.86E-04	1.10E-01	1.29E-03	1.19E-02
EW-31	alpha-Chlordane	NP	2.50E-05	9.40E-04	NA	NA	7.18E-05	NA	NA	1.03E-03
EW-31	Dieldrin	NP	3.00E-05	2.51E-03	NA	NA	1.92E-04	NA	NA	1.57E-03
EW-31	Endosulfan II	NP	3.00E-05	1.57E-04	NA	NA	1.21E-05	NA	NA	ND
EW-31	Endrin	NP	3.00E-05	3.93E-05	NA	NA	3.06E-06	NA	NA	ND
EW-31	gamma-Chlordane	NP	2.00E-05	8.60E-04	NA	NA	6.57E-05	NA	NA	8.56E-04
EW-31	Heptachlor	NP	2.50E-05	7.86E-05	NA	NA	6.05E-06	NA	NA	ND
EW-31	Dibutyltin	NP	6.00E-04	8.04E-03	1.19E+00	7.46E+01	6.15E-04	5.18E-04	8.25E-06	1.26E-02
EW-31	Monobutyltin	NP	3.17E-04	2.17E-02	NA	NA	1.66E-03	NA	NA	NA
EW-31	Tetrabutyltin	NP	7.52E-04	4.95E-02	NA	NA	3.78E-03	NA	NA	NA
EW-31	Tributyltin	NP	4.27E-04	2.24E-02	1.19E+00	7.46E+01	1.71E-03	1.44E-03	2.30E-05	4.48E-02

STATION ID = EW-32

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-32	Aluminum	NP	7.49E+04	1.19E+03	NA	NA	2.47E+02	NA	NA	1.95E+03
EW-32	Antimony	NP	9.46E-01	1.28E-01	NA	NA	1.18E-02	NA	NA	1.87E-01
EW-32	Arsenic	NP	1.11E+01	1.91E+01	5.43E+00	2.17E+01	1.48E+00	2.73E-01	6.82E-02	2.29E+01
EW-32	Barium	NP	4.58E+02	1.20E+01	NA	NA	1.87E+00	NA	NA	2.02E+01
EW-32	Cadmium	NP	2.71E-01	2.17E-01	8.53E-02	1.74E+01	1.71E-02	2.01E-01	9.82E-04	3.69E-01
EW-32	Chromium	NP	1.69E+02	8.10E+00	NA	NA	9.72E-01	NA	NA	2.46E+01
EW-32	Cobalt	NP	1.84E+01	2.05E+00	NA	NA	1.95E-01	NA	NA	3.63E+00
EW-32	Copper	NP	5.28E+01	1.24E+01	2.56E+00	6.37E+01	1.06E+00	4.12E-01	1.66E-02	1.48E+01
EW-32	Iron	NP	4.65E+04	1.85E+03	NA	NA	2.39E+02	NA	NA	2.80E+03
EW-32	Lead	NP	2.98E+01	2.53E+00	2.34E-02	9.33E+00	2.56E-01	1.09E+01	2.74E-02	3.76E+00
EW-32	Manganese	NP	4.45E+02	2.36E+01	NA	NA	2.73E+00	NA	NA	5.74E+01
EW-32	Mercury	P	2.86E-01	8.15E-04	3.98E-02	1.83E-01	6.60E-04	1.66E-02	3.60E-03	1.74E-01
EW-32	Molybdenum	NP	1.17E+00	2.58E+00	NA	NA	1.99E-01	NA	NA	3.04E+00
EW-32	Nickel	NP	9.75E+01	6.28E+00	1.55E+00	6.28E+01	6.83E-01	4.41E-01	1.09E-02	9.60E+00
EW-32	Selenium	NP	4.07E-01	4.24E+00	2.30E-01	9.29E-01	3.25E-01	1.41E+00	3.50E-01	5.34E+00
EW-32	Silver	NP	3.97E-01	2.49E-01	NA	NA	1.98E-02	NA	NA	2.52E-01
EW-32	Vanadium	NP	1.62E+02	6.86E+00	NA	NA	8.63E-01	NA	NA	1.15E+01
EW-32	Zinc	NP	1.27E+02	9.21E+01	1.77E+01	1.77E+02	7.30E+00	4.13E-01	4.13E-02	1.26E+02
EW-32	HMW PAH	NP	9.31E-01	3.69E-01	NA	NA	3.01E-02	NA	NA	3.62E-01
EW-32	LMW PAH	NP	1.77E-01	3.50E-02	NA	NA	3.04E-03	NA	NA	4.21E-02
EW-32	Total PCBs	P	2.90E-02	1.45E-01	9.59E-02	1.16E+00	1.11E-02	1.16E-01	9.57E-03	6.86E-02
EW-32	Total 4,4'-DDx	P	2.54E-03	1.42E-02	7.14E-03	6.12E-01	1.09E-03	1.53E-01	1.78E-03	1.19E-02
EW-32	alpha-Chlordane	NP	1.50E-04	1.18E-03	NA	NA	9.04E-05	NA	NA	1.03E-03
EW-32	Dieldrin	NP	6.00E-05	2.44E-03	NA	NA	1.86E-04	NA	NA	1.57E-03
EW-32	Endosulfan II	NP	6.00E-05	1.39E-04	NA	NA	1.08E-05	NA	NA	ND
EW-32	Endrin	NP	5.50E-05	3.48E-05	NA	NA	2.78E-06	NA	NA	ND
EW-32	gamma-Chlordane	NP	5.00E-05	9.10E-04	NA	NA	6.96E-05	NA	NA	8.56E-04
EW-32	Heptachlor	NP	5.00E-05	6.97E-05	NA	NA	5.43E-06	NA	NA	ND
EW-32	Dibutyltin	NP	4.82E-03	9.70E-03	1.19E+00	7.46E+01	7.51E-04	6.32E-04	1.01E-05	1.26E-02
EW-32	Monobutyltin	NP	6.47E-04	4.41E-02	NA	NA	3.37E-03	NA	NA	NA
EW-32	Tetrabutyltin	NP	1.53E-03	1.01E-01	NA	NA	7.68E-03	NA	NA	NA
EW-32	Tributyltin	NP	6.82E-03	3.07E-02	1.19E+00	7.46E+01	2.36E-03	1.99E-03	3.16E-05	4.48E-02

STATION ID = EW-33

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-33	Aluminum	NP	4.35E+04	1.75E+03	NA	NA	2.25E+02	NA	NA	1.95E+03
EW-33	Antimony	NP	3.64E+00	2.88E-01	NA	NA	2.96E-02	NA	NA	1.87E-01
EW-33	Arsenic	NP	6.12E+00	2.60E+01	5.43E+00	2.17E+01	2.00E+00	3.68E-01	9.20E-02	2.29E+01
EW-33	Barium	NP	3.72E+02	1.78E+01	NA	NA	2.14E+00	NA	NA	2.02E+01
EW-33	Cadmium	NP	2.64E-01	1.34E+00	8.53E-02	1.74E+01	1.03E-01	1.21E+00	5.90E-03	3.69E-01
EW-33	Chromium	NP	2.25E+02	1.34E+01	NA	NA	1.49E+00	NA	NA	2.46E+01
EW-33	Cobalt	NP	1.28E+01	1.89E+00	NA	NA	1.71E-01	NA	NA	3.63E+00
EW-33	Copper	NP	2.08E+01	2.07E+01	2.56E+00	6.37E+01	1.62E+00	6.33E-01	2.55E-02	1.48E+01
EW-33	Iron	NP	2.72E+04	2.24E+03	NA	NA	2.28E+02	NA	NA	2.80E+03
EW-33	Lead	NP	1.85E+01	4.55E+00	2.34E-02	9.33E+00	3.86E-01	1.65E+01	4.14E-02	3.76E+00
EW-33	Manganese	NP	5.79E+02	2.68E+01	NA	NA	3.26E+00	NA	NA	5.74E+01
EW-33	Mercury	P	1.42E-01	1.61E-01	3.98E-02	1.83E-01	1.26E-02	3.17E-01	6.86E-02	1.74E-01
EW-33	Molybdenum	NP	4.94E-01	3.33E+00	NA	NA	2.55E-01	NA	NA	3.04E+00
EW-33	Nickel	NP	5.96E+01	7.87E+00	1.55E+00	6.28E+01	7.26E-01	4.68E-01	1.16E-02	9.60E+00
EW-33	Selenium	NP	6.30E-02	4.48E+00	2.30E-01	9.29E-01	3.42E-01	1.49E+00	3.69E-01	5.34E+00
EW-33	Silver	NP	7.32E-02	2.60E-02	NA	NA	2.14E-03	NA	NA	2.52E-01
EW-33	Vanadium	NP	8.26E+01	7.85E+00	NA	NA	7.72E-01	NA	NA	1.15E+01
EW-33	Zinc	NP	7.95E+01	9.84E+01	1.77E+01	1.77E+02	7.68E+00	4.34E-01	4.34E-02	1.26E+02
EW-33	HMW PAH	NP	1.38E-01	2.89E-01	NA	NA	2.24E-02	NA	NA	3.62E-01
EW-33	LMW PAH	NP	2.94E-02	3.13E-02	NA	NA	2.45E-03	NA	NA	4.21E-02
EW-33	Total PCBs	P	2.05E-02	2.49E-01	9.59E-02	1.16E+00	1.90E-02	1.99E-01	1.64E-02	6.86E-02
EW-33	Total 4,4'-DDx	P	5.80E-04	8.27E-03	7.14E-03	6.12E-01	6.33E-04	8.86E-02	1.03E-03	1.19E-02
EW-33	alpha-Chlordane	NP	2.50E-05	7.60E-04	NA	NA	5.81E-05	NA	NA	1.03E-03
EW-33	Dieldrin	NP	3.00E-05	9.20E-04	NA	NA	7.03E-05	NA	NA	1.57E-03
EW-33	Endosulfan II	NP	3.00E-05	1.63E-04	NA	NA	1.25E-05	NA	NA	ND
EW-33	Endrin	NP	3.00E-05	1.36E-04	NA	NA	1.04E-05	NA	NA	ND
EW-33	gamma-Chlordane	NP	2.50E-05	8.20E-04	NA	NA	6.27E-05	NA	NA	8.56E-04
EW-33	Heptachlor	NP	2.50E-05	1.36E-04	NA	NA	1.04E-05	NA	NA	ND
EW-33	Dibutyltin	NP	6.23E-04	9.02E-03	1.19E+00	7.46E+01	6.90E-04	5.81E-04	9.25E-06	1.26E-02
EW-33	Monobutyltin	NP	3.30E-04	1.60E-02	NA	NA	1.23E-03	NA	NA	NA
EW-33	Tetrabutyltin	NP	7.81E-04	3.65E-02	NA	NA	2.79E-03	NA	NA	NA
EW-33	Tributyltin	NP	4.44E-04	2.60E-02	1.19E+00	7.46E+01	1.98E-03	1.67E-03	2.66E-05	4.48E-02

STATION ID = EW-34

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-34	Aluminum	NP	5.00E+04	1.01E+03	NA	NA	1.82E+02	NA	NA	1.95E+03
EW-34	Antimony	NP	8.74E-01	2.26E-01	NA	NA	1.91E-02	NA	NA	1.87E-01
EW-34	Arsenic	NP	6.55E+00	2.56E+01	5.43E+00	2.17E+01	1.97E+00	3.63E-01	9.06E-02	2.29E+01
EW-34	Barium	NP	3.84E+02	1.15E+01	NA	NA	1.68E+00	NA	NA	2.02E+01
EW-34	Cadmium	NP	1.89E-01	2.91E-01	8.53E-02	1.74E+01	2.26E-02	2.65E-01	1.30E-03	3.69E-01
EW-34	Chromium	NP	3.00E+02	1.41E+01	NA	NA	1.70E+00	NA	NA	2.46E+01
EW-34	Cobalt	NP	1.32E+01	2.35E+00	NA	NA	2.07E-01	NA	NA	3.63E+00
EW-34	Copper	NP	1.99E+01	1.08E+01	2.56E+00	6.37E+01	8.66E-01	3.38E-01	1.36E-02	1.48E+01
EW-34	Iron	NP	3.09E+04	2.06E+03	NA	NA	2.22E+02	NA	NA	2.80E+03
EW-34	Lead	NP	1.73E+01	3.02E+00	2.34E-02	9.33E+00	2.67E-01	1.14E+01	2.86E-02	3.76E+00
EW-34	Manganese	NP	5.40E+02	3.14E+01	NA	NA	3.53E+00	NA	NA	5.74E+01
EW-34	Mercury	P	9.30E-02	8.15E-04	3.98E-02	1.83E-01	2.57E-04	6.46E-03	1.40E-03	1.74E-01
EW-34	Molybdenum	NP	3.81E-01	2.96E+00	NA	NA	2.27E-01	NA	NA	3.04E+00
EW-34	Nickel	NP	6.34E+01	6.79E+00	1.55E+00	6.28E+01	6.51E-01	4.20E-01	1.04E-02	9.60E+00
EW-34	Selenium	NP	6.30E-02	4.29E+00	2.30E-01	9.29E-01	3.28E-01	1.43E+00	3.53E-01	5.34E+00
EW-34	Silver	NP	8.41E-02	1.24E-01	NA	NA	9.64E-03	NA	NA	2.52E-01
EW-34	Vanadium	NP	8.14E+01	7.43E+00	NA	NA	7.38E-01	NA	NA	1.15E+01
EW-34	Zinc	NP	8.47E+01	1.14E+02	1.77E+01	1.77E+02	8.88E+00	5.02E-01	5.02E-02	1.26E+02
EW-34	HMW PAH	NP	1.41E-01	3.11E-01	NA	NA	2.41E-02	NA	NA	3.62E-01
EW-34	LMW PAH	NP	3.92E-02	2.69E-02	NA	NA	2.14E-03	NA	NA	4.21E-02
EW-34	Total PCBs	P	1.95E-02	2.69E-01	9.59E-02	1.16E+00	2.06E-02	2.15E-01	1.77E-02	6.86E-02
EW-34	Total 4,4'-DDx	P	4.30E-04	1.31E-02	7.14E-03	6.12E-01	9.99E-04	1.40E-01	1.63E-03	1.19E-02
EW-34	alpha-Chlordane	NP	2.50E-05	1.02E-03	NA	NA	7.79E-05	NA	NA	1.03E-03
EW-34	Dieldrin	NP	3.00E-05	2.71E-03	NA	NA	2.07E-04	NA	NA	1.57E-03
EW-34	Endosulfan II	NP	3.00E-05	1.51E-04	NA	NA	1.16E-05	NA	NA	ND
EW-34	Endrin	NP	3.00E-05	6.02E-05	NA	NA	4.66E-06	NA	NA	ND
EW-34	gamma-Chlordane	NP	2.50E-05	9.60E-04	NA	NA	7.34E-05	NA	NA	8.56E-04
EW-34	Heptachlor	NP	2.50E-05	9.04E-05	NA	NA	6.95E-06	NA	NA	ND
EW-34	Dibutyltin	NP	6.31E-04	8.82E-03	1.19E+00	7.46E+01	6.75E-04	5.68E-04	9.05E-06	1.26E-02
EW-34	Monobutyltin	NP	3.34E-04	1.82E-02	NA	NA	1.39E-03	NA	NA	NA
EW-34	Tetrabutyltin	NP	7.91E-04	4.14E-02	NA	NA	3.17E-03	NA	NA	NA
EW-34	Tributyltin	NP	4.50E-04	2.30E-02	1.19E+00	7.46E+01	1.76E-03	1.48E-03	2.35E-05	4.48E-02

STATION ID = EW-35

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-35	Aluminum	NP	7.16E+04	1.23E+03	NA	NA	2.44E+02	NA	NA	1.95E+03
EW-35	Antimony	NP	8.14E-01	1.00E-01	NA	NA	9.34E-03	NA	NA	1.87E-01
EW-35	Arsenic	NP	1.05E+01	1.98E+01	5.43E+00	2.17E+01	1.53E+00	2.82E-01	7.06E-02	2.29E+01
EW-35	Barium	NP	4.42E+02	1.14E+01	NA	NA	1.79E+00	NA	NA	2.02E+01
EW-35	Cadmium	NP	2.57E-01	2.55E-01	8.53E-02	1.74E+01	2.00E-02	2.35E-01	1.15E-03	3.69E-01
EW-35	Chromium	NP	1.70E+02	1.52E+01	NA	NA	1.52E+00	NA	NA	2.46E+01
EW-35	Cobalt	NP	1.84E+01	1.90E+00	NA	NA	1.84E-01	NA	NA	3.63E+00
EW-35	Copper	NP	4.96E+01	1.28E+01	2.56E+00	6.37E+01	1.08E+00	4.22E-01	1.70E-02	1.48E+01
EW-35	Iron	NP	4.42E+04	1.93E+03	NA	NA	2.40E+02	NA	NA	2.80E+03
EW-35	Lead	NP	2.77E+01	1.94E+00	2.34E-02	9.33E+00	2.06E-01	8.80E+00	2.21E-02	3.76E+00
EW-35	Manganese	NP	4.28E+02	2.97E+01	NA	NA	3.16E+00	NA	NA	5.74E+01
EW-35	Mercury	P	2.76E-01	1.01E-01	3.98E-02	1.83E-01	8.29E-03	2.09E-01	4.52E-02	1.74E-01
EW-35	Molybdenum	NP	1.16E+00	2.27E+00	NA	NA	1.76E-01	NA	NA	3.04E+00
EW-35	Nickel	NP	9.66E+01	5.65E+00	1.55E+00	6.28E+01	6.33E-01	4.08E-01	1.01E-02	9.60E+00
EW-35	Selenium	NP	4.71E-01	5.12E+00	2.30E-01	9.29E-01	3.92E-01	1.71E+00	4.22E-01	5.34E+00
EW-35	Silver	NP	3.47E-01	2.60E-02	NA	NA	2.71E-03	NA	NA	2.52E-01
EW-35	Vanadium	NP	1.59E+02	6.88E+00	NA	NA	8.58E-01	NA	NA	1.15E+01
EW-35	Zinc	NP	1.23E+02	1.24E+02	1.77E+01	1.77E+02	9.73E+00	5.50E-01	5.50E-02	1.26E+02
EW-35	HMW PAH	NP	7.65E-01	2.65E-01	NA	NA	2.18E-02	NA	NA	3.62E-01
EW-35	LMW PAH	NP	1.27E-01	1.24E-02	NA	NA	1.21E-03	NA	NA	4.21E-02
EW-35	Total PCBs	P	2.88E-02	1.25E-01	9.59E-02	1.16E+00	9.61E-03	1.00E-01	8.27E-03	6.86E-02
EW-35	Total 4,4'-DDx	P	2.18E-03	1.11E-02	7.14E-03	6.12E-01	8.51E-04	1.19E-01	1.39E-03	1.19E-02
EW-35	alpha-Chlordane	NP	1.50E-04	1.33E-03	NA	NA	1.02E-04	NA	NA	1.03E-03
EW-35	Dieldrin	NP	6.00E-05	1.45E-03	NA	NA	1.11E-04	NA	NA	1.57E-03
EW-35	Endosulfan II	NP	6.00E-05	2.42E-04	NA	NA	1.86E-05	NA	NA	ND
EW-35	Endrin	NP	5.50E-05	2.12E-04	NA	NA	1.63E-05	NA	NA	ND
EW-35	gamma-Chlordane	NP	4.50E-05	1.33E-03	NA	NA	1.02E-04	NA	NA	8.56E-04
EW-35	Heptachlor	NP	5.00E-05	1.82E-04	NA	NA	1.40E-05	NA	NA	ND
EW-35	Dibutyltin	NP	5.36E-03	7.95E-03	1.19E+00	7.46E+01	6.18E-04	5.21E-04	8.29E-06	1.26E-02
EW-35	Monobutyltin	NP	6.28E-04	5.30E-03	NA	NA	4.06E-04	NA	NA	NA
EW-35	Tetrabutyltin	NP	1.49E-03	3.29E-02	NA	NA	2.51E-03	NA	NA	NA
EW-35	Tributyltin	NP	6.27E-03	2.16E-02	1.19E+00	7.46E+01	1.66E-03	1.40E-03	2.23E-05	4.48E-02

STATION ID = EW-36

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-36	Aluminum	NP	4.78E+04	1.78E+03	NA	NA	2.36E+02	NA	NA	1.95E+03
EW-36	Antimony	NP	6.42E-01	1.90E-01	NA	NA	1.59E-02	NA	NA	1.87E-01
EW-36	Arsenic	NP	6.35E+00	2.08E+01	5.43E+00	2.17E+01	1.60E+00	2.95E-01	7.37E-02	2.29E+01
EW-36	Barium	NP	3.70E+02	1.43E+01	NA	NA	1.87E+00	NA	NA	2.02E+01
EW-36	Cadmium	NP	1.95E-01	2.91E-01	8.53E-02	1.74E+01	2.26E-02	2.65E-01	1.30E-03	3.69E-01
EW-36	Chromium	NP	2.46E+02	2.05E+01	NA	NA	2.08E+00	NA	NA	2.46E+01
EW-36	Cobalt	NP	1.31E+01	2.21E+00	NA	NA	1.96E-01	NA	NA	3.63E+00
EW-36	Copper	NP	2.15E+01	2.50E+01	2.56E+00	6.37E+01	1.95E+00	7.62E-01	3.07E-02	1.48E+01
EW-36	Iron	NP	2.72E+04	2.27E+03	NA	NA	2.30E+02	NA	NA	2.80E+03
EW-36	Lead	NP	1.57E+01	4.56E+00	2.34E-02	9.33E+00	3.81E-01	1.63E+01	4.09E-02	3.76E+00
EW-36	Manganese	NP	4.74E+02	3.12E+01	NA	NA	3.37E+00	NA	NA	5.74E+01
EW-36	Mercury	P	9.14E-02	8.15E-04	3.98E-02	1.83E-01	2.53E-04	6.37E-03	1.38E-03	1.74E-01
EW-36	Molybdenum	NP	4.47E-01	3.24E+00	NA	NA	2.48E-01	NA	NA	3.04E+00
EW-36	Nickel	NP	6.49E+01	8.51E+00	1.55E+00	6.28E+01	7.86E-01	5.07E-01	1.25E-02	9.60E+00
EW-36	Selenium	NP	6.30E-02	4.90E+00	2.30E-01	9.29E-01	3.74E-01	1.63E+00	4.03E-01	5.34E+00
EW-36	Silver	NP	7.68E-02	3.28E-01	NA	NA	2.52E-02	NA	NA	2.52E-01
EW-36	Vanadium	NP	8.25E+01	8.44E+00	NA	NA	8.17E-01	NA	NA	1.15E+01
EW-36	Zinc	NP	6.93E+01	1.08E+02	1.77E+01	1.77E+02	8.39E+00	4.74E-01	4.74E-02	1.26E+02
EW-36	HMW PAH	NP	1.83E-01	3.25E-01	NA	NA	2.52E-02	NA	NA	3.62E-01
EW-36	LMW PAH	NP	2.87E-02	2.63E-02	NA	NA	2.07E-03	NA	NA	4.21E-02
EW-36	Total PCBs	P	3.25E-02	3.88E-01	9.59E-02	1.16E+00	2.97E-02	3.10E-01	2.56E-02	6.86E-02
EW-36	Total 4,4'-DDx	P	5.10E-04	1.16E-02	7.14E-03	6.12E-01	8.85E-04	1.24E-01	1.45E-03	1.19E-02
EW-36	alpha-Chlordane	NP	2.50E-05	1.02E-03	NA	NA	7.79E-05	NA	NA	1.03E-03
EW-36	Dieldrin	NP	3.50E-05	9.00E-04	NA	NA	6.88E-05	NA	NA	1.57E-03
EW-36	Endosulfan II	NP	3.50E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
EW-36	Endrin	NP	3.00E-05	1.80E-04	NA	NA	1.38E-05	NA	NA	ND
EW-36	gamma-Chlordane	NP	2.50E-05	1.02E-03	NA	NA	7.79E-05	NA	NA	8.56E-04
EW-36	Heptachlor	NP	3.00E-05	1.80E-04	NA	NA	1.38E-05	NA	NA	ND
EW-36	Dibutyltin	NP	6.55E-04	8.31E-03	1.19E+00	7.46E+01	6.36E-04	5.35E-04	8.53E-06	1.26E-02
EW-36	Monobutyltin	NP	3.46E-04	1.41E-02	NA	NA	1.07E-03	NA	NA	NA
EW-36	Tetrabutyltin	NP	8.21E-04	3.20E-02	NA	NA	2.45E-03	NA	NA	NA
EW-36	Tributyltin	NP	4.67E-04	2.57E-02	1.19E+00	7.46E+01	1.97E-03	1.65E-03	2.63E-05	4.48E-02

STATION ID = EW-37

WOE FINAL SCORE= -2

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-37	Aluminum	NP	6.56E+04	1.43E+03	NA	NA	2.46E+02	NA	NA	1.95E+03
EW-37	Antimony	NP	7.05E-01	1.03E-01	NA	NA	9.34E-03	NA	NA	1.87E-01
EW-37	Arsenic	NP	8.76E+00	2.06E+01	5.43E+00	2.17E+01	1.59E+00	2.93E-01	7.32E-02	2.29E+01
EW-37	Barium	NP	4.39E+02	1.24E+01	NA	NA	1.86E+00	NA	NA	2.02E+01
EW-37	Cadmium	NP	2.63E-01	2.15E-01	8.53E-02	1.74E+01	1.70E-02	1.99E-01	9.73E-04	3.69E-01
EW-37	Chromium	NP	2.17E+02	1.27E+01	NA	NA	1.42E+00	NA	NA	2.46E+01
EW-37	Cobalt	NP	1.67E+01	2.05E+00	NA	NA	1.91E-01	NA	NA	3.63E+00
EW-37	Copper	NP	3.90E+01	1.22E+01	2.56E+00	6.37E+01	1.01E+00	3.95E-01	1.59E-02	1.48E+01
EW-37	Iron	NP	3.99E+04	2.02E+03	NA	NA	2.38E+02	NA	NA	2.80E+03
EW-37	Lead	NP	2.18E+01	1.89E+00	2.34E-02	9.33E+00	1.90E-01	8.11E+00	2.04E-02	3.76E+00
EW-37	Manganese	NP	4.41E+02	2.98E+01	NA	NA	3.20E+00	NA	NA	5.74E+01
EW-37	Mercury	P	2.16E-01	9.60E-02	3.98E-02	1.83E-01	7.78E-03	1.96E-01	4.24E-02	1.74E-01
EW-37	Molybdenum	NP	9.19E-01	2.19E+00	NA	NA	1.69E-01	NA	NA	3.04E+00
EW-37	Nickel	NP	8.55E+01	6.28E+00	1.55E+00	6.28E+01	6.58E-01	4.25E-01	1.05E-02	9.60E+00
EW-37	Selenium	NP	3.05E-01	4.92E+00	2.30E-01	9.29E-01	3.76E-01	1.64E+00	4.05E-01	5.34E+00
EW-37	Silver	NP	2.47E-01	2.60E-02	NA	NA	2.50E-03	NA	NA	2.52E-01
EW-37	Vanadium	NP	1.35E+02	7.05E+00	NA	NA	8.21E-01	NA	NA	1.15E+01
EW-37	Zinc	NP	1.04E+02	1.02E+02	1.77E+01	1.77E+02	8.01E+00	4.53E-01	4.53E-02	1.26E+02
EW-37	HMW PAH	NP	1.13E+00	5.03E-02	NA	NA	6.21E-03	NA	NA	3.62E-01
EW-37	LMW PAH	NP	1.63E-01	0.00E+00	NA	NA	3.40E-04	NA	NA	4.21E-02
EW-37	Total PCBs	P	2.39E-02	2.76E-02	9.59E-02	1.16E+00	2.16E-03	2.25E-02	1.86E-03	6.86E-02
EW-37	Total 4,4'-DDx	P	2.29E-03	2.27E-03	7.14E-03	6.12E-01	1.78E-04	2.49E-02	2.91E-04	1.19E-02
EW-37	alpha-Chlordane	NP	1.10E-04	2.00E-04	NA	NA	1.55E-05	NA	NA	1.03E-03
EW-37	Dieldrin	NP	5.00E-05	2.00E-04	NA	NA	1.54E-05	NA	NA	1.57E-03
EW-37	Endosulfan II	NP	5.00E-05	2.00E-04	NA	NA	1.54E-05	NA	NA	ND
EW-37	Endrin	NP	4.50E-05	1.67E-04	NA	NA	1.28E-05	NA	NA	ND
EW-37	gamma-Chlordane	NP	4.00E-05	2.70E-04	NA	NA	2.07E-05	NA	NA	8.56E-04
EW-37	Heptachlor	NP	4.00E-05	1.67E-04	NA	NA	1.28E-05	NA	NA	ND
EW-37	Dibutyltin	NP	3.80E-03	9.82E-03	1.19E+00	7.46E+01	7.58E-04	6.38E-04	1.02E-05	1.26E-02
EW-37	Monobutyltin	NP	5.37E-04	1.62E-02	NA	NA	1.24E-03	NA	NA	NA
EW-37	Tetrabutyltin	NP	1.27E-03	3.70E-02	NA	NA	2.83E-03	NA	NA	NA
EW-37	Tributyltin	NP	4.52E-03	2.95E-02	1.19E+00	7.46E+01	2.26E-03	1.90E-03	3.03E-05	4.48E-02

STATION ID = OR-24

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-24	Aluminum	NP	5.73E+04	3.19E+03	NA	NA	3.63E+02	NA	NA	1.95E+03
OR-24	Antimony	NP	2.38E+00	3.14E-01	NA	NA	2.90E-02	NA	NA	1.87E-01
OR-24	Arsenic	NP	1.09E+01	2.21E+01	5.43E+00	2.17E+01	1.71E+00	3.15E-01	7.87E-02	2.29E+01
OR-24	Barium	NP	3.81E+02	2.58E+01	NA	NA	2.77E+00	NA	NA	2.02E+01
OR-24	Cadmium	NP	3.41E-01	9.98E-01	8.53E-02	1.74E+01	7.69E-02	9.02E-01	4.41E-03	3.69E-01
OR-24	Chromium	NP	4.34E+02	2.49E+01	NA	NA	2.81E+00	NA	NA	2.46E+01
OR-24	Cobalt	NP	1.98E+01	2.98E+00	NA	NA	2.69E-01	NA	NA	3.63E+00
OR-24	Copper	NP	9.75E+01	2.40E+01	2.56E+00	6.37E+01	2.04E+00	7.94E-01	3.20E-02	1.48E+01
OR-24	Iron	NP	4.56E+04	4.04E+03	NA	NA	4.04E+02	NA	NA	2.80E+03
OR-24	Lead	NP	6.01E+01	7.82E+00	2.34E-02	9.33E+00	7.23E-01	3.09E+01	7.75E-02	3.76E+00
OR-24	Manganese	NP	6.24E+02	4.92E+01	NA	NA	5.06E+00	NA	NA	5.74E+01
OR-24	Mercury	P	4.84E-01	1.59E-01	3.98E-02	1.83E-01	1.32E-02	3.31E-01	7.17E-02	1.74E-01
OR-24	Molybdenum	NP	1.41E+00	2.55E+00	NA	NA	1.98E-01	NA	NA	3.04E+00
OR-24	Nickel	NP	1.60E+02	1.35E+01	1.55E+00	6.28E+01	1.37E+00	8.80E-01	2.17E-02	9.60E+00
OR-24	Selenium	NP	2.39E-01	4.63E+00	2.30E-01	9.29E-01	3.54E-01	1.54E+00	3.81E-01	5.34E+00
OR-24	Silver	NP	3.56E-01	2.60E-02	NA	NA	2.73E-03	NA	NA	2.52E-01
OR-24	Vanadium	NP	1.34E+02	1.33E+01	NA	NA	1.30E+00	NA	NA	1.15E+01
OR-24	Zinc	NP	1.79E+02	1.12E+02	1.77E+01	1.77E+02	8.93E+00	5.05E-01	5.05E-02	1.26E+02
OR-24	HMW PAH	NP	1.26E+00	6.31E-01	NA	NA	5.08E-02	NA	NA	3.62E-01
OR-24	LMW PAH	NP	2.50E-01	3.23E-02	NA	NA	2.99E-03	NA	NA	4.21E-02
OR-24	Total PCBs	P	4.25E-01	1.36E+00	9.59E-02	1.16E+00	1.05E-01	1.09E+00	9.02E-02	6.86E-02
OR-24	Total 4,4'-DDx	P	4.19E-03	2.34E-02	7.14E-03	6.12E-01	1.79E-03	2.51E-01	2.93E-03	1.19E-02
OR-24	alpha-Chlordane	NP	4.10E-04	1.67E-03	NA	NA	1.28E-04	NA	NA	1.03E-03
OR-24	Dieldrin	NP	4.40E-04	1.47E-03	NA	NA	1.13E-04	NA	NA	1.57E-03
OR-24	Endosulfan II	NP	4.50E-05	2.34E-04	NA	NA	1.80E-05	NA	NA	ND
OR-24	Endrin	NP	4.00E-05	2.01E-04	NA	NA	1.54E-05	NA	NA	ND
OR-24	gamma-Chlordane	NP	4.10E-04	2.28E-03	NA	NA	1.75E-04	NA	NA	8.56E-04
OR-24	Heptachlor	NP	3.50E-05	2.01E-04	NA	NA	1.54E-05	NA	NA	ND
OR-24	Dibutyltin	NP	2.08E-02	3.56E-02	1.19E+00	7.46E+01	2.76E-03	2.32E-03	3.70E-05	1.26E-02
OR-24	Monobutyltin	NP	2.69E-03	1.95E-02	NA	NA	1.49E-03	NA	NA	NA
OR-24	Tetrabutyltin	NP	1.10E-03	4.44E-02	NA	NA	3.39E-03	NA	NA	NA
OR-24	Tributyltin	NP	6.59E-02	3.53E-01	1.19E+00	7.46E+01	2.71E-02	2.28E-02	3.63E-04	4.48E-02

STATION ID = OR-25

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-25	Aluminum	NP	7.30E+04	1.95E+03	NA	NA	3.02E+02	NA	NA	1.95E+03
OR-25	Antimony	NP	5.87E-01	1.47E-01	NA	NA	1.25E-02	NA	NA	1.87E-01
OR-25	Arsenic	NP	1.06E+01	1.95E+01	5.43E+00	2.17E+01	1.51E+00	2.78E-01	6.95E-02	2.29E+01
OR-25	Barium	NP	4.50E+02	1.56E+01	NA	NA	2.13E+00	NA	NA	2.02E+01
OR-25	Cadmium	NP	2.23E-01	2.50E-01	8.53E-02	1.74E+01	1.96E-02	2.29E-01	1.12E-03	3.69E-01
OR-25	Chromium	NP	1.67E+02	8.39E+00	NA	NA	9.90E-01	NA	NA	2.46E+01
OR-25	Cobalt	NP	2.26E+01	1.72E+00	NA	NA	1.79E-01	NA	NA	3.63E+00
OR-25	Copper	NP	5.51E+01	1.43E+01	2.56E+00	6.37E+01	1.21E+00	4.71E-01	1.90E-02	1.48E+01
OR-25	Iron	NP	4.24E+04	2.05E+03	NA	NA	2.45E+02	NA	NA	2.80E+03
OR-25	Lead	NP	1.19E+01	3.65E+00	2.34E-02	9.33E+00	3.04E-01	1.30E+01	3.26E-02	3.76E+00
OR-25	Manganese	NP	3.86E+02	1.88E+01	NA	NA	2.24E+00	NA	NA	5.74E+01
OR-25	Mercury	P	3.80E-01	1.11E-01	3.98E-02	1.83E-01	9.27E-03	2.33E-01	5.05E-02	1.74E-01
OR-25	Molybdenum	NP	8.30E-01	3.10E+00	NA	NA	2.38E-01	NA	NA	3.04E+00
OR-25	Nickel	NP	1.00E+02	7.00E+00	1.55E+00	6.28E+01	7.44E-01	4.80E-01	1.18E-02	9.60E+00
OR-25	Selenium	NP	3.48E-01	5.32E+00	2.30E-01	9.29E-01	4.07E-01	1.77E+00	4.38E-01	5.34E+00
OR-25	Silver	NP	1.20E-01	2.60E-02	NA	NA	2.24E-03	NA	NA	2.52E-01
OR-25	Vanadium	NP	1.71E+02	6.86E+00	NA	NA	8.81E-01	NA	NA	1.15E+01
OR-25	Zinc	NP	1.25E+02	9.71E+01	1.77E+01	1.77E+02	7.68E+00	4.34E-01	4.34E-02	1.26E+02
OR-25	HMW PAH	NP	9.57E-01	4.83E-01	NA	NA	3.89E-02	NA	NA	3.62E-01
OR-25	LMW PAH	NP	1.58E-01	3.05E-02	NA	NA	2.66E-03	NA	NA	4.21E-02
OR-25	Total PCBs	P	1.01E-01	5.64E-01	9.59E-02	1.16E+00	4.33E-02	4.52E-01	3.73E-02	6.86E-02
OR-25	Total 4,4'-DDx	P	2.34E-03	1.86E-02	7.14E-03	6.12E-01	1.43E-03	2.00E-01	2.33E-03	1.19E-02
OR-25	alpha-Chlordane	NP	1.40E-04	1.54E-03	NA	NA	1.18E-04	NA	NA	1.03E-03
OR-25	Dieldrin	NP	5.50E-05	1.42E-03	NA	NA	1.09E-04	NA	NA	1.57E-03
OR-25	Endosulfan II	NP	6.00E-05	1.85E-04	NA	NA	1.43E-05	NA	NA	ND
OR-25	Endrin	NP	5.00E-05	1.54E-04	NA	NA	1.19E-05	NA	NA	ND
OR-25	gamma-Chlordane	NP	1.00E-04	1.79E-03	NA	NA	1.37E-04	NA	NA	8.56E-04
OR-25	Heptachlor	NP	5.00E-05	1.54E-04	NA	NA	1.19E-05	NA	NA	ND
OR-25	Dibutyltin	NP	6.57E-03	1.21E-02	1.19E+00	7.46E+01	9.39E-04	7.91E-04	1.26E-05	1.26E-02
OR-25	Monobutyltin	NP	6.31E-04	1.49E-02	NA	NA	1.14E-03	NA	NA	NA
OR-25	Tetrabutyltin	NP	1.50E-03	3.41E-02	NA	NA	2.60E-03	NA	NA	NA
OR-25	Tributyltin	NP	7.88E-03	3.21E-02	1.19E+00	7.46E+01	2.47E-03	2.08E-03	3.31E-05	4.48E-02

Table H-33. Dose Assessment Results for Station OR-26 Using Depurated M. nasuta Data

STATION ID = OR-26

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-26	Aluminum	NP	6.83E+04	1.78E+03	NA	NA	2.79E+02	NA	NA	1.95E+03
OR-26	Antimony	NP	2.35E+00	2.64E-01	NA	NA	2.51E-02	NA	NA	1.87E-01
OR-26	Arsenic	NP	1.36E+01	2.27E+01	5.43E+00	2.17E+01	1.76E+00	3.24E-01	8.11E-02	2.29E+01
OR-26	Barium	NP	3.96E+02	2.06E+01	NA	NA	2.40E+00	NA	NA	2.02E+01
OR-26	Cadmium	NP	3.99E-01	1.89E+00	8.53E-02	1.74E+01	1.45E-01	1.70E+00	8.32E-03	3.69E-01
OR-26	Chromium	NP	2.54E+02	2.42E+01	NA	NA	2.38E+00	NA	NA	2.46E+01
OR-26	Cobalt	NP	1.94E+01	2.77E+00	NA	NA	2.52E-01	NA	NA	3.63E+00
OR-26	Copper	NP	8.64E+01	2.15E+01	2.56E+00	6.37E+01	1.82E+00	7.11E-01	2.86E-02	1.48E+01
OR-26	Iron	NP	4.87E+04	3.08E+03	NA	NA	3.37E+02	NA	NA	2.80E+03
OR-26	Lead	NP	4.80E+01	5.55E+00	2.34E-02	9.33E+00	5.24E-01	2.24E+01	5.62E-02	3.76E+00
OR-26	Manganese	NP	5.05E+02	4.88E+01	NA	NA	4.78E+00	NA	NA	5.74E+01
OR-26	Mercury	P	6.02E-01	1.11E-01	3.98E-02	1.83E-01	9.74E-03	2.45E-01	5.31E-02	1.74E-01
OR-26	Molybdenum	NP	1.68E+00	2.40E+00	NA	NA	1.87E-01	NA	NA	3.04E+00
OR-26	Nickel	NP	1.16E+02	1.06E+01	1.55E+00	6.28E+01	1.05E+00	6.78E-01	1.67E-02	9.60E+00
OR-26	Selenium	NP	3.41E-01	5.47E+00	2.30E-01	9.29E-01	4.18E-01	1.82E+00	4.51E-01	5.34E+00
OR-26	Silver	NP	3.97E-01	2.60E-02	NA	NA	2.82E-03	NA	NA	2.52E-01
OR-26	Vanadium	NP	1.54E+02	1.06E+01	NA	NA	1.13E+00	NA	NA	1.15E+01
OR-26	Zinc	NP	1.59E+02	1.22E+02	1.77E+01	1.77E+02	9.65E+00	5.45E-01	5.45E-02	1.26E+02
OR-26	HMW PAH	NP	0.68309	0.36475	NA	NA	2.93E-02	NA	NA	3.62E-01
OR-26	LMW PAH	NP	1.31E-01	2.85E-02	NA	NA	2.45E-03	NA	NA	4.21E-02
OR-26	Total PCBs	P	3.21E-01	9.15E-01	9.59E-02	1.16E+00	7.05E-02	7.35E-01	6.07E-02	6.86E-02
OR-26	Total 4,4'-DDx	P	4.88E-03	1.94E-02	7.14E-03	6.12E-01	1.49E-03	2.09E-01	2.44E-03	1.19E-02
OR-26	alpha-Chlordane	NP	3.80E-04	1.85E-03	NA	NA	1.42E-04	NA	NA	1.03E-03
OR-26	Dieldrin	NP	5.00E-05	1.37E-03	NA	NA	1.05E-04	NA	NA	1.57E-03
OR-26	Endosulfan II	NP	5.50E-05	2.40E-04	NA	NA	1.84E-05	NA	NA	ND
OR-26	Endrin	NP	4.50E-05	2.05E-04	NA	NA	1.58E-05	NA	NA	ND
OR-26	gamma-Chlordane	NP	3.40E-04	1.92E-03	NA	NA	1.47E-04	NA	NA	8.56E-04
OR-26	Heptachlor	NP	4.50E-05	2.05E-04	NA	NA	1.58E-05	NA	NA	ND
OR-26	Dibutyltin	NP	1.67E-02	1.47E-02	1.19E+00	7.46E+01	1.16E-03	9.74E-04	1.55E-05	1.26E-02
OR-26	Monobutyltin	NP	5.44E-04	1.91E-02	NA	NA	1.46E-03	NA	NA	NA
OR-26	Tetrabutyltin	NP	1.29E-03	4.35E-02	NA	NA	3.33E-03	NA	NA	NA
OR-26	Tributyltin	NP	2.80E-02	1.27E-01	1.19E+00	7.46E+01	9.75E-03	8.21E-03	1.31E-04	4.48E-02

STATION ID = OR-27

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-27	Aluminum	NP	6.64E+04	1.64E+03	NA	NA	2.64E+02	NA	NA	1.95E+03
OR-27	Antimony	NP	3.17E+00	1.74E-01	NA	NA	1.99E-02	NA	NA	1.87E-01
OR-27	Arsenic	NP	1.27E+01	1.87E+01	5.43E+00	2.17E+01	1.45E+00	2.68E-01	6.69E-02	2.29E+01
OR-27	Barium	NP	3.76E+02	1.39E+01	NA	NA	1.85E+00	NA	NA	2.02E+01
OR-27	Cadmium	NP	3.59E-01	2.09E-01	8.53E-02	1.74E+01	1.67E-02	1.96E-01	9.58E-04	3.69E-01
OR-27	Chromium	NP	4.64E+02	1.90E+01	NA	NA	2.42E+00	NA	NA	2.46E+01
OR-27	Cobalt	NP	1.83E+01	2.24E+00	NA	NA	2.09E-01	NA	NA	3.63E+00
OR-27	Copper	NP	6.45E+01	1.85E+01	2.56E+00	6.37E+01	1.55E+00	6.04E-01	2.43E-02	1.48E+01
OR-27	Iron	NP	4.74E+04	2.50E+03	NA	NA	2.90E+02	NA	NA	2.80E+03
OR-27	Lead	NP	5.14E+01	4.50E+00	2.34E-02	9.33E+00	4.51E-01	1.93E+01	4.84E-02	3.76E+00
OR-27	Manganese	NP	4.85E+02	2.71E+01	NA	NA	3.08E+00	NA	NA	5.74E+01
OR-27	Mercury	P	4.51E-01	8.15E-04	3.98E-02	1.83E-01	1.01E-03	2.53E-02	5.48E-03	1.74E-01
OR-27	Molybdenum	NP	1.71E+00	3.19E+00	NA	NA	2.47E-01	NA	NA	3.04E+00
OR-27	Nickel	NP	1.21E+02	9.08E+00	1.55E+00	6.28E+01	9.46E-01	6.10E-01	1.51E-02	9.60E+00
OR-27	Selenium	NP	3.57E-01	4.22E+00	2.30E-01	9.29E-01	3.23E-01	1.41E+00	3.48E-01	5.34E+00
OR-27	Silver	NP	4.15E-01	2.26E-01	NA	NA	1.81E-02	NA	NA	2.52E-01
OR-27	Vanadium	NP	1.49E+02	8.62E+00	NA	NA	9.70E-01	NA	NA	1.15E+01
OR-27	Zinc	NP	1.45E+02	8.39E+01	1.77E+01	1.77E+02	6.71E+00	3.79E-01	3.79E-02	1.26E+02
OR-27	HMW PAH	NP	6.14E-01	3.82E-01	NA	NA	3.04E-02	NA	NA	3.62E-01
OR-27	LMW PAH	NP	1.01E-01	2.36E-02	NA	NA	2.02E-03	NA	NA	4.21E-02
OR-27	Total PCBs	P	2.79E-01	1.59E+00	9.59E-02	1.16E+00	1.22E-01	1.28E+00	1.05E-01	6.86E-02
OR-27	Total 4,4'-DDx	P	3.87E-03	3.18E-02	7.14E-03	6.12E-01	2.44E-03	3.41E-01	3.98E-03	1.19E-02
OR-27	alpha-Chlordane	NP	2.90E-04	2.21E-03	NA	NA	1.69E-04	NA	NA	1.03E-03
OR-27	Dieldrin	NP	5.00E-05	2.01E-03	NA	NA	1.54E-04	NA	NA	1.57E-03
OR-27	Endosulfan II	NP	5.50E-05	3.52E-04	NA	NA	2.70E-05	NA	NA	ND
OR-27	Endrin	NP	4.50E-05	3.02E-04	NA	NA	2.31E-05	NA	NA	ND
OR-27	gamma-Chlordane	NP	4.20E-04	2.72E-03	NA	NA	2.09E-04	NA	NA	8.56E-04
OR-27	Heptachlor	NP	4.50E-05	3.02E-04	NA	NA	2.31E-05	NA	NA	ND
OR-27	Dibutyltin	NP	9.66E-03	2.73E-02	1.19E+00	7.46E+01	2.10E-03	1.77E-03	2.82E-05	1.26E-02
OR-27	Monobutyltin	NP	5.36E-04	2.46E-02	NA	NA	1.88E-03	NA	NA	NA
OR-27	Tetrabutyltin	NP	1.27E-03	5.60E-02	NA	NA	4.28E-03	NA	NA	NA
OR-27	Tributyltin	NP	1.42E-02	1.49E-01	1.19E+00	7.46E+01	1.14E-02	9.61E-03	1.53E-04	4.48E-02

STATION ID = OR-28

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-28	Aluminum	NP	7.19E+04	1.08E+03	NA	NA	2.33E+02	NA	NA	1.95E+03
OR-28	Antimony	NP	1.36E+00	1.53E-01	NA	NA	1.45E-02	NA	NA	1.87E-01
OR-28	Arsenic	NP	1.12E+01	1.94E+01	5.43E+00	2.17E+01	1.50E+00	2.77E-01	6.92E-02	2.29E+01
OR-28	Barium	NP	4.58E+02	8.40E+00	NA	NA	1.60E+00	NA	NA	2.02E+01
OR-28	Cadmium	NP	3.84E-01	6.47E-01	8.53E-02	1.74E+01	5.02E-02	5.89E-01	2.88E-03	3.69E-01
OR-28	Chromium	NP	1.87E+02	5.46E+00	NA	NA	8.08E-01	NA	NA	2.46E+01
OR-28	Cobalt	NP	1.84E+01	1.49E+00	NA	NA	1.52E-01	NA	NA	3.63E+00
OR-28	Copper	NP	5.78E+01	1.49E+01	2.56E+00	6.37E+01	1.26E+00	4.91E-01	1.98E-02	1.48E+01
OR-28	Iron	NP	4.42E+04	1.41E+03	NA	NA	2.00E+02	NA	NA	2.80E+03
OR-28	Lead	NP	3.89E+01	2.42E+00	2.34E-02	9.33E+00	2.66E-01	1.14E+01	2.85E-02	3.76E+00
OR-28	Manganese	NP	4.00E+02	1.45E+01	NA	NA	1.94E+00	NA	NA	5.74E+01
OR-28	Mercury	P	3.71E-01	1.03E-01	3.98E-02	1.83E-01	8.64E-03	2.17E-01	4.71E-02	1.74E-01
OR-28	Molybdenum	NP	1.39E+00	2.59E+00	NA	NA	2.01E-01	NA	NA	3.04E+00
OR-28	Nickel	NP	1.00E+02	5.29E+00	1.55E+00	6.28E+01	6.13E-01	3.95E-01	9.76E-03	9.60E+00
OR-28	Selenium	NP	4.06E-01	4.50E+00	2.30E-01	9.29E-01	3.44E-01	1.50E+00	3.71E-01	5.34E+00
OR-28	Silver	NP	4.35E-01	2.60E-02	NA	NA	2.90E-03	NA	NA	2.52E-01
OR-28	Vanadium	NP	1.63E+02	4.18E+00	NA	NA	6.60E-01	NA	NA	1.15E+01
OR-28	Zinc	NP	1.33E+02	9.63E+01	1.77E+01	1.77E+02	7.63E+00	4.31E-01	4.31E-02	1.26E+02
OR-28	HMW PAH	NP	9.42E-01	2.67E-01	NA	NA	2.23E-02	NA	NA	3.62E-01
OR-28	LMW PAH	NP	1.36E-01	1.95E-02	NA	NA	1.78E-03	NA	NA	4.21E-02
OR-28	Total PCBs	P	8.72E-02	3.41E-01	9.59E-02	1.16E+00	2.62E-02	2.73E-01	2.26E-02	6.86E-02
OR-28	Total 4,4'-DDx	P	2.36E-03	1.32E-02	7.14E-03	6.12E-01	1.01E-03	1.42E-01	1.65E-03	1.19E-02
OR-28	alpha-Chlordane	NP	2.40E-04	9.00E-04	NA	NA	6.92E-05	NA	NA	1.03E-03
OR-28	Dieldrin	NP	5.50E-05	1.09E-03	NA	NA	8.34E-05	NA	NA	1.57E-03
OR-28	Endosulfan II	NP	5.50E-05	2.25E-04	NA	NA	1.73E-05	NA	NA	ND
OR-28	Endrin	NP	5.00E-05	1.93E-04	NA	NA	1.48E-05	NA	NA	ND
OR-28	gamma-Chlordane	NP	4.50E-05	1.03E-03	NA	NA	7.87E-05	NA	NA	8.56E-04
OR-28	Heptachlor	NP	4.50E-05	1.93E-04	NA	NA	1.48E-05	NA	NA	ND
OR-28	Dibutyltin	NP	5.60E-03	9.21E-03	1.19E+00	7.46E+01	7.15E-04	6.02E-04	9.59E-06	1.26E-02
OR-28	Monobutyltin	NP	6.21E-04	2.08E-02	NA	NA	1.59E-03	NA	NA	NA
OR-28	Tetrabutyltin	NP	1.47E-03	4.74E-02	NA	NA	3.62E-03	NA	NA	NA
OR-28	Tributyltin	NP	1.01E-02	2.63E-02	1.19E+00	7.46E+01	2.03E-03	1.71E-03	2.72E-05	4.48E-02

STATION ID = OR-29

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-29	Aluminum	NP	5.20E+04	1.65E+03	NA	NA	2.35E+02	NA	NA	1.95E+03
OR-29	Antimony	NP	2.25E+00	1.40E-01	NA	NA	1.54E-02	NA	NA	1.87E-01
OR-29	Arsenic	NP	8.90E+00	2.48E+01	5.43E+00	2.17E+01	1.91E+00	3.52E-01	8.80E-02	2.29E+01
OR-29	Barium	NP	2.93E+02	1.26E+01	NA	NA	1.57E+00	NA	NA	2.02E+01
OR-29	Cadmium	NP	2.97E-01	2.12E-01	8.53E-02	1.74E+01	1.68E-02	1.97E-01	9.64E-04	3.69E-01
OR-29	Chromium	NP	4.14E+02	3.36E+01	NA	NA	3.43E+00	NA	NA	2.46E+01
OR-29	Cobalt	NP	1.75E+01	1.89E+00	NA	NA	1.81E-01	NA	NA	3.63E+00
OR-29	Copper	NP	5.51E+01	1.35E+01	2.56E+00	6.37E+01	1.15E+00	4.47E-01	1.80E-02	1.48E+01
OR-29	Iron	NP	4.12E+04	3.19E+03	NA	NA	3.30E+02	NA	NA	2.80E+03
OR-29	Lead	NP	3.29E+01	3.15E+00	2.34E-02	9.33E+00	3.09E-01	1.32E+01	3.32E-02	3.76E+00
OR-29	Manganese	NP	5.67E+02	4.80E+01	NA	NA	4.85E+00	NA	NA	5.74E+01
OR-29	Mercury	P	3.03E-01	1.41E-01	3.98E-02	1.83E-01	1.14E-02	2.87E-01	6.21E-02	1.74E-01
OR-29	Molybdenum	NP	1.08E+00	2.38E+00	NA	NA	1.84E-01	NA	NA	3.04E+00
OR-29	Nickel	NP	9.49E+01	7.00E+00	1.55E+00	6.28E+01	7.33E-01	4.73E-01	1.17E-02	9.60E+00
OR-29	Selenium	NP	2.33E-01	4.30E+00	2.30E-01	9.29E-01	3.29E-01	1.43E+00	3.54E-01	5.34E+00
OR-29	Silver	NP	2.29E-01	2.60E-02	NA	NA	2.46E-03	NA	NA	2.52E-01
OR-29	Vanadium	NP	1.39E+02	1.03E+01	NA	NA	1.08E+00	NA	NA	1.15E+01
OR-29	Zinc	NP	1.14E+02	8.93E+01	1.77E+01	1.77E+02	7.06E+00	3.99E-01	3.99E-02	1.26E+02
OR-29	HMW PAH	NP	5.43E-01	4.07E-01	NA	NA	3.22E-02	NA	NA	3.62E-01
OR-29	LMW PAH	NP	7.75E-02	1.95E-02	NA	NA	1.65E-03	NA	NA	4.21E-02
OR-29	Total PCBs	P	1.42E-01	8.93E-01	9.59E-02	1.16E+00	6.85E-02	7.14E-01	5.89E-02	6.86E-02
OR-29	Total 4,4'-DDx	P	1.87E-03	2.18E-02	7.14E-03	6.12E-01	1.67E-03	2.34E-01	2.73E-03	1.19E-02
OR-29	alpha-Chlordane	NP	1.60E-04	2.00E-03	NA	NA	1.53E-04	NA	NA	1.03E-03
OR-29	Dieldrin	NP	4.00E-05	2.21E-03	NA	NA	1.69E-04	NA	NA	1.57E-03
OR-29	Endosulfan II	NP	4.00E-05	2.86E-04	NA	NA	2.19E-05	NA	NA	ND
OR-29	Endrin	NP	3.50E-05	2.50E-04	NA	NA	1.92E-05	NA	NA	ND
OR-29	gamma-Chlordane	NP	8.00E-05	2.43E-03	NA	NA	1.86E-04	NA	NA	8.56E-04
OR-29	Heptachlor	NP	3.50E-05	2.14E-04	NA	NA	1.64E-05	NA	NA	ND
OR-29	Dibutyltin	NP	2.69E-03	1.29E-02	1.19E+00	7.46E+01	9.88E-04	8.32E-04	1.32E-05	1.26E-02
OR-29	Monobutyltin	NP	4.00E-04	1.72E-02	NA	NA	1.32E-03	NA	NA	NA
OR-29	Tetrabutyltin	NP	9.48E-04	3.92E-02	NA	NA	3.00E-03	NA	NA	NA
OR-29	Tributyltin	NP	3.30E-03	4.41E-02	1.19E+00	7.46E+01	3.37E-03	2.84E-03	4.52E-05	4.48E-02

STATION ID = SB-01

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-01	Aluminum	NP	6.19E+04	1.35E+03	NA	NA	2.33E+02	NA	NA	1.95E+03
SB-01	Antimony	NP	1.61E+00	1.72E-01	NA	NA	1.65E-02	NA	NA	1.87E-01
SB-01	Arsenic	NP	8.15E+00	2.09E+01	5.43E+00	2.17E+01	1.61E+00	2.97E-01	7.42E-02	2.29E+01
SB-01	Barium	NP	5.01E+02	1.40E+01	NA	NA	2.12E+00	NA	NA	2.02E+01
SB-01	Cadmium	NP	8.45E-01	2.24E-01	8.53E-02	1.74E+01	1.89E-02	2.21E-01	1.08E-03	3.69E-01
SB-01	Chromium	NP	2.02E+02	9.33E+00	NA	NA	1.13E+00	NA	NA	2.46E+01
SB-01	Cobalt	NP	1.27E+01	1.92E+00	NA	NA	1.73E-01	NA	NA	3.63E+00
SB-01	Copper	NP	6.98E+01	1.67E+01	2.56E+00	6.37E+01	1.42E+00	5.54E-01	2.23E-02	1.48E+01
SB-01	Iron	NP	3.62E+04	1.97E+03	NA	NA	2.26E+02	NA	NA	2.80E+03
SB-01	Lead	NP	1.21E+02	7.14E+00	2.34E-02	9.33E+00	7.98E-01	3.41E+01	8.56E-02	3.76E+00
SB-01	Manganese	NP	4.37E+02	2.50E+01	NA	NA	2.82E+00	NA	NA	5.74E+01
SB-01	Mercury	P	5.53E-01	1.22E-01	3.98E-02	1.83E-01	1.05E-02	2.63E-01	5.71E-02	1.74E-01
SB-01	Molybdenum	NP	1.18E+00	2.73E+00	NA	NA	2.11E-01	NA	NA	3.04E+00
SB-01	Nickel	NP	7.66E+01	7.65E+00	1.55E+00	6.28E+01	7.44E-01	4.80E-01	1.19E-02	9.60E+00
SB-01	Selenium	NP	2.27E-01	4.69E+00	2.30E-01	9.29E-01	3.59E-01	1.56E+00	3.86E-01	5.34E+00
SB-01	Silver	NP	5.23E-01	2.60E-02	NA	NA	3.08E-03	NA	NA	2.52E-01
SB-01	Vanadium	NP	1.01E+02	6.11E+00	NA	NA	6.78E-01	NA	NA	1.15E+01
SB-01	Zinc	NP	1.88E+02	1.14E+02	1.77E+01	1.77E+02	9.10E+00	5.14E-01	5.14E-02	1.26E+02
SB-01	HMW PAH	NP	1.26E+00	3.76E-01	NA	NA	3.14E-02	NA	NA	3.62E-01
SB-01	LMW PAH	NP	2.41E-01	3.86E-02	NA	NA	3.45E-03	NA	NA	4.21E-02
SB-01	Total PCBs	P	5.57E-01	1.30E+00	9.59E-02	1.16E+00	1.00E-01	1.04E+00	8.62E-02	6.86E-02
SB-01	Total 4,4'-DDx	P	1.72E-02	7.45E-02	7.14E-03	6.12E-01	5.72E-03	8.01E-01	9.36E-03	1.19E-02
SB-01	alpha-Chlordane	NP	3.56E-03	1.61E-02	NA	NA	1.24E-03	NA	NA	1.03E-03
SB-01	Dieldrin	NP	4.21E-03	2.81E-02	NA	NA	2.16E-03	NA	NA	1.57E-03
SB-01	Endosulfan II	NP	5.00E-05	2.40E-04	NA	NA	1.84E-05	NA	NA	ND
SB-01	Endrin	NP	4.50E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
SB-01	gamma-Chlordane	NP	6.29E-03	2.24E-02	NA	NA	1.73E-03	NA	NA	8.56E-04
SB-01	Heptachlor	NP	4.50E-05	1.80E-04	NA	NA	1.38E-05	NA	NA	ND
SB-01	Dibutyltin	NP	2.72E-03	1.02E-02	1.19E+00	7.46E+01	7.86E-04	6.62E-04	1.05E-05	1.26E-02
SB-01	Monobutyltin	NP	2.08E-03	1.47E-02	NA	NA	1.13E-03	NA	NA	NA
SB-01	Tetrabutyltin	NP	1.29E-03	3.35E-02	NA	NA	2.56E-03	NA	NA	NA
SB-01	Tributyltin	NP	3.08E-03	2.58E-02	1.19E+00	7.46E+01	1.98E-03	1.66E-03	2.65E-05	4.48E-02

Table H-38. Dose Assessment Results for Station SB-02 Using Depurated M. nasuta Data

STATION ID = SB-02

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-02	Aluminum	NP	6.98E+04	1.21E+03	NA	NA	2.38E+02	NA	NA	1.95E+03
SB-02	Antimony	NP	1.56E+00	1.35E-01	NA	NA	1.36E-02	NA	NA	1.87E-01
SB-02	Arsenic	NP	9.23E+00	2.14E+01	5.43E+00	2.17E+01	1.65E+00	3.04E-01	7.61E-02	2.29E+01
SB-02	Barium	NP	4.74E+02	1.00E+01	NA	NA	1.75E+00	NA	NA	2.02E+01
SB-02	Cadmium	NP	6.30E-01	2.20E-01	8.53E-02	1.74E+01	1.81E-02	2.12E-01	1.04E-03	3.69E-01
SB-02	Chromium	NP	1.89E+02	8.11E+00	NA	NA	1.01E+00	NA	NA	2.46E+01
SB-02	Cobalt	NP	1.45E+01	1.60E+00	NA	NA	1.53E-01	NA	NA	3.63E+00
SB-02	Copper	NP	8.51E+01	1.46E+01	2.56E+00	6.37E+01	1.29E+00	5.04E-01	2.03E-02	1.48E+01
SB-02	Iron	NP	4.31E+04	1.53E+03	NA	NA	2.07E+02	NA	NA	2.80E+03
SB-02	Lead	NP	9.43E+01	6.04E+00	2.34E-02	9.33E+00	6.58E-01	2.81E+01	7.06E-02	3.76E+00
SB-02	Manganese	NP	4.16E+02	1.55E+01	NA	NA	2.05E+00	NA	NA	5.74E+01
SB-02	Mercury	P	5.59E-01	1.19E-01	3.98E-02	1.83E-01	1.03E-02	2.58E-01	5.59E-02	1.74E-01
SB-02	Molybdenum	NP	1.15E+00	2.14E+00	NA	NA	1.66E-01	NA	NA	3.04E+00
SB-02	Nickel	NP	9.29E+01	5.55E+00	1.55E+00	6.28E+01	6.18E-01	3.99E-01	9.84E-03	9.60E+00
SB-02	Selenium	NP	3.87E-01	6.29E+00	2.30E-01	9.29E-01	4.81E-01	2.09E+00	5.18E-01	5.34E+00
SB-02	Silver	NP	4.91E-01	2.60E-02	NA	NA	3.01E-03	NA	NA	2.52E-01
SB-02	Vanadium	NP	1.21E+02	4.63E+00	NA	NA	6.07E-01	NA	NA	1.15E+01
SB-02	Zinc	NP	1.89E+02	6.98E+01	1.77E+01	1.77E+02	5.73E+00	3.24E-01	3.24E-02	1.26E+02
SB-02	HMW PAH	NP	1.65E+00	3.46E-01	NA	NA	2.99E-02	NA	NA	3.62E-01
SB-02	LMW PAH	NP	3.98E-01	1.72E-02	NA	NA	2.14E-03	NA	NA	4.21E-02
SB-02	Total PCBs	P	9.38E-01	1.09E+00	9.59E-02	1.16E+00	8.52E-02	8.89E-01	7.34E-02	6.86E-02
SB-02	Total 4,4'-DDx	P	3.54E-02	5.11E-02	7.14E-03	6.12E-01	3.97E-03	5.56E-01	6.50E-03	1.19E-02
SB-02	alpha-Chlordane	NP	5.36E-03	1.15E-02	NA	NA	8.90E-04	NA	NA	1.03E-03
SB-02	Dieldrin	NP	1.04E-02	1.50E-02	NA	NA	1.16E-03	NA	NA	1.57E-03
SB-02	Endosulfan II	NP	4.50E-05	2.35E-04	NA	NA	1.80E-05	NA	NA	ND
SB-02	Endrin	NP	4.00E-05	1.96E-04	NA	NA	1.50E-05	NA	NA	ND
SB-02	gamma-Chlordane	NP	1.05E-02	1.72E-02	NA	NA	1.33E-03	NA	NA	8.56E-04
SB-02	Heptachlor	NP	3.50E-05	1.96E-04	NA	NA	1.50E-05	NA	NA	ND
SB-02	Dibutyltin	NP	9.71E-03	5.88E-02	1.19E+00	7.46E+01	4.51E-03	3.80E-03	6.05E-05	1.26E-02
SB-02	Monobutyltin	NP	4.46E-04	1.86E-02	NA	NA	1.42E-03	NA	NA	NA
SB-02	Tetrabutyltin	NP	1.06E-03	4.23E-02	NA	NA	3.24E-03	NA	NA	NA
SB-02	Tributyltin	NP	1.11E-02	1.88E-02	1.19E+00	7.46E+01	1.46E-03	1.23E-03	1.95E-05	4.48E-02

STATION ID = SB-03

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-03	Aluminum	NP	7.32E+04	1.54E+03	NA	NA	2.71E+02	NA	NA	1.95E+03
SB-03	Antimony	NP	1.50E+00	1.73E-01	NA	NA	1.63E-02	NA	NA	1.87E-01
SB-03	Arsenic	NP	9.33E+00	1.76E+01	5.43E+00	2.17E+01	1.36E+00	2.51E-01	6.27E-02	2.29E+01
SB-03	Barium	NP	4.45E+02	1.56E+01	NA	NA	2.12E+00	NA	NA	2.02E+01
SB-03	Cadmium	NP	3.71E-01	1.82E-01	8.53E-02	1.74E+01	1.47E-02	1.72E-01	8.41E-04	3.69E-01
SB-03	Chromium	NP	1.71E+02	9.43E+00	NA	NA	1.08E+00	NA	NA	2.46E+01
SB-03	Cobalt	NP	1.53E+01	1.78E+00	NA	NA	1.68E-01	NA	NA	3.63E+00
SB-03	Copper	NP	7.44E+01	1.54E+01	2.56E+00	6.37E+01	1.33E+00	5.19E-01	2.09E-02	1.48E+01
SB-03	Iron	NP	4.58E+04	2.04E+03	NA	NA	2.52E+02	NA	NA	2.80E+03
SB-03	Lead	NP	6.93E+01	5.30E+00	2.34E-02	9.33E+00	5.50E-01	2.35E+01	5.89E-02	3.76E+00
SB-03	Manganese	NP	4.04E+02	1.88E+01	NA	NA	2.28E+00	NA	NA	5.74E+01
SB-03	Mercury	P	4.66E-01	1.18E-01	3.98E-02	1.83E-01	9.99E-03	2.51E-01	5.44E-02	1.74E-01
SB-03	Molybdenum	NP	1.27E+00	2.40E+00	NA	NA	1.86E-01	NA	NA	3.04E+00
SB-03	Nickel	NP	1.04E+02	7.00E+00	1.55E+00	6.28E+01	7.52E-01	4.85E-01	1.20E-02	9.60E+00
SB-03	Selenium	NP	4.10E-01	3.59E+00	2.30E-01	9.29E-01	2.75E-01	1.20E+00	2.96E-01	5.34E+00
SB-03	Silver	NP	4.25E-01	2.60E-02	NA	NA	2.87E-03	NA	NA	2.52E-01
SB-03	Vanadium	NP	1.31E+02	6.75E+00	NA	NA	7.89E-01	NA	NA	1.15E+01
SB-03	Zinc	NP	1.64E+02	8.42E+01	1.77E+01	1.77E+02	6.77E+00	3.83E-01	3.83E-02	1.26E+02
SB-03	HMW PAH	NP	7.99E-01	4.26E-01	NA	NA	3.42E-02	NA	NA	3.62E-01
SB-03	LMW PAH	NP	1.39E-01	2.68E-02	NA	NA	2.34E-03	NA	NA	4.21E-02
SB-03	Total PCBs	P	1.80E-01	8.41E-01	9.59E-02	1.16E+00	6.46E-02	6.74E-01	5.56E-02	6.86E-02
SB-03	Total 4,4'-DDx	P	4.46E-03	3.09E-02	7.14E-03	6.12E-01	2.37E-03	3.31E-01	3.87E-03	1.19E-02
SB-03	alpha-Chlordane	NP	6.70E-04	4.79E-03	NA	NA	3.67E-04	NA	NA	1.03E-03
SB-03	Dieldrin	NP	6.00E-05	5.13E-03	NA	NA	3.92E-04	NA	NA	1.57E-03
SB-03	Endosulfan II	NP	6.00E-05	2.43E-04	NA	NA	1.87E-05	NA	NA	ND
SB-03	Endrin	NP	5.50E-05	2.08E-04	NA	NA	1.60E-05	NA	NA	ND
SB-03	gamma-Chlordane	NP	5.40E-04	6.45E-03	NA	NA	4.94E-04	NA	NA	8.56E-04
SB-03	Heptachlor	NP	5.00E-05	2.08E-04	NA	NA	1.60E-05	NA	NA	ND
SB-03	Dibutyltin	NP	3.78E-03	9.50E-03	1.19E+00	7.46E+01	7.33E-04	6.17E-04	9.83E-06	1.26E-02
SB-03	Monobutyltin	NP	6.28E-04	1.71E-02	NA	NA	1.30E-03	NA	NA	NA
SB-03	Tetrabutyltin	NP	1.49E-03	3.89E-02	NA	NA	2.97E-03	NA	NA	NA
SB-03	Tributyltin	NP	3.08E-03	3.59E-02	1.19E+00	7.46E+01	2.75E-03	2.31E-03	3.69E-05	4.48E-02

Table H-40. Dose Assessment Results for Station SB-04 Using Depurated M. nasuta Data

STATION ID = SB-04

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-04	Aluminum	NP	7.40E+04	1.79E+03	NA	NA	2.91E+02	NA	NA	1.95E+03
SB-04	Antimony	NP	1.62E+00	1.56E-01	NA	NA	1.53E-02	NA	NA	1.87E-01
SB-04	Arsenic	NP	8.52E+00	1.96E+01	5.43E+00	2.17E+01	1.51E+00	2.79E-01	6.97E-02	2.29E+01
SB-04	Barium	NP	4.56E+02	1.46E+01	NA	NA	2.07E+00	NA	NA	2.02E+01
SB-04	Cadmium	NP	3.23E-01	1.83E-01	8.53E-02	1.74E+01	1.46E-02	1.72E-01	8.40E-04	3.69E-01
SB-04	Chromium	NP	1.85E+02	8.89E+00	NA	NA	1.07E+00	NA	NA	2.46E+01
SB-04	Cobalt	NP	1.53E+01	1.79E+00	NA	NA	1.69E-01	NA	NA	3.63E+00
SB-04	Copper	NP	7.40E+01	1.40E+01	2.56E+00	6.37E+01	1.22E+00	4.77E-01	1.92E-02	1.48E+01
SB-04	Iron	NP	4.65E+04	1.99E+03	NA	NA	2.49E+02	NA	NA	2.80E+03
SB-04	Lead	NP	6.72E+01	4.46E+00	2.34E-02	9.33E+00	4.81E-01	2.05E+01	5.16E-02	3.76E+00
SB-04	Manganese	NP	4.16E+02	1.80E+01	NA	NA	2.24E+00	NA	NA	5.74E+01
SB-04	Mercury	P	4.47E-01	1.29E-01	3.98E-02	1.83E-01	1.08E-02	2.71E-01	5.88E-02	1.74E-01
SB-04	Molybdenum	NP	1.13E+00	2.49E+00	NA	NA	1.93E-01	NA	NA	3.04E+00
SB-04	Nickel	NP	1.03E+02	5.69E+00	1.55E+00	6.28E+01	6.50E-01	4.19E-01	1.03E-02	9.60E+00
SB-04	Selenium	NP	3.86E-01	5.21E+00	2.30E-01	9.29E-01	3.99E-01	1.74E+00	4.29E-01	5.34E+00
SB-04	Silver	NP	4.55E-01	2.60E-02	NA	NA	2.94E-03	NA	NA	2.52E-01
SB-04	Vanadium	NP	1.30E+02	6.16E+00	NA	NA	7.42E-01	NA	NA	1.15E+01
SB-04	Zinc	NP	1.66E+02	9.89E+01	1.77E+01	1.77E+02	7.90E+00	4.46E-01	4.46E-02	1.26E+02
SB-04	HMW PAH	NP	1.02E+00	2.78E-01	NA	NA	2.34E-02	NA	NA	3.62E-01
SB-04	LMW PAH	NP	1.69E-01	1.32E-02	NA	NA	1.36E-03	NA	NA	4.21E-02
SB-04	Total PCBs	P	3.14E-01	6.59E-01	9.59E-02	1.16E+00	5.10E-02	5.31E-01	4.39E-02	6.86E-02
SB-04	Total 4,4'-DDx	P	6.91E-03	2.26E-02	7.14E-03	6.12E-01	1.74E-03	2.43E-01	2.84E-03	1.19E-02
SB-04	alpha-Chlordane	NP	9.70E-04	3.27E-03	NA	NA	2.52E-04	NA	NA	1.03E-03
SB-04	Dieldrin	NP	8.30E-04	3.16E-03	NA	NA	2.43E-04	NA	NA	1.57E-03
SB-04	Endosulfan II	NP	5.50E-05	2.54E-04	NA	NA	1.95E-05	NA	NA	ND
SB-04	Endrin	NP	5.00E-05	2.26E-04	NA	NA	1.73E-05	NA	NA	ND
SB-04	gamma-Chlordane	NP	9.80E-04	4.17E-03	NA	NA	3.20E-04	NA	NA	8.56E-04
SB-04	Heptachlor	NP	4.50E-05	1.97E-04	NA	NA	1.52E-05	NA	NA	ND
SB-04	Dibutyltin	NP	1.26E-02	7.85E-03	1.19E+00	7.46E+01	6.26E-04	5.27E-04	8.39E-06	1.26E-02
SB-04	Monobutyltin	NP	6.08E-04	2.02E-02	NA	NA	1.55E-03	NA	NA	NA
SB-04	Tetrabutyltin	NP	1.44E-03	4.61E-02	NA	NA	3.53E-03	NA	NA	NA
SB-04	Tributyltin	NP	1.25E-02	2.47E-02	1.19E+00	7.46E+01	1.91E-03	1.61E-03	2.56E-05	4.48E-02

STATION ID = SB-05

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-05	Aluminum	NP	7.39E+04	1.92E+03	NA	NA	3.01E+02	NA	NA	1.95E+03
SB-05	Antimony	NP	1.56E+00	1.54E-01	NA	NA	1.50E-02	NA	NA	1.87E-01
SB-05	Arsenic	NP	1.13E+01	1.62E+01	5.43E+00	2.17E+01	1.26E+00	2.32E-01	5.80E-02	2.29E+01
SB-05	Barium	NP	4.58E+02	1.62E+01	NA	NA	2.19E+00	NA	NA	2.02E+01
SB-05	Cadmium	NP	4.13E-01	1.47E-01	8.53E-02	1.74E+01	1.21E-02	1.42E-01	6.93E-04	3.69E-01
SB-05	Chromium	NP	1.89E+02	7.94E+00	NA	NA	1.00E+00	NA	NA	2.46E+01
SB-05	Cobalt	NP	1.78E+01	1.67E+00	NA	NA	1.65E-01	NA	NA	3.63E+00
SB-05	Copper	NP	7.80E+01	1.74E+01	2.56E+00	6.37E+01	1.49E+00	5.82E-01	2.34E-02	1.48E+01
SB-05	Iron	NP	4.72E+04	2.01E+03	NA	NA	2.52E+02	NA	NA	2.80E+03
SB-05	Lead	NP	6.54E+01	4.73E+00	2.34E-02	9.33E+00	4.98E-01	2.13E+01	5.34E-02	3.76E+00
SB-05	Manganese	NP	4.12E+02	2.07E+01	NA	NA	2.44E+00	NA	NA	5.74E+01
SB-05	Mercury	P	5.95E-01	1.15E-01	3.98E-02	1.83E-01	1.00E-02	2.52E-01	5.46E-02	1.74E-01
SB-05	Molybdenum	NP	1.47E+00	2.96E+00	NA	NA	2.29E-01	NA	NA	3.04E+00
SB-05	Nickel	NP	1.05E+02	7.21E+00	1.55E+00	6.28E+01	7.70E-01	4.97E-01	1.23E-02	9.60E+00
SB-05	Selenium	NP	4.44E-01	4.50E+00	2.30E-01	9.29E-01	3.45E-01	1.50E+00	3.71E-01	5.34E+00
SB-05	Silver	NP	5.44E-01	2.60E-02	NA	NA	3.12E-03	NA	NA	2.52E-01
SB-05	Vanadium	NP	1.57E+02	6.67E+00	NA	NA	8.38E-01	NA	NA	1.15E+01
SB-05	Zinc	NP	2.05E+02	9.23E+01	1.77E+01	1.77E+02	7.48E+00	4.23E-01	4.23E-02	1.26E+02
SB-05	HMW PAH	NP	8.59E-01	2.77E-01	NA	NA	2.30E-02	NA	NA	3.62E-01
SB-05	LMW PAH	NP	1.36E-01	1.11E-02	NA	NA	1.13E-03	NA	NA	4.21E-02
SB-05	Total PCBs	P	2.80E-01	6.22E-01	9.59E-02	1.16E+00	4.81E-02	5.02E-01	4.14E-02	6.86E-02
SB-05	Total 4,4'-DDx	P	5.50E-03	2.00E-02	7.14E-03	6.12E-01	1.54E-03	2.15E-01	2.51E-03	1.19E-02
SB-05	alpha-Chlordane	NP	9.40E-04	2.35E-03	NA	NA	1.81E-04	NA	NA	1.03E-03
SB-05	Dieldrin	NP	6.00E-05	1.85E-04	NA	NA	1.43E-05	NA	NA	1.57E-03
SB-05	Endosulfan II	NP	6.00E-05	1.85E-04	NA	NA	1.43E-05	NA	NA	ND
SB-05	Endrin	NP	5.50E-05	1.55E-04	NA	NA	1.19E-05	NA	NA	ND
SB-05	gamma-Chlordane	NP	1.10E-03	2.90E-03	NA	NA	2.24E-04	NA	NA	8.56E-04
SB-05	Heptachlor	NP	5.00E-05	1.55E-04	NA	NA	1.19E-05	NA	NA	ND
SB-05	Dibutyltin	NP	1.58E-02	6.37E-03	1.19E+00	7.46E+01	5.20E-04	4.37E-04	6.96E-06	1.26E-02
SB-05	Monobutyltin	NP	6.31E-04	1.55E-02	NA	NA	1.19E-03	NA	NA	NA
SB-05	Tetrabutyltin	NP	1.50E-03	3.53E-02	NA	NA	2.70E-03	NA	NA	NA
SB-05	Tributyltin	NP	1.32E-02	1.31E-02	1.19E+00	7.46E+01	1.02E-03	8.63E-04	1.37E-05	4.48E-02

STATION ID = SB-06

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-06	Aluminum	NP	7.16E+04	1.43E+03	NA	NA	2.59E+02	NA	NA	1.95E+03
SB-06	Antimony	NP	1.73E+00	1.96E-01	NA	NA	1.86E-02	NA	NA	1.87E-01
SB-06	Arsenic	NP	1.08E+01	2.25E+01	5.43E+00	2.17E+01	1.74E+00	3.21E-01	8.01E-02	2.29E+01
SB-06	Barium	NP	4.00E+02	1.37E+01	NA	NA	1.88E+00	NA	NA	2.02E+01
SB-06	Cadmium	NP	3.60E-01	3.36E-01	8.53E-02	1.74E+01	2.64E-02	3.10E-01	1.51E-03	3.69E-01
SB-06	Chromium	NP	1.98E+02	6.45E+00	NA	NA	9.07E-01	NA	NA	2.46E+01
SB-06	Cobalt	NP	1.72E+01	2.18E+00	NA	NA	2.02E-01	NA	NA	3.63E+00
SB-06	Copper	NP	7.69E+01	1.41E+01	2.56E+00	6.37E+01	1.24E+00	4.83E-01	1.94E-02	1.48E+01
SB-06	Iron	NP	4.68E+04	1.96E+03	NA	NA	2.48E+02	NA	NA	2.80E+03
SB-06	Lead	NP	6.53E+01	5.31E+00	2.34E-02	9.33E+00	5.42E-01	2.31E+01	5.81E-02	3.76E+00
SB-06	Manganese	NP	4.31E+02	1.84E+01	NA	NA	2.31E+00	NA	NA	5.74E+01
SB-06	Mercury	P	4.97E-01	1.53E-01	3.98E-02	1.83E-01	1.27E-02	3.20E-01	6.93E-02	1.74E-01
SB-06	Molybdenum	NP	1.05E+00	3.20E+00	NA	NA	2.47E-01	NA	NA	3.04E+00
SB-06	Nickel	NP	1.04E+02	6.90E+00	1.55E+00	6.28E+01	7.44E-01	4.80E-01	1.19E-02	9.60E+00
SB-06	Selenium	NP	3.22E-01	3.60E+00	2.30E-01	9.29E-01	2.76E-01	1.20E+00	2.97E-01	5.34E+00
SB-06	Silver	NP	5.66E-01	2.60E-02	NA	NA	3.17E-03	NA	NA	2.52E-01
SB-06	Vanadium	NP	1.53E+02	6.28E+00	NA	NA	7.99E-01	NA	NA	1.15E+01
SB-06	Zinc	NP	1.85E+02	1.35E+02	1.77E+01	1.77E+02	1.07E+01	6.05E-01	6.05E-02	1.26E+02
SB-06	HMW PAH	NP	2.62E-01	4.22E-01	NA	NA	3.28E-02	NA	NA	3.62E-01
SB-06	LMW PAH	NP	3.87E-02	2.67E-02	NA	NA	2.12E-03	NA	NA	4.21E-02
SB-06	Total PCBs	P	1.13E-01	1.02E+00	9.59E-02	1.16E+00	7.84E-02	8.18E-01	6.75E-02	6.86E-02
SB-06	Total 4,4'-DDx	P	2.45E-03	3.16E-02	7.14E-03	6.12E-01	2.42E-03	3.39E-01	3.96E-03	1.19E-02
SB-06	alpha-Chlordane	NP	2.00E-04	2.61E-03	NA	NA	2.00E-04	NA	NA	1.03E-03
SB-06	Dieldrin	NP	6.00E-05	2.74E-03	NA	NA	2.09E-04	NA	NA	1.57E-03
SB-06	Endosulfan II	NP	6.50E-05	3.50E-04	NA	NA	2.69E-05	NA	NA	ND
SB-06	Endrin	NP	5.50E-05	2.86E-04	NA	NA	2.20E-05	NA	NA	ND
SB-06	gamma-Chlordane	NP	1.70E-04	3.31E-03	NA	NA	2.53E-04	NA	NA	8.56E-04
SB-06	Heptachlor	NP	5.00E-05	2.86E-04	NA	NA	2.20E-05	NA	NA	ND
SB-06	Dibutyltin	NP	1.14E-02	1.15E-02	1.19E+00	7.46E+01	9.01E-04	7.59E-04	1.21E-05	1.26E-02
SB-06	Monobutyltin	NP	6.52E-04	1.84E-02	NA	NA	1.40E-03	NA	NA	NA
SB-06	Tetrabutyltin	NP	1.55E-03	4.19E-02	NA	NA	3.20E-03	NA	NA	NA
SB-06	Tributyltin	NP	1.50E-02	4.26E-02	1.19E+00	7.46E+01	3.28E-03	2.76E-03	4.40E-05	4.48E-02

STATION ID = SB-07

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-07	Aluminum	NP	7.05E+04	1.15E+03	NA	NA	2.35E+02	NA	NA	1.95E+03
SB-07	Antimony	NP	2.08E+00	1.29E-01	NA	NA	1.42E-02	NA	NA	1.87E-01
SB-07	Arsenic	NP	1.06E+01	1.75E+01	5.43E+00	2.17E+01	1.36E+00	2.50E-01	6.25E-02	2.29E+01
SB-07	Barium	NP	4.75E+02	1.10E+01	NA	NA	1.83E+00	NA	NA	2.02E+01
SB-07	Cadmium	NP	4.67E-01	2.24E-01	8.53E-02	1.74E+01	1.81E-02	2.12E-01	1.04E-03	3.69E-01
SB-07	Chromium	NP	2.09E+02	7.30E+00	NA	NA	9.94E-01	NA	NA	2.46E+01
SB-07	Cobalt	NP	1.55E+01	1.91E+00	NA	NA	1.78E-01	NA	NA	3.63E+00
SB-07	Copper	NP	8.01E+01	1.63E+01	2.56E+00	6.37E+01	1.41E+00	5.51E-01	2.22E-02	1.48E+01
SB-07	Iron	NP	4.56E+04	1.65E+03	NA	NA	2.21E+02	NA	NA	2.80E+03
SB-07	Lead	NP	8.89E+01	5.66E+00	2.34E-02	9.33E+00	6.18E-01	2.64E+01	6.63E-02	3.76E+00
SB-07	Manganese	NP	4.30E+02	1.64E+01	NA	NA	2.15E+00	NA	NA	5.74E+01
SB-07	Mercury	P	6.47E-01	8.15E-04	3.98E-02	1.83E-01	1.42E-03	3.56E-02	7.71E-03	1.74E-01
SB-07	Molybdenum	NP	1.34E+00	2.41E+00	NA	NA	1.87E-01	NA	NA	3.04E+00
SB-07	Nickel	NP	1.04E+02	6.22E+00	1.55E+00	6.28E+01	6.92E-01	4.46E-01	1.10E-02	9.60E+00
SB-07	Selenium	NP	3.64E-01	5.23E+00	2.30E-01	9.29E-01	4.00E-01	1.74E+00	4.31E-01	5.34E+00
SB-07	Silver	NP	5.04E-01	2.38E-01	NA	NA	1.92E-02	NA	NA	2.52E-01
SB-07	Vanadium	NP	1.26E+02	5.35E+00	NA	NA	6.72E-01	NA	NA	1.15E+01
SB-07	Zinc	NP	1.86E+02	6.71E+01	1.77E+01	1.77E+02	5.51E+00	3.12E-01	3.12E-02	1.26E+02
SB-07	HMW PAH	NP	1.25E+00	2.94E-01	NA	NA	2.50E-02	NA	NA	3.62E-01
SB-07	LMW PAH	NP	2.67E-01	2.06E-02	NA	NA	2.13E-03	NA	NA	4.21E-02
SB-07	Total PCBs	P	4.25E-01	7.85E-01	9.59E-02	1.16E+00	6.08E-02	6.34E-01	5.23E-02	6.86E-02
SB-07	Total 4,4'-DDx	P	9.49E-03	2.47E-02	7.14E-03	6.12E-01	1.91E-03	2.67E-01	3.12E-03	1.19E-02
SB-07	alpha-Chlordane	NP	1.28E-03	3.36E-03	NA	NA	2.59E-04	NA	NA	1.03E-03
SB-07	Dieldrin	NP	1.33E-03	2.88E-03	NA	NA	2.23E-04	NA	NA	1.57E-03
SB-07	Endosulfan II	NP	5.00E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
SB-07	Endrin	NP	4.50E-05	1.80E-04	NA	NA	1.38E-05	NA	NA	ND
SB-07	gamma-Chlordane	NP	1.70E-03	4.56E-03	NA	NA	3.52E-04	NA	NA	8.56E-04
SB-07	Heptachlor	NP	4.50E-05	1.80E-04	NA	NA	1.38E-05	NA	NA	ND
SB-07	Dibutyltin	NP	1.01E-02	1.08E-02	1.19E+00	7.46E+01	8.48E-04	7.14E-04	1.14E-05	1.26E-02
SB-07	Monobutyltin	NP	5.58E-04	1.48E-02	NA	NA	1.13E-03	NA	NA	NA
SB-07	Tetrabutyltin	NP	1.32E-03	3.37E-02	NA	NA	2.58E-03	NA	NA	NA
SB-07	Tributyltin	NP	1.26E-02	2.56E-02	1.19E+00	7.46E+01	1.98E-03	1.67E-03	2.66E-05	4.48E-02

STATION ID = SB-08

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-08	Aluminum	NP	7.41E+04	2.48E+03	NA	NA	3.44E+02	NA	NA	1.95E+03
SB-08	Antimony	NP	2.20E+00	3.07E-01	NA	NA	2.80E-02	NA	NA	1.87E-01
SB-08	Arsenic	NP	1.17E+01	1.94E+01	5.43E+00	2.17E+01	1.51E+00	2.77E-01	6.93E-02	2.29E+01
SB-08	Barium	NP	4.34E+02	1.86E+01	NA	NA	2.33E+00	NA	NA	2.02E+01
SB-08	Cadmium	NP	3.48E-01	2.55E-01	8.53E-02	1.74E+01	2.02E-02	2.37E-01	1.16E-03	3.69E-01
SB-08	Chromium	NP	2.02E+02	1.02E+01	NA	NA	1.20E+00	NA	NA	2.46E+01
SB-08	Cobalt	NP	1.71E+01	2.04E+00	NA	NA	1.92E-01	NA	NA	3.63E+00
SB-08	Copper	NP	8.09E+01	1.64E+01	2.56E+00	6.37E+01	1.42E+00	5.54E-01	2.23E-02	1.48E+01
SB-08	Iron	NP	4.78E+04	2.42E+03	NA	NA	2.85E+02	NA	NA	2.80E+03
SB-08	Lead	NP	7.64E+01	6.34E+00	2.34E-02	9.33E+00	6.44E-01	2.75E+01	6.90E-02	3.76E+00
SB-08	Manganese	NP	4.39E+02	2.09E+01	NA	NA	2.51E+00	NA	NA	5.74E+01
SB-08	Mercury	P	4.91E-01	1.21E-01	3.98E-02	1.83E-01	1.03E-02	2.58E-01	5.60E-02	1.74E-01
SB-08	Molybdenum	NP	9.63E-01	2.53E+00	NA	NA	1.95E-01	NA	NA	3.04E+00
SB-08	Nickel	NP	1.07E+02	7.37E+00	1.55E+00	6.28E+01	7.87E-01	5.07E-01	1.25E-02	9.60E+00
SB-08	Selenium	NP	3.21E-01	4.03E+00	2.30E-01	9.29E-01	3.08E-01	1.34E+00	3.32E-01	5.34E+00
SB-08	Silver	NP	5.38E-01	2.60E-02	NA	NA	3.11E-03	NA	NA	2.52E-01
SB-08	Vanadium	NP	1.51E+02	7.64E+00	NA	NA	8.99E-01	NA	NA	1.15E+01
SB-08	Zinc	NP	1.82E+02	9.80E+01	1.77E+01	1.77E+02	7.86E+00	4.44E-01	4.44E-02	1.26E+02
SB-08	HMW PAH	NP	9.48E-01	5.29E-01	NA	NA	4.24E-02	NA	NA	3.62E-01
SB-08	LMW PAH	NP	1.62E-01	2.11E-02	NA	NA	1.95E-03	NA	NA	4.21E-02
SB-08	Total PCBs	P	3.70E-01	1.07E+00	9.59E-02	1.16E+00	8.26E-02	8.61E-01	7.11E-02	6.86E-02
SB-08	Total 4,4'-DDx	P	8.03E-03	3.59E-02	7.14E-03	6.12E-01	2.76E-03	3.86E-01	4.51E-03	1.19E-02
SB-08	alpha-Chlordane	NP	9.50E-04	2.66E-03	NA	NA	2.05E-04	NA	NA	1.03E-03
SB-08	Dieldrin	NP	8.50E-04	4.14E-03	NA	NA	3.18E-04	NA	NA	1.57E-03
SB-08	Endosulfan II	NP	6.00E-05	2.16E-04	NA	NA	1.67E-05	NA	NA	ND
SB-08	Endrin	NP	5.00E-05	1.86E-04	NA	NA	1.43E-05	NA	NA	ND
SB-08	gamma-Chlordane	NP	9.50E-04	3.90E-03	NA	NA	3.00E-04	NA	NA	8.56E-04
SB-08	Heptachlor	NP	5.00E-05	1.86E-04	NA	NA	1.43E-05	NA	NA	ND
SB-08	Dibutyltin	NP	1.23E-02	1.23E-02	1.19E+00	7.46E+01	9.68E-04	8.15E-04	1.30E-05	1.26E-02
SB-08	Monobutyltin	NP	6.07E-04	1.82E-02	NA	NA	1.39E-03	NA	NA	NA
SB-08	Tetrabutyltin	NP	1.44E-03	4.14E-02	NA	NA	3.16E-03	NA	NA	NA
SB-08	Tributyltin	NP	1.70E-02	3.31E-02	1.19E+00	7.46E+01	2.57E-03	2.16E-03	3.44E-05	4.48E-02

Table H-45. Dose Assessment Results for Station SB-09 Using Depurated M. nasuta Data

STATION ID = SB-09

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-09	Aluminum	NP	5.75E+04	1.49E+03	NA	NA	2.34E+02	NA	NA	1.95E+03
SB-09	Antimony	NP	4.55E+00	1.83E-01	NA	NA	2.35E-02	NA	NA	1.87E-01
SB-09	Arsenic	NP	1.05E+01	1.53E+01	5.43E+00	2.17E+01	1.19E+00	2.19E-01	5.48E-02	2.29E+01
SB-09	Barium	NP	5.43E+02	2.25E+01	NA	NA	2.85E+00	NA	NA	2.02E+01
SB-09	Cadmium	NP	6.24E-01	2.44E-01	8.53E-02	1.74E+01	1.99E-02	2.34E-01	1.14E-03	3.69E-01
SB-09	Chromium	NP	2.19E+02	1.48E+01	NA	NA	1.59E+00	NA	NA	2.46E+01
SB-09	Cobalt	NP	1.42E+01	1.83E+00	NA	NA	1.69E-01	NA	NA	3.63E+00
SB-09	Copper	NP	7.55E+01	1.79E+01	2.56E+00	6.37E+01	1.52E+00	5.95E-01	2.39E-02	1.48E+01
SB-09	Iron	NP	3.56E+04	2.67E+03	NA	NA	2.78E+02	NA	NA	2.80E+03
SB-09	Lead	NP	1.18E+02	9.09E+00	2.34E-02	9.33E+00	9.41E-01	4.02E+01	1.01E-01	3.76E+00
SB-09	Manganese	NP	4.68E+02	3.52E+01	NA	NA	3.67E+00	NA	NA	5.74E+01
SB-09	Mercury	P	2.66E-01	9.10E-02	3.98E-02	1.83E-01	7.51E-03	1.89E-01	4.09E-02	1.74E-01
SB-09	Molybdenum	NP	1.83E+00	2.56E+00	NA	NA	1.99E-01	NA	NA	3.04E+00
SB-09	Nickel	NP	8.16E+01	7.61E+00	1.55E+00	6.28E+01	7.52E-01	4.85E-01	1.20E-02	9.60E+00
SB-09	Selenium	NP	3.04E-01	4.46E+00	2.30E-01	9.29E-01	3.41E-01	1.49E+00	3.67E-01	5.34E+00
SB-09	Silver	NP	4.23E-01	2.60E-02	NA	NA	2.87E-03	NA	NA	2.52E-01
SB-09	Vanadium	NP	1.06E+02	9.41E+00	NA	NA	9.40E-01	NA	NA	1.15E+01
SB-09	Zinc	NP	2.10E+02	8.93E+01	1.77E+01	1.77E+02	7.26E+00	4.10E-01	4.10E-02	1.26E+02
SB-09	HMW PAH	NP	7.20E-01	7.02E-01	NA	NA	5.51E-02	NA	NA	3.62E-01
SB-09	LMW PAH	NP	1.45E-01	3.51E-02	NA	NA	2.99E-03	NA	NA	4.21E-02
SB-09	Total PCBs	P	3.52E-01	1.06E+00	9.59E-02	1.16E+00	8.16E-02	8.51E-01	7.03E-02	6.86E-02
SB-09	Total 4,4'-DDx	P	8.44E-03	7.15E-02	7.14E-03	6.12E-01	5.48E-03	7.67E-01	8.96E-03	1.19E-02
SB-09	alpha-Chlordane	NP	4.10E-04	2.38E-03	NA	NA	1.83E-04	NA	NA	1.03E-03
SB-09	Dieldrin	NP	3.50E-05	1.93E-03	NA	NA	1.47E-04	NA	NA	1.57E-03
SB-09	Endosulfan II	NP	4.00E-05	1.42E-04	NA	NA	1.09E-05	NA	NA	ND
SB-09	Endrin	NP	3.50E-05	1.14E-04	NA	NA	8.74E-06	NA	NA	ND
SB-09	gamma-Chlordane	NP	7.10E-04	3.58E-03	NA	NA	2.75E-04	NA	NA	8.56E-04
SB-09	Heptachlor	NP	3.00E-05	1.14E-04	NA	NA	8.73E-06	NA	NA	ND
SB-09	Dibutyltin	NP	3.00E-03	8.92E-03	1.19E+00	7.46E+01	6.87E-04	5.79E-04	9.22E-06	1.26E-02
SB-09	Monobutyltin	NP	3.84E-04	1.35E-02	NA	NA	1.03E-03	NA	NA	NA
SB-09	Tetrabutyltin	NP	9.10E-04	3.08E-02	NA	NA	2.35E-03	NA	NA	NA
SB-09	Tributyltin	NP	3.46E-03	2.63E-02	1.19E+00	7.46E+01	2.01E-03	1.69E-03	2.70E-05	4.48E-02

Table H-46. Dose Assessment Results for Station SB-10 Using Depurated M. nasuta Data

STATION ID = SB-10

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-10	Aluminum	NP	6.21E+04	2.64E+03	NA	NA	3.31E+02	NA	NA	1.95E+03
SB-10	Antimony	NP	8.24E-01	1.33E+00	NA	NA	1.03E-01	NA	NA	1.87E-01
SB-10	Arsenic	NP	1.43E+01	1.76E+01	5.43E+00	2.17E+01	1.37E+00	2.53E-01	6.32E-02	2.29E+01
SB-10	Barium	NP	5.60E+02	3.47E+01	NA	NA	3.82E+00	NA	NA	2.02E+01
SB-10	Cadmium	NP	2.19E-01	2.76E-01	8.53E-02	1.74E+01	2.15E-02	2.52E-01	1.23E-03	3.69E-01
SB-10	Chromium	NP	2.51E+02	2.02E+01	NA	NA	2.07E+00	NA	NA	2.46E+01
SB-10	Cobalt	NP	2.17E+01	2.28E+00	NA	NA	2.19E-01	NA	NA	3.63E+00
SB-10	Copper	NP	1.10E+02	2.51E+01	2.56E+00	6.37E+01	2.15E+00	8.37E-01	3.37E-02	1.48E+01
SB-10	Iron	NP	3.82E+04	3.61E+03	NA	NA	3.56E+02	NA	NA	2.80E+03
SB-10	Lead	NP	2.93E+01	1.35E+01	2.34E-02	9.33E+00	1.09E+00	4.66E+01	1.17E-01	3.76E+00
SB-10	Manganese	NP	4.65E+02	3.71E+01	NA	NA	3.81E+00	NA	NA	5.74E+01
SB-10	Mercury	P	1.32E+00	1.67E-01	3.98E-02	1.83E-01	1.55E-02	3.90E-01	8.46E-02	1.74E-01
SB-10	Molybdenum	NP	1.08E+00	2.55E+00	NA	NA	1.97E-01	NA	NA	3.04E+00
SB-10	Nickel	NP	1.28E+02	1.06E+01	1.55E+00	6.28E+01	1.08E+00	6.95E-01	1.71E-02	9.60E+00
SB-10	Selenium	NP	3.78E-01	5.02E+00	2.30E-01	9.29E-01	3.84E-01	1.67E+00	4.14E-01	5.34E+00
SB-10	Silver	NP	3.15E-01	2.60E-02	NA	NA	2.64E-03	NA	NA	2.52E-01
SB-10	Vanadium	NP	1.54E+02	1.06E+01	NA	NA	1.13E+00	NA	NA	1.15E+01
SB-10	Zinc	NP	2.42E+02	8.38E+01	1.77E+01	1.77E+02	6.91E+00	3.90E-01	3.90E-02	1.26E+02
SB-10	HMW PAH	NP	1.50E+00	6.90E-01	NA	NA	5.58E-02	NA	NA	3.62E-01
SB-10	LMW PAH	NP	3.88E-01	4.70E-02	NA	NA	4.40E-03	NA	NA	4.21E-02
SB-10	Total PCBs	P	7.23E-01	1.32E+00	9.59E-02	1.16E+00	1.02E-01	1.07E+00	8.82E-02	6.86E-02
SB-10	Total 4,4'-DDx	P	1.79E-02	6.07E-02	7.14E-03	6.12E-01	4.67E-03	6.55E-01	7.64E-03	1.19E-02
SB-10	alpha-Chlordane	NP	1.32E-03	3.45E-03	NA	NA	2.66E-04	NA	NA	1.03E-03
SB-10	Dieldrin	NP	2.27E-03	4.62E-03	NA	NA	3.58E-04	NA	NA	1.57E-03
SB-10	Endosulfan II	NP	4.00E-05	2.60E-04	NA	NA	1.99E-05	NA	NA	ND
SB-10	Endrin	NP	3.50E-05	2.28E-04	NA	NA	1.75E-05	NA	NA	ND
SB-10	gamma-Chlordane	NP	2.50E-03	5.33E-03	NA	NA	4.12E-04	NA	NA	8.56E-04
SB-10	Heptachlor	NP	3.50E-05	1.95E-04	NA	NA	1.50E-05	NA	NA	ND
SB-10	Dibutyltin	NP	9.74E-03	1.01E-02	1.19E+00	7.46E+01	7.92E-04	6.67E-04	1.06E-05	1.26E-02
SB-10	Monobutyltin	NP	4.48E-04	1.57E-02	NA	NA	1.20E-03	NA	NA	NA
SB-10	Tetrabutyltin	NP	1.06E-03	3.58E-02	NA	NA	2.74E-03	NA	NA	NA
SB-10	Tributyltin	NP	1.18E-02	2.98E-02	1.19E+00	7.46E+01	2.30E-03	1.94E-03	3.08E-05	4.48E-02

STATION ID = SB-11

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-11	Aluminum	NP	6.96E+04	1.73E+03	NA	NA	2.78E+02	NA	NA	1.95E+03
SB-11	Antimony	NP	3.46E+00	2.45E-01	NA	NA	2.59E-02	NA	NA	1.87E-01
SB-11	Arsenic	NP	1.31E+01	2.22E+01	5.43E+00	2.17E+01	1.72E+00	3.17E-01	7.93E-02	2.29E+01
SB-11	Barium	NP	5.14E+02	1.86E+01	NA	NA	2.50E+00	NA	NA	2.02E+01
SB-11	Cadmium	NP	6.36E-01	2.79E-01	8.53E-02	1.74E+01	2.26E-02	2.65E-01	1.30E-03	3.69E-01
SB-11	Chromium	NP	2.32E+02	1.23E+01	NA	NA	1.42E+00	NA	NA	2.46E+01
SB-11	Cobalt	NP	1.85E+01	2.22E+00	NA	NA	2.08E-01	NA	NA	3.63E+00
SB-11	Copper	NP	1.11E+02	1.91E+01	2.56E+00	6.37E+01	1.69E+00	6.59E-01	2.65E-02	1.48E+01
SB-11	Iron	NP	4.36E+04	2.34E+03	NA	NA	2.70E+02	NA	NA	2.80E+03
SB-11	Lead	NP	1.14E+02	8.77E+00	2.34E-02	9.33E+00	9.08E-01	3.88E+01	9.74E-02	3.76E+00
SB-11	Manganese	NP	4.51E+02	2.71E+01	NA	NA	3.01E+00	NA	NA	5.74E+01
SB-11	Mercury	P	7.19E-01	8.15E-04	3.98E-02	1.83E-01	1.57E-03	3.94E-02	8.53E-03	1.74E-01
SB-11	Molybdenum	NP	1.39E+00	2.61E+00	NA	NA	2.02E-01	NA	NA	3.04E+00
SB-11	Nickel	NP	1.09E+02	7.68E+00	1.55E+00	6.28E+01	8.14E-01	5.25E-01	1.30E-02	9.60E+00
SB-11	Selenium	NP	4.11E-01	3.96E+00	2.30E-01	9.29E-01	3.03E-01	1.32E+00	3.27E-01	5.34E+00
SB-11	Silver	NP	7.09E-01	2.20E-01	NA	NA	1.83E-02	NA	NA	2.52E-01
SB-11	Vanadium	NP	1.52E+02	7.34E+00	NA	NA	8.78E-01	NA	NA	1.15E+01
SB-11	Zinc	NP	2.21E+02	1.02E+02	1.77E+01	1.77E+02	8.25E+00	4.66E-01	4.66E-02	1.26E+02
SB-11	HMW PAH	NP	1.35E+00	5.43E-01	NA	NA	4.42E-02	NA	NA	3.62E-01
SB-11	LMW PAH	NP	2.48E-01	2.96E-02	NA	NA	2.78E-03	NA	NA	4.21E-02
SB-11	Total PCBs	P	1.11E+00	2.20E+00	9.59E-02	1.16E+00	1.70E-01	1.77E+00	1.46E-01	6.86E-02
SB-11	Total 4,4'-DDx	P	1.72E-02	7.46E-02	7.14E-03	6.12E-01	5.73E-03	8.03E-01	9.38E-03	1.19E-02
SB-11	alpha-Chlordane	NP	1.67E-03	5.08E-03	NA	NA	3.91E-04	NA	NA	1.03E-03
SB-11	Dieldrin	NP	2.79E-03	9.39E-03	NA	NA	7.23E-04	NA	NA	1.57E-03
SB-11	Endosulfan II	NP	5.50E-05	2.78E-04	NA	NA	2.14E-05	NA	NA	ND
SB-11	Endrin	NP	4.50E-05	2.43E-04	NA	NA	1.87E-05	NA	NA	ND
SB-11	gamma-Chlordane	NP	3.01E-03	7.58E-03	NA	NA	5.85E-04	NA	NA	8.56E-04
SB-11	Heptachlor	NP	4.50E-05	2.09E-04	NA	NA	1.60E-05	NA	NA	ND
SB-11	Dibutyltin	NP	1.68E-02	1.08E-02	1.19E+00	7.46E+01	8.56E-04	7.21E-04	1.15E-05	1.26E-02
SB-11	Monobutyltin	NP	5.63E-04	2.01E-02	NA	NA	1.54E-03	NA	NA	NA
SB-11	Tetrabutyltin	NP	1.33E-03	4.59E-02	NA	NA	3.51E-03	NA	NA	NA
SB-11	Tributyltin	NP	1.61E-02	3.42E-02	1.19E+00	7.46E+01	2.65E-03	2.23E-03	3.55E-05	4.48E-02

STATION ID = SB-12

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-12	Aluminum	NP	7.11E+04	1.46E+03	NA	NA	2.60E+02	NA	NA	1.95E+03
SB-12	Antimony	NP	2.69E+00	1.51E-01	NA	NA	1.72E-02	NA	NA	1.87E-01
SB-12	Arsenic	NP	1.25E+01	1.67E+01	5.43E+00	2.17E+01	1.30E+00	2.40E-01	5.99E-02	2.29E+01
SB-12	Barium	NP	4.83E+02	1.21E+01	NA	NA	1.93E+00	NA	NA	2.02E+01
SB-12	Cadmium	NP	5.22E-01	2.63E-01	8.53E-02	1.74E+01	2.12E-02	2.48E-01	1.21E-03	3.69E-01
SB-12	Chromium	NP	2.12E+02	7.48E+00	NA	NA	1.01E+00	NA	NA	2.46E+01
SB-12	Cobalt	NP	1.75E+01	1.85E+00	NA	NA	1.78E-01	NA	NA	3.63E+00
SB-12	Copper	NP	9.55E+01	1.45E+01	2.56E+00	6.37E+01	1.31E+00	5.10E-01	2.05E-02	1.48E+01
SB-12	Iron	NP	4.50E+04	1.66E+03	NA	NA	2.21E+02	NA	NA	2.80E+03
SB-12	Lead	NP	9.08E+01	6.25E+00	2.34E-02	9.33E+00	6.67E-01	2.85E+01	7.15E-02	3.76E+00
SB-12	Manganese	NP	4.40E+02	1.57E+01	NA	NA	2.12E+00	NA	NA	5.74E+01
SB-12	Mercury	P	6.20E-01	1.10E-01	3.98E-02	1.83E-01	9.70E-03	2.44E-01	5.29E-02	1.74E-01
SB-12	Molybdenum	NP	1.09E+00	2.09E+00	NA	NA	1.62E-01	NA	NA	3.04E+00
SB-12	Nickel	NP	1.07E+02	5.56E+00	1.55E+00	6.28E+01	6.48E-01	4.18E-01	1.03E-02	9.60E+00
SB-12	Selenium	NP	4.18E-01	4.25E+00	2.30E-01	9.29E-01	3.25E-01	1.42E+00	3.50E-01	5.34E+00
SB-12	Silver	NP	6.15E-01	2.60E-02	NA	NA	3.27E-03	NA	NA	2.52E-01
SB-12	Vanadium	NP	1.46E+02	4.90E+00	NA	NA	6.79E-01	NA	NA	1.15E+01
SB-12	Zinc	NP	1.99E+02	1.15E+02	1.77E+01	1.77E+02	9.20E+00	5.20E-01	5.20E-02	1.26E+02
SB-12	HMW PAH	NP	1.15E+00	4.24E-01	NA	NA	3.48E-02	NA	NA	3.62E-01
SB-12	LMW PAH	NP	1.85E-01	1.91E-02	NA	NA	1.84E-03	NA	NA	4.21E-02
SB-12	Total PCBs	P	6.81E-01	1.67E+00	9.59E-02	1.16E+00	1.29E-01	1.34E+00	1.11E-01	6.86E-02
SB-12	Total 4,4'-DDx	P	1.31E-02	5.02E-02	7.14E-03	6.12E-01	3.86E-03	5.41E-01	6.31E-03	1.19E-02
SB-12	alpha-Chlordane	NP	1.33E-03	3.85E-03	NA	NA	2.97E-04	NA	NA	1.03E-03
SB-12	Dieldrin	NP	2.11E-03	7.49E-03	NA	NA	5.76E-04	NA	NA	1.57E-03
SB-12	Endosulfan II	NP	5.50E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
SB-12	Endrin	NP	5.00E-05	1.75E-04	NA	NA	1.35E-05	NA	NA	ND
SB-12	gamma-Chlordane	NP	1.84E-03	5.95E-03	NA	NA	4.58E-04	NA	NA	8.56E-04
SB-12	Heptachlor	NP	4.50E-05	1.75E-04	NA	NA	1.35E-05	NA	NA	ND
SB-12	Dibutyltin	NP	1.71E-02	1.19E-02	1.19E+00	7.46E+01	9.46E-04	7.96E-04	1.27E-05	1.26E-02
SB-12	Monobutyltin	NP	5.81E-04	1.72E-02	NA	NA	1.32E-03	NA	NA	NA
SB-12	Tetrabutyltin	NP	1.38E-03	3.92E-02	NA	NA	3.00E-03	NA	NA	NA
SB-12	Tributyltin	NP	1.54E-02	3.41E-02	1.19E+00	7.46E+01	2.64E-03	2.22E-03	3.53E-05	4.48E-02

STATION ID = SB-13

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-13	Aluminum	NP	7.21E+04	2.00E+03	NA	NA	3.03E+02	NA	NA	1.95E+03
SB-13	Antimony	NP	2.52E+00	2.07E-01	NA	NA	2.11E-02	NA	NA	1.87E-01
SB-13	Arsenic	NP	1.16E+01	2.23E+01	5.43E+00	2.17E+01	1.73E+00	3.18E-01	7.95E-02	2.29E+01
SB-13	Barium	NP	4.32E+02	1.95E+01	NA	NA	2.39E+00	NA	NA	2.02E+01
SB-13	Cadmium	NP	4.54E-01	3.70E-01	8.53E-02	1.74E+01	2.92E-02	3.42E-01	1.67E-03	3.69E-01
SB-13	Chromium	NP	2.07E+02	1.21E+01	NA	NA	1.36E+00	NA	NA	2.46E+01
SB-13	Cobalt	NP	1.78E+01	2.78E+00	NA	NA	2.50E-01	NA	NA	3.63E+00
SB-13	Copper	NP	9.49E+01	2.10E+01	2.56E+00	6.37E+01	1.80E+00	7.03E-01	2.83E-02	1.48E+01
SB-13	Iron	NP	4.68E+04	2.55E+03	NA	NA	2.93E+02	NA	NA	2.80E+03
SB-13	Lead	NP	8.42E+01	7.77E+00	2.34E-02	9.33E+00	7.69E-01	3.29E+01	8.25E-02	3.76E+00
SB-13	Manganese	NP	4.57E+02	2.85E+01	NA	NA	3.13E+00	NA	NA	5.74E+01
SB-13	Mercury	P	6.17E-01	1.53E-01	3.98E-02	1.83E-01	1.30E-02	3.26E-01	7.07E-02	1.74E-01
SB-13	Molybdenum	NP	1.00E+00	2.49E+00	NA	NA	1.92E-01	NA	NA	3.04E+00
SB-13	Nickel	NP	1.10E+02	1.07E+01	1.55E+00	6.28E+01	1.05E+00	6.75E-01	1.67E-02	9.60E+00
SB-13	Selenium	NP	3.31E-01	2.94E+00	2.30E-01	9.29E-01	2.25E-01	9.81E-01	2.42E-01	5.34E+00
SB-13	Silver	NP	5.83E-01	2.60E-02	NA	NA	3.20E-03	NA	NA	2.52E-01
SB-13	Vanadium	NP	1.50E+02	8.61E+00	NA	NA	9.71E-01	NA	NA	1.15E+01
SB-13	Zinc	NP	1.89E+02	1.10E+02	1.77E+01	1.77E+02	8.80E+00	4.97E-01	4.97E-02	1.26E+02
SB-13	HMW PAH	NP	1.24E+00	5.85E-01	NA	NA	4.72E-02	NA	NA	3.62E-01
SB-13	LMW PAH	NP	2.03E-01	2.69E-02	NA	NA	2.48E-03	NA	NA	4.21E-02
SB-13	Total PCBs	P	7.39E-01	1.53E+00	9.59E-02	1.16E+00	1.18E-01	1.23E+00	1.02E-01	6.86E-02
SB-13	Total 4,4'-DDx	P	3.85E-02	4.68E-02	7.14E-03	6.12E-01	3.66E-03	5.12E-01	5.98E-03	1.19E-02
SB-13	alpha-Chlordane	NP	8.70E-04	3.35E-03	NA	NA	2.58E-04	NA	NA	1.03E-03
SB-13	Dieldrin	NP	1.36E-03	5.28E-03	NA	NA	4.06E-04	NA	NA	1.57E-03
SB-13	Endosulfan II	NP	5.50E-05	1.61E-04	NA	NA	1.24E-05	NA	NA	ND
SB-13	Endrin	NP	5.00E-05	1.29E-04	NA	NA	9.95E-06	NA	NA	ND
SB-13	gamma-Chlordane	NP	1.25E-03	4.25E-03	NA	NA	3.27E-04	NA	NA	8.56E-04
SB-13	Heptachlor	NP	4.50E-05	1.29E-04	NA	NA	9.93E-06	NA	NA	ND
SB-13	Dibutyltin	NP	1.63E-02	1.32E-02	1.19E+00	7.46E+01	1.04E-03	8.75E-04	1.39E-05	1.26E-02
SB-13	Monobutyltin	NP	5.93E-04	1.82E-02	NA	NA	1.39E-03	NA	NA	NA
SB-13	Tetrabutyltin	NP	1.40E-03	4.14E-02	NA	NA	3.17E-03	NA	NA	NA
SB-13	Tributyltin	NP	1.83E-02	5.81E-02	1.19E+00	7.46E+01	4.47E-03	3.77E-03	5.99E-05	4.48E-02

STATION ID = SB-14

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-14	Aluminum	NP	7.17E+04	1.76E+03	NA	NA	2.84E+02	NA	NA	1.95E+03
SB-14	Antimony	NP	2.40E+00	1.93E-01	NA	NA	1.98E-02	NA	NA	1.87E-01
SB-14	Arsenic	NP	1.17E+01	2.09E+01	5.43E+00	2.17E+01	1.62E+00	2.98E-01	7.46E-02	2.29E+01
SB-14	Barium	NP	4.72E+02	1.51E+01	NA	NA	2.14E+00	NA	NA	2.02E+01
SB-14	Cadmium	NP	4.03E-01	3.94E-01	8.53E-02	1.74E+01	3.09E-02	3.63E-01	1.77E-03	3.69E-01
SB-14	Chromium	NP	2.05E+02	1.19E+01	NA	NA	1.34E+00	NA	NA	2.46E+01
SB-14	Cobalt	NP	1.79E+01	2.64E+00	NA	NA	2.39E-01	NA	NA	3.63E+00
SB-14	Copper	NP	8.91E+01	1.88E+01	2.56E+00	6.37E+01	1.62E+00	6.33E-01	2.55E-02	1.48E+01
SB-14	Iron	NP	4.55E+04	2.19E+03	NA	NA	2.62E+02	NA	NA	2.80E+03
SB-14	Lead	NP	8.63E+01	6.61E+00	2.34E-02	9.33E+00	6.85E-01	2.93E+01	7.35E-02	3.76E+00
SB-14	Manganese	NP	4.68E+02	2.47E+01	NA	NA	2.86E+00	NA	NA	5.74E+01
SB-14	Mercury	P	5.71E-01	8.15E-04	3.98E-02	1.83E-01	1.26E-03	3.16E-02	6.85E-03	1.74E-01
SB-14	Molybdenum	NP	9.88E-01	2.97E+00	NA	NA	2.29E-01	NA	NA	3.04E+00
SB-14	Nickel	NP	1.07E+02	8.28E+00	1.55E+00	6.28E+01	8.56E-01	5.52E-01	1.36E-02	9.60E+00
SB-14	Selenium	NP	3.99E-01	2.79E+00	2.30E-01	9.29E-01	2.14E-01	9.31E-01	2.30E-01	5.34E+00
SB-14	Silver	NP	2.80E+00	2.14E-01	NA	NA	2.22E-02	NA	NA	2.52E-01
SB-14	Vanadium	NP	1.47E+02	7.35E+00	NA	NA	8.69E-01	NA	NA	1.15E+01
SB-14	Zinc	NP	1.81E+02	1.32E+02	1.77E+01	1.77E+02	1.05E+01	5.91E-01	5.91E-02	1.26E+02
SB-14	HMW PAH	NP	1.11E+00	6.18E-01	NA	NA	4.95E-02	NA	NA	3.62E-01
SB-14	LMW PAH	NP	2.04E-01	3.68E-02	NA	NA	3.24E-03	NA	NA	4.21E-02
SB-14	Total PCBs	P	5.68E-01	1.71E+00	9.59E-02	1.16E+00	1.31E-01	1.37E+00	1.13E-01	6.86E-02
SB-14	Total 4,4'-DDx	P	1.43E-02	5.57E-02	7.14E-03	6.12E-01	4.28E-03	5.99E-01	7.00E-03	1.19E-02
SB-14	alpha-Chlordane	NP	5.47E-03	2.59E-03	NA	NA	2.09E-04	NA	NA	1.03E-03
SB-14	Dieldrin	NP	1.70E-03	8.96E-03	NA	NA	6.88E-04	NA	NA	1.57E-03
SB-14	Endosulfan II	NP	6.00E-05	1.24E-04	NA	NA	9.56E-06	NA	NA	ND
SB-14	Endrin	NP	5.00E-05	3.09E-05	NA	NA	2.46E-06	NA	NA	ND
SB-14	gamma-Chlordane	NP	7.26E-03	4.45E-03	NA	NA	3.55E-04	NA	NA	8.56E-04
SB-14	Heptachlor	NP	2.13E-03	6.18E-05	NA	NA	9.17E-06	NA	NA	ND
SB-14	Dibutyltin	NP	1.95E-02	1.00E-02	1.19E+00	7.46E+01	8.04E-04	6.77E-04	1.08E-05	1.26E-02
SB-14	Monobutyltin	NP	6.19E-04	1.71E-02	NA	NA	1.31E-03	NA	NA	NA
SB-14	Tetrabutyltin	NP	1.47E-03	3.90E-02	NA	NA	2.98E-03	NA	NA	NA
SB-14	Tributyltin	NP	2.25E-02	3.71E-02	1.19E+00	7.46E+01	2.88E-03	2.42E-03	3.86E-05	4.48E-02

STATION ID = SB-15

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-15	Aluminum	NP	7.35E+04	1.46E+03	NA	NA	2.65E+02	NA	NA	1.95E+03
SB-15	Antimony	NP	2.03E+00	1.27E-01	NA	NA	1.39E-02	NA	NA	1.87E-01
SB-15	Arsenic	NP	1.14E+01	1.85E+01	5.43E+00	2.17E+01	1.44E+00	2.65E-01	6.61E-02	2.29E+01
SB-15	Barium	NP	4.14E+02	1.12E+01	NA	NA	1.72E+00	NA	NA	2.02E+01
SB-15	Cadmium	NP	2.72E-01	1.65E-01	8.53E-02	1.74E+01	1.32E-02	1.54E-01	7.55E-04	3.69E-01
SB-15	Chromium	NP	1.97E+02	5.06E+00	NA	NA	7.98E-01	NA	NA	2.46E+01
SB-15	Cobalt	NP	1.77E+01	1.45E+00	NA	NA	1.48E-01	NA	NA	3.63E+00
SB-15	Copper	NP	7.88E+01	1.36E+01	2.56E+00	6.37E+01	1.20E+00	4.69E-01	1.89E-02	1.48E+01
SB-15	Iron	NP	4.78E+04	1.64E+03	NA	NA	2.25E+02	NA	NA	2.80E+03
SB-15	Lead	NP	7.00E+01	4.37E+00	2.34E-02	9.33E+00	4.80E-01	2.05E+01	5.15E-02	3.76E+00
SB-15	Manganese	NP	4.37E+02	1.62E+01	NA	NA	2.15E+00	NA	NA	5.74E+01
SB-15	Mercury	P	5.06E-01	1.40E-01	3.98E-02	1.83E-01	1.17E-02	2.96E-01	6.40E-02	1.74E-01
SB-15	Molybdenum	NP	1.24E+00	2.08E+00	NA	NA	1.61E-01	NA	NA	3.04E+00
SB-15	Nickel	NP	1.09E+02	4.83E+00	1.55E+00	6.28E+01	5.97E-01	3.85E-01	9.50E-03	9.60E+00
SB-15	Selenium	NP	3.33E-01	3.30E+00	2.30E-01	9.29E-01	2.53E-01	1.10E+00	2.72E-01	5.34E+00
SB-15	Silver	NP	5.21E-01	2.60E-02	NA	NA	3.07E-03	NA	NA	2.52E-01
SB-15	Vanadium	NP	1.55E+02	4.99E+00	NA	NA	7.05E-01	NA	NA	1.15E+01
SB-15	Zinc	NP	1.71E+02	8.76E+01	1.77E+01	1.77E+02	7.05E+00	3.98E-01	3.98E-02	1.26E+02
SB-15	HMW PAH	NP	1.09E+00	4.87E-01	NA	NA	3.95E-02	NA	NA	3.62E-01
SB-15	LMW PAH	NP	2.07E-01	3.41E-02	NA	NA	3.04E-03	NA	NA	4.21E-02
SB-15	Total PCBs	P	4.10E-01	1.14E+00	9.59E-02	1.16E+00	8.81E-02	9.19E-01	7.58E-02	6.86E-02
SB-15	Total 4,4'-DDx	P	5.70E-03	3.49E-02	7.14E-03	6.12E-01	2.67E-03	3.74E-01	4.37E-03	1.19E-02
SB-15	alpha-Chlordane	NP	5.40E-04	3.05E-03	NA	NA	2.34E-04	NA	NA	1.03E-03
SB-15	Dieldrin	NP	7.50E-04	2.81E-03	NA	NA	2.16E-04	NA	NA	1.57E-03
SB-15	Endosulfan II	NP	6.00E-05	1.83E-04	NA	NA	1.41E-05	NA	NA	ND
SB-15	Endrin	NP	5.50E-05	1.53E-04	NA	NA	1.18E-05	NA	NA	ND
SB-15	gamma-Chlordane	NP	7.50E-04	3.42E-03	NA	NA	2.63E-04	NA	NA	8.56E-04
SB-15	Heptachlor	NP	5.00E-05	1.53E-04	NA	NA	1.18E-05	NA	NA	ND
SB-15	Dibutyltin	NP	1.36E-02	1.27E-02	1.19E+00	7.46E+01	9.95E-04	8.37E-04	1.33E-05	1.26E-02
SB-15	Monobutyltin	NP	6.38E-04	1.47E-02	NA	NA	1.13E-03	NA	NA	NA
SB-15	Tetrabutyltin	NP	1.51E-03	3.36E-02	NA	NA	2.57E-03	NA	NA	NA
SB-15	Tributyltin	NP	1.70E-02	4.86E-02	1.19E+00	7.46E+01	3.75E-03	3.15E-03	5.02E-05	4.48E-02

STATION ID = SB-16

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-16	Aluminum	NP	5.39E+04	1.33E+03	NA	NA	2.14E+02	NA	NA	1.95E+03
SB-16	Antimony	NP	1.06E+01	2.44E-01	NA	NA	4.08E-02	NA	NA	1.87E-01
SB-16	Arsenic	NP	1.13E+01	2.04E+01	5.43E+00	2.17E+01	1.58E+00	2.91E-01	7.28E-02	2.29E+01
SB-16	Barium	NP	4.90E+02	1.93E+01	NA	NA	2.50E+00	NA	NA	2.02E+01
SB-16	Cadmium	NP	7.05E-01	3.26E-01	8.53E-02	1.74E+01	2.64E-02	3.09E-01	1.51E-03	3.69E-01
SB-16	Chromium	NP	4.51E+02	1.55E+01	NA	NA	2.13E+00	NA	NA	2.46E+01
SB-16	Cobalt	NP	1.94E+01	2.40E+00	NA	NA	2.24E-01	NA	NA	3.63E+00
SB-16	Copper	NP	1.73E+02	2.11E+01	2.56E+00	6.37E+01	1.97E+00	7.70E-01	3.10E-02	1.48E+01
SB-16	Iron	NP	3.92E+04	2.15E+03	NA	NA	2.46E+02	NA	NA	2.80E+03
SB-16	Lead	NP	1.39E+02	6.59E+00	2.34E-02	9.33E+00	7.94E-01	3.39E+01	8.51E-02	3.76E+00
SB-16	Manganese	NP	5.80E+02	3.17E+01	NA	NA	3.63E+00	NA	NA	5.74E+01
SB-16	Mercury	P	7.90E-01	1.43E-01	3.98E-02	1.83E-01	1.26E-02	3.16E-01	6.85E-02	1.74E-01
SB-16	Molybdenum	NP	1.03E+00	2.76E+00	NA	NA	2.13E-01	NA	NA	3.04E+00
SB-16	Nickel	NP	1.99E+02	7.97E+00	1.55E+00	6.28E+01	1.02E+00	6.61E-01	1.63E-02	9.60E+00
SB-16	Selenium	NP	2.25E-01	2.67E+00	2.30E-01	9.29E-01	2.04E-01	8.90E-01	2.20E-01	5.34E+00
SB-16	Silver	NP	6.83E-01	2.60E-02	NA	NA	3.41E-03	NA	NA	2.52E-01
SB-16	Vanadium	NP	1.12E+02	7.21E+00	NA	NA	7.85E-01	NA	NA	1.15E+01
SB-16	Zinc	NP	2.28E+02	1.25E+02	1.77E+01	1.77E+02	1.00E+01	5.66E-01	5.66E-02	1.26E+02
SB-16	HMW PAH	NP	2.41E+00	3.56E-01	NA	NA	3.22E-02	NA	NA	3.62E-01
SB-16	LMW PAH	NP	2.76E-01	1.52E-02	NA	NA	1.73E-03	NA	NA	4.21E-02
SB-16	Total PCBs	P	1.79E+00	2.33E+00	9.59E-02	1.16E+00	1.81E-01	1.89E+00	1.56E-01	6.86E-02
SB-16	Total 4,4'-DDx	P	5.09E-03	3.49E-02	7.14E-03	6.12E-01	2.68E-03	3.75E-01	4.38E-03	1.19E-02
SB-16	alpha-Chlordane	NP	7.70E-04	2.51E-03	NA	NA	1.93E-04	NA	NA	1.03E-03
SB-16	Dieldrin	NP	4.00E-05	3.45E-03	NA	NA	2.64E-04	NA	NA	1.57E-03
SB-16	Endosulfan II	NP	4.00E-05	1.57E-04	NA	NA	1.20E-05	NA	NA	ND
SB-16	Endrin	NP	3.50E-05	1.25E-04	NA	NA	9.64E-06	NA	NA	ND
SB-16	gamma-Chlordane	NP	1.55E-03	3.20E-03	NA	NA	2.48E-04	NA	NA	8.56E-04
SB-16	Heptachlor	NP	3.50E-05	1.25E-04	NA	NA	9.64E-06	NA	NA	ND
SB-16	Dibutyltin	NP	6.49E-03	1.66E-02	1.19E+00	7.46E+01	1.28E-03	1.08E-03	1.72E-05	1.26E-02
SB-16	Monobutyltin	NP	1.17E-03	1.43E-02	NA	NA	1.10E-03	NA	NA	NA
SB-16	Tetrabutyltin	NP	9.87E-04	3.26E-02	NA	NA	2.49E-03	NA	NA	NA
SB-16	Tributyltin	NP	1.11E-02	1.06E-01	1.19E+00	7.46E+01	8.09E-03	6.82E-03	1.09E-04	4.48E-02

STATION ID = SB-17

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-17	Aluminum	NP	6.50E+04	9.41E+02	NA	NA	2.08E+02	NA	NA	1.95E+03
SB-17	Antimony	NP	5.77E+00	1.94E-01	NA	NA	2.69E-02	NA	NA	1.87E-01
SB-17	Arsenic	NP	1.12E+01	1.84E+01	5.43E+00	2.17E+01	1.43E+00	2.63E-01	6.57E-02	2.29E+01
SB-17	Barium	NP	4.58E+02	9.94E+00	NA	NA	1.72E+00	NA	NA	2.02E+01
SB-17	Cadmium	NP	2.78E-01	2.33E-01	8.53E-02	1.74E+01	1.84E-02	2.15E-01	1.05E-03	3.69E-01
SB-17	Chromium	NP	2.73E+02	8.62E+00	NA	NA	1.23E+00	NA	NA	2.46E+01
SB-17	Cobalt	NP	2.13E+01	1.59E+00	NA	NA	1.66E-01	NA	NA	3.63E+00
SB-17	Copper	NP	1.02E+02	1.52E+01	2.56E+00	6.37E+01	1.37E+00	5.36E-01	2.16E-02	1.48E+01
SB-17	Iron	NP	4.24E+04	1.35E+03	NA	NA	1.92E+02	NA	NA	2.80E+03
SB-17	Lead	NP	7.36E+01	3.86E+00	2.34E-02	9.33E+00	4.49E-01	1.92E+01	4.81E-02	3.76E+00
SB-17	Manganese	NP	4.99E+02	2.32E+01	NA	NA	2.82E+00	NA	NA	5.74E+01
SB-17	Mercury	P	7.69E-01	1.10E-01	3.98E-02	1.83E-01	1.00E-02	2.52E-01	5.45E-02	1.74E-01
SB-17	Molybdenum	NP	1.12E+00	2.26E+00	NA	NA	1.75E-01	NA	NA	3.04E+00
SB-17	Nickel	NP	1.62E+02	5.58E+00	1.55E+00	6.28E+01	7.65E-01	4.93E-01	1.22E-02	9.60E+00
SB-17	Selenium	NP	3.40E-01	4.53E+00	2.30E-01	9.29E-01	3.47E-01	1.51E+00	3.73E-01	5.34E+00
SB-17	Silver	NP	4.12E-01	2.60E-02	NA	NA	2.85E-03	NA	NA	2.52E-01
SB-17	Vanadium	NP	1.21E+02	4.81E+00	NA	NA	6.20E-01	NA	NA	1.15E+01
SB-17	Zinc	NP	1.95E+02	1.25E+02	1.77E+01	1.77E+02	9.95E+00	5.63E-01	5.63E-02	1.26E+02
SB-17	HMW PAH	NP	1.85E+00	5.07E-01	NA	NA	4.26E-02	NA	NA	3.62E-01
SB-17	LMW PAH	NP	2.72E-01	2.52E-02	NA	NA	2.49E-03	NA	NA	4.21E-02
SB-17	Total PCBs	P	8.92E-01	1.43E+00	9.59E-02	1.16E+00	1.11E-01	1.15E+00	9.53E-02	6.86E-02
SB-17	Total 4,4'-DDx	P	3.03E-02	2.84E-02	7.14E-03	6.12E-01	2.23E-03	3.12E-01	3.65E-03	1.19E-02
SB-17	alpha-Chlordane	NP	6.80E-04	2.70E-03	NA	NA	2.08E-04	NA	NA	1.03E-03
SB-17	Dieldrin	NP	5.00E-05	2.70E-03	NA	NA	2.06E-04	NA	NA	1.57E-03
SB-17	Endosulfan II	NP	5.00E-05	2.01E-04	NA	NA	1.55E-05	NA	NA	ND
SB-17	Endrin	NP	4.50E-05	1.72E-04	NA	NA	1.33E-05	NA	NA	ND
SB-17	gamma-Chlordane	NP	1.01E-03	3.16E-03	NA	NA	2.43E-04	NA	NA	8.56E-04
SB-17	Heptachlor	NP	4.00E-05	1.72E-04	NA	NA	1.32E-05	NA	NA	ND
SB-17	Dibutyltin	NP	2.89E-02	1.82E-02	1.19E+00	7.46E+01	1.45E-03	1.22E-03	1.94E-05	1.26E-02
SB-17	Monobutyltin	NP	5.23E-04	1.63E-02	NA	NA	1.25E-03	NA	NA	NA
SB-17	Tetrabutyltin	NP	1.24E-03	3.71E-02	NA	NA	2.84E-03	NA	NA	NA
SB-17	Tributyltin	NP	4.09E-02	1.22E-01	1.19E+00	7.46E+01	9.37E-03	7.89E-03	1.26E-04	4.48E-02

Table H-54. Dose Assessment Results for Station SB-18 Using Depurated M. nasuta Data

STATION ID = SB-18

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-18	Aluminum	NP	4.92E+04	1.72E+03	NA	NA	2.34E+02	NA	NA	1.95E+03
SB-18	Antimony	NP	3.95E+00	3.94E-01	NA	NA	3.83E-02	NA	NA	1.87E-01
SB-18	Arsenic	NP	5.86E+00	2.22E+01	5.43E+00	2.17E+01	1.71E+00	3.14E-01	7.86E-02	2.29E+01
SB-18	Barium	NP	4.58E+02	2.16E+01	NA	NA	2.61E+00	NA	NA	2.02E+01
SB-18	Cadmium	NP	4.28E-01	3.24E-01	8.53E-02	1.74E+01	2.56E-02	3.01E-01	1.47E-03	3.69E-01
SB-18	Chromium	NP	1.75E+02	1.36E+01	NA	NA	1.40E+00	NA	NA	2.46E+01
SB-18	Cobalt	NP	1.13E+01	2.09E+00	NA	NA	1.83E-01	NA	NA	3.63E+00
SB-18	Copper	NP	6.61E+01	2.37E+01	2.56E+00	6.37E+01	1.95E+00	7.60E-01	3.06E-02	1.48E+01
SB-18	Iron	NP	2.55E+04	2.41E+03	NA	NA	2.37E+02	NA	NA	2.80E+03
SB-18	Lead	NP	1.22E+02	1.16E+01	2.34E-02	9.33E+00	1.14E+00	4.87E+01	1.22E-01	3.76E+00
SB-18	Manganese	NP	3.57E+02	2.64E+01	NA	NA	2.76E+00	NA	NA	5.74E+01
SB-18	Mercury	P	2.32E-01	1.80E-01	3.98E-02	1.83E-01	1.42E-02	3.58E-01	7.76E-02	1.74E-01
SB-18	Molybdenum	NP	7.04E-01	2.84E+00	NA	NA	2.18E-01	NA	NA	3.04E+00
SB-18	Nickel	NP	9.28E+01	9.22E+00	1.55E+00	6.28E+01	8.98E-01	5.79E-01	1.43E-02	9.60E+00
SB-18	Selenium	NP	1.51E-01	4.66E+00	2.30E-01	9.29E-01	3.56E-01	1.55E+00	3.84E-01	5.34E+00
SB-18	Silver	NP	2.57E-01	2.60E-02	NA	NA	2.52E-03	NA	NA	2.52E-01
SB-18	Vanadium	NP	7.75E+01	6.92E+00	NA	NA	6.90E-01	NA	NA	1.15E+01
SB-18	Zinc	NP	2.09E+02	1.15E+02	1.77E+01	1.77E+02	9.22E+00	5.21E-01	5.21E-02	1.26E+02
SB-18	HMW PAH	NP	2.10E+00	1.21E+00	NA	NA	9.71E-02	NA	NA	3.62E-01
SB-18	LMW PAH	NP	3.23E-01	5.96E-02	NA	NA	5.23E-03	NA	NA	4.21E-02
SB-18	Total PCBs	P	8.30E-01	2.48E+00	9.59E-02	1.16E+00	1.91E-01	2.00E+00	1.65E-01	6.86E-02
SB-18	Total 4,4'-DDx	P	1.06E-02	6.36E-02	7.14E-03	6.12E-01	4.88E-03	6.83E-01	7.97E-03	1.19E-02
SB-18	alpha-Chlordane	NP	7.00E-04	3.76E-03	NA	NA	2.89E-04	NA	NA	1.03E-03
SB-18	Dieldrin	NP	1.25E-03	4.00E-03	NA	NA	3.08E-04	NA	NA	1.57E-03
SB-18	Endosulfan II	NP	3.00E-05	2.09E-04	NA	NA	1.60E-05	NA	NA	ND
SB-18	Endrin	NP	3.00E-05	1.79E-04	NA	NA	1.37E-05	NA	NA	ND
SB-18	gamma-Chlordane	NP	2.01E-03	4.24E-03	NA	NA	3.28E-04	NA	NA	8.56E-04
SB-18	Heptachlor	NP	2.50E-05	1.79E-04	NA	NA	1.37E-05	NA	NA	ND
SB-18	Dibutyltin	NP	1.12E-02	1.22E-02	1.19E+00	7.46E+01	9.54E-04	8.03E-04	1.28E-05	1.26E-02
SB-18	Monobutyltin	NP	3.27E-04	2.35E-02	NA	NA	1.80E-03	NA	NA	NA
SB-18	Tetrabutyltin	NP	7.73E-04	5.36E-02	NA	NA	4.09E-03	NA	NA	NA
SB-18	Tributyltin	NP	1.72E-02	5.02E-02	1.19E+00	7.46E+01	3.87E-03	3.26E-03	5.19E-05	4.48E-02

STATION ID = SB-19

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-19	Aluminum	NP	3.91E+04	2.23E+02	NA	NA	9.88E+01	NA	NA	1.95E+03
SB-19	Antimony	NP	4.85E-01	1.59E-01	NA	NA	1.32E-02	NA	NA	1.87E-01
SB-19	Arsenic	NP	1.15E+01	1.42E+01	5.43E+00	2.17E+01	1.11E+00	2.04E-01	5.10E-02	2.29E+01
SB-19	Barium	NP	8.93E+02	3.31E+00	NA	NA	2.12E+00	NA	NA	2.02E+01
SB-19	Cadmium	NP	2.52E-01	2.52E-01	8.53E-02	1.74E+01	1.98E-02	2.32E-01	1.13E-03	3.69E-01
SB-19	Chromium	NP	1.67E+02	3.26E+00	NA	NA	5.98E-01	NA	NA	2.46E+01
SB-19	Cobalt	NP	1.84E+01	1.04E+00	NA	NA	1.18E-01	NA	NA	3.63E+00
SB-19	Copper	NP	2.85E+02	3.14E+01	2.56E+00	6.37E+01	2.99E+00	1.17E+00	4.70E-02	1.48E+01
SB-19	Iron	NP	1.57E+04	7.62E+02	NA	NA	9.10E+01	NA	NA	2.80E+03
SB-19	Lead	NP	1.10E+01	2.67E+00	2.34E-02	9.33E+00	2.27E-01	9.69E+00	2.43E-02	3.76E+00
SB-19	Manganese	NP	2.71E+02	2.19E+01	NA	NA	2.24E+00	NA	NA	5.74E+01
SB-19	Mercury	P	9.59E-01	1.85E-01	3.98E-02	1.83E-01	1.61E-02	4.06E-01	8.79E-02	1.74E-01
SB-19	Molybdenum	NP	8.75E-01	2.33E+00	NA	NA	1.80E-01	NA	NA	3.04E+00
SB-19	Nickel	NP	7.25E+01	2.49E+00	1.55E+00	6.28E+01	3.42E-01	2.20E-01	5.44E-03	9.60E+00
SB-19	Selenium	NP	6.30E-02	2.46E+00	2.30E-01	9.29E-01	1.88E-01	8.18E-01	2.02E-01	5.34E+00
SB-19	Silver	NP	1.39E-01	2.60E-02	NA	NA	2.28E-03	NA	NA	2.52E-01
SB-19	Vanadium	NP	1.46E+02	2.87E+00	NA	NA	5.24E-01	NA	NA	1.15E+01
SB-19	Zinc	NP	1.75E+02	7.45E+01	1.77E+01	1.77E+02	6.06E+00	3.42E-01	3.42E-02	1.26E+02
SB-19	HMW PAH	NP	4.83E-01	8.06E-02	NA	NA	7.17E-03	NA	NA	3.62E-01
SB-19	LMW PAH	NP	8.20E-02	1.33E-02	NA	NA	1.19E-03	NA	NA	4.21E-02
SB-19	Total PCBs	P	3.07E+00	1.81E+00	9.59E-02	1.16E+00	1.44E-01	1.50E+00	1.24E-01	6.86E-02
SB-19	Total 4,4'-DDx	P	3.60E-03	7.38E-03	7.14E-03	6.12E-01	5.71E-04	8.00E-02	9.34E-04	1.19E-02
SB-19	alpha-Chlordane	NP	5.40E-04	6.80E-04	NA	NA	5.31E-05	NA	NA	1.03E-03
SB-19	Dieldrin	NP	7.70E-04	3.77E-04	NA	NA	3.04E-05	NA	NA	1.57E-03
SB-19	Endosulfan II	NP	3.00E-05	3.77E-04	NA	NA	2.88E-05	NA	NA	ND
SB-19	Endrin	NP	3.00E-05	3.39E-04	NA	NA	2.60E-05	NA	NA	ND
SB-19	gamma-Chlordane	NP	7.90E-04	6.80E-04	NA	NA	5.36E-05	NA	NA	8.56E-04
SB-19	Heptachlor	NP	2.50E-05	3.39E-04	NA	NA	2.59E-05	NA	NA	ND
SB-19	Dibutyltin	NP	1.72E-02	1.34E-02	1.19E+00	7.46E+01	1.06E-03	8.94E-04	1.42E-05	1.26E-02
SB-19	Monobutyltin	NP	3.30E-03	2.74E-02	NA	NA	2.10E-03	NA	NA	NA
SB-19	Tetrabutyltin	NP	7.83E-04	6.23E-02	NA	NA	4.76E-03	NA	NA	NA
SB-19	Tributyltin	NP	1.61E-02	2.26E-02	1.19E+00	7.46E+01	1.76E-03	1.48E-03	2.36E-05	4.48E-02

Table H-56. Dose Assessment Results for Station SB-20 Using Depurated M. nasuta Data

STATION ID = SB-20

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-20	Aluminum	NP	6.86E+04	1.06E+03	NA	NA	2.24E+02	NA	NA	1.95E+03
SB-20	Antimony	NP	4.29E+00	1.73E-01	NA	NA	2.22E-02	NA	NA	1.87E-01
SB-20	Arsenic	NP	1.13E+01	1.90E+01	5.43E+00	2.17E+01	1.47E+00	2.72E-01	6.79E-02	2.29E+01
SB-20	Barium	NP	4.69E+02	1.07E+01	NA	NA	1.80E+00	NA	NA	2.02E+01
SB-20	Cadmium	NP	6.82E-01	2.11E-01	8.53E-02	1.74E+01	1.75E-02	2.06E-01	1.01E-03	3.69E-01
SB-20	Chromium	NP	2.25E+02	6.70E+00	NA	NA	9.82E-01	NA	NA	2.46E+01
SB-20	Cobalt	NP	1.76E+01	1.71E+00	NA	NA	1.67E-01	NA	NA	3.63E+00
SB-20	Copper	NP	1.33E+02	2.30E+01	2.56E+00	6.37E+01	2.03E+00	7.93E-01	3.19E-02	1.48E+01
SB-20	Iron	NP	4.46E+04	1.51E+03	NA	NA	2.09E+02	NA	NA	2.80E+03
SB-20	Lead	NP	1.06E+02	6.34E+00	2.34E-02	9.33E+00	7.06E-01	3.01E+01	7.57E-02	3.76E+00
SB-20	Manganese	NP	4.44E+02	1.78E+01	NA	NA	2.29E+00	NA	NA	5.74E+01
SB-20	Mercury	P	1.06E+00	8.15E-04	3.98E-02	1.83E-01	2.28E-03	5.73E-02	1.24E-02	1.74E-01
SB-20	Molybdenum	NP	1.14E+00	2.71E+00	NA	NA	2.09E-01	NA	NA	3.04E+00
SB-20	Nickel	NP	1.18E+02	5.93E+00	1.55E+00	6.28E+01	7.00E-01	4.51E-01	1.11E-02	9.60E+00
SB-20	Selenium	NP	4.57E-01	3.04E+00	2.30E-01	9.29E-01	2.33E-01	1.01E+00	2.51E-01	5.34E+00
SB-20	Silver	NP	6.34E-01	2.24E-01	NA	NA	1.84E-02	NA	NA	2.52E-01
SB-20	Vanadium	NP	1.39E+02	4.83E+00	NA	NA	6.59E-01	NA	NA	1.15E+01
SB-20	Zinc	NP	2.15E+02	1.08E+02	1.77E+01	1.77E+02	8.70E+00	4.92E-01	4.92E-02	1.26E+02
SB-20	HMW PAH	NP	1.67E+00	7.30E-01	NA	NA	5.92E-02	NA	NA	3.62E-01
SB-20	LMW PAH	NP	2.81E-01	6.41E-02	NA	NA	5.48E-03	NA	NA	4.21E-02
SB-20	Total PCBs	P	1.56E+00	2.53E+00	9.59E-02	1.16E+00	1.97E-01	2.05E+00	1.69E-01	6.86E-02
SB-20	Total 4,4'-DDx	P	1.58E-02	6.33E-02	7.14E-03	6.12E-01	4.87E-03	6.82E-01	7.96E-03	1.19E-02
SB-20	alpha-Chlordane	NP	2.37E-03	2.85E-03	NA	NA	2.23E-04	NA	NA	1.03E-03
SB-20	Dieldrin	NP	3.63E-03	1.33E-02	NA	NA	1.02E-03	NA	NA	1.57E-03
SB-20	Endosulfan II	NP	5.50E-05	1.27E-04	NA	NA	9.79E-06	NA	NA	ND
SB-20	Endrin	NP	5.00E-05	3.17E-05	NA	NA	2.52E-06	NA	NA	ND
SB-20	gamma-Chlordane	NP	3.60E-03	4.75E-03	NA	NA	3.70E-04	NA	NA	8.56E-04
SB-20	Heptachlor	NP	4.50E-05	6.33E-05	NA	NA	4.93E-06	NA	NA	ND
SB-20	Dibutyltin	NP	1.95E-02	6.09E-02	1.19E+00	7.46E+01	4.69E-03	3.95E-03	6.28E-05	1.26E-02
SB-20	Monobutyltin	NP	5.67E-04	1.92E-02	NA	NA	1.47E-03	NA	NA	NA
SB-20	Tetrabutyltin	NP	1.34E-03	4.38E-02	NA	NA	3.35E-03	NA	NA	NA
SB-20	Tributyltin	NP	2.76E-02	6.60E-02	1.19E+00	7.46E+01	5.10E-03	4.29E-03	6.83E-05	4.48E-02

STATION ID = SB-21

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-21	Aluminum	NP	4.64E+04	1.14E+03	NA	NA	1.84E+02	NA	NA	1.95E+03
SB-21	Antimony	NP	6.54E-01	4.54E-01	NA	NA	3.60E-02	NA	NA	1.87E-01
SB-21	Arsenic	NP	9.95E+00	1.88E+01	5.43E+00	2.17E+01	1.46E+00	2.68E-01	6.70E-02	2.29E+01
SB-21	Barium	NP	7.61E+02	1.53E+01	NA	NA	2.76E+00	NA	NA	2.02E+01
SB-21	Cadmium	NP	2.62E-01	1.76E-01	8.53E-02	1.74E+01	1.40E-02	1.64E-01	8.02E-04	3.69E-01
SB-21	Chromium	NP	3.38E+02	1.44E+01	NA	NA	1.81E+00	NA	NA	2.46E+01
SB-21	Cobalt	NP	2.19E+01	1.54E+00	NA	NA	1.63E-01	NA	NA	3.63E+00
SB-21	Copper	NP	3.19E+02	2.19E+01	2.56E+00	6.37E+01	2.34E+00	9.12E-01	3.67E-02	1.48E+01
SB-21	Iron	NP	3.10E+04	2.18E+03	NA	NA	2.31E+02	NA	NA	2.80E+03
SB-21	Lead	NP	1.18E+01	8.19E+00	2.34E-02	9.33E+00	6.50E-01	2.78E+01	6.97E-02	3.76E+00
SB-21	Manganese	NP	4.53E+02	3.01E+01	NA	NA	3.25E+00	NA	NA	5.74E+01
SB-21	Mercury	P	1.47E+00	1.56E-01	3.98E-02	1.83E-01	1.50E-02	3.77E-01	8.17E-02	1.74E-01
SB-21	Molybdenum	NP	7.73E-01	2.48E+00	NA	NA	1.91E-01	NA	NA	3.04E+00
SB-21	Nickel	NP	1.61E+02	9.95E+00	1.55E+00	6.28E+01	1.10E+00	7.07E-01	1.75E-02	9.60E+00
SB-21	Selenium	NP	1.78E-01	3.61E+00	2.30E-01	9.29E-01	2.76E-01	1.20E+00	2.97E-01	5.34E+00
SB-21	Silver	NP	1.44E-01	2.60E-02	NA	NA	2.29E-03	NA	NA	2.52E-01
SB-21	Vanadium	NP	1.72E+02	5.51E+00	NA	NA	7.80E-01	NA	NA	1.15E+01
SB-21	Zinc	NP	2.97E+02	9.87E+01	1.77E+01	1.77E+02	8.16E+00	4.61E-01	4.61E-02	1.26E+02
SB-21	HMW PAH	NP	4.13E+00	7.64E-01	NA	NA	6.69E-02	NA	NA	3.62E-01
SB-21	LMW PAH	NP	1.10E+00	4.74E-02	NA	NA	5.92E-03	NA	NA	4.21E-02
SB-21	Total PCBs	P	5.19E+00	4.17E+00	9.59E-02	1.16E+00	3.30E-01	3.44E+00	2.84E-01	6.86E-02
SB-21	Total 4,4'-DDx	P	5.28E-02	4.46E-02	7.14E-03	6.12E-01	3.52E-03	4.92E-01	5.75E-03	1.19E-02
SB-21	alpha-Chlordane	NP	7.00E-04	2.58E-03	NA	NA	1.98E-04	NA	NA	1.03E-03
SB-21	Dieldrin	NP	3.50E-05	3.99E-03	NA	NA	3.05E-04	NA	NA	1.57E-03
SB-21	Endosulfan II	NP	3.50E-05	2.26E-04	NA	NA	1.73E-05	NA	NA	ND
SB-21	Endrin	NP	3.00E-05	1.93E-04	NA	NA	1.48E-05	NA	NA	ND
SB-21	gamma-Chlordane	NP	8.60E-04	3.22E-03	NA	NA	2.48E-04	NA	NA	8.56E-04
SB-21	Heptachlor	NP	3.00E-05	1.93E-04	NA	NA	1.48E-05	NA	NA	ND
SB-21	Dibutyltin	NP	2.96E-02	2.08E-02	1.19E+00	7.46E+01	1.65E-03	1.39E-03	2.21E-05	1.26E-02
SB-21	Monobutyltin	NP	3.71E-04	1.55E-02	NA	NA	1.19E-03	NA	NA	NA
SB-21	Tetrabutyltin	NP	8.79E-04	3.54E-02	NA	NA	2.71E-03	NA	NA	NA
SB-21	Tributyltin	NP	5.65E-02	1.66E-01	1.19E+00	7.46E+01	1.28E-02	1.08E-02	1.72E-04	4.48E-02

STATION ID = SB-22

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-22	Aluminum	NP	6.53E+04	1.38E+03	NA	NA	2.42E+02	NA	NA	1.95E+03
SB-22	Antimony	NP	7.43E+00	2.67E-01	NA	NA	3.59E-02	NA	NA	1.87E-01
SB-22	Arsenic	NP	1.29E+01	2.11E+01	5.43E+00	2.17E+01	1.64E+00	3.02E-01	7.54E-02	2.29E+01
SB-22	Barium	NP	4.59E+02	1.44E+01	NA	NA	2.06E+00	NA	NA	2.02E+01
SB-22	Cadmium	NP	5.67E-01	5.25E-01	8.53E-02	1.74E+01	4.13E-02	4.84E-01	2.37E-03	3.69E-01
SB-22	Chromium	NP	2.56E+02	1.33E+01	NA	NA	1.55E+00	NA	NA	2.46E+01
SB-22	Cobalt	NP	1.82E+01	2.07E+00	NA	NA	1.96E-01	NA	NA	3.63E+00
SB-22	Copper	NP	1.63E+02	2.20E+01	2.56E+00	6.37E+01	2.02E+00	7.88E-01	3.17E-02	1.48E+01
SB-22	Iron	NP	4.26E+04	1.96E+03	NA	NA	2.39E+02	NA	NA	2.80E+03
SB-22	Lead	NP	1.42E+02	7.56E+00	2.34E-02	9.33E+00	8.74E-01	3.73E+01	9.37E-02	3.76E+00
SB-22	Manganese	NP	4.46E+02	2.40E+01	NA	NA	2.77E+00	NA	NA	5.74E+01
SB-22	Mercury	P	1.26E+00	1.43E-01	3.98E-02	1.83E-01	1.36E-02	3.41E-01	7.39E-02	1.74E-01
SB-22	Molybdenum	NP	1.50E+00	2.89E+00	NA	NA	2.24E-01	NA	NA	3.04E+00
SB-22	Nickel	NP	1.30E+02	7.36E+00	1.55E+00	6.28E+01	8.34E-01	5.38E-01	1.33E-02	9.60E+00
SB-22	Selenium	NP	3.63E-01	3.62E+00	2.30E-01	9.29E-01	2.77E-01	1.21E+00	2.98E-01	5.34E+00
SB-22	Silver	NP	6.95E-01	2.60E-02	NA	NA	3.44E-03	NA	NA	2.52E-01
SB-22	Vanadium	NP	1.41E+02	5.64E+00	NA	NA	7.26E-01	NA	NA	1.15E+01
SB-22	Zinc	NP	2.43E+02	8.16E+01	1.77E+01	1.77E+02	6.74E+00	3.81E-01	3.81E-02	1.26E+02
SB-22	HMW PAH	NP	1.58E+00	3.95E-01	NA	NA	3.35E-02	NA	NA	3.62E-01
SB-22	LMW PAH	NP	2.34E-01	2.58E-02	NA	NA	2.46E-03	NA	NA	4.21E-02
SB-22	Total PCBs	P	1.82E+00	2.47E+00	9.59E-02	1.16E+00	1.93E-01	2.01E+00	1.66E-01	6.86E-02
SB-22	Total 4,4'-DDx	P	1.02E-02	4.33E-02	7.14E-03	6.12E-01	3.33E-03	4.66E-01	5.44E-03	1.19E-02
SB-22	alpha-Chlordane	NP	1.38E-03	3.24E-03	NA	NA	2.50E-04	NA	NA	1.03E-03
SB-22	Dieldrin	NP	2.75E-03	6.49E-03	NA	NA	5.01E-04	NA	NA	1.57E-03
SB-22	Endosulfan II	NP	5.00E-05	2.07E-04	NA	NA	1.59E-05	NA	NA	ND
SB-22	Endrin	NP	4.50E-05	2.07E-04	NA	NA	1.59E-05	NA	NA	ND
SB-22	gamma-Chlordane	NP	2.35E-03	5.24E-03	NA	NA	4.05E-04	NA	NA	8.56E-04
SB-22	Heptachlor	NP	4.00E-05	1.73E-04	NA	NA	1.33E-05	NA	NA	ND
SB-22	Dibutyltin	NP	3.72E-02	2.83E-02	1.19E+00	7.46E+01	2.24E-03	1.89E-03	3.00E-05	1.26E-02
SB-22	Monobutyltin	NP	5.28E-04	1.81E-02	NA	NA	1.38E-03	NA	NA	NA
SB-22	Tetrabutyltin	NP	1.25E-03	4.12E-02	NA	NA	3.15E-03	NA	NA	NA
SB-22	Tributyltin	NP	5.76E-02	7.38E-02	1.19E+00	7.46E+01	5.75E-03	4.85E-03	7.71E-05	4.48E-02

STATION ID = SB-23

WOE FINAL SCORE= +1

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-23	Aluminum	NP	4.79E+04	8.88E+02	NA	NA	1.68E+02	NA	NA	1.95E+03
SB-23	Antimony	NP	7.26E+00	1.99E-01	NA	NA	3.04E-02	NA	NA	1.87E-01
SB-23	Arsenic	NP	7.03E+00	1.72E+01	5.43E+00	2.17E+01	1.33E+00	2.45E-01	6.11E-02	2.29E+01
SB-23	Barium	NP	7.26E+02	8.65E+00	NA	NA	2.18E+00	NA	NA	2.02E+01
SB-23	Cadmium	NP	3.95E-01	2.21E-01	8.53E-02	1.74E+01	1.77E-02	2.08E-01	1.01E-03	3.69E-01
SB-23	Chromium	NP	2.92E+02	6.11E+00	NA	NA	1.08E+00	NA	NA	2.46E+01
SB-23	Cobalt	NP	1.05E+01	1.39E+00	NA	NA	1.28E-01	NA	NA	3.63E+00
SB-23	Copper	NP	2.77E+02	2.25E+01	2.56E+00	6.37E+01	2.30E+00	8.96E-01	3.61E-02	1.48E+01
SB-23	Iron	NP	2.10E+04	1.50E+03	NA	NA	1.58E+02	NA	NA	2.80E+03
SB-23	Lead	NP	1.14E+02	6.66E+00	2.34E-02	9.33E+00	7.47E-01	3.19E+01	8.01E-02	3.76E+00
SB-23	Manganese	NP	3.05E+02	1.47E+01	NA	NA	1.76E+00	NA	NA	5.74E+01
SB-23	Mercury	P	8.44E-01	1.75E-01	3.98E-02	1.83E-01	1.51E-02	3.81E-01	8.25E-02	1.74E-01
SB-23	Molybdenum	NP	8.26E-01	2.39E+00	NA	NA	1.84E-01	NA	NA	3.04E+00
SB-23	Nickel	NP	1.23E+02	5.41E+00	1.55E+00	6.28E+01	6.70E-01	4.32E-01	1.07E-02	9.60E+00
SB-23	Selenium	NP	1.99E-01	5.12E+00	2.30E-01	9.29E-01	3.91E-01	1.70E+00	4.21E-01	5.34E+00
SB-23	Silver	NP	3.70E-01	2.60E-02	NA	NA	2.76E-03	NA	NA	2.52E-01
SB-23	Vanadium	NP	5.09E+01	4.15E+00	NA	NA	4.23E-01	NA	NA	1.15E+01
SB-23	Zinc	NP	2.12E+02	7.39E+01	1.77E+01	1.77E+02	6.09E+00	3.44E-01	3.44E-02	1.26E+02
SB-23	HMW PAH	NP	2.84E+00	1.09E+00	NA	NA	8.88E-02	NA	NA	3.62E-01
SB-23	LMW PAH	NP	8.05E-01	8.02E-02	NA	NA	7.81E-03	NA	NA	4.21E-02
SB-23	Total PCBs	P	3.71E+00	4.65E+00	9.59E-02	1.16E+00	3.63E-01	3.78E+00	3.12E-01	6.86E-02
SB-23	Total 4,4'-DDx	P	5.64E-03	4.14E-02	7.14E-03	6.12E-01	3.17E-03	4.45E-01	5.19E-03	1.19E-02
SB-23	alpha-Chlordane	NP	2.90E-04	1.97E-03	NA	NA	1.51E-04	NA	NA	1.03E-03
SB-23	Dieldrin	NP	7.00E-04	3.59E-03	NA	NA	2.76E-04	NA	NA	1.57E-03
SB-23	Endosulfan II	NP	7.00E-04	1.76E-04	NA	NA	1.49E-05	NA	NA	ND
SB-23	Endrin	NP	6.00E-04	1.76E-04	NA	NA	1.47E-05	NA	NA	ND
SB-23	gamma-Chlordane	NP	3.70E-04	2.60E-03	NA	NA	1.99E-04	NA	NA	8.56E-04
SB-23	Heptachlor	NP	6.00E-04	1.76E-04	NA	NA	1.47E-05	NA	NA	ND
SB-23	Dibutyltin	NP	5.12E-02	3.02E-02	1.19E+00	7.46E+01	2.42E-03	2.03E-03	3.24E-05	1.26E-02
SB-23	Monobutyltin	NP	3.47E-04	1.73E-02	NA	NA	1.32E-03	NA	NA	NA
SB-23	Tetrabutyltin	NP	8.22E-04	3.94E-02	NA	NA	3.01E-03	NA	NA	NA
SB-23	Tributyltin	NP	1.29E-01	2.40E-01	1.19E+00	7.46E+01	1.86E-02	1.56E-02	2.49E-04	4.48E-02

ND = Not detected

Dose Assessment on Average and 95% UCL Concentrations

Table H-60. Dose Assessment Results for Area X Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X	Aluminum	NP	6.44E+04	1.48E+03	NA	NA	2.48E+02	NA	NA	1.95E+03
Area X	Antimony	NP	3.18E+00	2.58E-01	NA	NA	2.64E-02	NA	NA	1.87E-01
Area X	Arsenic	NP	1.07E+01	1.91E+01	5.43E+00	2.17E+01	1.48E+00	2.73E-01	6.82E-02	2.29E+01
Area X	Barium	NP	5.12E+02	1.52E+01	NA	NA	2.23E+00	NA	NA	2.02E+01
Area X	Cadmium	NP	4.55E-01	2.62E-01	8.53E-02	1.74E+01	2.09E-02	2.45E-01	1.20E-03	3.69E-01
Area X	Chromium	NP	2.28E+02	1.01E+01	NA	NA	1.25E+00	NA	NA	2.46E+01
Area X	Cobalt	NP	1.69E+01	1.90E+00	NA	NA	1.81E-01	NA	NA	3.63E+00
Area X	Copper	NP	1.21E+02	1.89E+01	2.56E+00	6.37E+01	1.70E+00	6.63E-01	2.67E-02	1.48E+01
Area X	Iron	NP	4.02E+04	2.00E+03	NA	NA	2.37E+02	NA	NA	2.80E+03
Area X	Lead	P	8.52E+01	6.73E+00	2.34E-02	9.33E+00	6.92E-01	2.96E+01	7.42E-02	3.76E+00
Area X	Manganese	NP	4.32E+02	2.30E+01	NA	NA	2.66E+00	NA	NA	5.74E+01
Area X	Mercury	NP	7.09E-01	1.28E-01	3.98E-02	1.83E-01	1.12E-02	2.83E-01	6.13E-02	1.74E-01
Area X	Molybdenum	NP	1.14E+00	2.56E+00	NA	NA	1.98E-01	NA	NA	3.04E+00
Area X	Nickel	NP	1.13E+02	7.08E+00	1.55E+00	6.28E+01	7.77E-01	5.01E-01	1.24E-02	9.60E+00
Area X	Selenium	NP	3.22E-01	4.07E+00	2.30E-01	9.29E-01	3.11E-01	1.36E+00	3.35E-01	5.34E+00
Area X	Silver	NP	4.83E-01	1.31E-01	NA	NA	1.10E-02	NA	NA	2.52E-01
Area X	Vanadium	NP	1.32E+02	6.29E+00	NA	NA	7.57E-01	NA	NA	1.15E+01
Area X	Zinc	NP	2.02E+02	9.92E+01	1.77E+01	1.77E+02	8.00E+00	4.52E-01	4.52E-02	1.26E+02
Area X	HMW PAH	P	2.34E+00	5.35E-01	NA	NA	4.57E-02	NA	NA	3.62E-01
Area X	LMW PAH	P	2.80E-01	3.73E-02	NA	NA	3.44E-03	NA	NA	4.21E-02
Area X	Total PCBs	NP	1.14E+00	1.73E+00	9.59E-02	1.16E+00	1.34E-01	1.40E+00	1.15E-01	6.86E-02
Area X	Total 4,4'-DDx	NP	1.46E-02	4.42E-02	7.14E-03	6.12E-01	3.40E-03	4.76E-01	5.56E-03	1.19E-02
Area X	alpha-Chlordane	NP	1.39E-03	3.94E-03	NA	NA	3.04E-04	NA	NA	1.03E-03
Area X	Dieldrin	NP	1.73E-03	6.07E-03	NA	NA	4.67E-04	NA	NA	1.57E-03
Area X	Endosulfan II	NP	8.00E-05	2.16E-04	NA	NA	1.67E-05	NA	NA	ND
Area X	Endrin	NP	7.02E-05	1.80E-04	NA	NA	1.39E-05	NA	NA	ND
Area X	gamma-Chlordane	NP	2.23E-03	5.50E-03	NA	NA	4.25E-04	NA	NA	8.56E-04
Area X	Heptachlor	NP	1.62E-04	1.76E-04	NA	NA	1.38E-05	NA	NA	ND
Area X	Dibutyltin	NP	1.67E-02	1.76E-02	1.19E+00	7.46E+01	1.38E-03	1.16E-03	1.85E-05	1.26E-02
Area X	Monobutyltin	NP	7.65E-04	1.76E-02	NA	NA	1.35E-03	NA	NA	NA
Area X	Tetrabutyltin	NP	1.23E-03	4.02E-02	NA	NA	3.07E-03	NA	NA	NA
Area X	Tributyltin	NP	2.38E-02	5.57E-02	1.19E+00	7.46E+01	4.30E-03	3.62E-03	5.77E-05	4.48E-02

ND - Not detected

Table H-61. Dose Assessment Results for Area X Using 95% UCL of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	95UCL Sediment Conc (dry wt mg/kg)	95 UCL Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X	Aluminum	NP	7.39E+04	1.67E+03	NA	NA	2.82E+02	NA	NA	1.95E+03
Area X	Antimony	NP	4.69E+00	4.83E-01	NA	NA	4.67E-02	NA	NA	1.87E-01
Area X	Arsenic	NP	1.14E+01	2.00E+01	5.43E+00	2.17E+01	1.55E+00	2.85E-01	7.13E-02	2.29E+01
Area X	Barium	NP	6.21E+02	1.75E+01	NA	NA	2.63E+00	NA	NA	2.02E+01
Area X	Cadmium	NP	5.15E-01	2.95E-01	8.53E-02	1.74E+01	2.36E-02	2.77E-01	1.35E-03	3.69E-01
Area X	Chromium	NP	2.86E+02	1.16E+01	NA	NA	1.48E+00	NA	NA	2.46E+01
Area X	Cobalt	NP	1.80E+01	2.05E+00	NA	NA	1.94E-01	NA	NA	3.63E+00
Area X	Copper	NP	1.89E+02	2.06E+01	2.56E+00	6.37E+01	1.97E+00	7.68E-01	3.09E-02	1.48E+01
Area X	Iron	NP	4.78E+04	2.20E+03	NA	NA	2.68E+02	NA	NA	2.80E+03
Area X	Lead	P	9.80E+01	7.60E+00	2.34E-02	9.33E+00	7.85E-01	3.35E+01	8.42E-02	3.76E+00
Area X	Manganese	NP	4.87E+02	2.53E+01	NA	NA	2.95E+00	NA	NA	5.74E+01
Area X	Mercury	NP	8.59E-01	1.40E-01	3.98E-02	1.83E-01	1.25E-02	3.14E-01	6.80E-02	1.74E-01
Area X	Molybdenum	NP	1.23E+00	2.66E+00	NA	NA	2.06E-01	NA	NA	3.04E+00
Area X	Nickel	NP	1.24E+02	7.77E+00	1.55E+00	6.28E+01	8.52E-01	5.49E-01	1.36E-02	9.60E+00
Area X	Selenium	NP	4.15E-01	4.42E+00	2.30E-01	9.29E-01	3.38E-01	1.47E+00	3.64E-01	5.34E+00
Area X	Silver	NP	5.39E-01	2.38E-01	NA	NA	1.93E-02	NA	NA	2.52E-01
Area X	Vanadium	NP	1.58E+02	6.92E+00	NA	NA	8.58E-01	NA	NA	1.15E+01
Area X	Zinc	NP	2.13E+02	1.06E+02	1.77E+01	1.77E+02	8.56E+00	4.84E-01	4.84E-02	1.26E+02
Area X	HMW PAH	P	2.73E+00	6.27E-01	NA	NA	5.36E-02	NA	NA	3.62E-01
Area X	LMW PAH	P	3.66E-01	4.48E-02	NA	NA	4.19E-03	NA	NA	4.21E-02
Area X	Total PCBs	NP	1.61E+00	2.18E+00	9.59E-02	1.16E+00	1.70E-01	1.77E+00	1.46E-01	6.86E-02
Area X	Total 4,4'-DDx	NP	1.93E-02	5.07E-02	7.14E-03	6.12E-01	3.91E-03	5.48E-01	6.40E-03	1.19E-02
Area X	alpha-Chlordane	NP	2.13E-03	6.96E-03	NA	NA	5.36E-04	NA	NA	1.03E-03
Area X	Dieldrin	NP	4.77E-03	1.39E-02	NA	NA	1.08E-03	NA	NA	1.57E-03
Area X	Endosulfan II	NP	7.00E-04	3.75E-04	NA	NA	3.01E-05	NA	NA	ND
Area X	Endrin	NP	6.00E-04	3.40E-04	NA	NA	2.72E-05	NA	NA	ND
Area X	gamma-Chlordane	NP	3.82E-03	9.86E-03	NA	NA	7.61E-04	NA	NA	8.56E-04
Area X	Heptachlor	NP	2.13E-03	3.40E-04	NA	NA	3.04E-05	NA	NA	ND
Area X	Dibutyltin	NP	2.40E-02	3.09E-02	1.19E+00	7.46E+01	2.41E-03	2.03E-03	3.23E-05	1.26E-02
Area X	Monobutyltin	NP	3.30E-03	2.74E-02	NA	NA	2.10E-03	NA	NA	NA
Area X	Tetrabutyltin	NP	1.55E-03	6.23E-02	NA	NA	4.76E-03	NA	NA	NA
Area X	Tributyltin	NP	4.85E-02	7.88E-02	1.19E+00	7.46E+01	6.12E-03	5.15E-03	8.20E-05	4.48E-02

ND - Not detected

Table H-62. Dose Assessment Results for Area IX Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX	Aluminum	NP	6.48E+04	1.88E+03	NA	NA	2.79E+02	NA	NA	1.95E+03
Area IX	Antimony	NP	2.02E+00	1.99E-01	NA	NA	1.94E-02	NA	NA	1.87E-01
Area IX	Arsenic	NP	1.13E+01	2.12E+01	5.43E+00	2.17E+01	1.64E+00	3.02E-01	7.56E-02	2.29E+01
Area IX	Barium	NP	3.92E+02	1.62E+01	NA	NA	2.05E+00	NA	NA	2.02E+01
Area IX	Cadmium	NP	3.34E-01	7.01E-01	8.53E-02	1.74E+01	5.42E-02	6.36E-01	3.11E-03	3.69E-01
Area IX	Chromium	NP	3.20E+02	1.93E+01	NA	NA	2.14E+00	NA	NA	2.46E+01
Area IX	Cobalt	NP	1.93E+01	2.18E+00	NA	NA	2.07E-01	NA	NA	3.63E+00
Area IX	Copper	NP	6.94E+01	1.78E+01	2.56E+00	6.37E+01	1.50E+00	5.86E-01	2.36E-02	1.48E+01
Area IX	Iron	NP	4.49E+04	2.71E+03	NA	NA	3.01E+02	NA	NA	2.80E+03
Area IX	Lead	P	4.05E+01	4.52E+00	2.34E-02	9.33E+00	4.30E-01	1.83E+01	4.61E-02	3.76E+00
Area IX	Manganese	NP	4.95E+02	3.44E+01	NA	NA	3.66E+00	NA	NA	5.74E+01
Area IX	Mercury	NP	4.32E-01	1.16E-01	3.98E-02	1.83E-01	9.75E-03	2.45E-01	5.32E-02	1.74E-01
Area IX	Molybdenum	NP	1.35E+00	2.70E+00	NA	NA	2.09E-01	NA	NA	3.04E+00
Area IX	Nickel	NP	1.15E+02	8.75E+00	1.55E+00	6.28E+01	9.09E-01	5.86E-01	1.45E-02	9.60E+00
Area IX	Selenium	NP	3.21E-01	4.74E+00	2.30E-01	9.29E-01	3.63E-01	1.58E+00	3.90E-01	5.34E+00
Area IX	Silver	NP	3.25E-01	1.33E-01	NA	NA	1.08E-02	NA	NA	2.52E-01
Area IX	Vanadium	NP	1.52E+02	8.98E+00	NA	NA	1.00E+00	NA	NA	1.15E+01
Area IX	Zinc	NP	1.43E+02	1.00E+02	1.77E+01	1.77E+02	7.94E+00	4.49E-01	4.49E-02	1.26E+02
Area IX	HMW PAH	P	1.33E+00	4.22E-01	NA	NA	3.50E-02	NA	NA	3.62E-01
Area IX	LMW PAH	P	1.42E-01	3.04E-02	NA	NA	2.62E-03	NA	NA	4.21E-02
Area IX	Total PCBs	NP	2.27E-01	9.49E-01	9.59E-02	1.16E+00	7.29E-02	7.60E-01	6.27E-02	6.86E-02
Area IX	Total 4,4'-DDx	NP	3.26E-03	2.16E-02	7.14E-03	6.12E-01	1.65E-03	2.32E-01	2.70E-03	1.19E-02
Area IX	alpha-Chlordane	NP	2.70E-04	1.70E-03	NA	NA	1.30E-04	NA	NA	1.03E-03
Area IX	Dieldrin	NP	1.15E-04	1.60E-03	NA	NA	1.22E-04	NA	NA	1.57E-03
Area IX	Endosulfan II	NP	5.17E-05	2.53E-04	NA	NA	1.95E-05	NA	NA	ND
Area IX	Endrin	NP	4.42E-05	2.18E-04	NA	NA	1.67E-05	NA	NA	ND
Area IX	gamma-Chlordane	NP	2.33E-04	2.03E-03	NA	NA	1.55E-04	NA	NA	8.56E-04
Area IX	Heptachlor	NP	4.25E-05	2.12E-04	NA	NA	1.63E-05	NA	NA	ND
Area IX	Dibutyltin	NP	1.03E-02	1.86E-02	1.19E+00	7.46E+01	1.44E-03	1.22E-03	1.93E-05	1.26E-02
Area IX	Monobutyltin	NP	9.03E-04	1.94E-02	NA	NA	1.48E-03	NA	NA	NA
Area IX	Tetrabutyltin	NP	1.26E-03	4.41E-02	NA	NA	3.37E-03	NA	NA	NA
Area IX	Tributyltin	NP	2.11E-02	1.22E-01	1.19E+00	7.46E+01	9.36E-03	7.88E-03	1.25E-04	4.48E-02

ND - Not detected

Table H-63. Dose Assessment Results for Area IX Using 95% UCL of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	95UCL Sediment Conc (dry wt mg/kg)	95 UCL Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX	Aluminum	NP	7.17E+04	2.46E+03	NA	NA	3.38E+02	NA	NA	1.95E+03
Area IX	Antimony	NP	2.76E+00	2.58E-01	NA	NA	2.55E-02	NA	NA	1.87E-01
Area IX	Arsenic	NP	1.27E+01	2.32E+01	5.43E+00	2.17E+01	1.80E+00	3.31E-01	8.26E-02	2.29E+01
Area IX	Barium	NP	4.42E+02	2.12E+01	NA	NA	2.54E+00	NA	NA	2.02E+01
Area IX	Cadmium	NP	3.87E-01	1.25E+00	8.53E-02	1.74E+01	9.59E-02	1.12E+00	5.50E-03	3.69E-01
Area IX	Chromium	NP	4.29E+02	2.80E+01	NA	NA	3.04E+00	NA	NA	2.46E+01
Area IX	Cobalt	NP	2.08E+01	2.67E+00	NA	NA	2.47E-01	NA	NA	3.63E+00
Area IX	Copper	NP	8.43E+01	2.13E+01	2.56E+00	6.37E+01	1.80E+00	7.03E-01	2.83E-02	1.48E+01
Area IX	Iron	NP	4.73E+04	3.48E+03	NA	NA	3.64E+02	NA	NA	2.80E+03
Area IX	Lead	P	5.45E+01	6.12E+00	2.34E-02	9.33E+00	5.81E-01	2.48E+01	6.23E-02	3.76E+00
Area IX	Manganese	NP	5.71E+02	4.77E+01	NA	NA	4.83E+00	NA	NA	5.74E+01
Area IX	Mercury	NP	5.18E-01	1.41E-01	3.98E-02	1.83E-01	1.19E-02	2.99E-01	6.47E-02	1.74E-01
Area IX	Molybdenum	NP	1.63E+00	2.99E+00	NA	NA	2.32E-01	NA	NA	3.04E+00
Area IX	Nickel	NP	1.35E+02	1.12E+01	1.55E+00	6.28E+01	1.14E+00	7.33E-01	1.81E-02	9.60E+00
Area IX	Selenium	NP	3.78E-01	5.18E+00	2.30E-01	9.29E-01	3.96E-01	1.72E+00	4.26E-01	5.34E+00
Area IX	Silver	NP	4.28E-01	2.26E-01	NA	NA	1.82E-02	NA	NA	2.52E-01
Area IX	Vanadium	NP	1.63E+02	1.16E+01	NA	NA	1.23E+00	NA	NA	1.15E+01
Area IX	Zinc	NP	1.62E+02	1.12E+02	1.77E+01	1.77E+02	8.88E+00	5.02E-01	5.02E-02	1.26E+02
Area IX	HMW PAH	P	1.66E+00	5.24E-01	NA	NA	4.35E-02	NA	NA	3.62E-01
Area IX	LMW PAH	P	1.92E-01	3.46E-02	NA	NA	3.04E-03	NA	NA	4.21E-02
Area IX	Total PCBs	NP	3.39E-01	1.34E+00	9.59E-02	1.16E+00	1.03E-01	1.07E+00	8.84E-02	6.86E-02
Area IX	Total 4,4'-DDx	NP	4.26E-03	2.67E-02	7.14E-03	6.12E-01	2.05E-03	2.87E-01	3.35E-03	1.19E-02
Area IX	alpha-Chlordane	NP	3.62E-04	2.07E-03	NA	NA	1.59E-04	NA	NA	1.03E-03
Area IX	Dieldrin	NP	4.40E-04	1.94E-03	NA	NA	1.49E-04	NA	NA	1.57E-03
Area IX	Endosulfan II	NP	6.00E-05	3.50E-04	NA	NA	2.69E-05	NA	NA	ND
Area IX	Endrin	NP	5.00E-05	3.00E-04	NA	NA	2.30E-05	NA	NA	ND
Area IX	gamma-Chlordane	NP	3.77E-04	2.52E-03	NA	NA	1.93E-04	NA	NA	8.56E-04
Area IX	Heptachlor	NP	5.00E-05	3.00E-04	NA	NA	2.30E-05	NA	NA	ND
Area IX	Dibutyltin	NP	1.61E-02	2.72E-02	1.19E+00	7.46E+01	2.11E-03	1.78E-03	2.83E-05	1.26E-02
Area IX	Monobutyltin	NP	2.69E-03	2.46E-02	NA	NA	1.88E-03	NA	NA	NA
Area IX	Tetrabutyltin	NP	1.50E-03	5.61E-02	NA	NA	4.28E-03	NA	NA	NA
Area IX	Tributyltin	NP	6.59E-02	2.24E-01	1.19E+00	7.46E+01	1.73E-02	1.45E-02	2.32E-04	4.48E-02

ND - Not detected

Table H-64. Dose Assessment Results for Area VIII Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII	Aluminum	NP	5.51E+04	1.24E+03	NA	NA	2.10E+02	NA	NA	1.95E+03
Area VIII	Antimony	NP	1.21E+00	1.75E-01	NA	NA	1.59E-02	NA	NA	1.87E-01
Area VIII	Arsenic	NP	8.12E+00	2.26E+01	5.43E+00	2.17E+01	1.74E+00	3.21E-01	8.02E-02	2.29E+01
Area VIII	Barium	NP	3.92E+02	1.18E+01	NA	NA	1.72E+00	NA	NA	2.02E+01
Area VIII	Cadmium	NP	2.34E-01	4.23E-01	8.53E-02	1.74E+01	3.28E-02	3.84E-01	1.88E-03	3.69E-01
Area VIII	Chromium	NP	2.36E+02	1.30E+01	NA	NA	1.49E+00	NA	NA	2.46E+01
Area VIII	Cobalt	NP	1.55E+01	2.10E+00	NA	NA	1.93E-01	NA	NA	3.63E+00
Area VIII	Copper	NP	3.11E+01	1.64E+01	2.56E+00	6.37E+01	1.32E+00	5.14E-01	2.07E-02	1.48E+01
Area VIII	Iron	NP	3.34E+04	1.88E+03	NA	NA	2.13E+02	NA	NA	2.80E+03
Area VIII	Lead	P	2.14E+01	3.19E+00	2.34E-02	9.33E+00	2.88E-01	1.23E+01	3.09E-02	3.76E+00
Area VIII	Manganese	NP	4.95E+02	2.73E+01	NA	NA	3.12E+00	NA	NA	5.74E+01
Area VIII	Mercury	NP	1.60E-01	1.06E-01	3.98E-02	1.83E-01	8.41E-03	2.12E-01	4.58E-02	1.74E-01
Area VIII	Molybdenum	NP	7.38E-01	2.96E+00	NA	NA	2.27E-01	NA	NA	3.04E+00
Area VIII	Nickel	NP	7.41E+01	6.93E+00	1.55E+00	6.28E+01	6.84E-01	4.41E-01	1.09E-02	9.60E+00
Area VIII	Selenium	NP	1.87E-01	4.76E+00	2.30E-01	9.29E-01	3.64E-01	1.58E+00	3.92E-01	5.34E+00
Area VIII	Silver	NP	1.87E-01	1.59E-01	NA	NA	1.25E-02	NA	NA	2.52E-01
Area VIII	Vanadium	NP	1.15E+02	6.96E+00	NA	NA	7.71E-01	NA	NA	1.15E+01
Area VIII	Zinc	NP	9.05E+01	1.08E+02	1.77E+01	1.77E+02	8.47E+00	4.78E-01	4.78E-02	1.26E+02
Area VIII	HMW PAH	P	8.34E-01	2.90E-01	NA	NA	2.39E-02	NA	NA	3.62E-01
Area VIII	LMW PAH	P	1.01E-01	2.79E-02	NA	NA	2.34E-03	NA	NA	4.21E-02
Area VIII	Total PCBs	NP	2.32E-02	2.12E-01	9.59E-02	1.16E+00	1.62E-02	1.69E-01	1.40E-02	6.86E-02
Area VIII	Total 4,4'-DDx	NP	1.19E-03	1.02E-02	7.14E-03	6.12E-01	7.78E-04	1.09E-01	1.27E-03	1.19E-02
Area VIII	alpha-Chlordane	NP	6.69E-05	8.74E-04	NA	NA	6.69E-05	NA	NA	1.03E-03
Area VIII	Dieldrin	NP	4.06E-05	1.49E-03	NA	NA	1.14E-04	NA	NA	1.57E-03
Area VIII	Endosulfan II	NP	4.06E-05	1.88E-04	NA	NA	1.44E-05	NA	NA	ND
Area VIII	Endrin	NP	3.81E-05	1.29E-04	NA	NA	9.96E-06	NA	NA	ND
Area VIII	gamma-Chlordane	NP	3.18E-05	8.76E-04	NA	NA	6.70E-05	NA	NA	8.56E-04
Area VIII	Heptachlor	NP	3.38E-05	1.39E-04	NA	NA	1.07E-05	NA	NA	ND
Area VIII	Dibutyltin	NP	2.14E-03	8.76E-03	1.19E+00	7.46E+01	6.74E-04	5.67E-04	9.03E-06	1.26E-02
Area VIII	Monobutyltin	NP	4.33E-04	1.93E-02	NA	NA	1.47E-03	NA	NA	NA
Area VIII	Tetrabutyltin	NP	1.03E-03	4.63E-02	NA	NA	3.54E-03	NA	NA	NA
Area VIII	Tributyltin	NP	2.48E-03	2.60E-02	1.19E+00	7.46E+01	1.99E-03	1.68E-03	2.67E-05	4.48E-02

ND - Not detected

Table H-65. Dose Assessment Results for Area VIII Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	95UCL Sediment Conc (dry wt mg/kg)	95 UCL Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII	Aluminum	NP	6.40E+04	1.51E+03	NA	NA	2.49E+02	NA	NA	1.95E+03
Area VIII	Antimony	NP	2.77E+00	2.23E-01	NA	NA	2.28E-02	NA	NA	1.87E-01
Area VIII	Arsenic	NP	9.69E+00	2.47E+01	5.43E+00	2.17E+01	1.91E+00	3.52E-01	8.79E-02	2.29E+01
Area VIII	Barium	NP	4.24E+02	1.41E+01	NA	NA	1.96E+00	NA	NA	2.02E+01
Area VIII	Cadmium	NP	2.71E-01	1.02E+00	8.53E-02	1.74E+01	7.81E-02	9.16E-01	4.48E-03	3.69E-01
Area VIII	Chromium	NP	2.90E+02	1.56E+01	NA	NA	1.80E+00	NA	NA	2.46E+01
Area VIII	Cobalt	NP	1.88E+01	2.29E+00	NA	NA	2.14E-01	NA	NA	3.63E+00
Area VIII	Copper	NP	4.11E+01	2.29E+01	2.56E+00	6.37E+01	1.83E+00	7.15E-01	2.88E-02	1.48E+01
Area VIII	Iron	NP	3.94E+04	2.13E+03	NA	NA	2.45E+02	NA	NA	2.80E+03
Area VIII	Lead	P	2.47E+01	4.04E+00	2.34E-02	9.33E+00	3.60E-01	1.54E+01	3.87E-02	3.76E+00
Area VIII	Manganese	NP	5.34E+02	3.01E+01	NA	NA	3.42E+00	NA	NA	5.74E+01
Area VIII	Mercury	NP	2.64E-01	1.32E-01	3.98E-02	1.83E-01	1.06E-02	2.67E-01	5.78E-02	1.74E-01
Area VIII	Molybdenum	NP	9.47E-01	3.40E+00	NA	NA	2.62E-01	NA	NA	3.04E+00
Area VIII	Nickel	NP	9.75E+01	7.79E+00	1.55E+00	6.28E+01	7.99E-01	5.15E-01	1.27E-02	9.60E+00
Area VIII	Selenium	NP	4.60E-01	5.01E+00	2.30E-01	9.29E-01	3.83E-01	1.67E+00	4.13E-01	5.34E+00
Area VIII	Silver	NP	2.80E-01	2.16E-01	NA	NA	1.71E-02	NA	NA	2.52E-01
Area VIII	Vanadium	NP	1.62E+02	7.63E+00	NA	NA	9.22E-01	NA	NA	1.15E+01
Area VIII	Zinc	NP	1.09E+02	1.21E+02	1.77E+01	1.77E+02	9.45E+00	5.34E-01	5.34E-02	1.26E+02
Area VIII	HMW PAH	P	1.70E+00	3.61E-01	NA	NA	3.11E-02	NA	NA	3.62E-01
Area VIII	LMW PAH	P	1.97E-01	3.59E-02	NA	NA	3.15E-03	NA	NA	4.21E-02
Area VIII	Total PCBs	NP	3.31E-02	2.87E-01	9.59E-02	1.16E+00	2.20E-02	2.29E-01	1.89E-02	6.86E-02
Area VIII	Total 4,4'-DDx	NP	3.54E-03	1.26E-02	7.14E-03	6.12E-01	9.70E-04	1.36E-01	1.59E-03	1.19E-02
Area VIII	alpha-Chlordane	NP	1.50E-04	1.12E-03	NA	NA	8.57E-05	NA	NA	1.03E-03
Area VIII	Dieldrin	NP	6.00E-05	2.12E-03	NA	NA	1.62E-04	NA	NA	1.57E-03
Area VIII	Endosulfan II	NP	6.00E-05	2.40E-04	NA	NA	1.85E-05	NA	NA	ND
Area VIII	Endrin	NP	5.50E-05	2.10E-04	NA	NA	1.62E-05	NA	NA	ND
Area VIII	gamma-Chlordane	NP	5.00E-05	1.07E-03	NA	NA	8.21E-05	NA	NA	8.56E-04
Area VIII	Heptachlor	NP	5.00E-05	2.10E-04	NA	NA	1.61E-05	NA	NA	ND
Area VIII	Dibutyltin	NP	5.36E-03	9.24E-03	1.19E+00	7.46E+01	7.17E-04	6.03E-04	9.61E-06	1.26E-02
Area VIII	Monobutyltin	NP	6.47E-04	4.42E-02	NA	NA	3.37E-03	NA	NA	NA
Area VIII	Tetrabutyltin	NP	1.53E-03	1.01E-01	NA	NA	7.69E-03	NA	NA	NA
Area VIII	Tributyltin	NP	6.82E-03	2.84E-02	1.19E+00	7.46E+01	2.18E-03	1.84E-03	2.92E-05	4.48E-02

ND - Not detected

Table H-66. Dose Assessment Results for Area III Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area III	Aluminum	NP	6.61E+04	1.68E+03	NA	NA	2.67E+02	NA	NA	1.95E+03
Area III	Antimony	NP	1.96E+00	1.40E-01	NA	NA	1.48E-02	NA	NA	1.87E-01
Area III	Arsenic	NP	1.18E+01	2.03E+01	5.43E+00	2.17E+01	1.57E+00	2.89E-01	7.23E-02	2.29E+01
Area III	Barium	NP	4.61E+02	1.73E+01	NA	NA	2.29E+00	NA	NA	2.02E+01
Area III	Cadmium	NP	2.80E-01	2.76E-01	8.53E-02	1.74E+01	2.16E-02	2.54E-01	1.24E-03	3.69E-01
Area III	Chromium	NP	2.38E+02	1.59E+01	NA	NA	1.71E+00	NA	NA	2.46E+01
Area III	Cobalt	NP	1.74E+01	2.40E+00	NA	NA	2.20E-01	NA	NA	3.63E+00
Area III	Copper	NP	1.77E+02	3.96E+01	2.56E+00	6.37E+01	3.39E+00	1.32E+00	5.33E-02	1.48E+01
Area III	Iron	NP	4.10E+04	2.59E+03	NA	NA	2.83E+02	NA	NA	2.80E+03
Area III	Lead	P	4.72E+01	2.83E+00	2.34E-02	9.33E+00	3.14E-01	1.34E+01	3.37E-02	3.76E+00
Area III	Manganese	NP	5.07E+02	3.88E+01	NA	NA	4.02E+00	NA	NA	5.74E+01
Area III	Mercury	NP	8.52E-01	5.36E-01	3.98E-02	1.83E-01	4.27E-02	1.07E+00	2.33E-01	1.74E-01
Area III	Molybdenum	NP	9.46E-01	2.56E+00	NA	NA	1.98E-01	NA	NA	3.04E+00
Area III	Nickel	NP	1.13E+02	8.29E+00	1.55E+00	6.28E+01	8.69E-01	5.60E-01	1.38E-02	9.60E+00
Area III	Selenium	NP	3.39E-01	3.88E+00	2.30E-01	9.29E-01	2.97E-01	1.29E+00	3.20E-01	5.34E+00
Area III	Silver	NP	2.74E-01	1.03E-01	NA	NA	8.46E-03	NA	NA	2.52E-01
Area III	Vanadium	NP	1.31E+02	8.28E+00	NA	NA	9.06E-01	NA	NA	1.15E+01
Area III	Zinc	NP	1.28E+02	1.01E+02	1.77E+01	1.77E+02	8.00E+00	4.52E-01	4.52E-02	1.26E+02
Area III	HMW PAH	P	3.98E+00	4.49E-01	NA	NA	4.26E-02	NA	NA	3.62E-01
Area III	LMW PAH	P	6.39E-01	4.53E-02	NA	NA	4.79E-03	NA	NA	4.21E-02
Area III	Total PCBs	NP	3.92E-01	1.32E-01	9.59E-02	1.16E+00	1.09E-02	1.13E-01	9.35E-03	6.86E-02
Area III	Total 4,4'-DDx	NP	2.53E-03	9.78E-03	7.14E-03	6.12E-01	7.52E-04	1.05E-01	1.23E-03	1.19E-02
Area III	alpha-Chlordane	NP	1.13E-04	6.77E-04	NA	NA	5.19E-05	NA	NA	1.03E-03
Area III	Dieldrin	NP	4.66E-05	8.14E-04	NA	NA	6.23E-05	NA	NA	1.57E-03
Area III	Endosulfan II	NP	4.75E-05	2.06E-04	NA	NA	1.58E-05	NA	NA	ND
Area III	Endrin	NP	4.25E-05	1.65E-04	NA	NA	1.27E-05	NA	NA	ND
Area III	gamma-Chlordane	NP	3.75E-05	6.83E-04	NA	NA	5.23E-05	NA	NA	8.56E-04
Area III	Heptachlor	NP	3.88E-05	1.67E-04	NA	NA	1.28E-05	NA	NA	ND
Area III	Dibutyltin	NP	1.90E-02	3.84E-02	1.19E+00	7.46E+01	2.98E-03	2.51E-03	3.99E-05	1.26E-02
Area III	Monobutyltin	NP	4.87E-04	1.67E-02	NA	NA	1.28E-03	NA	NA	NA
Area III	Tetrabutyltin	NP	1.15E-03	3.99E-02	NA	NA	3.05E-03	NA	NA	NA
Area III	Tributyltin	NP	6.52E-02	3.60E-01	1.19E+00	7.46E+01	2.76E-02	2.32E-02	3.70E-04	4.48E-02

ND - Not detected

Table H-67. Dose Assessment Results for Area III Using 95% UCL of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	95UCL Sediment Conc (dry wt mg/kg)	95 UCL Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area III	Aluminum	NP	6.77E+04	1.86E+03	NA	NA	2.83E+02	NA	NA	1.95E+03
Area III	Antimony	NP	6.30E+00	1.53E-01	NA	NA	2.49E-02	NA	NA	1.87E-01
Area III	Arsenic	NP	1.40E+01	2.11E+01	5.43E+00	2.17E+01	1.64E+00	3.02E-01	7.56E-02	2.29E+01
Area III	Barium	NP	4.79E+02	1.96E+01	NA	NA	2.50E+00	NA	NA	2.02E+01
Area III	Cadmium	NP	4.29E-01	2.99E-01	8.53E-02	1.74E+01	2.38E-02	2.79E-01	1.36E-03	3.69E-01
Area III	Chromium	NP	3.20E+02	1.96E+01	NA	NA	2.16E+00	NA	NA	2.46E+01
Area III	Cobalt	NP	1.82E+01	2.53E+00	NA	NA	2.31E-01	NA	NA	3.63E+00
Area III	Copper	NP	7.08E+02	9.00E+01	2.56E+00	6.37E+01	8.35E+00	3.26E+00	1.31E-01	1.48E+01
Area III	Iron	NP	4.11E+04	2.86E+03	NA	NA	3.04E+02	NA	NA	2.80E+03
Area III	Lead	P	1.18E+02	3.28E+00	2.34E-02	9.33E+00	4.97E-01	2.12E+01	5.33E-02	3.76E+00
Area III	Manganese	NP	5.27E+02	4.42E+01	NA	NA	4.48E+00	NA	NA	5.74E+01
Area III	Mercury	NP	1.66E+00	2.12E+00	3.98E-02	1.83E-01	1.65E-01	4.15E+00	9.00E-01	1.74E-01
Area III	Molybdenum	NP	1.04E+00	2.67E+00	NA	NA	2.06E-01	NA	NA	3.04E+00
Area III	Nickel	NP	1.71E+02	9.10E+00	1.55E+00	6.28E+01	1.05E+00	6.78E-01	1.67E-02	9.60E+00
Area III	Selenium	NP	3.76E-01	4.29E+00	2.30E-01	9.29E-01	3.28E-01	1.43E+00	3.53E-01	5.34E+00
Area III	Silver	NP	3.00E-01	none*	NA	NA	#VALUE!	NA	NA	2.52E-01
Area III	Vanadium	NP	1.36E+02	9.08E+00	NA	NA	9.77E-01	NA	NA	1.15E+01
Area III	Zinc	NP	1.93E+02	1.08E+02	1.77E+01	1.77E+02	8.64E+00	4.88E-01	4.88E-02	1.26E+02
Area III	HMW PAH	P	4.71E+00	5.19E-01	NA	NA	4.95E-02	NA	NA	3.62E-01
Area III	LMW PAH	P	7.86E-01	5.15E-02	NA	NA	5.58E-03	NA	NA	4.21E-02
Area III	Total PCBs	NP	2.44E+00	2.58E-01	9.59E-02	1.16E+00	2.48E-02	2.58E-01	2.13E-02	6.86E-02
Area III	Total 4,4'-DDx	NP	2.89E-03	1.06E-02	7.14E-03	6.12E-01	8.18E-04	1.15E-01	1.34E-03	1.19E-02
Area III	alpha-Chlordane	NP	2.20E-04	7.69E-04	NA	NA	5.92E-05	NA	NA	1.03E-03
Area III	Dieldrin	NP	5.50E-05	1.02E-03	NA	NA	7.82E-05	NA	NA	1.57E-03
Area III	Endosulfan II	NP	5.50E-05	3.45E-04	NA	NA	2.65E-05	NA	NA	ND
Area III	Endrin	NP	5.00E-05	3.05E-04	NA	NA	2.34E-05	NA	NA	ND
Area III	gamma-Chlordane	NP	4.50E-05	8.22E-04	NA	NA	6.28E-05	NA	NA	8.56E-04
Area III	Heptachlor	NP	4.50E-05	3.05E-04	NA	NA	2.34E-05	NA	NA	ND
Area III	Dibutyltin	NP	4.59E-02	7.56E-02	1.19E+00	7.46E+01	5.87E-03	4.94E-03	7.86E-05	1.26E-02
Area III	Monobutyltin	NP	5.69E-04	3.05E-02	NA	NA	2.33E-03	NA	NA	NA
Area III	Tetrabutyltin	NP	1.35E-03	6.94E-02	NA	NA	5.30E-03	NA	NA	NA
Area III	Tributyltin	NP	2.08E-01	8.85E-01	1.19E+00	7.46E+01	6.80E-02	5.73E-02	9.12E-04	4.48E-02

ND - Not detected

Table H-68. Dose Assessment Results for Area I Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I	Aluminum	NP	6.92E+04	1.46E+03	NA	NA	2.56E+02	NA	NA	1.95E+03
Area I	Antimony	NP	9.09E-01	1.28E-01	NA	NA	1.16E-02	NA	NA	1.87E-01
Area I	Arsenic	NP	1.05E+01	2.04E+01	5.43E+00	2.17E+01	1.58E+00	2.91E-01	7.28E-02	2.29E+01
Area I	Barium	NP	4.69E+02	1.40E+01	NA	NA	2.05E+00	NA	NA	2.02E+01
Area I	Cadmium	NP	2.25E-01	2.51E-01	8.53E-02	1.74E+01	1.97E-02	2.30E-01	1.13E-03	3.69E-01
Area I	Chromium	NP	2.06E+02	8.17E+00	NA	NA	1.05E+00	NA	NA	2.46E+01
Area I	Cobalt	NP	1.68E+01	2.00E+00	NA	NA	1.88E-01	NA	NA	3.63E+00
Area I	Copper	NP	5.89E+01	1.32E+01	2.56E+00	6.37E+01	1.13E+00	4.40E-01	1.77E-02	1.48E+01
Area I	Iron	NP	4.18E+04	1.83E+03	NA	NA	2.27E+02	NA	NA	2.80E+03
Area I	Lead	P	4.11E+01	2.39E+00	2.34E-02	9.33E+00	2.68E-01	1.14E+01	2.87E-02	3.76E+00
Area I	Manganese	NP	4.28E+02	2.21E+01	NA	NA	2.59E+00	NA	NA	5.74E+01
Area I	Mercury	NP	3.12E-01	9.72E-02	3.98E-02	1.83E-01	8.07E-03	2.03E-01	4.40E-02	1.74E-01
Area I	Molybdenum	NP	1.03E+00	2.66E+00	NA	NA	2.05E-01	NA	NA	3.04E+00
Area I	Nickel	NP	1.26E+02	8.24E+00	1.55E+00	6.28E+01	8.93E-01	5.76E-01	1.42E-02	9.60E+00
Area I	Selenium	NP	3.37E-01	4.28E+00	2.30E-01	9.29E-01	3.28E-01	1.43E+00	3.53E-01	5.34E+00
Area I	Silver	NP	2.79E-01	3.89E-01	NA	NA	3.03E-02	NA	NA	2.52E-01
Area I	Vanadium	NP	1.36E+02	6.43E+00	NA	NA	7.76E-01	NA	NA	1.15E+01
Area I	Zinc	NP	1.22E+02	9.33E+01	1.77E+01	1.77E+02	7.38E+00	4.17E-01	4.17E-02	1.26E+02
Area I	HMW PAH	P	1.78E+00	6.34E-01	NA	NA	5.22E-02	NA	NA	3.62E-01
Area I	LMW PAH	P	2.41E-01	5.50E-02	NA	NA	4.70E-03	NA	NA	4.21E-02
Area I	Total PCBs	NP	3.87E-02	9.53E-02	9.59E-02	1.16E+00	7.36E-03	7.67E-02	6.33E-03	6.86E-02
Area I	Total 4,4'-DDx	NP	2.93E-03	1.28E-02	7.14E-03	6.12E-01	9.81E-04	1.37E-01	1.60E-03	1.19E-02
Area I	alpha-Chlordane	NP	1.74E-04	1.22E-03	NA	NA	9.33E-05	NA	NA	1.03E-03
Area I	Dieldrin	NP	5.33E-05	1.63E-03	NA	NA	1.24E-04	NA	NA	1.57E-03
Area I	Endosulfan II	NP	5.33E-05	2.05E-04	NA	NA	1.58E-05	NA	NA	ND
Area I	Endrin	NP	4.83E-05	1.48E-04	NA	NA	1.14E-05	NA	NA	ND
Area I	gamma-Chlordane	NP	5.83E-05	9.96E-04	NA	NA	7.62E-05	NA	NA	8.56E-04
Area I	Heptachlor	NP	4.50E-05	1.60E-04	NA	NA	1.23E-05	NA	NA	ND
Area I	Dibutyltin	NP	2.69E-03	9.74E-03	1.19E+00	7.46E+01	7.49E-04	6.31E-04	1.00E-05	1.26E-02
Area I	Monobutyltin	NP	5.63E-04	1.82E-02	NA	NA	1.39E-03	NA	NA	NA
Area I	Tetrabutyltin	NP	1.33E-03	4.14E-02	NA	NA	3.17E-03	NA	NA	NA
Area I	Tributyltin	NP	3.58E-03	3.47E-02	1.19E+00	7.46E+01	2.66E-03	2.24E-03	3.56E-05	4.48E-02

ND - Not detected

Table H-69. Dose Assessment Results for Area I Using 95% UCL of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	95UCL Sediment Conc (dry wt mg/kg)	95 UCL Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I	Aluminum	NP	7.21E+04	1.97E+03	NA	NA	3.01E+02	NA	NA	1.95E+03
Area I	Antimony	NP	1.08E+00	1.48E-01	NA	NA	1.36E-02	NA	NA	1.87E-01
Area I	Arsenic	NP	1.10E+01	2.17E+01	5.43E+00	2.17E+01	1.68E+00	3.10E-01	7.74E-02	2.29E+01
Area I	Barium	NP	4.71E+02	1.81E+01	NA	NA	2.37E+00	NA	NA	2.02E+01
Area I	Cadmium	NP	2.45E-01	2.95E-01	8.53E-02	1.74E+01	2.30E-02	2.70E-01	1.32E-03	3.69E-01
Area I	Chromium	NP	3.19E+02	9.88E+00	NA	NA	1.42E+00	NA	NA	2.46E+01
Area I	Cobalt	NP	2.09E+01	2.26E+00	NA	NA	2.16E-01	NA	NA	3.63E+00
Area I	Copper	NP	1.12E+02	1.47E+01	2.56E+00	6.37E+01	1.35E+00	5.28E-01	2.13E-02	1.48E+01
Area I	Iron	NP	4.30E+04	2.16E+03	NA	NA	2.55E+02	NA	NA	2.80E+03
Area I	Lead	P	1.15E+02	2.79E+00	2.34E-02	9.33E+00	4.54E-01	1.94E+01	4.87E-02	3.76E+00
Area I	Manganese	NP	4.40E+02	2.71E+01	NA	NA	2.99E+00	NA	NA	5.74E+01
Area I	Mercury	NP	3.62E-01	1.21E-01	3.98E-02	1.83E-01	1.00E-02	2.52E-01	5.46E-02	1.74E-01
Area I	Molybdenum	NP	1.29E+00	2.83E+00	NA	NA	2.19E-01	NA	NA	3.04E+00
Area I	Nickel	NP	2.32E+02	1.33E+01	1.55E+00	6.28E+01	1.50E+00	9.66E-01	2.38E-02	9.60E+00
Area I	Selenium	NP	3.87E-01	5.14E+00	2.30E-01	9.29E-01	3.93E-01	1.71E+00	4.23E-01	5.34E+00
Area I	Silver	NP	3.00E-01	1.69E+00	NA	NA	1.30E-01	NA	NA	2.52E-01
Area I	Vanadium	NP	1.41E+02	7.57E+00	NA	NA	8.73E-01	NA	NA	1.15E+01
Area I	Zinc	NP	1.30E+02	1.07E+02	1.77E+01	1.77E+02	8.41E+00	4.75E-01	4.75E-02	1.26E+02
Area I	HMW PAH	P	2.69E+00	1.33E+00	NA	NA	1.07E-01	NA	NA	3.62E-01
Area I	LMW PAH	P	3.83E-01	7.96E-02	NA	NA	6.88E-03	NA	NA	4.21E-02
Area I	Total PCBs	NP	8.98E-02	1.31E-01	9.59E-02	1.16E+00	1.02E-02	1.07E-01	8.79E-03	6.86E-02
Area I	Total 4,4'-DDx	NP	3.62E-03	1.50E-02	7.14E-03	6.12E-01	1.15E-03	1.62E-01	1.89E-03	1.19E-02
Area I	alpha-Chlordane	NP	5.00E-04	1.90E-03	NA	NA	1.46E-04	NA	NA	1.03E-03
Area I	Dieldrin	NP	5.50E-05	3.80E-03	NA	NA	2.90E-04	NA	NA	1.57E-03
Area I	Endosulfan II	NP	5.50E-05	2.70E-04	NA	NA	2.07E-05	NA	NA	ND
Area I	Endrin	NP	5.00E-05	2.35E-04	NA	NA	1.81E-05	NA	NA	ND
Area I	gamma-Chlordane	NP	1.40E-04	2.02E-03	NA	NA	1.54E-04	NA	NA	8.56E-04
Area I	Heptachlor	NP	4.50E-05	2.35E-04	NA	NA	1.80E-05	NA	NA	ND
Area I	Dibutyltin	NP	1.09E-02	1.18E-02	1.19E+00	7.46E+01	9.28E-04	7.81E-04	1.24E-05	1.26E-02
Area I	Monobutyltin	NP	5.89E-04	2.18E-02	NA	NA	1.67E-03	NA	NA	NA
Area I	Tetrabutyltin	NP	1.40E-03	4.97E-02	NA	NA	3.80E-03	NA	NA	NA
Area I	Tributyltin	NP	1.77E-02	5.31E-02	1.19E+00	7.46E+01	4.09E-03	3.44E-03	5.48E-05	4.48E-02

ND - Not detected

Table H-70. HPS Site-Wide Dose Assessment Results Using Average of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	Aluminum	NP	6.41E+04	1.54E+03	NA	NA	2.52E+02	NA	NA	1.95E+03
Site-wide	Antimony	NP	2.23E+00	1.95E-01	NA	NA	1.96E-02	NA	NA	1.87E-01
Site-wide	Arsenic	NP	1.07E+01	2.02E+01	5.43E+00	2.17E+01	1.57E+00	2.89E-01	7.22E-02	2.29E+01
Site-wide	Barium	NP	4.65E+02	1.53E+01	NA	NA	2.14E+00	NA	NA	2.02E+01
Site-wide	Cadmium	NP	3.42E-01	3.31E-01	8.53E-02	1.74E+01	2.60E-02	3.05E-01	1.49E-03	3.69E-01
Site-wide	Chromium	NP	2.39E+02	1.28E+01	NA	NA	1.48E+00	NA	NA	2.46E+01
Site-wide	Cobalt	NP	1.71E+01	2.10E+00	NA	NA	1.96E-01	NA	NA	3.63E+00
Site-wide	Copper	NP	1.17E+02	2.35E+01	2.56E+00	6.37E+01	2.04E+00	7.96E-01	3.20E-02	1.48E+01
Site-wide	Iron	NP	4.01E+04	2.20E+03	NA	NA	2.52E+02	NA	NA	2.80E+03
Site-wide	Lead	P	5.72E+01	4.53E+00	2.34E-02	9.33E+00	4.65E-01	1.99E+01	4.99E-02	3.76E+00
Site-wide	Manganese	NP	4.67E+02	2.89E+01	NA	NA	3.18E+00	NA	NA	5.74E+01
Site-wide	Mercury	NP	6.48E-01	2.31E-01	3.98E-02	1.83E-01	1.90E-02	4.78E-01	1.04E-01	1.74E-01
Site-wide	Molybdenum	NP	1.04E+00	2.64E+00	NA	NA	2.04E-01	NA	NA	3.04E+00
Site-wide	Nickel	NP	1.09E+02	7.68E+00	1.55E+00	6.28E+01	8.15E-01	5.26E-01	1.30E-02	9.60E+00
Site-wide	Selenium	NP	3.10E-01	4.20E+00	2.30E-01	9.29E-01	3.21E-01	1.40E+00	3.46E-01	5.34E+00
Site-wide	Silver	NP	3.49E-01	1.54E-01	NA	NA	1.25E-02	NA	NA	2.52E-01
Site-wide	Vanadium	NP	1.32E+02	7.21E+00	NA	NA	8.26E-01	NA	NA	1.15E+01
Site-wide	Zinc	NP	1.53E+02	1.00E+02	1.77E+01	1.77E+02	7.99E+00	4.52E-01	4.52E-02	1.26E+02
Site-wide	HMW PAH	P	2.41E+00	4.78E-01	NA	NA	4.15E-02	NA	NA	3.62E-01
Site-wide	LMW PAH	P	3.44E-01	3.93E-02	NA	NA	3.72E-03	NA	NA	4.21E-02
Site-wide	Total PCBs	NP	5.84E-01	8.48E-01	9.59E-02	1.16E+00	6.60E-02	6.88E-01	5.68E-02	6.86E-02
Site-wide	Total 4,4'-DDx	NP	7.01E-03	2.47E-02	7.14E-03	6.12E-01	1.90E-03	2.67E-01	3.11E-03	1.19E-02
Site-wide	alpha-Chlordane	NP	6.76E-04	2.14E-03	NA	NA	1.65E-04	NA	NA	1.03E-03
Site-wide	Dieldrin	NP	6.91E-04	3.09E-03	NA	NA	2.37E-04	NA	NA	1.57E-03
Site-wide	Endosulfan II	NP	5.99E-05	2.12E-04	NA	NA	1.63E-05	NA	NA	ND
Site-wide	Endrin	NP	5.32E-05	1.70E-04	NA	NA	1.31E-05	NA	NA	ND
Site-wide	gamma-Chlordane	NP	9.27E-04	2.74E-03	NA	NA	2.11E-04	NA	NA	8.56E-04
Site-wide	Heptachlor	NP	8.57E-05	1.71E-04	NA	NA	1.32E-05	NA	NA	ND
Site-wide	Dibutyltin	NP	1.31E-02	2.12E-02	1.19E+00	7.46E+01	1.65E-03	1.39E-03	2.21E-05	1.26E-02
Site-wide	Monobutyltin	NP	6.36E-04	1.78E-02	NA	NA	1.36E-03	NA	NA	NA
Site-wide	Tetrabutyltin	NP	1.19E-03	4.15E-02	NA	NA	3.17E-03	NA	NA	NA
Site-wide	Tributyltin	NP	2.99E-02	1.40E-01	1.19E+00	7.46E+01	1.07E-02	9.03E-03	1.44E-04	4.48E-02

ND - Not detected

Table H-71. HPS Site-Wide Dose Assessment Results Using 95% UCL of Depurated M. nasuta Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sed Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC	P/NP	95UCL Sediment Conc (dry wt mg/kg)	95 UCL Lab Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	Aluminum	NP	6.95E+04	1.66E+03	NA	NA	2.72E+02	NA	NA	1.95E+03
Site-wide	Antimony	NP	3.77E+00	2.90E-01	NA	NA	3.00E-02	NA	NA	1.87E-01
Site-wide	Arsenic	NP	1.19E+01	2.08E+01	5.43E+00	2.17E+01	1.61E+00	2.97E-01	7.42E-02	2.29E+01
Site-wide	Barium	NP	5.18E+02	1.85E+01	NA	NA	2.50E+00	NA	NA	2.02E+01
Site-wide	Cadmium	NP	4.32E-01	4.90E-01	8.53E-02	1.74E+01	3.83E-02	4.49E-01	2.20E-03	3.69E-01
Site-wide	Chromium	NP	2.85E+02	1.45E+01	NA	NA	1.71E+00	NA	NA	2.46E+01
Site-wide	Cobalt	NP	1.77E+01	2.19E+00	NA	NA	2.04E-01	NA	NA	3.63E+00
Site-wide	Copper	NP	2.06E+02	3.82E+01	2.56E+00	6.37E+01	3.35E+00	1.31E+00	5.25E-02	1.48E+01
Site-wide	Iron	NP	4.42E+04	2.34E+03	NA	NA	2.71E+02	NA	NA	2.80E+03
Site-wide	Lead	P	8.45E+01	5.97E+00	2.34E-02	9.33E+00	6.32E-01	2.70E+01	6.78E-02	3.76E+00
Site-wide	Manganese	NP	4.81E+02	3.54E+01	NA	NA	3.71E+00	NA	NA	5.74E+01
Site-wide	Mercury	NP	1.20E+00	5.42E-01	3.98E-02	1.83E-01	4.39E-02	1.10E+00	2.39E-01	1.74E-01
Site-wide	Molybdenum	NP	1.11E+00	2.85E+00	NA	NA	2.20E-01	NA	NA	3.04E+00
Site-wide	Nickel	NP	1.33E+02	8.99E+00	1.55E+00	6.28E+01	9.64E-01	6.22E-01	1.53E-02	9.60E+00
Site-wide	Selenium	NP	3.74E-01	4.40E+00	2.30E-01	9.29E-01	3.36E-01	1.46E+00	3.62E-01	5.34E+00
Site-wide	Silver	NP	3.85E-01	2.74E-01	NA	NA	2.17E-02	NA	NA	2.52E-01
Site-wide	Vanadium	NP	1.46E+02	7.66E+00	NA	NA	8.89E-01	NA	NA	1.15E+01
Site-wide	Zinc	NP	1.68E+02	1.04E+02	1.77E+01	1.77E+02	8.31E+00	4.70E-01	4.70E-02	1.26E+02
Site-wide	HMW PAH	P	3.31E+00	5.31E-01	NA	NA	4.75E-02	NA	NA	3.62E-01
Site-wide	LMW PAH	P	4.46E-01	4.33E-02	NA	NA	4.24E-03	NA	NA	4.21E-02
Site-wide	Total PCBs	NP	1.37E+00	1.07E+00	9.59E-02	1.16E+00	8.43E-02	8.78E-01	7.25E-02	6.86E-02
Site-wide	Total 4,4'-DDx	NP	1.23E-02	2.90E-02	7.14E-03	6.12E-01	2.24E-03	3.14E-01	3.67E-03	1.19E-02
Site-wide	alpha-Chlordane	NP	1.43E-03	3.58E-03	NA	NA	2.77E-04	NA	NA	1.03E-03
Site-wide	Dieldrin	NP	2.01E-03	5.47E-03	NA	NA	4.22E-04	NA	NA	1.57E-03
Site-wide	Endosulfan II	NP	7.00E-04	3.75E-04	NA	NA	3.01E-05	NA	NA	ND
Site-wide	Endrin	NP	6.00E-04	3.40E-04	NA	NA	2.72E-05	NA	NA	ND
Site-wide	gamma-Chlordane	NP	2.47E-03	4.72E-03	NA	NA	3.66E-04	NA	NA	8.56E-04
Site-wide	Heptachlor	NP	2.13E-03	3.40E-04	NA	NA	3.04E-05	NA	NA	ND
Site-wide	Dibutyltin	NP	2.39E-02	3.39E-02	1.19E+00	7.46E+01	2.64E-03	2.22E-03	3.54E-05	1.26E-02
Site-wide	Monobutyltin	NP	3.30E-03	4.42E-02	NA	NA	3.38E-03	NA	NA	NA
Site-wide	Tetrabutyltin	NP	1.55E-03	1.01E-01	NA	NA	7.69E-03	NA	NA	NA
Site-wide	Tributyltin	NP	6.53E-02	3.23E-01	1.19E+00	7.46E+01	2.48E-02	2.09E-02	3.32E-04	4.48E-02

ND - Not detected

Reference Stations

STATION ID = AB-67

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
AB-67	Aluminum	NP	6.97E+04	1.64E+03	NA	NA	2.71E+02	NA	NA	1.95E+03
AB-67	Antimony	NP	9.29E-01	1.59E-01	NA	NA	1.41E-02	NA	NA	1.87E-01
AB-67	Arsenic	NP	1.08E+01	2.02E+01	5.43E+00	2.17E+01	1.56E+00	2.88E-01	7.19E-02	2.29E+01
AB-67	Barium	NP	4.28E+02	1.76E+01	NA	NA	2.24E+00	NA	NA	2.02E+01
AB-67	Cadmium	NP	4.47E-01	3.03E-01	8.53E-02	1.74E+01	2.40E-02	2.82E-01	1.38E-03	3.69E-01
AB-67	Chromium	NP	1.76E+02	2.12E+01	NA	NA	1.99E+00	NA	NA	2.46E+01
AB-67	Cobalt	NP	1.78E+01	2.57E+00	NA	NA	2.34E-01	NA	NA	3.63E+00
AB-67	Copper	NP	4.27E+01	1.28E+01	2.56E+00	6.37E+01	1.06E+00	4.15E-01	1.67E-02	1.48E+01
AB-67	Iron	NP	4.21E+04	2.56E+03	NA	NA	2.84E+02	NA	NA	2.80E+03
AB-67	Lead	NP	2.97E+01	3.36E+00	2.34E-02	9.33E+00	3.19E-01	1.36E+01	3.42E-02	3.76E+00
AB-67	Manganese	NP	4.48E+02	4.22E+01	NA	NA	4.16E+00	NA	NA	5.74E+01
AB-67	Mercury	P	3.84E-01	1.68E-01	3.98E-02	1.83E-01	1.36E-02	3.42E-01	7.41E-02	1.74E-01
AB-67	Molybdenum	NP	8.51E-01	2.59E+00	NA	NA	2.00E-01	NA	NA	3.04E+00
AB-67	Nickel	NP	8.58E+01	7.81E+00	1.55E+00	6.28E+01	7.76E-01	5.00E-01	1.23E-02	9.60E+00
AB-67	Selenium	NP	4.12E-01	3.29E+00	2.30E-01	9.29E-01	2.52E-01	1.10E+00	2.72E-01	5.34E+00
AB-67	Silver	NP	5.38E-01	2.60E-02	NA	NA	3.11E-03	NA	NA	2.52E-01
AB-67	Vanadium	NP	1.48E+02	9.38E+00	NA	NA	1.03E+00	NA	NA	1.15E+01
AB-67	Zinc	NP	1.15E+02	1.09E+02	1.77E+01	1.77E+02	8.56E+00	4.84E-01	4.84E-02	1.26E+02
AB-67	HMW PAH	NP	1.22E+00	2.29E-01	NA	NA	2.00E-02	NA	NA	3.62E-01
AB-67	LMW PAH	NP	2.44E-01	1.82E-02	NA	NA	1.90E-03	NA	NA	4.21E-02
AB-67	Total Aroclors	P	0.00E+00	0.00E+00	9.59E-02	1.16E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-02
AB-67	Total Congeners	P	4.25E-02	1.16E-01	9.59E-02	1.16E+00	8.98E-03	9.36E-02	7.73E-03	NA
AB-67	Total DDx	P	2.56E-03	7.11E-03	7.14E-03	6.12E-01	5.48E-04	7.68E-02	8.97E-04	1.19E-02
AB-67	alpha-Chlordane	NP	3.50E-05	4.66E-04	NA	NA	3.57E-05	NA	NA	1.03E-03
AB-67	Dieldrin	NP	5.00E-05	6.23E-04	NA	NA	4.77E-05	NA	NA	1.57E-03
AB-67	Endosulfan II	NP	5.00E-05	2.25E-04	NA	NA	1.73E-05	NA	NA	ND
AB-67	Endrin	NP	4.50E-05	1.93E-04	NA	NA	1.48E-05	NA	NA	ND
AB-67	gamma-Chlordane	NP	4.00E-05	3.68E-04	NA	NA	2.82E-05	NA	NA	8.56E-04
AB-67	Heptachlor	NP	4.00E-05	1.87E-04	NA	NA	1.43E-05	NA	NA	ND
AB-67	Dibutyltin	NP	9.39E-04	9.37E-03	1.19E+00	7.46E+01	7.17E-04	6.04E-04	9.62E-06	1.26E-02
AB-67	Monobutyltin	NP	4.97E-04	2.15E-02	NA	NA	1.64E-03	NA	NA	NA
AB-67	Tetrabutyltin	NP	1.18E-03	4.89E-02	NA	NA	3.74E-03	NA	NA	NA
AB-67	Tributyltin	NP	6.69E-04	2.36E-02	1.19E+00	7.46E+01	1.80E-03	1.52E-03	2.42E-05	4.48E-02

ND = Not Detected

STATION ID = AL-64

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
AL-64	Aluminum	NP	4.43E+04	7.86E+02	NA	NA	1.53E+02	NA	NA	1.95E+03
AL-64	Antimony	NP	3.61E-01	1.41E-01	NA	NA	1.15E-02	NA	NA	1.87E-01
AL-64	Arsenic	NP	6.69E+00	1.96E+01	5.43E+00	2.17E+01	1.51E+00	2.78E-01	6.95E-02	2.29E+01
AL-64	Barium	NP	5.01E+02	1.11E+01	NA	NA	1.90E+00	NA	NA	2.02E+01
AL-64	Cadmium	NP	8.41E-01	9.55E-01	8.53E-02	1.74E+01	7.47E-02	8.75E-01	4.28E-03	3.69E-01
AL-64	Chromium	NP	1.03E+02	7.81E+00	NA	NA	8.12E-01	NA	NA	2.46E+01
AL-64	Cobalt	NP	1.03E+01	2.71E+00	NA	NA	2.29E-01	NA	NA	3.63E+00
AL-64	Copper	NP	1.65E+01	1.19E+01	2.56E+00	6.37E+01	9.46E-01	3.69E-01	1.49E-02	1.48E+01
AL-64	Iron	NP	2.06E+04	1.26E+03	NA	NA	1.39E+02	NA	NA	2.80E+03
AL-64	Lead	NP	1.23E+01	2.48E+00	2.34E-02	9.33E+00	2.15E-01	9.19E+00	2.31E-02	3.76E+00
AL-64	Manganese	NP	3.90E+02	4.30E+01	NA	NA	4.10E+00	NA	NA	5.74E+01
AL-64	Mercury	P	2.52E-02	2.35E-02	3.98E-02	1.83E-01	1.84E-03	4.64E-02	1.00E-02	1.74E-01
AL-64	Molybdenum	NP	2.93E-01	2.87E+00	NA	NA	2.20E-01	NA	NA	3.04E+00
AL-64	Nickel	NP	3.98E+01	5.30E+00	1.55E+00	6.28E+01	4.88E-01	3.15E-01	7.77E-03	9.60E+00
AL-64	Selenium	NP	6.30E-02	4.69E+00	2.30E-01	9.29E-01	3.58E-01	1.56E+00	3.86E-01	5.34E+00
AL-64	Silver	NP	3.30E-02	1.44E-01	NA	NA	1.11E-02	NA	NA	2.52E-01
AL-64	Vanadium	NP	6.27E+01	5.37E+00	NA	NA	5.41E-01	NA	NA	1.15E+01
AL-64	Zinc	NP	4.25E+01	9.09E+01	1.77E+01	1.77E+02	7.03E+00	3.98E-01	3.98E-02	1.26E+02
AL-64	HMW PAH	NP	3.82E-01	3.51E-01	NA	NA	2.76E-02	NA	NA	3.62E-01
AL-64	LMW PAH	NP	5.85E-02	4.38E-02	NA	NA	3.46E-03	NA	NA	4.21E-02
AL-64	Total Aroclors	P	0.00E+00	0.00E+00	9.59E-02	1.16E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-02
AL-64	Total Congeners	P	0.00E+00	3.88E-02	9.59E-02	1.16E+00	2.96E-03	3.09E-02	2.55E-03	NA
AL-64	Total DDx	P	0.00E+00	4.88E-03	7.14E-03	6.12E-01	3.73E-04	5.22E-02	6.10E-04	1.19E-02
AL-64	alpha-Chlordane	NP	2.50E-05	3.10E-04	NA	NA	2.37E-05	NA	NA	1.03E-03
AL-64	Dieldrin	NP	3.00E-05	2.99E-04	NA	NA	2.29E-05	NA	NA	1.57E-03
AL-64	Endosulfan II	NP	3.00E-05	2.55E-04	NA	NA	1.95E-05	NA	NA	ND
AL-64	Endrin	NP	2.50E-05	2.23E-04	NA	NA	1.71E-05	NA	NA	ND
AL-64	gamma-Chlordane	NP	2.50E-05	2.93E-04	NA	NA	2.24E-05	NA	NA	8.56E-04
AL-64	Heptachlor	NP	2.50E-05	2.16E-04	NA	NA	1.66E-05	NA	NA	ND
AL-64	Dibutyltin	NP	1.32E-03	1.20E-02	1.19E+00	7.46E+01	9.23E-04	7.77E-04	1.24E-05	1.26E-02
AL-64	Monobutyltin	NP	3.12E-04	2.15E-02	NA	NA	1.64E-03	NA	NA	NA
AL-64	Tetrabutyltin	NP	7.40E-04	4.90E-02	NA	NA	3.74E-03	NA	NA	NA
AL-64	Tributyltin	NP	4.04E-03	4.71E-02	1.19E+00	7.46E+01	3.60E-03	3.04E-03	4.83E-05	4.48E-02

ND = Not Detected

STATION ID = BF-66

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
BF-66	Aluminum	NP	7.59E+04	1.71E+03	NA	NA	2.90E+02	NA	NA	1.95E+03
BF-66	Antimony	NP	8.54E-01	1.03E-01	NA	NA	9.63E-03	NA	NA	1.87E-01
BF-66	Arsenic	NP	1.21E+01	1.94E+01	5.43E+00	2.17E+01	1.51E+00	2.78E-01	6.95E-02	2.29E+01
BF-66	Barium	NP	4.05E+02	1.36E+01	NA	NA	1.89E+00	NA	NA	2.02E+01
BF-66	Cadmium	NP	1.56E-01	2.24E-01	8.53E-02	1.74E+01	1.74E-02	2.04E-01	9.98E-04	3.69E-01
BF-66	Chromium	NP	1.61E+02	8.27E+00	NA	NA	9.68E-01	NA	NA	2.46E+01
BF-66	Cobalt	NP	1.84E+01	1.95E+00	NA	NA	1.88E-01	NA	NA	3.63E+00
BF-66	Copper	NP	4.79E+01	1.26E+01	2.56E+00	6.37E+01	1.06E+00	4.13E-01	1.66E-02	1.48E+01
BF-66	Iron	NP	4.95E+04	2.03E+03	NA	NA	2.58E+02	NA	NA	2.80E+03
BF-66	Lead	NP	2.78E+01	2.41E+00	2.34E-02	9.33E+00	2.42E-01	1.03E+01	2.59E-02	3.76E+00
BF-66	Manganese	NP	5.77E+02	2.65E+01	NA	NA	3.23E+00	NA	NA	5.74E+01
BF-66	Mercury	P	3.03E-01	1.31E-01	3.98E-02	1.83E-01	1.06E-02	2.67E-01	5.78E-02	1.74E-01
BF-66	Molybdenum	NP	7.82E-01	2.37E+00	NA	NA	1.83E-01	NA	NA	3.04E+00
BF-66	Nickel	NP	1.01E+02	6.88E+00	1.55E+00	6.28E+01	7.37E-01	4.75E-01	1.17E-02	9.60E+00
BF-66	Selenium	NP	4.98E-01	4.67E+00	2.30E-01	9.29E-01	3.57E-01	1.56E+00	3.85E-01	5.34E+00
BF-66	Silver	NP	3.42E-01	2.60E-02	NA	NA	2.70E-03	NA	NA	2.52E-01
BF-66	Vanadium	NP	1.59E+02	6.68E+00	NA	NA	8.42E-01	NA	NA	1.15E+01
BF-66	Zinc	NP	1.30E+02	8.66E+01	1.77E+01	1.77E+02	6.88E+00	3.89E-01	3.89E-02	1.26E+02
BF-66	HMW PAH	NP	5.35E-01	2.71E-01	NA	NA	2.18E-02	NA	NA	3.62E-01
BF-66	LMW PAH	NP	8.88E-02	1.66E-02	NA	NA	1.46E-03	NA	NA	4.21E-02
BF-66	Total Aroclors	P	0.00E+00	0.00E+00	9.59E-02	1.16E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-02
BF-66	Total Congeners	P	1.35E-02	6.68E-02	9.59E-02	1.16E+00	5.13E-03	5.34E-02	4.41E-03	NA
BF-66	Total DDx	P	1.65E-03	1.07E-02	7.14E-03	6.12E-01	8.21E-04	1.15E-01	1.34E-03	1.19E-02
BF-66	alpha-Chlordane	NP	1.20E-04	1.13E-03	NA	NA	8.67E-05	NA	NA	1.03E-03
BF-66	Dieldrin	NP	6.00E-05	1.49E-03	NA	NA	1.14E-04	NA	NA	1.57E-03
BF-66	Endosulfan II	NP	6.50E-05	2.06E-04	NA	NA	1.59E-05	NA	NA	ND
BF-66	Endrin	NP	5.50E-05	1.87E-04	NA	NA	1.44E-05	NA	NA	ND
BF-66	gamma-Chlordane	NP	5.00E-05	9.20E-04	NA	NA	7.04E-05	NA	NA	8.56E-04
BF-66	Heptachlor	NP	5.50E-05	1.73E-04	NA	NA	1.33E-05	NA	NA	ND
BF-66	Dibutyltin	NP	1.30E-03	7.53E-03	1.19E+00	7.46E+01	5.78E-04	4.86E-04	7.74E-06	1.26E-02
BF-66	Monobutyltin	NP	6.87E-04	1.56E-02	NA	NA	1.19E-03	NA	NA	NA
BF-66	Tetrabutyltin	NP	1.63E-03	3.55E-02	NA	NA	2.71E-03	NA	NA	NA
BF-66	Tributyltin	NP	9.25E-04	1.50E-02	1.19E+00	7.46E+01	1.15E-03	9.65E-04	1.54E-05	4.48E-02

ND = Not Detected

STATION ID = PC-63

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PC-63	Aluminum	NP	7.21E+04	1.16E+03	NA	NA	2.40E+02	NA	NA	1.95E+03
PC-63	Antimony	NP	7.73E-01	1.23E-01	NA	NA	1.10E-02	NA	NA	1.87E-01
PC-63	Arsenic	NP	1.15E+01	2.01E+01	5.43E+00	2.17E+01	1.56E+00	2.87E-01	7.17E-02	2.29E+01
PC-63	Barium	NP	4.72E+02	1.28E+01	NA	NA	1.96E+00	NA	NA	2.02E+01
PC-63	Cadmium	NP	1.92E-01	2.71E-01	8.53E-02	1.74E+01	2.11E-02	2.47E-01	1.21E-03	3.69E-01
PC-63	Chromium	NP	1.61E+02	7.11E+00	NA	NA	8.80E-01	NA	NA	2.46E+01
PC-63	Cobalt	NP	1.72E+01	2.83E+00	NA	NA	2.52E-01	NA	NA	3.63E+00
PC-63	Copper	NP	4.01E+01	1.26E+01	2.56E+00	6.37E+01	1.05E+00	4.08E-01	1.64E-02	1.48E+01
PC-63	Iron	NP	4.12E+04	1.46E+03	NA	NA	1.98E+02	NA	NA	2.80E+03
PC-63	Lead	NP	2.16E+01	1.60E+00	2.34E-02	9.33E+00	1.67E-01	7.14E+00	1.79E-02	3.76E+00
PC-63	Manganese	NP	5.54E+02	3.89E+01	NA	NA	4.13E+00	NA	NA	5.74E+01
PC-63	Mercury	P	2.89E-01	8.15E-04	3.98E-02	1.83E-01	6.67E-04	1.68E-02	3.63E-03	1.74E-01
PC-63	Molybdenum	NP	8.21E-01	2.56E+00	NA	NA	1.98E-01	NA	NA	3.04E+00
PC-63	Nickel	NP	8.69E+01	6.61E+00	1.55E+00	6.28E+01	6.87E-01	4.43E-01	1.09E-02	9.60E+00
PC-63	Selenium	NP	2.92E-01	4.67E+00	2.30E-01	9.29E-01	3.57E-01	1.56E+00	3.85E-01	5.34E+00
PC-63	Silver	NP	2.42E-01	1.68E-01	NA	NA	1.34E-02	NA	NA	2.52E-01
PC-63	Vanadium	NP	1.39E+02	5.99E+00	NA	NA	7.48E-01	NA	NA	1.15E+01
PC-63	Zinc	NP	1.05E+02	9.46E+01	1.77E+01	1.77E+02	7.44E+00	4.21E-01	4.21E-02	1.26E+02
PC-63	HMW PAH	NP	4.86E-01	2.02E-01	NA	NA	1.65E-02	NA	NA	3.62E-01
PC-63	LMW PAH	NP	9.07E-02	2.17E-02	NA	NA	1.85E-03	NA	NA	4.21E-02
PC-63	Total Aroclors	P	0.00E+00	0.00E+00	9.59E-02	1.16E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-02
PC-63	Total Congeners	P	6.08E-03	3.84E-02	9.59E-02	1.16E+00	2.94E-03	3.07E-02	2.53E-03	NA
PC-63	Total DDx	P	5.47E-03	9.04E-03	7.14E-03	6.12E-01	7.02E-04	9.83E-02	1.15E-03	1.19E-02
PC-63	alpha-Chlordane	NP	4.00E-05	7.42E-04	NA	NA	5.67E-05	NA	NA	1.03E-03
PC-63	Dieldrin	NP	5.00E-05	1.00E-03	NA	NA	7.68E-05	NA	NA	1.57E-03
PC-63	Endosulfan II	NP	5.50E-05	1.96E-04	NA	NA	1.51E-05	NA	NA	ND
PC-63	Endrin	NP	4.50E-05	1.37E-04	NA	NA	1.05E-05	NA	NA	ND
PC-63	gamma-Chlordane	NP	4.00E-05	5.40E-04	NA	NA	4.13E-05	NA	NA	8.56E-04
PC-63	Heptachlor	NP	4.50E-05	1.49E-04	NA	NA	1.15E-05	NA	NA	ND
PC-63	Dibutyltin	NP	1.01E-03	2.30E-02	1.19E+00	7.46E+01	1.76E-03	1.48E-03	2.36E-05	1.26E-02
PC-63	Monobutyltin	NP	5.36E-04	2.09E-02	NA	NA	1.59E-03	NA	NA	NA
PC-63	Tetrabutyltin	NP	1.27E-03	4.75E-02	NA	NA	3.63E-03	NA	NA	NA
PC-63	Tributyltin	NP	7.22E-04	1.75E-02	1.19E+00	7.46E+01	1.34E-03	1.13E-03	1.80E-05	4.48E-02

ND = Not Detected

STATION ID = RR-65

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
RR-65	Aluminum	NP	5.97E+04	1.83E+03	NA	NA	2.64E+02	NA	NA	1.95E+03
RR-65	Antimony	NP	3.98E-01	1.67E-01	NA	NA	1.36E-02	NA	NA	1.87E-01
RR-65	Arsenic	NP	9.65E+00	2.20E+01	5.43E+00	2.17E+01	1.70E+00	3.13E-01	7.83E-02	2.29E+01
RR-65	Barium	NP	4.17E+02	2.03E+01	NA	NA	2.42E+00	NA	NA	2.02E+01
RR-65	Cadmium	NP	1.80E-01	6.66E-01	8.53E-02	1.74E+01	5.12E-02	6.01E-01	2.94E-03	3.69E-01
RR-65	Chromium	NP	1.69E+02	1.61E+01	NA	NA	1.59E+00	NA	NA	2.46E+01
RR-65	Cobalt	NP	2.26E+01	3.71E+00	NA	NA	3.31E-01	NA	NA	3.63E+00
RR-65	Copper	NP	1.92E+01	1.51E+01	2.56E+00	6.37E+01	1.19E+00	4.64E-01	1.87E-02	1.48E+01
RR-65	Iron	NP	4.09E+04	2.60E+03	NA	NA	2.84E+02	NA	NA	2.80E+03
RR-65	Lead	NP	1.59E+01	2.60E+00	2.34E-02	9.33E+00	2.32E-01	9.91E+00	2.49E-02	3.76E+00
RR-65	Manganese	NP	6.34E+02	5.87E+01	NA	NA	5.81E+00	NA	NA	5.74E+01
RR-65	Mercury	P	7.16E-02	1.17E-01	3.98E-02	1.83E-01	9.07E-03	2.28E-01	4.94E-02	1.74E-01
RR-65	Molybdenum	NP	4.61E-01	2.74E+00	NA	NA	2.10E-01	NA	NA	3.04E+00
RR-65	Nickel	NP	7.83E+01	9.33E+00	1.55E+00	6.28E+01	8.76E-01	5.65E-01	1.40E-02	9.60E+00
RR-65	Selenium	NP	1.24E-01	3.95E+00	2.30E-01	9.29E-01	3.02E-01	1.32E+00	3.25E-01	5.34E+00
RR-65	Silver	NP	1.23E-01	2.60E-02	NA	NA	2.24E-03	NA	NA	2.52E-01
RR-65	Vanadium	NP	1.42E+02	1.06E+01	NA	NA	1.10E+00	NA	NA	1.15E+01
RR-65	Zinc	NP	8.13E+01	1.06E+02	1.77E+01	1.77E+02	8.27E+00	4.67E-01	4.67E-02	1.26E+02
RR-65	HMW PAH	NP	1.32E-01	1.59E-01	NA	NA	1.25E-02	NA	NA	3.62E-01
RR-65	LMW PAH	NP	2.13E-02	1.11E-02	NA	NA	8.94E-04	NA	NA	4.21E-02
RR-65	Total Aroclors	P	0.00E+00	0.00E+00	9.59E-02	1.16E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-02
RR-65	Total Congeners	P	2.04E-03	3.74E-02	9.59E-02	1.16E+00	2.86E-03	2.98E-02	2.46E-03	NA
RR-65	Total DDx	P	7.20E-04	9.49E-03	7.14E-03	6.12E-01	7.27E-04	1.02E-01	1.19E-03	1.19E-02
RR-65	alpha-Chlordane	NP	2.50E-05	5.92E-04	NA	NA	4.53E-05	NA	NA	1.03E-03
RR-65	Dieldrin	NP	3.50E-05	7.56E-04	NA	NA	5.78E-05	NA	NA	1.57E-03
RR-65	Endosulfan II	NP	3.50E-05	1.87E-04	NA	NA	1.44E-05	NA	NA	ND
RR-65	Endrin	NP	3.00E-05	1.60E-04	NA	NA	1.23E-05	NA	NA	ND
RR-65	gamma-Chlordane	NP	2.50E-05	4.34E-04	NA	NA	3.32E-05	NA	NA	8.56E-04
RR-65	Heptachlor	NP	3.00E-05	1.54E-04	NA	NA	1.18E-05	NA	NA	ND
RR-65	Dibutyltin	NP	6.71E-04	8.78E-03	1.19E+00	7.46E+01	6.72E-04	5.66E-04	9.00E-06	1.26E-02
RR-65	Monobutyltin	NP	3.55E-04	1.86E-02	NA	NA	1.42E-03	NA	NA	NA
RR-65	Tetrabutyltin	NP	8.41E-04	4.24E-02	NA	NA	3.24E-03	NA	NA	NA
RR-65	Tributyltin	NP	4.78E-04	1.97E-02	1.19E+00	7.46E+01	1.50E-03	1.27E-03	2.02E-05	4.48E-02

ND = Not Detected

Non-depurated *M. nasuta* Tissue

STATION ID = IB-56

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
IB-56	Aluminum	NP	7.14E+04	3.27E+03	NA	NA	3.99E+02	NA	NA	1.95E+03
IB-56	Antimony	NP	8.07E-01	1.37E-01	NA	NA	1.21E-02	NA	NA	1.87E-01
IB-56	Arsenic	NP	1.06E+01	1.86E+01	5.43E+00	2.17E+01	1.44E+00	2.66E-01	6.64E-02	2.29E+01
IB-56	Barium	NP	4.62E+02	3.24E+01	NA	NA	3.44E+00	NA	NA	2.02E+01
IB-56	Cadmium	NP	2.28E-01	2.25E-01	8.53E-02	1.74E+01	1.77E-02	2.07E-01	1.01E-03	3.69E-01
IB-56	Chromium	NP	1.63E+02	9.95E+00	NA	NA	1.10E+00	NA	NA	2.46E+01
IB-56	Cobalt	NP	1.58E+01	2.59E+00	NA	NA	2.31E-01	NA	NA	3.63E+00
IB-56	Copper	NP	4.37E+01	1.40E+01	2.56E+00	6.37E+01	1.16E+00	4.53E-01	1.82E-02	1.48E+01
IB-56	Iron	NP	4.24E+04	3.35E+03	NA	NA	3.44E+02	NA	NA	2.80E+03
IB-56	Lead	NP	2.54E+01	3.22E+00	2.34E-02	9.33E+00	2.99E-01	1.28E+01	3.21E-02	3.76E+00
IB-56	Manganese	NP	4.21E+02	3.28E+01	NA	NA	3.39E+00	NA	NA	5.74E+01
IB-56	Mercury	P	3.12E-01	1.46E-01	3.98E-02	1.83E-01	1.18E-02	2.97E-01	6.43E-02	1.74E-01
IB-56	Molybdenum	NP	1.63E+00	2.14E+00	NA	NA	1.67E-01	NA	NA	3.04E+00
IB-56	Nickel	NP	8.98E+01	1.00E+01	1.55E+00	6.28E+01	9.51E-01	6.13E-01	1.51E-02	9.60E+00
IB-56	Selenium	NP	3.90E-01	2.88E+00	2.30E-01	9.29E-01	2.21E-01	9.61E-01	2.38E-01	5.34E+00
IB-56	Silver	NP	2.68E-01	1.53E-01	NA	NA	1.22E-02	NA	NA	2.52E-01
IB-56	Vanadium	NP	1.41E+02	9.65E+00	NA	NA	1.03E+00	NA	NA	1.15E+01
IB-56	Zinc	NP	1.11E+02	9.94E+01	1.77E+01	1.77E+02	7.82E+00	4.42E-01	4.42E-02	1.26E+02
IB-56	HMW PAH	NP	9.58E-01	3.12E-01	NA	NA	2.58E-02	NA	NA	3.62E-01
IB-56	LMW PAH	NP	1.73E-01	3.46E-02	NA	NA	3.00E-03	NA	NA	4.21E-02
IB-56	Total PCBs	P	1.67E-02	3.21E-02	9.59E-02	1.16E+00	2.49E-03	2.59E-02	2.14E-03	6.86E-02
IB-56	Total 4,4'-DDx	P	3.19E-03	5.01E-03	7.14E-03	6.12E-01	3.89E-04	5.45E-02	6.37E-04	1.19E-02
IB-56	alpha-Chlordane	NP	8.00E-05	6.11E-05	NA	NA	4.83E-06	NA	NA	1.03E-03
IB-56	Dieldrin	NP	5.50E-05	1.04E-03	NA	NA	7.95E-05	NA	NA	1.57E-03
IB-56	Endosulfan II	NP	5.50E-05	1.22E-04	NA	NA	9.44E-06	NA	NA	ND
IB-56	Endrin	NP	5.00E-05	3.05E-05	NA	NA	2.44E-06	NA	NA	ND
IB-56	gamma-Chlordane	NP	4.50E-05	9.80E-04	NA	NA	7.49E-05	NA	NA	8.56E-04
IB-56	Heptachlor	NP	4.50E-05	6.11E-05	NA	NA	4.76E-06	NA	NA	ND
IB-56	Dibutyltin	NP	9.64E-04	9.17E-03	1.19E+00	7.46E+01	7.02E-04	5.91E-04	9.41E-06	1.26E-02
IB-56	Monobutyltin	NP	5.78E-04	1.74E-02	NA	NA	1.33E-03	NA	NA	NA
IB-56	Tetrabutyltin	NP	1.01E-03	2.44E-02	NA	NA	1.86E-03	NA	NA	NA
IB-56	Tributyltin	NP	7.79E-04	3.97E-02	1.19E+00	7.46E+01	3.03E-03	2.55E-03	4.06E-05	4.48E-02

ND = Not Detected

STATION ID = PA-46

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
PA-46	Aluminum	NP	6.12E+04	2.69E+03	NA	NA	3.33E+02	NA	NA	1.95E+03
PA-46	Antimony	NP	1.85E+00	1.41E-01	NA	NA	1.46E-02	NA	NA	1.87E-01
PA-46	Arsenic	NP	1.25E+01	1.94E+01	5.43E+00	2.17E+01	1.51E+00	2.78E-01	6.94E-02	2.29E+01
PA-46	Barium	NP	4.31E+02	2.20E+01	NA	NA	2.58E+00	NA	NA	2.02E+01
PA-46	Cadmium	NP	3.59E-01	2.87E-01	8.53E-02	1.74E+01	2.27E-02	2.66E-01	1.30E-03	3.69E-01
PA-46	Chromium	NP	3.91E+02	1.85E+01	NA	NA	2.23E+00	NA	NA	2.46E+01
PA-46	Cobalt	NP	2.00E+01	2.32E+00	NA	NA	2.19E-01	NA	NA	3.63E+00
PA-46	Copper	NP	2.89E+02	2.93E+01	2.56E+00	6.37E+01	2.84E+00	1.11E+00	4.46E-02	1.48E+01
PA-46	Iron	NP	4.65E+04	3.12E+03	NA	NA	3.35E+02	NA	NA	2.80E+03
PA-46	Lead	NP	5.48E+01	3.60E+00	2.34E-02	9.33E+00	3.89E-01	1.66E+01	4.18E-02	3.76E+00
PA-46	Manganese	NP	5.46E+02	5.34E+01	NA	NA	5.22E+00	NA	NA	5.74E+01
PA-46	Mercury	P	1.07E+00	1.67E-01	3.98E-02	1.83E-01	1.50E-02	3.77E-01	8.17E-02	1.74E-01
PA-46	Molybdenum	NP	1.11E+00	2.60E+00	NA	NA	2.01E-01	NA	NA	3.04E+00
PA-46	Nickel	NP	2.50E+02	9.27E+00	1.55E+00	6.28E+01	1.23E+00	7.94E-01	1.96E-02	9.60E+00
PA-46	Selenium	NP	3.29E-01	2.43E+00	2.30E-01	9.29E-01	1.86E-01	8.11E-01	2.01E-01	5.34E+00
PA-46	Silver	NP	2.72E-01	1.33E-01	NA	NA	1.07E-02	NA	NA	2.52E-01
PA-46	Vanadium	NP	1.27E+02	8.42E+00	NA	NA	9.09E-01	NA	NA	1.15E+01
PA-46	Zinc	NP	1.56E+02	1.29E+02	1.77E+01	1.77E+02	1.02E+01	5.75E-01	5.75E-02	1.26E+02
PA-46	HMW PAH	NP	1.70E+00	4.06E-01	NA	NA	3.46E-02	NA	NA	3.62E-01
PA-46	LMW PAH	NP	3.48E-01	3.16E-02	NA	NA	3.14E-03	NA	NA	4.21E-02
PA-46	Total PCBs	P	3.57E-01	1.04E-01	9.59E-02	1.16E+00	8.70E-03	9.07E-02	7.49E-03	6.86E-02
PA-46	Total 4,4'-DDx	P	2.34E-03	7.33E-03	7.14E-03	6.12E-01	5.65E-04	7.91E-02	9.23E-04	1.19E-02
PA-46	alpha-Chlordane	NP	3.00E-05	6.21E-05	NA	NA	4.80E-06	NA	NA	1.03E-03
PA-46	Dieldrin	NP	4.50E-05	1.24E-03	NA	NA	9.48E-05	NA	NA	1.57E-03
PA-46	Endosulfan II	NP	4.50E-05	1.24E-04	NA	NA	9.57E-06	NA	NA	ND
PA-46	Endrin	NP	4.00E-05	3.10E-05	NA	NA	2.45E-06	NA	NA	ND
PA-46	gamma-Chlordane	NP	3.50E-05	7.40E-04	NA	NA	5.66E-05	NA	NA	8.56E-04
PA-46	Heptachlor	NP	3.50E-05	6.21E-05	NA	NA	4.81E-06	NA	NA	ND
PA-46	Dibutyltin	NP	2.99E-02	2.61E-02	1.19E+00	7.46E+01	2.06E-03	1.73E-03	2.76E-05	1.26E-02
PA-46	Monobutyltin	NP	4.69E-04	3.59E-02	NA	NA	2.74E-03	NA	NA	NA
PA-46	Tetrabutyltin	NP	8.20E-04	2.44E-01	NA	NA	1.86E-02	NA	NA	NA
PA-46	Tributyltin	NP	7.63E-02	8.17E-02	1.19E+00	7.46E+01	6.40E-03	5.39E-03	8.58E-05	4.48E-02

ND = Not Detected

STATION ID = EW-36

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
EW-36	Aluminum	NP	4.78E+04	3.10E+03	NA	NA	3.37E+02	NA	NA	1.95E+03
EW-36	Antimony	NP	6.42E-01	2.69E-01	NA	NA	2.19E-02	NA	NA	1.87E-01
EW-36	Arsenic	NP	6.35E+00	1.82E+01	5.43E+00	2.17E+01	1.40E+00	2.58E-01	6.46E-02	2.29E+01
EW-36	Barium	NP	3.70E+02	2.96E+01	NA	NA	3.04E+00	NA	NA	2.02E+01
EW-36	Cadmium	NP	1.95E-01	1.79E-01	8.53E-02	1.74E+01	1.41E-02	1.65E-01	8.07E-04	3.69E-01
EW-36	Chromium	NP	2.46E+02	1.56E+01	NA	NA	1.71E+00	NA	NA	2.46E+01
EW-36	Cobalt	NP	1.31E+01	2.08E+00	NA	NA	1.86E-01	NA	NA	3.63E+00
EW-36	Copper	NP	2.15E+01	1.94E+01	2.56E+00	6.37E+01	1.53E+00	5.95E-01	2.40E-02	1.48E+01
EW-36	Iron	NP	2.72E+04	3.61E+03	NA	NA	3.33E+02	NA	NA	2.80E+03
EW-36	Lead	NP	1.57E+01	5.14E+00	2.34E-02	9.33E+00	4.25E-01	1.82E+01	4.56E-02	3.76E+00
EW-36	Manganese	NP	4.74E+02	4.63E+01	NA	NA	4.53E+00	NA	NA	5.74E+01
EW-36	Mercury	P	9.14E-02	1.46E-01	3.98E-02	1.83E-01	1.13E-02	2.85E-01	6.18E-02	1.74E-01
EW-36	Molybdenum	NP	4.47E-01	2.62E+00	NA	NA	2.01E-01	NA	NA	3.04E+00
EW-36	Nickel	NP	6.49E+01	9.53E+00	1.55E+00	6.28E+01	8.63E-01	5.57E-01	1.37E-02	9.60E+00
EW-36	Selenium	NP	6.30E-02	2.17E+00	2.30E-01	9.29E-01	1.66E-01	7.22E-01	1.79E-01	5.34E+00
EW-36	Silver	NP	7.68E-02	2.16E-01	NA	NA	1.67E-02	NA	NA	2.52E-01
EW-36	Vanadium	NP	8.25E+01	1.06E+01	NA	NA	9.82E-01	NA	NA	1.15E+01
EW-36	Zinc	NP	6.93E+01	7.64E+01	1.77E+01	1.77E+02	5.98E+00	3.38E-01	3.38E-02	1.26E+02
EW-36	HMW PAH	NP	1.83E-01	5.68E-01	NA	NA	4.38E-02	NA	NA	3.62E-01
EW-36	LMW PAH	NP	2.87E-02	5.97E-02	NA	NA	4.62E-03	NA	NA	4.21E-02
EW-36	Total PCBs	P	3.25E-02	4.10E-01	9.59E-02	1.16E+00	3.13E-02	3.27E-01	2.70E-02	6.86E-02
EW-36	Total 4,4'-DDx	P	5.10E-04	1.35E-02	7.14E-03	6.12E-01	1.03E-03	1.44E-01	1.69E-03	1.19E-02
EW-36	alpha-Chlordane	NP	2.50E-05	8.30E-04	NA	NA	6.34E-05	NA	NA	1.03E-03
EW-36	Dieldrin	NP	3.50E-05	1.22E-03	NA	NA	9.32E-05	NA	NA	1.57E-03
EW-36	Endosulfan II	NP	3.50E-05	1.28E-04	NA	NA	9.88E-06	NA	NA	ND
EW-36	Endrin	NP	3.00E-05	3.21E-05	NA	NA	2.51E-06	NA	NA	ND
EW-36	gamma-Chlordane	NP	2.50E-05	1.22E-03	NA	NA	9.32E-05	NA	NA	8.56E-04
EW-36	Heptachlor	NP	3.00E-05	6.42E-05	NA	NA	4.97E-06	NA	NA	ND
EW-36	Dibutyltin	NP	5.78E-04	7.35E-03	1.19E+00	7.46E+01	5.62E-04	4.74E-04	7.54E-06	1.26E-02
EW-36	Monobutyltin	NP	3.46E-04	1.85E-02	NA	NA	1.42E-03	NA	NA	NA
EW-36	Tetrabutyltin	NP	6.06E-04	2.46E-02	NA	NA	1.88E-03	NA	NA	NA
EW-36	Tributyltin	NP	4.67E-04	4.22E-02	1.19E+00	7.46E+01	3.22E-03	2.72E-03	4.32E-05	4.48E-02

ND = Not Detected

STATION ID = OR-26

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
OR-26	Aluminum	NP	6.83E+04	3.77E+03	NA	NA	4.31E+02	NA	NA	1.95E+03
OR-26	Antimony	NP	2.35E+00	2.97E-01	NA	NA	2.76E-02	NA	NA	1.87E-01
OR-26	Arsenic	NP	1.36E+01	2.10E+01	5.43E+00	2.17E+01	1.63E+00	3.01E-01	7.51E-02	2.29E+01
OR-26	Barium	NP	3.96E+02	3.47E+01	NA	NA	3.48E+00	NA	NA	2.02E+01
OR-26	Cadmium	NP	3.99E-01	2.19E-01	8.53E-02	1.74E+01	1.76E-02	2.06E-01	1.01E-03	3.69E-01
OR-26	Chromium	NP	2.54E+02	1.66E+01	NA	NA	1.80E+00	NA	NA	2.46E+01
OR-26	Cobalt	NP	1.94E+01	2.65E+00	NA	NA	2.43E-01	NA	NA	3.63E+00
OR-26	Copper	NP	8.64E+01	1.83E+01	2.56E+00	6.37E+01	1.58E+00	6.16E-01	2.48E-02	1.48E+01
OR-26	Iron	NP	4.87E+04	5.12E+03	NA	NA	4.93E+02	NA	NA	2.80E+03
OR-26	Lead	NP	4.80E+01	7.05E+00	2.34E-02	9.33E+00	6.39E-01	2.73E+01	6.85E-02	3.76E+00
OR-26	Manganese	NP	5.05E+02	5.37E+01	NA	NA	5.16E+00	NA	NA	5.74E+01
OR-26	Mercury	P	6.02E-01	1.86E-01	3.98E-02	1.83E-01	1.55E-02	3.89E-01	8.43E-02	1.74E-01
OR-26	Molybdenum	NP	1.68E+00	2.24E+00	NA	NA	1.75E-01	NA	NA	3.04E+00
OR-26	Nickel	NP	1.16E+02	1.30E+01	1.55E+00	6.28E+01	1.24E+00	7.97E-01	1.97E-02	9.60E+00
OR-26	Selenium	NP	3.41E-01	2.55E+00	2.30E-01	9.29E-01	1.95E-01	8.51E-01	2.10E-01	5.34E+00
OR-26	Silver	NP	3.97E-01	1.31E-01	NA	NA	1.08E-02	NA	NA	2.52E-01
OR-26	Vanadium	NP	1.54E+02	1.11E+01	NA	NA	1.17E+00	NA	NA	1.15E+01
OR-26	Zinc	NP	1.59E+02	7.97E+01	1.77E+01	1.77E+02	6.42E+00	3.63E-01	3.63E-02	1.26E+02
OR-26	HMW PAH	NP	6.83E-01	5.31E-01	NA	NA	4.20E-02	NA	NA	3.62E-01
OR-26	LMW PAH	NP	1.31E-01	5.84E-02	NA	NA	4.73E-03	NA	NA	4.21E-02
OR-26	Total PCBs	P	3.21E-01	1.13E+00	9.59E-02	1.16E+00	8.72E-02	9.09E-01	7.50E-02	6.86E-02
OR-26	Total 4,4'-DDx	P	4.88E-03	2.43E-02	7.14E-03	6.12E-01	1.87E-03	2.61E-01	3.05E-03	1.19E-02
OR-26	alpha-Chlordane	NP	3.80E-04	6.69E-05	NA	NA	5.91E-06	NA	NA	1.03E-03
OR-26	Dieldrin	NP	5.00E-05	3.01E-03	NA	NA	2.30E-04	NA	NA	1.57E-03
OR-26	Endosulfan II	NP	5.50E-05	1.34E-04	NA	NA	1.03E-05	NA	NA	ND
OR-26	Endrin	NP	4.50E-05	3.35E-05	NA	NA	2.65E-06	NA	NA	ND
OR-26	gamma-Chlordane	NP	3.40E-04	1.74E-03	NA	NA	1.34E-04	NA	NA	8.56E-04
OR-26	Heptachlor	NP	4.50E-05	6.69E-05	NA	NA	5.21E-06	NA	NA	ND
OR-26	Dibutyltin	NP	1.67E-02	1.33E-02	1.19E+00	7.46E+01	1.05E-03	8.87E-04	1.41E-05	1.26E-02
OR-26	Monobutyltin	NP	5.44E-04	1.95E-02	NA	NA	1.49E-03	NA	NA	NA
OR-26	Tetrabutyltin	NP	9.51E-04	6.86E-02	NA	NA	5.24E-03	NA	NA	NA
OR-26	Tributyltin	NP	2.80E-02	4.43E-02	1.19E+00	7.46E+01	3.44E-03	2.90E-03	4.62E-05	4.48E-02

ND = Not Detected

STATION ID = SB-21

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	COPEC Name	Priority/Non-Priority	Sediment Conc (dry wt mg/kg)	Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (dry wt mg/kg)
SB-21	Aluminum	NP	4.64E+04	2.70E+03	NA	NA	3.03E+02	NA	NA	1.95E+03
SB-21	Antimony	NP	6.54E-01	1.26E+00	NA	NA	9.76E-02	NA	NA	1.87E-01
SB-21	Arsenic	NP	9.95E+00	2.30E+01	5.43E+00	2.17E+01	1.78E+00	3.27E-01	8.18E-02	2.29E+01
SB-21	Barium	NP	7.61E+02	4.75E+01	NA	NA	5.22E+00	NA	NA	2.02E+01
SB-21	Cadmium	NP	2.62E-01	3.07E-01	8.53E-02	1.74E+01	2.40E-02	2.81E-01	1.38E-03	3.69E-01
SB-21	Chromium	NP	3.38E+02	1.84E+01	NA	NA	2.11E+00	NA	NA	2.46E+01
SB-21	Cobalt	NP	2.19E+01	2.58E+00	NA	NA	2.43E-01	NA	NA	3.63E+00
SB-21	Copper	NP	3.19E+02	5.48E+01	2.56E+00	6.37E+01	4.85E+00	1.89E+00	7.62E-02	1.48E+01
SB-21	Iron	NP	3.10E+04	3.72E+03	NA	NA	3.49E+02	NA	NA	2.80E+03
SB-21	Lead	NP	1.18E+01	2.86E+01	2.34E-02	9.33E+00	2.21E+00	9.43E+01	2.37E-01	3.76E+00
SB-21	Manganese	NP	4.53E+02	6.01E+01	NA	NA	5.54E+00	NA	NA	5.74E+01
SB-21	Mercury	P	1.47E+00	3.78E-01	3.98E-02	1.83E-01	3.19E-02	8.03E-01	1.74E-01	1.74E-01
SB-21	Molybdenum	NP	7.73E-01	2.31E+00	NA	NA	1.78E-01	NA	NA	3.04E+00
SB-21	Nickel	NP	1.61E+02	1.55E+01	1.55E+00	6.28E+01	1.52E+00	9.80E-01	2.42E-02	9.60E+00
SB-21	Selenium	NP	1.78E-01	2.43E+00	2.30E-01	9.29E-01	1.86E-01	8.10E-01	2.00E-01	5.34E+00
SB-21	Silver	NP	1.44E-01	2.62E-01	NA	NA	2.03E-02	NA	NA	2.52E-01
SB-21	Vanadium	NP	1.72E+02	8.88E+00	NA	NA	1.04E+00	NA	NA	1.15E+01
SB-21	Zinc	NP	2.97E+02	9.19E+01	1.77E+01	1.77E+02	7.64E+00	4.32E-01	4.32E-02	1.26E+02
SB-21	HMW PAH	NP	4.13E+00	1.05E+00	NA	NA	8.88E-02	NA	NA	3.62E-01
SB-21	LMW PAH	NP	1.10E+00	9.92E-02	NA	NA	9.88E-03	NA	NA	4.21E-02
SB-21	Total PCBs	P	5.19E+00	4.87E+00	9.59E-02	1.16E+00	3.82E-01	3.99E+00	3.29E-01	6.86E-02
SB-21	Total 4,4'-DDx	P	5.28E-02	5.24E-02	7.14E-03	6.12E-01	4.11E-03	5.76E-01	6.73E-03	1.19E-02
SB-21	alpha-Chlordane	NP	7.00E-04	1.74E-03	NA	NA	1.34E-04	NA	NA	1.03E-03
SB-21	Dieldrin	NP	3.50E-05	6.48E-03	NA	NA	4.95E-04	NA	NA	1.57E-03
SB-21	Endosulfan II	NP	3.50E-05	1.20E-04	NA	NA	9.23E-06	NA	NA	ND
SB-21	Endrin	NP	3.00E-05	3.00E-05	NA	NA	2.35E-06	NA	NA	ND
SB-21	gamma-Chlordane	NP	8.60E-04	2.46E-03	NA	NA	1.90E-04	NA	NA	8.56E-04
SB-21	Heptachlor	NP	3.00E-05	6.00E-05	NA	NA	4.64E-06	NA	NA	ND
SB-21	Dibutyltin	NP	2.96E-02	2.44E-02	1.19E+00	7.46E+01	1.93E-03	1.62E-03	2.58E-05	1.26E-02
SB-21	Monobutyltin	NP	3.71E-04	1.68E-02	NA	NA	1.29E-03	NA	NA	NA
SB-21	Tetrabutyltin	NP	6.49E-04	1.18E-01	NA	NA	9.03E-03	NA	NA	NA
SB-21	Tributyltin	NP	5.65E-02	3.84E-02	1.19E+00	7.46E+01	3.05E-03	2.57E-03	4.09E-05	4.48E-02

ND = Not Detected

Hard-Bodied Invertebrate Tissue

Table H-82. Dose Assessment Results for Area I Using 95% UCL Sediment Data
and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Sample ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I HBI	AAB-369	Aluminum	NP	72101.03	3490	NA	NA	4.17E+02	NA	NA	1.95E+03
Area I HBI	AAB-369	Antimony	NP	1.08	0.218	NA	NA	1.89E-02	NA	NA	1.87E-01
Area I HBI	AAB-369	Arsenic	NP	10.98	7.37	5.43E+00	2.17E+01	5.86E-01	1.08E-01	2.70E-02	2.29E+01
Area I HBI	AAB-369	Barium	NP	470.90	32	NA	NA	3.43E+00	NA	NA	2.02E+01
Area I HBI	AAB-369	Cadmium	NP	0.25	0.521	8.53E-02	1.74E+01	4.03E-02	4.72E-01	2.31E-03	3.69E-01
Area I HBI	AAB-369	Chromium	NP	319.00	13.9	NA	NA	1.73E+00	NA	NA	2.46E+01
Area I HBI	AAB-369	Cobalt	NP	20.93	2.44	NA	NA	2.30E-01	NA	NA	3.63E+00
Area I HBI	AAB-369	Copper	NP	112.24	31.6	2.56E+00	6.37E+01	2.65E+00	1.03E+00	4.16E-02	1.48E+01
Area I HBI	AAB-369	Iron	NP	42950.02	2720	NA	NA	2.98E+02	NA	NA	2.80E+03
Area I HBI	AAB-369	Lead	P	115.24	10.3	2.34E-02	9.33E+00	1.03E+00	4.39E+01	1.10E-01	3.76E+00
Area I HBI	AAB-369	Manganese	NP	439.96	70.9	NA	NA	6.33E+00	NA	NA	5.74E+01
Area I HBI	AAB-369	Mercury	NP	0.36	0.126	3.98E-02	1.83E-01	1.04E-02	2.61E-01	5.66E-02	1.74E-01
Area I HBI	AAB-369	Molybdenum	NP	1.29	0.888	NA	NA	7.05E-02	NA	NA	3.04E+00
Area I HBI	AAB-369	Nickel	NP	232.00	13.6	1.55E+00	6.28E+01	1.52E+00	9.82E-01	2.43E-02	9.60E+00
Area I HBI	AAB-369	Selenium	NP	0.39	3.74	2.30E-01	9.29E-01	2.86E-01	1.25E+00	3.08E-01	5.34E+00
Area I HBI	AAB-369	Silver	NP	0.30	0.345	NA	NA	2.70E-02	NA	NA	2.52E-01
Area I HBI	AAB-369	Vanadium	NP	141.00	7.21	NA	NA	8.45E-01	NA	NA	1.15E+01
Area I HBI	AAB-369	Zinc	NP	129.99	115	1.77E+01	1.77E+02	9.05E+00	5.12E-01	5.12E-02	1.26E+02
Area I HBI	AAB-369	HMW PAH	P	2.69	2.18673	NA	NA	1.73E-01	NA	NA	3.62E-01
Area I HBI	AAB-369	LMW PAH	P	0.38	0.5254	NA	NA	4.09E-02	NA	NA	4.21E-02
Area I HBI	AAB-369	Total PCBs	NP	0.09	0.25622	9.59E-02	1.16E+00	1.98E-02	2.06E-01	1.70E-02	6.86E-02
Area I HBI	AAB-369	Total 4,4'-DDx	NP	0.00	0.02989	7.14E-03	6.12E-01	2.29E-03	3.21E-01	3.74E-03	1.19E-02
Area I HBI	AAB-369	alpha-Chlordane	NP	0.00	0.00626	NA	NA	4.79E-04	NA	NA	1.03E-03
Area I HBI	AAB-369	Dieldrin	NP	0.00	8.85916E-05	NA	NA	6.88E-06	NA	NA	1.57E-03
Area I HBI	AAB-369	Endosulfan II	NP	0.00	0.000174816	NA	NA	1.35E-05	NA	NA	ND
Area I HBI	AAB-369	Endrin	NP	0.00	6.00313E-05	NA	NA	4.69E-06	NA	NA	ND
Area I HBI	AAB-369	gamma-Chlordane	NP	0.00	0.00259	NA	NA	1.98E-04	NA	NA	8.56E-04
Area I HBI	AAB-369	Heptachlor	NP	0.00	9.69341E-05	NA	NA	7.50E-06	NA	NA	ND
Area I HBI	AAB-369	Dibutyltin	NP	0.01	0.25791	1.19E+00	7.46E+01	1.97E-02	1.66E-02	2.64E-04	1.26E-02
Area I HBI	AAB-369	Monobutyltin	NP	0.00	0.02965	NA	NA	2.27E-03	NA	NA	NA
Area I HBI	AAB-369	Tetrabutyltin	NP	0.00	0.007458289	NA	NA	5.72E-04	NA	NA	NA
Area I HBI	AAB-369	Tributyltin	NP	0.02	0.84228	1.19E+00	7.46E+01	6.44E-02	5.42E-02	8.63E-04	4.48E-02

Table H-83. Dose Assessment Results for Area VIII Using 95% UCL Sediment Data
and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII HBI	AAB-377	Aluminum	NP	64043.90	593	NA	NA	1.79E+02	NA	NA	1.95E+03
Area VIII HBI	AAB-377	Antimony	NP	2.77	0.182	NA	NA	1.97E-02	NA	NA	1.87E-01
Area VIII HBI	AAB-377	Arsenic	NP	9.69	7.16	5.43E+00	2.17E+01	5.67E-01	1.04E-01	2.61E-02	2.29E+01
Area VIII HBI	AAB-377	Barium	NP	424.37	5.25	NA	NA	1.29E+00	NA	NA	2.02E+01
Area VIII HBI	AAB-377	Cadmium	NP	0.27	0.789	8.53E-02	1.74E+01	6.08E-02	7.13E-01	3.49E-03	3.69E-01
Area VIII HBI	AAB-377	Chromium	NP	290.22	3.3	NA	NA	8.59E-01	NA	NA	2.46E+01
Area VIII HBI	AAB-377	Cobalt	NP	18.80	1.21	NA	NA	1.32E-01	NA	NA	3.63E+00
Area VIII HBI	AAB-377	Copper	NP	41.09	11.4	2.56E+00	6.37E+01	9.56E-01	3.73E-01	1.50E-02	1.48E+01
Area VIII HBI	AAB-377	Iron	NP	39354.33	708	NA	NA	1.36E+02	NA	NA	2.80E+03
Area VIII HBI	AAB-377	Lead	P	24.69	2.77	2.34E-02	9.33E+00	2.63E-01	1.12E+01	2.82E-02	3.76E+00
Area VIII HBI	AAB-377	Manganese	NP	534.46	22.1	NA	NA	2.81E+00	NA	NA	5.74E+01
Area VIII HBI	AAB-377	Mercury	NP	0.26	0.154	3.98E-02	1.83E-01	1.23E-02	3.10E-01	6.71E-02	1.74E-01
Area VIII HBI	AAB-377	Molybdenum	NP	0.95	0.389	NA	NA	3.17E-02	NA	NA	3.04E+00
Area VIII HBI	AAB-377	Nickel	NP	97.50	8.98	1.55E+00	6.28E+01	8.90E-01	5.74E-01	1.42E-02	9.60E+00
Area VIII HBI	AAB-377	Selenium	NP	0.46	3.78	2.30E-01	9.29E-01	2.90E-01	1.26E+00	3.12E-01	5.34E+00
Area VIII HBI	AAB-377	Silver	NP	0.28	0.297	NA	NA	2.33E-02	NA	NA	2.52E-01
Area VIII HBI	AAB-377	Vanadium	NP	162.00	2.25	NA	NA	5.11E-01	NA	NA	1.15E+01
Area VIII HBI	AAB-377	Zinc	NP	108.56	109	1.77E+01	1.77E+02	8.55E+00	4.83E-01	4.83E-02	1.26E+02
Area VIII HBI	AAB-377	HMW PAH	P	1.70	0.23875	NA	NA	2.18E-02	NA	NA	3.62E-01
Area VIII HBI	AAB-377	LMW PAH	P	0.20	0.04808	NA	NA	4.08E-03	NA	NA	4.21E-02
Area VIII HBI	AAB-377	Total PCBs	NP	0.03	0.4652	9.59E-02	1.16E+00	3.56E-02	3.71E-01	3.06E-02	6.86E-02
Area VIII HBI	AAB-377	Total 4,4'-DDx	NP	0.00	0.01288	7.14E-03	6.12E-01	9.91E-04	1.39E-01	1.62E-03	1.19E-02
Area VIII HBI	AAB-377	alpha-Chlordane	NP	0.00	0.00146	NA	NA	1.12E-04	NA	NA	1.03E-03
Area VIII HBI	AAB-377	Dieldrin	NP	0.00	0.00376	NA	NA	2.87E-04	NA	NA	1.57E-03
Area VIII HBI	AAB-377	Endosulfan II	NP	0.00	0.000177408	NA	NA	1.37E-05	NA	NA	ND
Area VIII HBI	AAB-377	Endrin	NP	0.00	6.09213E-05	NA	NA	4.77E-06	NA	NA	ND
Area VIII HBI	AAB-377	gamma-Chlordane	NP	0.00	0.00118	NA	NA	9.02E-05	NA	NA	8.56E-04
Area VIII HBI	AAB-377	Heptachlor	NP	0.00	9.83713E-05	NA	NA	7.62E-06	NA	NA	ND
Area VIII HBI	AAB-377	Dibutyltin	NP	0.01	0.07969	1.19E+00	7.46E+01	6.10E-03	5.13E-03	8.17E-05	1.26E-02
Area VIII HBI	AAB-377	Monobutyltin	NP	0.00	0.02934	NA	NA	2.24E-03	NA	NA	NA
Area VIII HBI	AAB-377	Tetrabutyltin	NP	0.00	0.0308814	NA	NA	2.36E-03	NA	NA	NA
Area VIII HBI	AAB-377	Tributyltin	NP	0.01	0.31653	1.19E+00	7.46E+01	2.42E-02	2.04E-02	3.24E-04	4.48E-02

Table H-84. Dose Assessment Results for Area IX Using 95% UCL Sediment Data
and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX HBI	AAB-404	Aluminum	NP	71724.38	1950	NA	NA	2.99E+02	NA	NA	1.95E+03
Area IX HBI	AAB-404	Antimony	NP	2.76	0.109	NA	NA	1.41E-02	NA	NA	1.87E-01
Area IX HBI	AAB-404	Arsenic	NP	12.68	6.84	5.43E+00	2.17E+01	5.49E-01	1.01E-01	2.53E-02	2.29E+01
Area IX HBI	AAB-404	Barium	NP	441.57	14.5	NA	NA	2.03E+00	NA	NA	2.02E+01
Area IX HBI	AAB-404	Cadmium	NP	0.39	0.753	8.53E-02	1.74E+01	5.83E-02	6.84E-01	3.34E-03	3.69E-01
Area IX HBI	AAB-404	Chromium	NP	429.15	10.4	NA	NA	1.69E+00	NA	NA	2.46E+01
Area IX HBI	AAB-404	Cobalt	NP	20.81	1.59	NA	NA	1.65E-01	NA	NA	3.63E+00
Area IX HBI	AAB-404	Copper	NP	84.33	9.09	2.56E+00	6.37E+01	8.70E-01	3.40E-01	1.37E-02	1.48E+01
Area IX HBI	AAB-404	Iron	NP	47289.76	1930	NA	NA	2.46E+02	NA	NA	2.80E+03
Area IX HBI	AAB-404	Lead	P	54.48	2.48	2.34E-02	9.33E+00	3.03E-01	1.30E+01	3.25E-02	3.76E+00
Area IX HBI	AAB-404	Manganese	NP	570.73	35.7	NA	NA	3.92E+00	NA	NA	5.74E+01
Area IX HBI	AAB-404	Mercury	NP	0.52	0.181	3.98E-02	1.83E-01	1.49E-02	3.75E-01	8.12E-02	1.74E-01
Area IX HBI	AAB-404	Molybdenum	NP	1.63	0.601	NA	NA	4.93E-02	NA	NA	3.04E+00
Area IX HBI	AAB-404	Nickel	NP	135.18	11.4	1.55E+00	6.28E+01	1.15E+00	7.44E-01	1.84E-02	9.60E+00
Area IX HBI	AAB-404	Selenium	NP	0.38	4.67	2.30E-01	9.29E-01	3.57E-01	1.56E+00	3.85E-01	5.34E+00
Area IX HBI	AAB-404	Silver	NP	0.43	0.669	NA	NA	5.20E-02	NA	NA	2.52E-01
Area IX HBI	AAB-404	Vanadium	NP	163.23	4.84	NA	NA	7.11E-01	NA	NA	1.15E+01
Area IX HBI	AAB-404	Zinc	NP	162.03	87.5	1.77E+01	1.77E+02	7.02E+00	3.97E-01	3.97E-02	1.26E+02
Area IX HBI	AAB-404	HMW PAH	P	1.66	0.23539	NA	NA	2.14E-02	NA	NA	3.62E-01
Area IX HBI	AAB-404	LMW PAH	P	0.19	0.03092	NA	NA	2.76E-03	NA	NA	4.21E-02
Area IX HBI	AAB-404	Total PCBs	NP	0.34	0.9427	9.59E-02	1.16E+00	7.27E-02	7.58E-01	6.26E-02	6.86E-02
Area IX HBI	AAB-404	Total 4,4'-DDx	NP	0.00	0.01451	7.14E-03	6.12E-01	1.12E-03	1.56E-01	1.83E-03	1.19E-02
Area IX HBI	AAB-404	alpha-Chlordane	NP	0.00	0.00121	NA	NA	9.32E-05	NA	NA	1.03E-03
Area IX HBI	AAB-404	Dieldrin	NP	0.00	0.00208	NA	NA	1.60E-04	NA	NA	1.57E-03
Area IX HBI	AAB-404	Endosulfan II	NP	0.00	0.000193029	NA	NA	1.49E-05	NA	NA	ND
Area IX HBI	AAB-404	Endrin	NP	0.00	6.62857E-05	NA	NA	5.17E-06	NA	NA	ND
Area IX HBI	AAB-404	gamma-Chlordane	NP	0.00	0.00162	NA	NA	1.24E-04	NA	NA	8.56E-04
Area IX HBI	AAB-404	Heptachlor	NP	0.00	0.000107033	NA	NA	8.28E-06	NA	NA	ND
Area IX HBI	AAB-404	Dibutyltin	NP	0.02	0.01284	1.19E+00	7.46E+01	1.01E-03	8.54E-04	1.36E-05	1.26E-02
Area IX HBI	AAB-404	Monobutyltin	NP	0.00	0.003359424	NA	NA	2.62E-04	NA	NA	NA
Area IX HBI	AAB-404	Tetrabutyltin	NP	0.00	0.003429017	NA	NA	2.65E-04	NA	NA	NA
Area IX HBI	AAB-404	Tributyltin	NP	0.07	0.04884	1.19E+00	7.46E+01	3.87E-03	3.26E-03	5.18E-05	4.48E-02

Table H-85. Dose Assessment Results for Area X Using 95% UCL Sediment Data
and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X HBI	AAB-399	Aluminum	NP	73918.03	1270	NA	NA	2.52E+02	NA	NA	1.95E+03
Area X HBI	AAB-399	Antimony	NP	4.69	0.104	NA	NA	1.77E-02	NA	NA	1.87E-01
Area X HBI	AAB-399	Arsenic	NP	11.39	6.43	5.43E+00	2.17E+01	5.15E-01	9.48E-02	2.37E-02	2.29E+01
Area X HBI	AAB-399	Barium	NP	621.19	15.6	NA	NA	2.49E+00	NA	NA	2.02E+01
Area X HBI	AAB-399	Cadmium	NP	0.52	0.83	8.53E-02	1.74E+01	6.45E-02	7.56E-01	3.69E-03	3.69E-01
Area X HBI	AAB-399	Chromium	NP	285.80	7.86	NA	NA	1.20E+00	NA	NA	2.46E+01
Area X HBI	AAB-399	Cobalt	NP	17.99	1.2	NA	NA	1.29E-01	NA	NA	3.63E+00
Area X HBI	AAB-399	Copper	NP	188.58	15.2	2.56E+00	6.37E+01	1.56E+00	6.07E-01	2.44E-02	1.48E+01
Area X HBI	AAB-399	Iron	NP	47800.00	1220	NA	NA	1.93E+02	NA	NA	2.80E+03
Area X HBI	AAB-399	Lead	P	97.95	5.25	2.34E-02	9.33E+00	6.06E-01	2.59E+01	6.50E-02	3.76E+00
Area X HBI	AAB-399	Manganese	NP	486.84	34.5	NA	NA	3.65E+00	NA	NA	5.74E+01
Area X HBI	AAB-399	Mercury	NP	0.86	0.195	3.98E-02	1.83E-01	1.67E-02	4.20E-01	9.10E-02	1.74E-01
Area X HBI	AAB-399	Molybdenum	NP	1.23	0.543	NA	NA	4.40E-02	NA	NA	3.04E+00
Area X HBI	AAB-399	Nickel	NP	123.77	8.62	1.55E+00	6.28E+01	9.17E-01	5.91E-01	1.46E-02	9.60E+00
Area X HBI	AAB-399	Selenium	NP	0.42	5.04	2.30E-01	9.29E-01	3.86E-01	1.68E+00	4.15E-01	5.34E+00
Area X HBI	AAB-399	Silver	NP	0.54	0.119	NA	NA	1.02E-02	NA	NA	2.52E-01
Area X HBI	AAB-399	Vanadium	NP	157.69	3.08	NA	NA	5.65E-01	NA	NA	1.15E+01
Area X HBI	AAB-399	Zinc	NP	212.99	110	1.77E+01	1.77E+02	8.85E+00	5.00E-01	5.00E-02	1.26E+02
Area X HBI	AAB-399	HMW PAH	P	2.73	0.44593	NA	NA	3.98E-02	NA	NA	3.62E-01
Area X HBI	AAB-399	LMW PAH	P	0.37	0.05643	NA	NA	5.08E-03	NA	NA	4.21E-02
Area X HBI	AAB-399	Total PCBs	NP	1.61	2.51088	9.59E-02	1.16E+00	1.95E-01	2.03E+00	1.68E-01	6.86E-02
Area X HBI	AAB-399	Total 4,4'-DDx	NP	0.02	0.04008	7.14E-03	6.12E-01	3.10E-03	4.34E-01	5.07E-03	1.19E-02
Area X HBI	AAB-399	alpha-Chlordane	NP	0.00	0.00245	NA	NA	1.92E-04	NA	NA	1.03E-03
Area X HBI	AAB-399	Dieldrin	NP	0.00	0.00481	NA	NA	3.77E-04	NA	NA	1.57E-03
Area X HBI	AAB-399	Endosulfan II	NP	0.00	0.000195307	NA	NA	1.64E-05	NA	NA	ND
Area X HBI	AAB-399	Endrin	NP	0.00	6.70678E-05	NA	NA	6.38E-06	NA	NA	ND
Area X HBI	AAB-399	gamma-Chlordane	NP	0.00	0.00374	NA	NA	2.94E-04	NA	NA	8.56E-04
Area X HBI	AAB-399	Heptachlor	NP	0.00	0.000108296	NA	NA	1.27E-05	NA	NA	ND
Area X HBI	AAB-399	Dibutyltin	NP	0.02	0.01636	1.19E+00	7.46E+01	1.30E-03	1.09E-03	1.74E-05	1.26E-02
Area X HBI	AAB-399	Monobutyltin	NP	0.00	0.00382	NA	NA	2.99E-04	NA	NA	NA
Area X HBI	AAB-399	Tetrabutyltin	NP	0.00	0.003640872	NA	NA	2.81E-04	NA	NA	NA
Area X HBI	AAB-399	Tributyltin	NP	0.05	0.08778	1.19E+00	7.46E+01	6.80E-03	5.73E-03	9.12E-05	4.48E-02

Table H-86. HPS Site-wide Dose Assessment Results Using 95% UCL Sediment Data
and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	95% UCL Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	all stations	Aluminum	NP	69476.31	3284.98	NA	NA	3.96E+02	NA	NA	1.95E+03
Site-wide	all stations	Antimony	NP	3.77	0.22	NA	NA	2.45E-02	NA	NA	1.87E-01
Site-wide	all stations	Arsenic	NP	11.92	7.37	5.43E+00	2.17E+01	5.88E-01	1.08E-01	2.70E-02	2.29E+01
Site-wide	all stations	Barium	NP	518.42	29.93	NA	NA	3.37E+00	NA	NA	2.02E+01
Site-wide	all stations	Cadmium	NP	0.43	0.83	8.53E-02	1.74E+01	6.43E-02	7.54E-01	3.68E-03	3.69E-01
Site-wide	all stations	Chromium	NP	284.86	13.90	NA	NA	1.66E+00	NA	NA	2.46E+01
Site-wide	all stations	Cobalt	NP	17.67	2.30	NA	NA	2.12E-01	NA	NA	3.63E+00
Site-wide	all stations	Copper	NP	206.08	28.79	2.56E+00	6.37E+01	2.63E+00	1.03E+00	4.13E-02	1.48E+01
Site-wide	all stations	Iron	NP	44186.10	2673.78	NA	NA	2.97E+02	NA	NA	2.80E+03
Site-wide	all stations	Lead	P	84.51	9.46	2.34E-02	9.33E+00	8.99E-01	3.84E+01	9.64E-02	3.76E+00
Site-wide	all stations	Manganese	NP	481.04	65.50	NA	NA	6.01E+00	NA	NA	5.74E+01
Site-wide	all stations	Mercury	NP	1.20	0.20	3.98E-02	1.83E-01	1.74E-02	4.37E-01	9.48E-02	1.74E-01
Site-wide	all stations	Molybdenum	NP	1.11	0.85	NA	NA	6.73E-02	NA	NA	3.04E+00
Site-wide	all stations	Nickel	NP	132.53	13.38	1.55E+00	6.28E+01	1.30E+00	8.38E-01	2.07E-02	9.60E+00
Site-wide	all stations	Selenium	NP	0.37	5.04	2.30E-01	9.29E-01	3.86E-01	1.68E+00	4.15E-01	5.34E+00
Site-wide	all stations	Silver	NP	0.39	0.63	NA	NA	4.87E-02	NA	NA	2.52E-01
Site-wide	all stations	Vanadium	NP	145.60	6.93	NA	NA	8.33E-01	NA	NA	1.15E+01
Site-wide	all stations	Zinc	NP	167.66	115.00	1.77E+01	1.77E+02	9.13E+00	5.16E-01	5.16E-02	1.26E+02
Site-wide	all stations	HMW PAH	P	3.31	2.19	NA	NA	1.74E-01	NA	NA	3.62E-01
Site-wide	all stations	LMW PAH	P	0.45	0.53	NA	NA	4.11E-02	NA	NA	4.21E-02
Site-wide	all stations	Total PCBs	NP	1.37	2.24	9.59E-02	1.16E+00	1.74E-01	1.82E+00	1.50E-01	6.86E-02
Site-wide	all stations	Total 4,4'-DDx	NP	0.01	0.04	7.14E-03	6.12E-01	3.05E-03	4.27E-01	4.99E-03	1.19E-02
Site-wide	all stations	alpha-Chlordane	NP	0.00	0.01	NA	NA	4.30E-04	NA	NA	1.03E-03
Site-wide	all stations	Dieldrin	NP	0.00	0.00	NA	NA	3.72E-04	NA	NA	1.57E-03
Site-wide	all stations	Endosulfan II	NP	0.00	0.00	NA	NA	1.64E-05	NA	NA	ND
Site-wide	all stations	Endrin	NP	0.00	0.00	NA	NA	6.22E-06	NA	NA	ND
Site-wide	all stations	gamma-Chlordane	NP	0.00	0.00	NA	NA	2.82E-04	NA	NA	8.56E-04
Site-wide	all stations	Heptachlor	NP	0.00	0.00	NA	NA	1.29E-05	NA	NA	ND
Site-wide	all stations	Dibutyltin	NP	0.02	0.23	1.19E+00	7.46E+01	1.74E-02	1.46E-02	2.33E-04	1.26E-02
Site-wide	all stations	Monobutyltin	NP	0.00	0.03	NA	NA	2.27E-03	NA	NA	NA
Site-wide	all stations	Tetrabutyltin	NP	0.00	0.15	NA	NA	1.18E-02	NA	NA	NA
Site-wide	all stations	Tributyltin	NP	0.07	0.75	1.19E+00	7.46E+01	5.77E-02	4.86E-02	7.73E-04	4.48E-02

ND = Not Detected

Table H-87. Dose Assessment Results for Area I Using Average of Sediment Data and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I HBI	AAB-369	Aluminum	NP	69216.67	3490	NA	NA	4.11E+02	NA	NA	1.95E+03
Area I HBI	AAB-369	Antimony	NP	0.91	0.218	NA	NA	1.85E-02	NA	NA	1.87E-01
Area I HBI	AAB-369	Arsenic	NP	10.50	7.37	5.43E+00	2.17E+01	5.85E-01	1.08E-01	2.69E-02	2.29E+01
Area I HBI	AAB-369	Barium	NP	469.31	32	NA	NA	3.42E+00	NA	NA	2.02E+01
Area I HBI	AAB-369	Cadmium	NP	0.23	0.521	8.53E-02	1.74E+01	4.03E-02	4.72E-01	2.31E-03	3.69E-01
Area I HBI	AAB-369	Chromium	NP	205.83	13.9	NA	NA	1.49E+00	NA	NA	2.46E+01
Area I HBI	AAB-369	Cobalt	NP	16.80	2.44	NA	NA	2.21E-01	NA	NA	3.63E+00
Area I HBI	AAB-369	Copper	NP	58.85	31.6	2.56E+00	6.37E+01	2.54E+00	9.89E-01	3.98E-02	1.48E+01
Area I HBI	AAB-369	Iron	NP	41833.33	2720	NA	NA	2.95E+02	NA	NA	2.80E+03
Area I HBI	AAB-369	Lead	P	41.12	10.3	2.34E-02	9.33E+00	8.73E-01	3.73E+01	9.36E-02	3.76E+00
Area I HBI	AAB-369	Manganese	NP	428.00	70.9	NA	NA	6.31E+00	NA	NA	5.74E+01
Area I HBI	AAB-369	Mercury	NP	0.31	0.126	3.98E-02	1.83E-01	1.03E-02	2.58E-01	5.60E-02	1.74E-01
Area I HBI	AAB-369	Molybdenum	NP	1.03	0.888	NA	NA	7.00E-02	NA	NA	3.04E+00
Area I HBI	AAB-369	Nickel	NP	126.35	13.6	1.55E+00	6.28E+01	1.30E+00	8.40E-01	2.07E-02	9.60E+00
Area I HBI	AAB-369	Selenium	NP	0.34	3.74	2.30E-01	9.29E-01	2.86E-01	1.25E+00	3.08E-01	5.34E+00
Area I HBI	AAB-369	Silver	NP	0.28	0.345	NA	NA	2.69E-02	NA	NA	2.52E-01
Area I HBI	AAB-369	Vanadium	NP	136.17	7.21	NA	NA	8.35E-01	NA	NA	1.15E+01
Area I HBI	AAB-369	Zinc	NP	122.33	115	1.77E+01	1.77E+02	9.04E+00	5.11E-01	5.11E-02	1.26E+02
Area I HBI	AAB-369	HMW PAH	P	1.78	2.18673	NA	NA	1.71E-01	NA	NA	3.62E-01
Area I HBI	AAB-369	LMW PAH	P	0.24	0.5254	NA	NA	4.06E-02	NA	NA	4.21E-02
Area I HBI	AAB-369	Total PCBs	NP	0.04	0.25622	9.59E-02	1.16E+00	1.96E-02	2.05E-01	1.69E-02	6.86E-02
Area I HBI	AAB-369	Total 4,4'-DDx	NP	0.00	0.02989	7.14E-03	6.12E-01	2.29E-03	3.21E-01	3.74E-03	1.19E-02
Area I HBI	AAB-369	alpha-Chlordane	NP	0.00	0.00626	NA	NA	4.78E-04	NA	NA	1.03E-03
Area I HBI	AAB-369	Dieldrin	NP	0.00	8.85916E-05	NA	NA	6.88E-06	NA	NA	1.57E-03
Area I HBI	AAB-369	Endosulfan II	NP	0.00	0.000174816	NA	NA	1.35E-05	NA	NA	ND
Area I HBI	AAB-369	Endrin	NP	0.00	6.00313E-05	NA	NA	4.69E-06	NA	NA	ND
Area I HBI	AAB-369	gamma-Chlordane	NP	0.00	0.00259	NA	NA	1.98E-04	NA	NA	8.56E-04
Area I HBI	AAB-369	Heptachlor	NP	0.00	9.69341E-05	NA	NA	7.50E-06	NA	NA	ND
Area I HBI	AAB-369	Dibutyltin	NP	0.00	0.25791	1.19E+00	7.46E+01	1.97E-02	1.66E-02	2.64E-04	1.26E-02
Area I HBI	AAB-369	Monobutyltin	NP	0.00	0.02965	NA	NA	2.27E-03	NA	NA	NA
Area I HBI	AAB-369	Tetrabutyltin	NP	0.00	0.007458289	NA	NA	5.72E-04	NA	NA	NA
Area I HBI	AAB-369	Tributyltin	NP	0.00	0.84228	1.19E+00	7.46E+01	6.43E-02	5.42E-02	8.62E-04	4.48E-02

ND = Not Detected

Table H-88. Dose Assessment Results for Area VIII Using Average of Sediment Data and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII HBI	AAB-377	Aluminum	NP	55050.00	593	NA	NA	1.60E+02	NA	NA	1.95E+03
Area VIII HBI	AAB-377	Antimony	NP	1.21	0.182	NA	NA	1.64E-02	NA	NA	1.87E-01
Area VIII HBI	AAB-377	Arsenic	NP	8.12	7.16	5.43E+00	2.17E+01	5.64E-01	1.04E-01	2.59E-02	2.29E+01
Area VIII HBI	AAB-377	Barium	NP	391.50	5.25	NA	NA	1.22E+00	NA	NA	2.02E+01
Area VIII HBI	AAB-377	Cadmium	NP	0.23	0.789	8.53E-02	1.74E+01	6.07E-02	7.12E-01	3.48E-03	3.69E-01
Area VIII HBI	AAB-377	Chromium	NP	235.63	3.3	NA	NA	7.45E-01	NA	NA	2.46E+01
Area VIII HBI	AAB-377	Cobalt	NP	15.51	1.21	NA	NA	1.25E-01	NA	NA	3.63E+00
Area VIII HBI	AAB-377	Copper	NP	31.06	11.4	2.56E+00	6.37E+01	9.35E-01	3.65E-01	1.47E-02	1.48E+01
Area VIII HBI	AAB-377	Iron	NP	33350.00	708	NA	NA	1.24E+02	NA	NA	2.80E+03
Area VIII HBI	AAB-377	Lead	P	21.36	2.77	2.34E-02	9.33E+00	2.56E-01	1.09E+01	2.75E-02	3.76E+00
Area VIII HBI	AAB-377	Manganese	NP	494.63	22.1	NA	NA	2.72E+00	NA	NA	5.74E+01
Area VIII HBI	AAB-377	Mercury	NP	0.16	0.154	3.98E-02	1.83E-01	1.21E-02	3.04E-01	6.59E-02	1.74E-01
Area VIII HBI	AAB-377	Molybdenum	NP	0.74	0.389	NA	NA	3.12E-02	NA	NA	3.04E+00
Area VIII HBI	AAB-377	Nickel	NP	74.06	8.98	1.55E+00	6.28E+01	8.41E-01	5.42E-01	1.34E-02	9.60E+00
Area VIII HBI	AAB-377	Selenium	NP	0.19	3.78	2.30E-01	9.29E-01	2.89E-01	1.26E+00	3.11E-01	5.34E+00
Area VIII HBI	AAB-377	Silver	NP	0.19	0.297	NA	NA	2.31E-02	NA	NA	2.52E-01
Area VIII HBI	AAB-377	Vanadium	NP	114.71	2.25	NA	NA	4.12E-01	NA	NA	1.15E+01
Area VIII HBI	AAB-377	Zinc	NP	90.54	109	1.77E+01	1.77E+02	8.51E+00	4.81E-01	4.81E-02	1.26E+02
Area VIII HBI	AAB-377	HMW PAH	P	0.83	0.23875	NA	NA	2.00E-02	NA	NA	3.62E-01
Area VIII HBI	AAB-377	LMW PAH	P	0.10	0.04808	NA	NA	3.88E-03	NA	NA	4.21E-02
Area VIII HBI	AAB-377	Total PCBs	NP	0.02	0.4652	9.59E-02	1.16E+00	3.56E-02	3.71E-01	3.06E-02	6.86E-02
Area VIII HBI	AAB-377	Total 4,4'-DDx	NP	0.00	0.01288	7.14E-03	6.12E-01	9.86E-04	1.38E-01	1.61E-03	1.19E-02
Area VIII HBI	AAB-377	alpha-Chlordane	NP	0.00	0.00146	NA	NA	1.12E-04	NA	NA	1.03E-03
Area VIII HBI	AAB-377	Dieldrin	NP	0.00	0.00376	NA	NA	2.87E-04	NA	NA	1.57E-03
Area VIII HBI	AAB-377	Endosulfan II	NP	0.00	0.000177408	NA	NA	1.36E-05	NA	NA	ND
Area VIII HBI	AAB-377	Endrin	NP	0.00	6.09213E-05	NA	NA	4.73E-06	NA	NA	ND
Area VIII HBI	AAB-377	gamma-Chlordane	NP	0.00	0.00118	NA	NA	9.02E-05	NA	NA	8.56E-04
Area VIII HBI	AAB-377	Heptachlor	NP	0.00	9.83713E-05	NA	NA	7.58E-06	NA	NA	ND
Area VIII HBI	AAB-377	Dibutyltin	NP	0.00	0.07969	1.19E+00	7.46E+01	6.09E-03	5.13E-03	8.16E-05	1.26E-02
Area VIII HBI	AAB-377	Monobutyltin	NP	0.00	0.02934	NA	NA	2.24E-03	NA	NA	NA
Area VIII HBI	AAB-377	Tetrabutyltin	NP	0.00	0.0308814	NA	NA	2.36E-03	NA	NA	NA
Area VIII HBI	AAB-377	Tributyltin	NP	0.00	0.31653	1.19E+00	7.46E+01	2.42E-02	2.04E-02	3.24E-04	4.48E-02

ND = Not Detected

Table H-89. Dose Assessment Results for Area IX Using Average of Sediment Data and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX HBI	AAB-404	Aluminum	NP	64816.67	1950	NA	NA	2.84E+02	NA	NA	1.95E+03
Area IX HBI	AAB-404	Antimony	NP	2.02	0.109	NA	NA	1.25E-02	NA	NA	1.87E-01
Area IX HBI	AAB-404	Arsenic	NP	11.32	6.84	5.43E+00	2.17E+01	5.46E-01	1.01E-01	2.51E-02	2.29E+01
Area IX HBI	AAB-404	Barium	NP	392.33	14.5	NA	NA	1.93E+00	NA	NA	2.02E+01
Area IX HBI	AAB-404	Cadmium	NP	0.33	0.753	8.53E-02	1.74E+01	5.82E-02	6.82E-01	3.34E-03	3.69E-01
Area IX HBI	AAB-404	Chromium	NP	320.00	10.4	NA	NA	1.46E+00	NA	NA	2.46E+01
Area IX HBI	AAB-404	Cobalt	NP	19.33	1.59	NA	NA	1.62E-01	NA	NA	3.63E+00
Area IX HBI	AAB-404	Copper	NP	69.40	9.09	2.56E+00	6.37E+01	8.39E-01	3.27E-01	1.32E-02	1.48E+01
Area IX HBI	AAB-404	Iron	NP	44916.67	1930	NA	NA	2.41E+02	NA	NA	2.80E+03
Area IX HBI	AAB-404	Lead	P	40.53	2.48	2.34E-02	9.33E+00	2.74E-01	1.17E+01	2.94E-02	3.76E+00
Area IX HBI	AAB-404	Manganese	NP	494.50	35.7	NA	NA	3.76E+00	NA	NA	5.74E+01
Area IX HBI	AAB-404	Mercury	NP	0.43	0.181	3.98E-02	1.83E-01	1.47E-02	3.70E-01	8.03E-02	1.74E-01
Area IX HBI	AAB-404	Molybdenum	NP	1.35	0.601	NA	NA	4.87E-02	NA	NA	3.04E+00
Area IX HBI	AAB-404	Nickel	NP	115.32	11.4	1.55E+00	6.28E+01	1.11E+00	7.17E-01	1.77E-02	9.60E+00
Area IX HBI	AAB-404	Selenium	NP	0.32	4.67	2.30E-01	9.29E-01	3.57E-01	1.56E+00	3.85E-01	5.34E+00
Area IX HBI	AAB-404	Silver	NP	0.33	0.669	NA	NA	5.18E-02	NA	NA	2.52E-01
Area IX HBI	AAB-404	Vanadium	NP	151.67	4.84	NA	NA	6.87E-01	NA	NA	1.15E+01
Area IX HBI	AAB-404	Zinc	NP	142.50	87.5	1.77E+01	1.77E+02	6.98E+00	3.94E-01	3.94E-02	1.26E+02
Area IX HBI	AAB-404	HMW PAH	P	1.33	0.23539	NA	NA	2.08E-02	NA	NA	3.62E-01
Area IX HBI	AAB-404	LMW PAH	P	0.14	0.03092	NA	NA	2.66E-03	NA	NA	4.21E-02
Area IX HBI	AAB-404	Total PCBs	NP	0.23	0.9427	9.59E-02	1.16E+00	7.25E-02	7.55E-01	6.24E-02	6.86E-02
Area IX HBI	AAB-404	Total 4,4'-DDx	NP	0.00	0.01451	7.14E-03	6.12E-01	1.11E-03	1.56E-01	1.82E-03	1.19E-02
Area IX HBI	AAB-404	alpha-Chlordane	NP	0.00	0.00121	NA	NA	9.30E-05	NA	NA	1.03E-03
Area IX HBI	AAB-404	Dieldrin	NP	0.00	0.00208	NA	NA	1.59E-04	NA	NA	1.57E-03
Area IX HBI	AAB-404	Endosulfan II	NP	0.00	0.000193029	NA	NA	1.48E-05	NA	NA	ND
Area IX HBI	AAB-404	Endrin	NP	0.00	6.62857E-05	NA	NA	5.15E-06	NA	NA	ND
Area IX HBI	AAB-404	gamma-Chlordane	NP	0.00	0.00162	NA	NA	1.24E-04	NA	NA	8.56E-04
Area IX HBI	AAB-404	Heptachlor	NP	0.00	0.000107033	NA	NA	8.26E-06	NA	NA	ND
Area IX HBI	AAB-404	Dibutyltin	NP	0.01	0.01284	1.19E+00	7.46E+01	1.00E-03	8.44E-04	1.34E-05	1.26E-02
Area IX HBI	AAB-404	Monobutyltin	NP	0.00	0.003359424	NA	NA	2.58E-04	NA	NA	NA
Area IX HBI	AAB-404	Tetrabutyltin	NP	0.00	0.003429017	NA	NA	2.64E-04	NA	NA	NA
Area IX HBI	AAB-404	Tributyltin	NP	0.02	0.04884	1.19E+00	7.46E+01	3.77E-03	3.18E-03	5.06E-05	4.48E-02

ND = Not Detected

Table H-90. Dose Assessment Results for Area X Using Average of Sediment Data and HBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X HBI	AAB-399	Aluminum	NP	64434.78	1270	NA	NA	2.32E+02	NA	NA	1.95E+03
Area X HBI	AAB-399	Antimony	NP	3.18	0.104	NA	NA	1.46E-02	NA	NA	1.87E-01
Area X HBI	AAB-399	Arsenic	NP	10.69	6.43	5.43E+00	2.17E+01	5.13E-01	9.45E-02	2.36E-02	2.29E+01
Area X HBI	AAB-399	Barium	NP	511.96	15.6	NA	NA	2.26E+00	NA	NA	2.02E+01
Area X HBI	AAB-399	Cadmium	NP	0.45	0.83	8.53E-02	1.74E+01	6.43E-02	7.54E-01	3.69E-03	3.69E-01
Area X HBI	AAB-399	Chromium	NP	228.04	7.86	NA	NA	1.08E+00	NA	NA	2.46E+01
Area X HBI	AAB-399	Cobalt	NP	16.93	1.2	NA	NA	1.27E-01	NA	NA	3.63E+00
Area X HBI	AAB-399	Copper	NP	121.40	15.2	2.56E+00	6.37E+01	1.41E+00	5.52E-01	2.22E-02	1.48E+01
Area X HBI	AAB-399	Iron	NP	40152.17	1220	NA	NA	1.77E+02	NA	NA	2.80E+03
Area X HBI	AAB-399	Lead	P	85.21	5.25	2.34E-02	9.33E+00	5.79E-01	2.47E+01	6.21E-02	3.76E+00
Area X HBI	AAB-399	Manganese	NP	431.57	34.5	NA	NA	3.54E+00	NA	NA	5.74E+01
Area X HBI	AAB-399	Mercury	NP	0.71	0.195	3.98E-02	1.83E-01	1.64E-02	4.12E-01	8.92E-02	1.74E-01
Area X HBI	AAB-399	Molybdenum	NP	1.14	0.543	NA	NA	4.38E-02	NA	NA	3.04E+00
Area X HBI	AAB-399	Nickel	NP	113.18	8.62	1.55E+00	6.28E+01	8.95E-01	5.77E-01	1.42E-02	9.60E+00
Area X HBI	AAB-399	Selenium	NP	0.32	5.04	2.30E-01	9.29E-01	3.86E-01	1.68E+00	4.15E-01	5.34E+00
Area X HBI	AAB-399	Silver	NP	0.48	0.119	NA	NA	1.01E-02	NA	NA	2.52E-01
Area X HBI	AAB-399	Vanadium	NP	132.15	3.08	NA	NA	5.12E-01	NA	NA	1.15E+01
Area X HBI	AAB-399	Zinc	NP	202.18	110	1.77E+01	1.77E+02	8.82E+00	4.99E-01	4.99E-02	1.26E+02
Area X HBI	AAB-399	HMW PAH	P	2.34	0.44593	NA	NA	3.90E-02	NA	NA	3.62E-01
Area X HBI	AAB-399	LMW PAH	P	0.28	0.05643	NA	NA	4.89E-03	NA	NA	4.21E-02
Area X HBI	AAB-399	Total PCBs	NP	1.14	2.51088	9.59E-02	1.16E+00	1.94E-01	2.02E+00	1.67E-01	6.86E-02
Area X HBI	AAB-399	Total 4,4'-DDx	NP	0.01	0.04008	7.14E-03	6.12E-01	3.09E-03	4.33E-01	5.05E-03	1.19E-02
Area X HBI	AAB-399	alpha-Chlordane	NP	0.00	0.00245	NA	NA	1.90E-04	NA	NA	1.03E-03
Area X HBI	AAB-399	Dieldrin	NP	0.00	0.00481	NA	NA	3.71E-04	NA	NA	1.57E-03
Area X HBI	AAB-399	Endosulfan II	NP	0.00	0.000195307	NA	NA	1.51E-05	NA	NA	ND
Area X HBI	AAB-399	Endrin	NP	0.00	6.70678E-05	NA	NA	5.27E-06	NA	NA	ND
Area X HBI	AAB-399	gamma-Chlordane	NP	0.00	0.00374	NA	NA	2.90E-04	NA	NA	8.56E-04
Area X HBI	AAB-399	Heptachlor	NP	0.00	0.000108296	NA	NA	8.61E-06	NA	NA	ND
Area X HBI	AAB-399	Dibutyltin	NP	0.02	0.01636	1.19E+00	7.46E+01	1.28E-03	1.08E-03	1.72E-05	1.26E-02
Area X HBI	AAB-399	Monobutyltin	NP	0.00	0.00382	NA	NA	2.93E-04	NA	NA	NA
Area X HBI	AAB-399	Tetrabutyltin	NP	0.00	0.003640872	NA	NA	2.81E-04	NA	NA	NA
Area X HBI	AAB-399	Tributyltin	NP	0.02	0.08778	1.19E+00	7.46E+01	6.75E-03	5.69E-03	9.05E-05	4.48E-02

ND = Not Detected

Table H-91. HPS Site-wide Dose Assessment Results Using Average of Sediment Data and HBI Data

Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	all stations	Aluminum	NP	64128.81	1825.75	NA	NA	2.74E+02	NA	NA	1.95E+03
Site-wide	all stations	Antimony	NP	2.23	0.15325	NA	NA	1.64E-02	NA	NA	1.87E-01
Site-wide	all stations	Arsenic	NP	10.68	6.95	5.43E+00	2.17E+01	5.53E-01	1.02E-01	2.54E-02	2.29E+01
Site-wide	all stations	Barium	NP	465.32	16.8375	NA	NA	2.26E+00	NA	NA	2.02E+01
Site-wide	all stations	Cadmium	NP	0.34	0.72325	8.53E-02	1.74E+01	5.59E-02	6.56E-01	3.21E-03	3.69E-01
Site-wide	all stations	Chromium	NP	238.75	8.865	NA	NA	1.18E+00	NA	NA	2.46E+01
Site-wide	all stations	Cobalt	NP	17.10	1.61	NA	NA	1.59E-01	NA	NA	3.63E+00
Site-wide	all stations	Copper	NP	117.47	16.8225	2.56E+00	6.37E+01	1.53E+00	5.97E-01	2.40E-02	1.48E+01
Site-wide	all stations	Iron	NP	40123.73	1644.5	NA	NA	2.09E+02	NA	NA	2.80E+03
Site-wide	all stations	Lead	P	57.22	5.2	2.34E-02	9.33E+00	5.17E-01	2.21E+01	5.54E-02	3.76E+00
Site-wide	all stations	Manganese	NP	466.59	40.8	NA	NA	4.09E+00	NA	NA	5.74E+01
Site-wide	all stations	Mercury	NP	0.65	0.164	3.98E-02	1.83E-01	1.39E-02	3.49E-01	7.56E-02	1.74E-01
Site-wide	all stations	Molybdenum	NP	1.04	0.60525	NA	NA	4.84E-02	NA	NA	3.04E+00
Site-wide	all stations	Nickel	NP	109.38	10.65	1.55E+00	6.28E+01	1.04E+00	6.72E-01	1.66E-02	9.60E+00
Site-wide	all stations	Selenium	NP	0.31	4.3075	2.30E-01	9.29E-01	3.30E-01	1.43E+00	3.55E-01	5.34E+00
Site-wide	all stations	Silver	NP	0.35	0.3575	NA	NA	2.80E-02	NA	NA	2.52E-01
Site-wide	all stations	Vanadium	NP	131.87	4.345	NA	NA	6.08E-01	NA	NA	1.15E+01
Site-wide	all stations	Zinc	NP	153.21	105.375	1.77E+01	1.77E+02	8.37E+00	4.73E-01	4.73E-02	1.26E+02
Site-wide	all stations	HMW PAH	P	2.41	0.709623545	NA	NA	5.92E-02	NA	NA	3.62E-01
Site-wide	all stations	LMW PAH	P	0.34	0.140332217	NA	NA	1.14E-02	NA	NA	4.21E-02
Site-wide	all stations	Total PCBs	NP	0.58	1.04375	9.59E-02	1.16E+00	8.09E-02	8.44E-01	6.96E-02	6.86E-02
Site-wide	all stations	Total 4,4'-DDx	NP	0.01	0.02434	7.14E-03	6.12E-01	1.87E-03	2.62E-01	3.06E-03	1.19E-02
Site-wide	all stations	alpha-Chlordane	NP	0.00	0.002845	NA	NA	2.19E-04	NA	NA	1.03E-03
Site-wide	all stations	Dieldrin	NP	0.00	0.002685	NA	NA	2.06E-04	NA	NA	1.57E-03
Site-wide	all stations	Endosulfan II	NP	0.00	0.000185	NA	NA	1.43E-05	NA	NA	ND
Site-wide	all stations	Endrin	NP	0.00	0.0000625	NA	NA	4.88E-06	NA	NA	ND
Site-wide	all stations	gamma-Chlordane	NP	0.00	0.0022825	NA	NA	1.76E-04	NA	NA	8.56E-04
Site-wide	all stations	Heptachlor	NP	0.00	0.0001025	NA	NA	8.01E-06	NA	NA	ND
Site-wide	all stations	Dibutyltin	NP	0.01	0.0917	1.19E+00	7.46E+01	7.03E-03	5.92E-03	9.42E-05	1.26E-02
Site-wide	all stations	Monobutyltin	NP	0.00	0.01757875	NA	NA	1.34E-03	NA	NA	NA
Site-wide	all stations	Tetrabutyltin	NP	0.00	0.052597397	NA	NA	4.02E-03	NA	NA	NA
Site-wide	all stations	Tributyltin	NP	0.03	0.3238575	1.19E+00	7.46E+01	2.48E-02	2.09E-02	3.32E-04	4.48E-02

ND = Not Detected

Soft-Bodied Invertebrate Tissue

Table H-92. Dose Assessment Results for Area I Using 95% UCL Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I SBI	AAB-398	Aluminum	NP	72101.034	28100	NA	NA	2.30E+03	NA	NA	1.95E+03
Area I SBI	AAB-398	Antimony	NP	1.082754355	0.378	NA	NA	3.11E-02	NA	NA	1.87E-01
Area I SBI	AAB-398	Arsenic	NP	10.9774579	18.7	5.43E+00	2.17E+01	1.45E+00	2.67E-01	6.68E-02	2.29E+01
Area I SBI	AAB-398	Barium	NP	470.8967057	163	NA	NA	1.34E+01	NA	NA	2.02E+01
Area I SBI	AAB-398	Cadmium	NP	0.245333376	0.435	8.53E-02	1.74E+01	3.37E-02	3.95E-01	1.93E-03	3.69E-01
Area I SBI	AAB-398	Chromium	NP	319	76.2	NA	NA	6.49E+00	NA	NA	2.46E+01
Area I SBI	AAB-398	Cobalt	NP	20.92908384	8.32	NA	NA	6.79E-01	NA	NA	3.63E+00
Area I SBI	AAB-398	Copper	NP	112.2430723	37.7	2.56E+00	6.37E+01	3.11E+00	1.21E+00	4.89E-02	1.48E+01
Area I SBI	AAB-398	Iron	NP	42950.02491	19000	NA	NA	1.54E+03	NA	NA	2.80E+03
Area I SBI	AAB-398	Lead	P	115.2386648	13.3	2.34E-02	9.33E+00	1.26E+00	5.37E+01	1.35E-01	3.76E+00
Area I SBI	AAB-398	Manganese	NP	439.955199	228	NA	NA	1.83E+01	NA	NA	5.74E+01
Area I SBI	AAB-398	Mercury	NP	0.361681718	0.2	3.98E-02	1.83E-01	1.60E-02	4.03E-01	8.74E-02	1.74E-01
Area I SBI	AAB-398	Molybdenum	NP	1.293634135	1.87	NA	NA	1.46E-01	NA	NA	3.04E+00
Area I SBI	AAB-398	Nickel	NP	232	51	1.55E+00	6.28E+01	4.38E+00	2.82E+00	6.97E-02	9.60E+00
Area I SBI	AAB-398	Selenium	NP	0.387027636	4.83	2.30E-01	9.29E-01	3.70E-01	1.61E+00	3.98E-01	5.34E+00
Area I SBI	AAB-398	Silver	NP	0.300265711	0.366	NA	NA	2.86E-02	NA	NA	2.52E-01
Area I SBI	AAB-398	Vanadium	NP	141	51	NA	NA	4.19E+00	NA	NA	1.15E+01
Area I SBI	AAB-398	Zinc	NP	129.9916955	95.8	1.77E+01	1.77E+02	7.59E+00	4.29E-01	4.29E-02	1.26E+02
Area I SBI	AAB-398	HMW PAH	P	2.694645456	1.93017	NA	NA	1.53E-01	NA	NA	3.62E-01
Area I SBI	AAB-398	LMW PAH	P	0.383194027	0.44788	NA	NA	3.50E-02	NA	NA	4.21E-02
Area I SBI	AAB-398	Total PCBs	NP	0.08979	0.4323	9.59E-02	1.16E+00	3.32E-02	3.46E-01	2.86E-02	6.86E-02
Area I SBI	AAB-398	Total 4,4'-DDx	NP	0.003615486	0.04683	7.14E-03	6.12E-01	3.58E-03	5.02E-01	5.86E-03	1.19E-02
Area I SBI	AAB-398	alpha-Chlordane	NP	0.0005	0.00564	NA	NA	4.32E-04	NA	NA	1.03E-03
Area I SBI	AAB-398	Dieldrin	NP	0.000055	0.000104158	NA	NA	8.07E-06	NA	NA	1.57E-03
Area I SBI	AAB-398	Endosulfan II	NP	0.000055	0.000205533	NA	NA	1.58E-05	NA	NA	ND
Area I SBI	AAB-398	Endrin	NP	0.00005	7.05793E-05	NA	NA	5.49E-06	NA	NA	ND
Area I SBI	AAB-398	gamma-Chlordane	NP	0.00014	0.00163	NA	NA	1.25E-04	NA	NA	8.56E-04
Area I SBI	AAB-398	Heptachlor	NP	0.000045	0.000113966	NA	NA	8.80E-06	NA	NA	ND
Area I SBI	AAB-398	Dibutyltin	NP	0.01086	0.06481	1.19E+00	7.46E+01	4.97E-03	4.19E-03	6.67E-05	1.26E-02
Area I SBI	AAB-398	Monobutyltin	NP	0.0005891	0.00896	NA	NA	6.85E-04	NA	NA	NA
Area I SBI	AAB-398	Tetrabutyltin	NP	0.001395	0.003443394	NA	NA	2.66E-04	NA	NA	NA
Area I SBI	AAB-398	Tributyltin	NP	0.01773	0.20728	1.19E+00	7.46E+01	1.59E-02	1.34E-02	2.13E-04	4.48E-02

ND = Not Detected

Table H-93. Dose Assessment Results for Area III Using 95% UCL Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area III SBI	AAB-460	Aluminum	NP	67661.43786	27600	NA	NA	2.25E+03	NA	NA	1.95E+03
Area III SBI	AAB-460	Antimony	NP	6.302162762	1.31	NA	NA	1.13E-01	NA	NA	1.87E-01
Area III SBI	AAB-460	Arsenic	NP	14.0291479	23.5	5.43E+00	2.17E+01	1.82E+00	3.36E-01	8.39E-02	2.29E+01
Area III SBI	AAB-460	Barium	NP	478.590424	161	NA	NA	1.33E+01	NA	NA	2.02E+01
Area III SBI	AAB-460	Cadmium	NP	0.428736553	3.08	8.53E-02	1.74E+01	2.36E-01	2.77E+00	1.35E-02	3.69E-01
Area III SBI	AAB-460	Chromium	NP	319.9838972	75.6	NA	NA	6.44E+00	NA	NA	2.46E+01
Area III SBI	AAB-460	Cobalt	NP	18.20168168	9.97	NA	NA	7.99E-01	NA	NA	3.63E+00
Area III SBI	AAB-460	Copper	NP	708.1164728	313	2.56E+00	6.37E+01	2.54E+01	9.90E+00	3.99E-01	1.48E+01
Area III SBI	AAB-460	Iron	NP	41082.902	19600	NA	NA	1.58E+03	NA	NA	2.80E+03
Area III SBI	AAB-460	Lead	P	117.7697479	33.6	2.34E-02	9.33E+00	2.81E+00	1.20E+02	3.02E-01	3.76E+00
Area III SBI	AAB-460	Manganese	NP	526.9717217	254	NA	NA	2.05E+01	NA	NA	5.74E+01
Area III SBI	AAB-460	Mercury	NP	1.664888881	0.559	3.98E-02	1.83E-01	4.62E-02	1.16E+00	2.52E-01	1.74E-01
Area III SBI	AAB-460	Molybdenum	NP	1.037621064	2.52	NA	NA	1.95E-01	NA	NA	3.04E+00
Area III SBI	AAB-460	Nickel	NP	170.5896718	46.6	1.55E+00	6.28E+01	3.92E+00	2.52E+00	6.23E-02	9.60E+00
Area III SBI	AAB-460	Selenium	NP	0.37580912	9.87	2.30E-01	9.29E-01	7.54E-01	3.28E+00	8.12E-01	5.34E+00
Area III SBI	AAB-460	Silver	NP	0.299843508	0.715	NA	NA	5.52E-02	NA	NA	2.52E-01
Area III SBI	AAB-460	Vanadium	NP	135.7364812	54.9	NA	NA	4.48E+00	NA	NA	1.15E+01
Area III SBI	AAB-460	Zinc	NP	192.7916485	165	1.77E+01	1.77E+02	1.30E+01	7.35E-01	7.35E-02	1.26E+02
Area III SBI	AAB-460	HMW PAH	P	4.70591771	3.88916	NA	NA	3.07E-01	NA	NA	3.62E-01
Area III SBI	AAB-460	LMW PAH	P	0.786224917	0.63998	NA	NA	5.05E-02	NA	NA	4.21E-02
Area III SBI	AAB-460	Total PCBs	NP	2.440446765	1.0989	9.59E-02	1.16E+00	8.90E-02	9.28E-01	7.66E-02	6.86E-02
Area III SBI	AAB-460	Total 4,4'-DDx	NP	0.002891139	0.05885	7.14E-03	6.12E-01	4.50E-03	6.30E-01	7.36E-03	1.19E-02
Area III SBI	AAB-460	alpha-Chlordane	NP	0.000219689	0.00044	NA	NA	3.41E-05	NA	NA	1.03E-03
Area III SBI	AAB-460	Dieldrin	NP	0.000055	6.76011E-05	NA	NA	5.28E-06	NA	NA	1.57E-03
Area III SBI	AAB-460	Endosulfan II	NP	0.000055	0.000133396	NA	NA	1.03E-05	NA	NA	ND
Area III SBI	AAB-460	Endrin	NP	0.00005	4.58078E-05	NA	NA	3.60E-06	NA	NA	ND
Area III SBI	AAB-460	gamma-Chlordane	NP	0.000045	0.00037	NA	NA	2.83E-05	NA	NA	8.56E-04
Area III SBI	AAB-460	Heptachlor	NP	0.000045	7.39671E-05	NA	NA	5.74E-06	NA	NA	ND
Area III SBI	AAB-460	Dibutyltin	NP	0.045884735	1.02096	1.19E+00	7.46E+01	7.81E-02	6.57E-02	1.05E-03	1.26E-02
Area III SBI	AAB-460	Monobutyltin	NP	0.0005689	0.14365	NA	NA	1.10E-02	NA	NA	NA
Area III SBI	AAB-460	Tetrabutyltin	NP	0.001348	0.002406624	NA	NA	1.87E-04	NA	NA	NA
Area III SBI	AAB-460	Tributyltin	NP	0.2076	1.74443	1.19E+00	7.46E+01	1.34E-01	1.13E-01	1.79E-03	4.48E-02

ND = Not Detected

Table H-94. Dose Assessment Results for Area VIII Using 95% UCL Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII SBI	AAB-372	Aluminum	NP	64043.90493	25400	NA	NA	2.07E+03	NA	NA	1.95E+03
Area VIII SBI	AAB-372	Antimony	NP	2.770611517	0.34	NA	NA	3.18E-02	NA	NA	1.87E-01
Area VIII SBI	AAB-372	Arsenic	NP	9.688741648	17.5	5.43E+00	2.17E+01	1.36E+00	2.50E-01	6.24E-02	2.29E+01
Area VIII SBI	AAB-372	Barium	NP	424.3736101	150	NA	NA	1.23E+01	NA	NA	2.02E+01
Area VIII SBI	AAB-372	Cadmium	NP	0.271	0.568	8.53E-02	1.74E+01	4.39E-02	5.15E-01	2.52E-03	3.69E-01
Area VIII SBI	AAB-372	Chromium	NP	290.2201228	61.1	NA	NA	5.27E+00	NA	NA	2.46E+01
Area VIII SBI	AAB-372	Cobalt	NP	18.8	8.4	NA	NA	6.81E-01	NA	NA	3.63E+00
Area VIII SBI	AAB-372	Copper	NP	41.0853617	41.1	2.56E+00	6.37E+01	3.22E+00	1.26E+00	5.06E-02	1.48E+01
Area VIII SBI	AAB-372	Iron	NP	39354.32839	18400	NA	NA	1.49E+03	NA	NA	2.80E+03
Area VIII SBI	AAB-372	Lead	P	24.68630306	11.9	2.34E-02	9.33E+00	9.60E-01	4.10E+01	1.03E-01	3.76E+00
Area VIII SBI	AAB-372	Manganese	NP	534.4577428	247	NA	NA	2.00E+01	NA	NA	5.74E+01
Area VIII SBI	AAB-372	Mercury	NP	0.263858018	0.2	3.98E-02	1.83E-01	1.58E-02	3.98E-01	8.63E-02	1.74E-01
Area VIII SBI	AAB-372	Molybdenum	NP	0.946984703	1.89	NA	NA	1.46E-01	NA	NA	3.04E+00
Area VIII SBI	AAB-372	Nickel	NP	97.5	38.4	1.55E+00	6.28E+01	3.14E+00	2.02E+00	4.99E-02	9.60E+00
Area VIII SBI	AAB-372	Selenium	NP	0.460371196	9.67	2.30E-01	9.29E-01	7.39E-01	3.22E+00	7.96E-01	5.34E+00
Area VIII SBI	AAB-372	Silver	NP	0.279660096	0.345	NA	NA	2.69E-02	NA	NA	2.52E-01
Area VIII SBI	AAB-372	Vanadium	NP	162	53.6	NA	NA	4.43E+00	NA	NA	1.15E+01
Area VIII SBI	AAB-372	Zinc	NP	108.5601235	97.3	1.77E+01	1.77E+02	7.66E+00	4.33E-01	4.33E-02	1.26E+02
Area VIII SBI	AAB-372	HMW PAH	P	1.695	0.62029	NA	NA	5.09E-02	NA	NA	3.62E-01
Area VIII SBI	AAB-372	LMW PAH	P	0.1971	0.08112	NA	NA	6.61E-03	NA	NA	4.21E-02
Area VIII SBI	AAB-372	Total PCBs	NP	0.03312	0.30298	9.59E-02	1.16E+00	2.32E-02	2.42E-01	2.00E-02	6.86E-02
Area VIII SBI	AAB-372	Total 4,4'-DDx	NP	0.003537581	0.02395	7.14E-03	6.12E-01	1.84E-03	2.57E-01	3.00E-03	1.19E-02
Area VIII SBI	AAB-372	alpha-Chlordane	NP	0.00015	0.00108	NA	NA	8.28E-05	NA	NA	1.03E-03
Area VIII SBI	AAB-372	Dieldrin	NP	0.00006	8.12476E-05	NA	NA	6.33E-06	NA	NA	1.57E-03
Area VIII SBI	AAB-372	Endosulfan II	NP	0.00006	0.000160324	NA	NA	1.24E-05	NA	NA	ND
Area VIII SBI	AAB-372	Endrin	NP	0.000055	5.50548E-05	NA	NA	4.32E-06	NA	NA	ND
Area VIII SBI	AAB-372	gamma-Chlordane	NP	0.00005	0.00126	NA	NA	9.63E-05	NA	NA	8.56E-04
Area VIII SBI	AAB-372	Heptachlor	NP	0.00005	8.88985E-05	NA	NA	6.89E-06	NA	NA	ND
Area VIII SBI	AAB-372	Dibutyltin	NP	0.005359	0.03495	1.19E+00	7.46E+01	2.68E-03	2.26E-03	3.59E-05	1.26E-02
Area VIII SBI	AAB-372	Monobutyltin	NP	0.000647	0.00412	NA	NA	3.16E-04	NA	NA	NA
Area VIII SBI	AAB-372	Tetrabutyltin	NP	0.001533	0.002760466	NA	NA	2.14E-04	NA	NA	NA
Area VIII SBI	AAB-372	Tributyltin	NP	0.006816	0.13207	1.19E+00	7.46E+01	1.01E-02	8.50E-03	1.35E-04	4.48E-02

ND = Not Detected

Table H-95. Dose Assessment Results for Area IX Using 95% UCL Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX SBI	AAB-456	Aluminum	NP	71724.37802	6290	NA	NA	6.30E+02	NA	NA	1.95E+03
Area IX SBI	AAB-456	Antimony	NP	2.761362399	0.184	NA	NA	1.98E-02	NA	NA	1.87E-01
Area IX SBI	AAB-456	Arsenic	NP	12.67680359	10.4	5.43E+00	2.17E+01	8.21E-01	1.51E-01	3.78E-02	2.29E+01
Area IX SBI	AAB-456	Barium	NP	441.5727674	38.4	NA	NA	3.86E+00	NA	NA	2.02E+01
Area IX SBI	AAB-456	Cadmium	NP	0.387259145	0.957	8.53E-02	1.74E+01	7.39E-02	8.66E-01	4.24E-03	3.69E-01
Area IX SBI	AAB-456	Chromium	NP	429.1491769	33.6	NA	NA	3.46E+00	NA	NA	2.46E+01
Area IX SBI	AAB-456	Cobalt	NP	20.81378072	4.18	NA	NA	3.63E-01	NA	NA	3.63E+00
Area IX SBI	AAB-456	Copper	NP	84.32659919	18.2	2.56E+00	6.37E+01	1.57E+00	6.11E-01	2.46E-02	1.48E+01
Area IX SBI	AAB-456	Iron	NP	47289.76104	5270	NA	NA	5.01E+02	NA	NA	2.80E+03
Area IX SBI	AAB-456	Lead	P	54.48184174	6	2.34E-02	9.33E+00	5.72E-01	2.44E+01	6.13E-02	3.76E+00
Area IX SBI	AAB-456	Manganese	NP	570.7259357	99.9	NA	NA	8.82E+00	NA	NA	5.74E+01
Area IX SBI	AAB-456	Mercury	NP	0.518136731	0.157	3.98E-02	1.83E-01	1.31E-02	3.29E-01	7.13E-02	1.74E-01
Area IX SBI	AAB-456	Molybdenum	NP	1.631866783	1.07	NA	NA	8.51E-02	NA	NA	3.04E+00
Area IX SBI	AAB-456	Nickel	NP	135.1810252	18.2	1.55E+00	6.28E+01	1.67E+00	1.08E+00	2.66E-02	9.60E+00
Area IX SBI	AAB-456	Selenium	NP	0.377799991	4.68	2.30E-01	9.29E-01	3.58E-01	1.56E+00	3.86E-01	5.34E+00
Area IX SBI	AAB-456	Silver	NP	0.427807563	0.096	NA	NA	8.23E-03	NA	NA	2.52E-01
Area IX SBI	AAB-456	Vanadium	NP	163.2266378	15.1	NA	NA	1.49E+00	NA	NA	1.15E+01
Area IX SBI	AAB-456	Zinc	NP	162.0348868	111	1.77E+01	1.77E+02	8.82E+00	4.98E-01	4.98E-02	1.26E+02
Area IX SBI	AAB-456	HMW PAH	P	1.661436916	0.30842	NA	NA	2.70E-02	NA	NA	3.62E-01
Area IX SBI	AAB-456	LMW PAH	P	0.191501124	0.03836	NA	NA	3.33E-03	NA	NA	4.21E-02
Area IX SBI	AAB-456	Total PCBs	NP	0.338947423	7.33166	9.59E-02	1.16E+00	5.61E-01	5.84E+00	4.82E-01	6.86E-02
Area IX SBI	AAB-456	Total 4,4'-DDx	NP	0.004258348	0.13135	7.14E-03	6.12E-01	1.00E-02	1.41E+00	1.64E-02	1.19E-02
Area IX SBI	AAB-456	alpha-Chlordane	NP	0.000361605	0.00134	NA	NA	1.03E-04	NA	NA	1.03E-03
Area IX SBI	AAB-456	Dieldrin	NP	0.00044	0.01789	NA	NA	1.37E-03	NA	NA	1.57E-03
Area IX SBI	AAB-456	Endosulfan II	NP	0.00006	0.000129553	NA	NA	1.00E-05	NA	NA	ND
Area IX SBI	AAB-456	Endrin	NP	0.00005	4.44882E-05	NA	NA	3.50E-06	NA	NA	ND
Area IX SBI	AAB-456	gamma-Chlordane	NP	0.000376961	0.00174	NA	NA	1.34E-04	NA	NA	8.56E-04
Area IX SBI	AAB-456	Heptachlor	NP	0.00005	7.18363E-05	NA	NA	5.59E-06	NA	NA	ND
Area IX SBI	AAB-456	Dibutyltin	NP	0.016067765	0.05017	1.19E+00	7.46E+01	3.86E-03	3.25E-03	5.18E-05	1.26E-02
Area IX SBI	AAB-456	Monobutyltin	NP	0.002688	0.01105	NA	NA	8.49E-04	NA	NA	NA
Area IX SBI	AAB-456	Tetrabutyltin	NP	0.001495	0.002225181	NA	NA	1.73E-04	NA	NA	NA
Area IX SBI	AAB-456	Tributyltin	NP	0.06591	0.06885	1.19E+00	7.46E+01	5.40E-03	4.54E-03	7.23E-05	4.48E-02

ND = Not Detected

Table H-96. Dose Assessment Results for Area X Using 95% UCL Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X SBI	AAB-453	Aluminum	NP	73918.03301	12900	NA	NA	1.14E+03	NA	NA	1.95E+03
Area X SBI	AAB-453	Antimony	NP	4.685818638	1.14	NA	NA	9.69E-02	NA	NA	1.87E-01
Area X SBI	AAB-453	Arsenic	NP	11.38892099	9.95	5.43E+00	2.17E+01	7.84E-01	1.44E-01	3.61E-02	2.29E+01
Area X SBI	AAB-453	Barium	NP	621.186943	121	NA	NA	1.05E+01	NA	NA	2.02E+01
Area X SBI	AAB-453	Cadmium	NP	0.515101289	0.786	8.53E-02	1.74E+01	6.11E-02	7.16E-01	3.50E-03	3.69E-01
Area X SBI	AAB-453	Chromium	NP	285.8002973	58.2	NA	NA	5.04E+00	NA	NA	2.46E+01
Area X SBI	AAB-453	Cobalt	NP	17.99060138	4.92	NA	NA	4.13E-01	NA	NA	3.63E+00
Area X SBI	AAB-453	Copper	NP	188.5794627	73	2.56E+00	6.37E+01	5.97E+00	2.33E+00	9.37E-02	1.48E+01
Area X SBI	AAB-453	Iron	NP	47800	9470	NA	NA	8.23E+02	NA	NA	2.80E+03
Area X SBI	AAB-453	Lead	P	97.95479048	30.7	2.34E-02	9.33E+00	2.55E+00	1.09E+02	2.73E-01	3.76E+00
Area X SBI	AAB-453	Manganese	NP	486.842767	131	NA	NA	1.10E+01	NA	NA	5.74E+01
Area X SBI	AAB-453	Mercury	NP	0.859238218	0.305	3.98E-02	1.83E-01	2.51E-02	6.31E-01	1.37E-01	1.74E-01
Area X SBI	AAB-453	Molybdenum	NP	1.228077263	1.4	NA	NA	1.09E-01	NA	NA	3.04E+00
Area X SBI	AAB-453	Nickel	NP	123.7680416	33.6	1.55E+00	6.28E+01	2.82E+00	1.82E+00	4.50E-02	9.60E+00
Area X SBI	AAB-453	Selenium	NP	0.415208384	4.96	2.30E-01	9.29E-01	3.80E-01	1.65E+00	4.09E-01	5.34E+00
Area X SBI	AAB-453	Silver	NP	0.539351914	0.248	NA	NA	2.01E-02	NA	NA	2.52E-01
Area X SBI	AAB-453	Vanadium	NP	157.6925319	25.3	NA	NA	2.26E+00	NA	NA	1.15E+01
Area X SBI	AAB-453	Zinc	NP	212.9942996	151	1.77E+01	1.77E+02	1.20E+01	6.77E-01	6.77E-02	1.26E+02
Area X SBI	AAB-453	HMW PAH	P	2.730736335	1.14439	NA	NA	9.31E-02	NA	NA	3.62E-01
Area X SBI	AAB-453	LMW PAH	P	0.366410452	0.14873	NA	NA	1.21E-02	NA	NA	4.21E-02
Area X SBI	AAB-453	Total PCBs	NP	1.608782277	13.43592	9.59E-02	1.16E+00	1.03E+00	1.07E+01	8.86E-01	6.86E-02
Area X SBI	AAB-453	Total 4,4'-DDx	NP	0.019342636	0.18492	7.14E-03	6.12E-01	1.42E-02	1.98E+00	2.32E-02	1.19E-02
Area X SBI	AAB-453	alpha-Chlordane	NP	0.002126102	0.00197	NA	NA	1.55E-04	NA	NA	1.03E-03
Area X SBI	AAB-453	Dieldrin	NP	0.004770724	0.02528	NA	NA	1.94E-03	NA	NA	1.57E-03
Area X SBI	AAB-453	Endosulfan II	NP	0.0007	0.000136526	NA	NA	1.19E-05	NA	NA	ND
Area X SBI	AAB-453	Endrin	NP	0.0006	4.68826E-05	NA	NA	4.83E-06	NA	NA	ND
Area X SBI	AAB-453	gamma-Chlordane	NP	0.003819858	0.00364	NA	NA	2.86E-04	NA	NA	8.56E-04
Area X SBI	AAB-453	Heptachlor	NP	0.00213	7.57027E-05	NA	NA	1.02E-05	NA	NA	ND
Area X SBI	AAB-453	Dibutyltin	NP	0.023980358	0.10509	1.19E+00	7.46E+01	8.08E-03	6.80E-03	1.08E-04	1.26E-02
Area X SBI	AAB-453	Monobutyltin	NP	0.003295	0.01221	NA	NA	9.39E-04	NA	NA	NA
Area X SBI	AAB-453	Tetrabutyltin	NP	0.001545	0.00234258	NA	NA	1.82E-04	NA	NA	NA
Area X SBI	AAB-453	Tributyltin	NP	0.048497887	0.20272	1.19E+00	7.46E+01	1.56E-02	1.31E-02	2.09E-04	4.48E-02

ND = Not Detected

Table H-97. HPS Site-wide Dose Assessment Results Using 95% UCL Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	95% UCL Sediment Conc (dry wt mg/kg)	95% UCL Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Sitewide	all stations	Aluminum	NP	69476.31087	28100.00	NA	NA	2.29E+03	NA	NA	1.95E+03
Sitewide	all stations	Antimony	NP	3.770864736	1.16	NA	NA	9.66E-02	NA	NA	1.87E-01
Sitewide	all stations	Arsenic	NP	11.92194433	21.52	5.43E+00	2.17E+01	1.67E+00	3.07E-01	7.68E-02	2.29E+01
Sitewide	all stations	Barium	NP	518.4237215	163.00	NA	NA	1.35E+01	NA	NA	2.02E+01
Sitewide	all stations	Cadmium	NP	0.432019848	3.08	8.53E-02	1.74E+01	2.36E-01	2.77E+00	1.35E-02	3.69E-01
Sitewide	all stations	Chromium	NP	284.863806	76.20	NA	NA	6.41E+00	NA	NA	2.46E+01
Sitewide	all stations	Cobalt	NP	17.66938276	9.53	NA	NA	7.64E-01	NA	NA	3.63E+00
Sitewide	all stations	Copper	NP	206.0845862	313.00	2.56E+00	6.37E+01	2.43E+01	9.49E+00	3.82E-01	1.48E+01
Sitewide	all stations	Iron	NP	44186.09651	19600.00	NA	NA	1.59E+03	NA	NA	2.80E+03
Sitewide	all stations	Lead	P	84.51495224	30.80	2.34E-02	9.33E+00	2.53E+00	1.08E+02	2.71E-01	3.76E+00
Sitewide	all stations	Manganese	NP	481.0401649	254.00	NA	NA	2.04E+01	NA	NA	5.74E+01
Sitewide	all stations	Mercury	NP	1.195232083	0.44	3.98E-02	1.83E-01	3.61E-02	9.07E-01	1.97E-01	1.74E-01
Sitewide	all stations	Molybdenum	NP	1.108782961	2.27	NA	NA	1.76E-01	NA	NA	3.04E+00
Sitewide	all stations	Nickel	NP	132.5319188	49.75	1.55E+00	6.28E+01	4.08E+00	2.63E+00	6.49E-02	9.60E+00
Sitewide	all stations	Selenium	NP	0.373553049	9.87	2.30E-01	9.29E-01	7.54E-01	3.28E+00	8.12E-01	5.34E+00
Sitewide	all stations	Silver	NP	0.385078912	0.57	NA	NA	4.45E-02	NA	NA	2.52E-01
Sitewide	all stations	Vanadium	NP	145.5985777	54.90	NA	NA	4.50E+00	NA	NA	1.15E+01
Sitewide	all stations	Zinc	NP	167.6590595	154.50	1.77E+01	1.77E+02	1.21E+01	6.87E-01	6.87E-02	1.26E+02
Sitewide	all stations	HMW PAH	P	3.306376346	2.94	NA	NA	2.32E-01	NA	NA	3.62E-01
Sitewide	all stations	LMW PAH	P	0.44590478	0.52	NA	NA	4.06E-02	NA	NA	4.21E-02
Sitewide	all stations	Total PCBs	NP	1.371804111	10.03	9.59E-02	1.16E+00	7.69E-01	8.02E+00	6.62E-01	6.86E-02
Sitewide	all stations	Total 4,4'-DDx	NP	0.012305185	0.15	7.14E-03	6.12E-01	1.17E-02	1.64E+00	1.91E-02	1.19E-02
Sitewide	all stations	alpha-Chlordane	NP	0.001431881	0.0041	NA	NA	3.13E-04	NA	NA	1.03E-03
Sitewide	all stations	Dieldrin	NP	0.00201221	0.03	NA	NA	1.93E-03	NA	NA	1.57E-03
Sitewide	all stations	Endosulfan II	NP	0.0007	0.00021	NA	NA	1.71E-05	NA	NA	ND
Sitewide	all stations	Endrin	NP	0.0006	0.00007	NA	NA	6.60E-06	NA	NA	ND
Sitewide	all stations	gamma-Chlordane	NP	0.002467095	0.00287	NA	NA	2.24E-04	NA	NA	8.56E-04
Sitewide	all stations	Heptachlor	NP	0.00213	0.00012	NA	NA	1.32E-05	NA	NA	ND
Sitewide	all stations	Dibutyltin	NP	0.023860433	1.02	1.19E+00	7.46E+01	7.80E-02	6.57E-02	1.05E-03	1.26E-02
Sitewide	all stations	Monobutyltin	NP	0.003295	0.14	NA	NA	1.10E-02	NA	NA	NA
Sitewide	all stations	Tetrabutyltin	NP	0.001545	0.017	NA	NA	1.31E-03	NA	NA	NA
Sitewide	all stations	Tributyltin	NP	0.065347886	1.74	1.19E+00	7.46E+01	1.33E-01	1.12E-01	1.79E-03	4.48E-02

ND = Not Detected

Table H-98. Dose Assessment Results for Area I Using Average of Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I SBI	AAB-398	Aluminum	NP	69216.66667	28100	NA	NA	2.29E+03	NA	NA	1.95E+03
Area I SBI	AAB-398	Antimony	NP	0.909	0.378	NA	NA	3.08E-02	NA	NA	1.87E-01
Area I SBI	AAB-398	Arsenic	NP	10.49833333	18.7	5.43E+00	2.17E+01	1.45E+00	2.67E-01	6.67E-02	2.29E+01
Area I SBI	AAB-398	Barium	NP	469.3092455	163	NA	NA	1.34E+01	NA	NA	2.02E+01
Area I SBI	AAB-398	Cadmium	NP	0.225166667	0.435	8.53E-02	1.74E+01	3.37E-02	3.95E-01	1.93E-03	3.69E-01
Area I SBI	AAB-398	Chromium	NP	205.8333333	76.2	NA	NA	6.25E+00	NA	NA	2.46E+01
Area I SBI	AAB-398	Cobalt	NP	16.8	8.32	NA	NA	6.70E-01	NA	NA	3.63E+00
Area I SBI	AAB-398	Copper	NP	58.85	37.7	2.56E+00	6.37E+01	3.00E+00	1.17E+00	4.71E-02	1.48E+01
Area I SBI	AAB-398	Iron	NP	41833.33333	19000	NA	NA	1.54E+03	NA	NA	2.80E+03
Area I SBI	AAB-398	Lead	P	41.11666667	13.3	2.34E-02	9.33E+00	1.10E+00	4.70E+01	1.18E-01	3.76E+00
Area I SBI	AAB-398	Manganese	NP	428	228	NA	NA	1.83E+01	NA	NA	5.74E+01
Area I SBI	AAB-398	Mercury	NP	0.3115	0.2	3.98E-02	1.83E-01	1.59E-02	4.01E-01	8.68E-02	1.74E-01
Area I SBI	AAB-398	Molybdenum	NP	1.027833333	1.87	NA	NA	1.45E-01	NA	NA	3.04E+00
Area I SBI	AAB-398	Nickel	NP	126.35	51	1.55E+00	6.28E+01	4.16E+00	2.68E+00	6.62E-02	9.60E+00
Area I SBI	AAB-398	Selenium	NP	0.336833333	4.83	2.30E-01	9.29E-01	3.70E-01	1.61E+00	3.98E-01	5.34E+00
Area I SBI	AAB-398	Silver	NP	0.279333333	0.366	NA	NA	2.85E-02	NA	NA	2.52E-01
Area I SBI	AAB-398	Vanadium	NP	136.1666667	51	NA	NA	4.18E+00	NA	NA	1.15E+01
Area I SBI	AAB-398	Zinc	NP	122.3333333	95.8	1.77E+01	1.77E+02	7.57E+00	4.28E-01	4.28E-02	1.26E+02
Area I SBI	AAB-398	HMW PAH	P	1.778758333	1.93017	NA	NA	1.51E-01	NA	NA	3.62E-01
Area I SBI	AAB-398	LMW PAH	P	0.241111814	0.44788	NA	NA	3.47E-02	NA	NA	4.21E-02
Area I SBI	AAB-398	Total PCBs	NP	0.038736667	0.4323	9.59E-02	1.16E+00	3.31E-02	3.45E-01	2.85E-02	6.86E-02
Area I SBI	AAB-398	Total 4,4'-DDx	NP	0.002931667	0.04683	7.14E-03	6.12E-01	3.58E-03	5.02E-01	5.86E-03	1.19E-02
Area I SBI	AAB-398	alpha-Chlordane	NP	0.000173653	0.00564	NA	NA	4.31E-04	NA	NA	1.03E-03
Area I SBI	AAB-398	Dieldrin	NP	5.33333E-05	0.000104158	NA	NA	8.07E-06	NA	NA	1.57E-03
Area I SBI	AAB-398	Endosulfan II	NP	5.33333E-05	0.000205533	NA	NA	1.58E-05	NA	NA	ND
Area I SBI	AAB-398	Endrin	NP	4.83333E-05	7.05793E-05	NA	NA	5.49E-06	NA	NA	ND
Area I SBI	AAB-398	gamma-Chlordane	NP	5.83333E-05	0.00163	NA	NA	1.25E-04	NA	NA	8.56E-04
Area I SBI	AAB-398	Heptachlor	NP	0.000045	0.000113966	NA	NA	8.80E-06	NA	NA	ND
Area I SBI	AAB-398	Dibutyltin	NP	0.002690796	0.06481	1.19E+00	7.46E+01	4.95E-03	4.17E-03	6.64E-05	1.26E-02
Area I SBI	AAB-398	Monobutyltin	NP	0.000562698	0.00896	NA	NA	6.85E-04	NA	NA	NA
Area I SBI	AAB-398	Tetrabutyltin	NP	0.001332872	0.003443394	NA	NA	2.66E-04	NA	NA	NA
Area I SBI	AAB-398	Tributyltin	NP	0.00358201	0.20728	1.19E+00	7.46E+01	1.58E-02	1.33E-02	2.12E-04	4.48E-02

ND = Not Detected

Table H-99. Dose Assessment Results for Area III Using Average of Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area III SBI	AAB-460	Aluminum	NP	66062.5	27600	NA	NA	2.25E+03	NA	NA	1.95E+03
Area III SBI	AAB-460	Antimony	NP	1.9633125	1.31	NA	NA	1.04E-01	NA	NA	1.87E-01
Area III SBI	AAB-460	Arsenic	NP	11.79	23.5	5.43E+00	2.17E+01	1.82E+00	3.35E-01	8.37E-02	2.29E+01
Area III SBI	AAB-460	Barium	NP	461.0625	161	NA	NA	1.33E+01	NA	NA	2.02E+01
Area III SBI	AAB-460	Cadmium	NP	0.279625	3.08	8.53E-02	1.74E+01	2.36E-01	2.76E+00	1.35E-02	3.69E-01
Area III SBI	AAB-460	Chromium	NP	237.5625	75.6	NA	NA	6.27E+00	NA	NA	2.46E+01
Area III SBI	AAB-460	Cobalt	NP	17.43125	9.97	NA	NA	7.98E-01	NA	NA	3.63E+00
Area III SBI	AAB-460	Copper	NP	176.9502533	313	2.56E+00	6.37E+01	2.43E+01	9.47E+00	3.81E-01	1.48E+01
Area III SBI	AAB-460	Iron	NP	41030.43719	19600	NA	NA	1.58E+03	NA	NA	2.80E+03
Area III SBI	AAB-460	Lead	P	47.20625	33.6	2.34E-02	9.33E+00	2.66E+00	1.14E+02	2.86E-01	3.76E+00
Area III SBI	AAB-460	Manganese	NP	506.9375	254	NA	NA	2.05E+01	NA	NA	5.74E+01
Area III SBI	AAB-460	Mercury	NP	0.851573951	0.559	3.98E-02	1.83E-01	4.45E-02	1.12E+00	2.42E-01	1.74E-01
Area III SBI	AAB-460	Molybdenum	NP	0.9460625	2.52	NA	NA	1.94E-01	NA	NA	3.04E+00
Area III SBI	AAB-460	Nickel	NP	112.79375	46.6	1.55E+00	6.28E+01	3.79E+00	2.45E+00	6.04E-02	9.60E+00
Area III SBI	AAB-460	Selenium	NP	0.338833115	9.87	2.30E-01	9.29E-01	7.54E-01	3.28E+00	8.12E-01	5.34E+00
Area III SBI	AAB-460	Silver	NP	0.2741875	0.715	NA	NA	5.52E-02	NA	NA	2.52E-01
Area III SBI	AAB-460	Vanadium	NP	131	54.9	NA	NA	4.47E+00	NA	NA	1.15E+01
Area III SBI	AAB-460	Zinc	NP	128.38125	165	1.77E+01	1.77E+02	1.29E+01	7.27E-01	7.27E-02	1.26E+02
Area III SBI	AAB-460	HMW PAH	P	3.976578125	3.88916	NA	NA	3.05E-01	NA	NA	3.62E-01
Area III SBI	AAB-460	LMW PAH	P	0.638923125	0.63998	NA	NA	5.02E-02	NA	NA	4.21E-02
Area III SBI	AAB-460	Total PCBs	NP	0.391764788	1.0989	9.59E-02	1.16E+00	8.47E-02	8.83E-01	7.29E-02	6.86E-02
Area III SBI	AAB-460	Total 4,4'-DDx	NP	0.002525625	0.05885	7.14E-03	6.12E-01	4.50E-03	6.30E-01	7.36E-03	1.19E-02
Area III SBI	AAB-460	alpha-Chlordane	NP	0.000113125	0.00044	NA	NA	3.38E-05	NA	NA	1.03E-03
Area III SBI	AAB-460	Dieldrin	NP	4.65625E-05	6.76011E-05	NA	NA	5.26E-06	NA	NA	1.57E-03
Area III SBI	AAB-460	Endosulfan II	NP	0.0000475	0.000133396	NA	NA	1.03E-05	NA	NA	ND
Area III SBI	AAB-460	Endrin	NP	0.0000425	4.58078E-05	NA	NA	3.59E-06	NA	NA	ND
Area III SBI	AAB-460	gamma-Chlordane	NP	0.0000375	0.00037	NA	NA	2.83E-05	NA	NA	8.56E-04
Area III SBI	AAB-460	Heptachlor	NP	0.00003875	7.39671E-05	NA	NA	5.73E-06	NA	NA	ND
Area III SBI	AAB-460	Dibutyltin	NP	0.019007596	1.02096	1.19E+00	7.46E+01	7.80E-02	6.57E-02	1.05E-03	1.26E-02
Area III SBI	AAB-460	Monobutyltin	NP	0.000487145	0.14365	NA	NA	1.10E-02	NA	NA	NA
Area III SBI	AAB-460	Tetrabutyltin	NP	0.001153909	0.002406624	NA	NA	1.86E-04	NA	NA	NA
Area III SBI	AAB-460	Tributyltin	NP	0.065210772	1.74443	1.19E+00	7.46E+01	1.33E-01	1.12E-01	1.79E-03	4.48E-02

ND = Not Detected

Table H-100. Dose Assessment Results for Area VIII Using Average of Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII SBI	AAB-372	Aluminum	NP	55050	25400	NA	NA	2.05E+03	NA	NA	1.95E+03
Area VIII SBI	AAB-372	Antimony	NP	1.213875	0.34	NA	NA	2.85E-02	NA	NA	1.87E-01
Area VIII SBI	AAB-372	Arsenic	NP	8.12	17.5	5.43E+00	2.17E+01	1.35E+00	2.49E-01	6.23E-02	2.29E+01
Area VIII SBI	AAB-372	Barium	NP	391.5	150	NA	NA	1.23E+01	NA	NA	2.02E+01
Area VIII SBI	AAB-372	Cadmium	NP	0.23375	0.568	8.53E-02	1.74E+01	4.39E-02	5.14E-01	2.51E-03	3.69E-01
Area VIII SBI	AAB-372	Chromium	NP	235.625	61.1	NA	NA	5.16E+00	NA	NA	2.46E+01
Area VIII SBI	AAB-372	Cobalt	NP	15.5125	8.4	NA	NA	6.74E-01	NA	NA	3.63E+00
Area VIII SBI	AAB-372	Copper	NP	31.0625	41.1	2.56E+00	6.37E+01	3.20E+00	1.25E+00	5.03E-02	1.48E+01
Area VIII SBI	AAB-372	Iron	NP	33350	18400	NA	NA	1.47E+03	NA	NA	2.80E+03
Area VIII SBI	AAB-372	Lead	P	21.3625	11.9	2.34E-02	9.33E+00	9.53E-01	4.07E+01	1.02E-01	3.76E+00
Area VIII SBI	AAB-372	Manganese	NP	494.625	247	NA	NA	1.99E+01	NA	NA	5.74E+01
Area VIII SBI	AAB-372	Mercury	NP	0.159834681	0.2	3.98E-02	1.83E-01	1.56E-02	3.93E-01	8.51E-02	1.74E-01
Area VIII SBI	AAB-372	Molybdenum	NP	0.738125	1.89	NA	NA	1.46E-01	NA	NA	3.04E+00
Area VIII SBI	AAB-372	Nickel	NP	74.0625	38.4	1.55E+00	6.28E+01	3.09E+00	1.99E+00	4.92E-02	9.60E+00
Area VIII SBI	AAB-372	Selenium	NP	0.18725	9.67	2.30E-01	9.29E-01	7.39E-01	3.22E+00	7.96E-01	5.34E+00
Area VIII SBI	AAB-372	Silver	NP	0.1866375	0.345	NA	NA	2.67E-02	NA	NA	2.52E-01
Area VIII SBI	AAB-372	Vanadium	NP	114.7125	53.6	NA	NA	4.33E+00	NA	NA	1.15E+01
Area VIII SBI	AAB-372	Zinc	NP	90.5375	97.3	1.77E+01	1.77E+02	7.62E+00	4.31E-01	4.31E-02	1.26E+02
Area VIII SBI	AAB-372	HMW PAH	P	0.83446524	0.62029	NA	NA	4.91E-02	NA	NA	3.62E-01
Area VIII SBI	AAB-372	LMW PAH	P	0.101438828	0.08112	NA	NA	6.41E-03	NA	NA	4.21E-02
Area VIII SBI	AAB-372	Total PCBs	NP	0.023205	0.30298	9.59E-02	1.16E+00	2.32E-02	2.42E-01	2.00E-02	6.86E-02
Area VIII SBI	AAB-372	Total 4,4'-DDx	NP	0.001188907	0.02395	7.14E-03	6.12E-01	1.83E-03	2.56E-01	2.99E-03	1.19E-02
Area VIII SBI	AAB-372	alpha-Chlordane	NP	0.000066875	0.00108	NA	NA	8.26E-05	NA	NA	1.03E-03
Area VIII SBI	AAB-372	Dieldrin	NP	0.000040625	8.12476E-05	NA	NA	6.29E-06	NA	NA	1.57E-03
Area VIII SBI	AAB-372	Endosulfan II	NP	0.000040625	0.000160324	NA	NA	1.23E-05	NA	NA	ND
Area VIII SBI	AAB-372	Endrin	NP	0.000038125	5.50548E-05	NA	NA	4.28E-06	NA	NA	ND
Area VIII SBI	AAB-372	gamma-Chlordane	NP	3.18131E-05	0.00126	NA	NA	9.63E-05	NA	NA	8.56E-04
Area VIII SBI	AAB-372	Heptachlor	NP	0.00003375	8.88985E-05	NA	NA	6.86E-06	NA	NA	ND
Area VIII SBI	AAB-372	Dibutyltin	NP	0.002137441	0.03495	1.19E+00	7.46E+01	2.67E-03	2.25E-03	3.58E-05	1.26E-02
Area VIII SBI	AAB-372	Monobutyltin	NP	0.000432966	0.00412	NA	NA	3.16E-04	NA	NA	NA
Area VIII SBI	AAB-372	Tetrabutyltin	NP	0.001025573	0.002760466	NA	NA	2.13E-04	NA	NA	NA
Area VIII SBI	AAB-372	Tributyltin	NP	0.002478814	0.13207	1.19E+00	7.46E+01	1.01E-02	8.50E-03	1.35E-04	4.48E-02

ND = Not Detected

Table H-101. Dose Assessment Results for Area IX Using Average of Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX SBI	AAB-456	Aluminum	NP	64816.66667	6290	NA	NA	6.16E+02	NA	NA	1.95E+03
Area IX SBI	AAB-456	Antimony	NP	2.016166667	0.184	NA	NA	1.83E-02	NA	NA	1.87E-01
Area IX SBI	AAB-456	Arsenic	NP	11.31666667	10.4	5.43E+00	2.17E+01	8.18E-01	1.51E-01	3.76E-02	2.29E+01
Area IX SBI	AAB-456	Barium	NP	392.3333333	38.4	NA	NA	3.75E+00	NA	NA	2.02E+01
Area IX SBI	AAB-456	Cadmium	NP	0.333833333	0.957	8.53E-02	1.74E+01	7.38E-02	8.65E-01	4.23E-03	3.69E-01
Area IX SBI	AAB-456	Chromium	NP	320	33.6	NA	NA	3.23E+00	NA	NA	2.46E+01
Area IX SBI	AAB-456	Cobalt	NP	19.33333333	4.18	NA	NA	3.60E-01	NA	NA	3.63E+00
Area IX SBI	AAB-456	Copper	NP	69.4	18.2	2.56E+00	6.37E+01	1.53E+00	5.99E-01	2.41E-02	1.48E+01
Area IX SBI	AAB-456	Iron	NP	44916.66667	5270	NA	NA	4.96E+02	NA	NA	2.80E+03
Area IX SBI	AAB-456	Lead	P	40.53333333	6	2.34E-02	9.33E+00	5.43E-01	2.32E+01	5.82E-02	3.76E+00
Area IX SBI	AAB-456	Manganese	NP	494.5	99.9	NA	NA	8.66E+00	NA	NA	5.74E+01
Area IX SBI	AAB-456	Mercury	NP	0.431833333	0.157	3.98E-02	1.83E-01	1.29E-02	3.24E-01	7.03E-02	1.74E-01
Area IX SBI	AAB-456	Molybdenum	NP	1.35	1.07	NA	NA	8.45E-02	NA	NA	3.04E+00
Area IX SBI	AAB-456	Nickel	NP	115.3166667	18.2	1.55E+00	6.28E+01	1.63E+00	1.05E+00	2.60E-02	9.60E+00
Area IX SBI	AAB-456	Selenium	NP	0.320666667	4.68	2.30E-01	9.29E-01	3.58E-01	1.56E+00	3.86E-01	5.34E+00
Area IX SBI	AAB-456	Silver	NP	0.325333333	0.096	NA	NA	8.01E-03	NA	NA	2.52E-01
Area IX SBI	AAB-456	Vanadium	NP	151.6666667	15.1	NA	NA	1.47E+00	NA	NA	1.15E+01
Area IX SBI	AAB-456	Zinc	NP	142.5	111	1.77E+01	1.77E+02	8.77E+00	4.96E-01	4.96E-02	1.26E+02
Area IX SBI	AAB-456	HMW PAH	P	1.331778333	0.30842	NA	NA	2.63E-02	NA	NA	3.62E-01
Area IX SBI	AAB-456	LMW PAH	P	0.142203333	0.03836	NA	NA	3.23E-03	NA	NA	4.21E-02
Area IX SBI	AAB-456	Total PCBs	NP	0.22659	7.33166	9.59E-02	1.16E+00	5.60E-01	5.84E+00	4.82E-01	6.86E-02
Area IX SBI	AAB-456	Total 4,4'-DDx	NP	0.003260833	0.13135	7.14E-03	6.12E-01	1.00E-02	1.41E+00	1.64E-02	1.19E-02
Area IX SBI	AAB-456	alpha-Chlordane	NP	0.00027	0.00134	NA	NA	1.03E-04	NA	NA	1.03E-03
Area IX SBI	AAB-456	Dieldrin	NP	0.000115	0.01789	NA	NA	1.37E-03	NA	NA	1.57E-03
Area IX SBI	AAB-456	Endosulfan II	NP	5.16667E-05	0.000129553	NA	NA	1.00E-05	NA	NA	ND
Area IX SBI	AAB-456	Endrin	NP	4.41667E-05	4.44882E-05	NA	NA	3.49E-06	NA	NA	ND
Area IX SBI	AAB-456	gamma-Chlordane	NP	0.0002325	0.00174	NA	NA	1.33E-04	NA	NA	8.56E-04
Area IX SBI	AAB-456	Heptachlor	NP	0.0000425	7.18363E-05	NA	NA	5.57E-06	NA	NA	ND
Area IX SBI	AAB-456	Dibutyltin	NP	0.010319618	0.05017	1.19E+00	7.46E+01	3.85E-03	3.24E-03	5.16E-05	1.26E-02
Area IX SBI	AAB-456	Monobutyltin	NP	0.000903375	0.01105	NA	NA	8.46E-04	NA	NA	NA
Area IX SBI	AAB-456	Tetrabutyltin	NP	0.001262056	0.002225181	NA	NA	1.73E-04	NA	NA	NA
Area IX SBI	AAB-456	Tributyltin	NP	0.021077563	0.06885	1.19E+00	7.46E+01	5.30E-03	4.46E-03	7.11E-05	4.48E-02

ND = Not Detected

Table H-102. Dose Assessment Results for Area X Using Average of Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X SBI	AAB-453	Aluminum	NP	64434.78261	12900	NA	NA	1.12E+03	NA	NA	1.95E+03
Area X SBI	AAB-453	Antimony	NP	3.183163327	1.14	NA	NA	9.37E-02	NA	NA	1.87E-01
Area X SBI	AAB-453	Arsenic	NP	10.68565217	9.95	5.43E+00	2.17E+01	7.82E-01	1.44E-01	3.60E-02	2.29E+01
Area X SBI	AAB-453	Barium	NP	511.9565217	121	NA	NA	1.03E+01	NA	NA	2.02E+01
Area X SBI	AAB-453	Cadmium	NP	0.454608696	0.786	8.53E-02	1.74E+01	6.10E-02	7.15E-01	3.49E-03	3.69E-01
Area X SBI	AAB-453	Chromium	NP	228.0434783	58.2	NA	NA	4.92E+00	NA	NA	2.46E+01
Area X SBI	AAB-453	Cobalt	NP	16.92608696	4.92	NA	NA	4.11E-01	NA	NA	3.63E+00
Area X SBI	AAB-453	Copper	NP	121.3956522	73	2.56E+00	6.37E+01	5.83E+00	2.27E+00	9.15E-02	1.48E+01
Area X SBI	AAB-453	Iron	NP	40152.17391	9470	NA	NA	8.07E+02	NA	NA	2.80E+03
Area X SBI	AAB-453	Lead	P	85.20869565	30.7	2.34E-02	9.33E+00	2.52E+00	1.08E+02	2.71E-01	3.76E+00
Area X SBI	AAB-453	Manganese	NP	431.5652174	131	NA	NA	1.09E+01	NA	NA	5.74E+01
Area X SBI	AAB-453	Mercury	NP	0.708613664	0.305	3.98E-02	1.83E-01	2.48E-02	6.23E-01	1.35E-01	1.74E-01
Area X SBI	AAB-453	Molybdenum	NP	1.136478261	1.4	NA	NA	1.09E-01	NA	NA	3.04E+00
Area X SBI	AAB-453	Nickel	NP	113.1762543	33.6	1.55E+00	6.28E+01	2.80E+00	1.81E+00	4.46E-02	9.60E+00
Area X SBI	AAB-453	Selenium	NP	0.322217391	4.96	2.30E-01	9.29E-01	3.79E-01	1.65E+00	4.09E-01	5.34E+00
Area X SBI	AAB-453	Silver	NP	0.482869565	0.248	NA	NA	1.99E-02	NA	NA	2.52E-01
Area X SBI	AAB-453	Vanadium	NP	132.1478261	25.3	NA	NA	2.21E+00	NA	NA	1.15E+01
Area X SBI	AAB-453	Zinc	NP	202.1778151	151	1.77E+01	1.77E+02	1.20E+01	6.76E-01	6.76E-02	1.26E+02
Area X SBI	AAB-453	HMW PAH	P	2.343774429	1.14439	NA	NA	9.23E-02	NA	NA	3.62E-01
Area X SBI	AAB-453	LMW PAH	P	0.279574624	0.14873	NA	NA	1.19E-02	NA	NA	4.21E-02
Area X SBI	AAB-453	Total PCBs	NP	1.137025207	13.43592	9.59E-02	1.16E+00	1.03E+00	1.07E+01	8.85E-01	6.86E-02
Area X SBI	AAB-453	Total 4,4'-DDx	NP	0.014594469	0.18492	7.14E-03	6.12E-01	1.42E-02	1.98E+00	2.31E-02	1.19E-02
Area X SBI	AAB-453	alpha-Chlordane	NP	0.00138759	0.00197	NA	NA	1.53E-04	NA	NA	1.03E-03
Area X SBI	AAB-453	Dieldrin	NP	0.001727727	0.02528	NA	NA	1.93E-03	NA	NA	1.57E-03
Area X SBI	AAB-453	Endosulfan II	NP	0.00008	0.000136526	NA	NA	1.06E-05	NA	NA	ND
Area X SBI	AAB-453	Endrin	NP	7.02273E-05	4.68826E-05	NA	NA	3.73E-06	NA	NA	ND
Area X SBI	AAB-453	gamma-Chlordane	NP	0.002231062	0.00364	NA	NA	2.83E-04	NA	NA	8.56E-04
Area X SBI	AAB-453	Heptachlor	NP	0.000161591	7.57027E-05	NA	NA	6.12E-06	NA	NA	ND
Area X SBI	AAB-453	Dibutyltin	NP	0.016738459	0.10509	1.19E+00	7.46E+01	8.06E-03	6.79E-03	1.08E-04	1.26E-02
Area X SBI	AAB-453	Monobutyltin	NP	0.000764646	0.01221	NA	NA	9.34E-04	NA	NA	NA
Area X SBI	AAB-453	Tetrabutyltin	NP	0.001226494	0.00234258	NA	NA	1.81E-04	NA	NA	NA
Area X SBI	AAB-453	Tributyltin	NP	0.023836639	0.20272	1.19E+00	7.46E+01	1.55E-02	1.31E-02	2.08E-04	4.48E-02

ND = Not Detected

Table H-103. HPS Site-wide Dose Assessment Results Using Average of Sediment Data and SBI Data

Exposure Parameters

ASSUMPTIONS	Surf Scoter	Units
Body Weight	1.1	kg
Prey Ingestion Rate	0.084	kg/day
Sediment Ingestion Rate	0.0023	kg/day
Site Use Factor	1	unitless

Data

Station ID	Station ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Field Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	all stations	Aluminum	NP	64128.81356	20058	NA	NA	1.67E+03	NA	NA	1.95E+03
Site-wide	all stations	Antimony	NP	2.227932203	0.6704	NA	NA	5.59E-02	NA	NA	1.87E-01
Site-wide	all stations	Arsenic	NP	10.68237288	16.01	5.43E+00	2.17E+01	1.24E+00	2.29E-01	5.73E-02	2.29E+01
Site-wide	all stations	Barium	NP	465.3220339	126.68	NA	NA	1.06E+01	NA	NA	2.02E+01
Site-wide	all stations	Cadmium	NP	0.34159322	1.114040014	8.53E-02	1.74E+01	8.58E-02	1.01E+00	4.92E-03	3.69E-01
Site-wide	all stations	Chromium	NP	238.7457627	60.94	NA	NA	5.15E+00	NA	NA	2.46E+01
Site-wide	all stations	Cobalt	NP	17.10338983	7.158	NA	NA	5.82E-01	NA	NA	3.63E+00
Site-wide	all stations	Copper	NP	117.4745763	88.32264124	2.56E+00	6.37E+01	6.99E+00	2.73E+00	1.10E-01	1.48E+01
Site-wide	all stations	Iron	NP	40123.72881	14348	NA	NA	1.18E+03	NA	NA	2.80E+03
Site-wide	all stations	Lead	P	57.21864407	19.1	2.34E-02	9.33E+00	1.58E+00	6.74E+01	1.69E-01	3.76E+00
Site-wide	all stations	Manganese	NP	466.5932203	191.98	NA	NA	1.56E+01	NA	NA	5.74E+01
Site-wide	all stations	Mercury	NP	0.647932203	0.2842	3.98E-02	1.83E-01	2.31E-02	5.80E-01	1.26E-01	1.74E-01
Site-wide	all stations	Molybdenum	NP	1.041491525	1.75	NA	NA	1.36E-01	NA	NA	3.04E+00
Site-wide	all stations	Nickel	NP	109.3830508	37.56	1.55E+00	6.28E+01	3.10E+00	2.00E+00	4.93E-02	9.60E+00
Site-wide	all stations	Selenium	NP	0.309847458	6.802	2.30E-01	9.29E-01	5.20E-01	2.26E+00	5.60E-01	5.34E+00
Site-wide	all stations	Silver	NP	0.349391525	0.354	NA	NA	2.78E-02	NA	NA	2.52E-01
Site-wide	all stations	Vanadium	NP	131.8661017	39.98	NA	NA	3.33E+00	NA	NA	1.15E+01
Site-wide	all stations	Zinc	NP	153.2077473	124.02	1.77E+01	1.77E+02	9.79E+00	5.53E-01	5.53E-02	1.26E+02
Site-wide	all stations	HMW PAH	P	2.408213627	1.578486	NA	NA	1.26E-01	NA	NA	3.62E-01
Site-wide	all stations	LMW PAH	P	0.344144685	0.271214	NA	NA	2.14E-02	NA	NA	4.21E-02
Site-wide	all stations	Total PCBs	NP	0.583609492	4.520352	9.59E-02	1.16E+00	3.46E-01	3.61E+00	2.98E-01	6.86E-02
Site-wide	all stations	Total 4,4'-DDx	NP	0.007014998	0.08918	7.14E-03	6.12E-01	6.82E-03	9.56E-01	1.12E-02	1.19E-02
Site-wide	all stations	alpha-Chlordane	NP	0.000675635	0.002094	NA	NA	1.61E-04	NA	NA	1.03E-03
Site-wide	all stations	Dieldrin	NP	0.000691207	0.008685	NA	NA	6.65E-04	NA	NA	1.57E-03
Site-wide	all stations	Endosulfan II	NP	5.99138E-05	0.000153	NA	NA	1.18E-05	NA	NA	ND
Site-wide	all stations	Endrin	NP	5.31897E-05	0.000052	NA	NA	4.08E-06	NA	NA	ND
Site-wide	all stations	gamma-Chlordane	NP	0.000927458	0.001728	NA	NA	1.34E-04	NA	NA	8.56E-04
Site-wide	all stations	Heptachlor	NP	8.56897E-05	0.000085	NA	NA	6.67E-06	NA	NA	ND
Site-wide	all stations	Dibutyltin	NP	0.013134667	0.198625628	1.19E+00	7.46E+01	1.52E-02	1.28E-02	2.04E-04	1.26E-02
Site-wide	all stations	Monobutyltin	NP	0.000635805	0.02832782	NA	NA	2.16E-03	NA	NA	NA
Site-wide	all stations	Tetrabutyltin	NP	0.001194001	0.013142	NA	NA	1.01E-03	NA	NA	NA
Site-wide	all stations	Tributyltin	NP	0.029868928	0.397747351	1.19E+00	7.46E+01	3.04E-02	2.56E-02	4.08E-04	4.48E-02

ND = Not Detected

Forage Fish Tissue

Table H-104. Dose Assessment Results for Cormorant in Area I Using 95% UCL Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	95 UCL Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I	Area I FF	AAB-400	Aluminum	NP	72101.034	699	NA	NA	1.16E+02	NA	NA	1.95E+03
Area I	Area I FF	AAB-400	Antimony	NP	1.082754355	0.00365	NA	NA	1.37E-03	NA	NA	1.87E-01
Area I	Area I FF	AAB-400	Arsenic	NP	10.9774579	0.04575	5.90E+00	2.36E+01	1.43E-02	2.43E-03	6.06E-04	2.29E+01
Area I	Area I FF	AAB-400	Barium	NP	470.8967057	6.52	NA	NA	8.63E-01	NA	NA	2.02E+01
Area I	Area I FF	AAB-400	Cadmium	NP	0.245333376	0.0287	9.27E-02	1.90E+01	1.83E-03	1.97E-02	9.64E-05	3.69E-01
Area I	Area I FF	AAB-400	Chromium	NP	319	3.04	NA	NA	5.09E-01	NA	NA	2.46E+01
Area I	Area I FF	AAB-400	Cobalt	NP	20.92908384	0.392	NA	NA	4.39E-02	NA	NA	3.63E+00
Area I	Area I FF	AAB-400	Copper	NP	112.2430723	7.75	2.79E+00	6.92E+01	5.43E-01	1.95E-01	7.85E-03	1.48E+01
Area I	Area I FF	AAB-400	Iron	NP	42950.02491	475	NA	NA	7.22E+01	NA	NA	2.80E+03
Area I	Area I FF	AAB-400	Lead	NP	115.2386648	0.969	2.55E-02	1.01E+01	1.77E-01	6.95E+00	1.75E-02	3.76E+00
Area I	Area I FF	AAB-400	Manganese	NP	439.955199	15.7	NA	NA	1.33E+00	NA	NA	5.74E+01
Area I	Area I FF	AAB-400	Mercury	P	0.361681718	0.255	4.32E-02	1.99E-01	1.43E-02	3.31E-01	7.16E-02	1.74E-01
Area I	Area I FF	AAB-400	Molybdenum	NP	1.293634135	0.0812	NA	NA	5.82E-03	NA	NA	3.04E+00
Area I	Area I FF	AAB-400	Nickel	NP	232	3.15	1.69E+00	6.83E+01	4.22E-01	2.50E-01	6.18E-03	9.60E+00
Area I	Area I FF	AAB-400	Selenium	NP	0.387027636	2.96	2.50E-01	1.01E+00	1.62E-01	6.48E-01	1.60E-01	5.34E+00
Area I	Area I FF	AAB-400	Silver	NP	0.300265711	0.0394	NA	NA	2.47E-03	NA	NA	2.52E-01
Area I	Area I FF	AAB-400	Vanadium	NP	141	2.97	NA	NA	3.14E-01	NA	NA	1.15E+01
Area I	Area I FF	AAB-400	Zinc	NP	129.9916955	67.5	1.92E+01	1.92E+02	3.82E+00	1.99E-01	1.99E-02	1.26E+02
Area I	Area I FF	AAB-400	HMW PAH	NP	2.694645456	0.03759	NA	NA	4.95E-03	NA	NA	3.62E-01
Area I	Area I FF	AAB-400	LMW PAH	NP	0.383194027	0.02103	NA	NA	1.56E-03	NA	NA	4.21E-02
Area I	Area I FF	AAB-400	Total PCBs	P	0.08979	1.88908	1.04E-01	1.26E+00	1.03E-01	9.88E-01	8.16E-02	6.86E-02
Area I	Area I FF	AAB-400	Total 4,4'-DDx	P	0.003615486	0.08068	7.76E-03	6.65E-01	4.40E-03	5.67E-01	6.62E-03	1.19E-02
Area I	Area I FF	AAB-400	alpha-Chlordane	NP	0.0005	0.00422	NA	NA	2.30E-04	NA	NA	1.03E-03
Area I	Area I FF	AAB-400	Dieldrin	NP	0.000055	0.00623	NA	NA	3.40E-04	NA	NA	1.57E-03
Area I	Area I FF	AAB-400	Endosulfan II	NP	0.000055	NA	NA	NA	NA	NA	NA	ND
Area I	Area I FF	AAB-400	Endrin	NP	0.00005	NA	NA	NA	NA	NA	NA	ND
Area I	Area I FF	AAB-400	gamma-Chlordane	NP	0.00014	0.00401	NA	NA	2.19E-04	NA	NA	8.56E-04
Area I	Area I FF	AAB-400	Heptachlor	NP	0.000045	NA	NA	NA	NA	NA	NA	ND
Area I	Area I FF	AAB-400	Dibutyltin	NP	0.01086	0.01152	1.29E+00	8.11E+01	6.39E-04	4.95E-04	7.89E-06	1.26E-02
Area I	Area I FF	AAB-400	Monobutyltin	NP	0.0005891	0.005412252	NA	NA	2.96E-04	NA	NA	NA
Area I	Area I FF	AAB-400	Tetrabutyltin	NP	0.001395	0.00552437	NA	NA	3.03E-04	NA	NA	NA
Area I	Area I FF	AAB-400	Tributyltin	NP	0.01773	0.04537	1.29E+00	8.11E+01	2.49E-03	1.93E-03	3.07E-05	4.48E-02

ND = Not Detected

Table H-105. Dose Assessment Results for Cormorant in Area III Using 95% UCL Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	95 UCL Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area III	Area III FF	AAB-401	Aluminum	NP	67661.43786	210	NA	NA	8.44E+01	NA	NA	1.95E+03
Area III	Area III FF	AAB-401	Antimony	NP	6.302162762	0.00365	NA	NA	6.99E-03	NA	NA	1.87E-01
Area III	Area III FF	AAB-401	Arsenic	NP	14.0291479	2.91	5.90E+00	2.36E+01	1.74E-01	2.94E-02	7.35E-03	2.29E+01
Area III	Area III FF	AAB-401	Barium	NP	478.590424	5.21	NA	NA	8.00E-01	NA	NA	2.02E+01
Area III	Area III FF	AAB-401	Cadmium	NP	0.428736553	0.058	9.27E-02	1.90E+01	3.62E-03	3.91E-02	1.91E-04	3.69E-01
Area III	Area III FF	AAB-401	Chromium	NP	319.9838972	2.53	NA	NA	4.83E-01	NA	NA	2.46E+01
Area III	Area III FF	AAB-401	Cobalt	NP	18.20168168	0.242	NA	NA	3.28E-02	NA	NA	3.63E+00
Area III	Area III FF	AAB-401	Copper	NP	708.1164728	4.94	2.79E+00	6.92E+01	1.03E+00	3.70E-01	1.49E-02	1.48E+01
Area III	Area III FF	AAB-401	Iron	NP	41082.902	195	NA	NA	5.49E+01	NA	NA	2.80E+03
Area III	Area III FF	AAB-401	Lead	NP	117.7697479	0.272	2.55E-02	1.01E+01	1.42E-01	5.57E+00	1.40E-02	3.76E+00
Area III	Area III FF	AAB-401	Manganese	NP	526.9717217	9.9	NA	NA	1.11E+00	NA	NA	5.74E+01
Area III	Area III FF	AAB-401	Mercury	P	1.664888881	0.213	4.32E-02	1.99E-01	1.34E-02	3.10E-01	6.72E-02	1.74E-01
Area III	Area III FF	AAB-401	Molybdenum	NP	1.037621064	0.131	NA	NA	8.26E-03	NA	NA	3.04E+00
Area III	Area III FF	AAB-401	Nickel	NP	170.5896718	1.52	1.69E+00	6.83E+01	2.67E-01	1.58E-01	3.91E-03	9.60E+00
Area III	Area III FF	AAB-401	Selenium	NP	0.37580912	1.96	2.50E-01	1.01E+00	1.07E-01	4.29E-01	1.06E-01	5.34E+00
Area III	Area III FF	AAB-401	Silver	NP	0.299843508	0.025	NA	NA	1.69E-03	NA	NA	2.52E-01
Area III	Area III FF	AAB-401	Vanadium	NP	135.7364812	1.51	NA	NA	2.29E-01	NA	NA	1.15E+01
Area III	Area III FF	AAB-401	Zinc	NP	192.7916485	56.5	1.92E+01	1.92E+02	3.29E+00	1.71E-01	1.71E-02	1.26E+02
Area III	Area III FF	AAB-401	HMW PAH	NP	4.70591771	0.02347	NA	NA	6.35E-03	NA	NA	3.62E-01
Area III	Area III FF	AAB-401	LMW PAH	NP	0.786224917	0.08196	NA	NA	5.31E-03	NA	NA	4.21E-02
Area III	Area III FF	AAB-401	Total PCBs	P	2.440446765	1.59528	1.04E-01	1.26E+00	8.96E-02	8.59E-01	7.09E-02	6.86E-02
Area III	Area III FF	AAB-401	Total 4,4'-DDx	P	0.002891139	0.09712	7.76E-03	6.65E-01	5.30E-03	6.82E-01	7.97E-03	1.19E-02
Area III	Area III FF	AAB-401	alpha-Chlordane	NP	0.000219689	0.00148	NA	NA	8.09E-05	NA	NA	1.03E-03
Area III	Area III FF	AAB-401	Dieldrin	NP	0.000055	7.89483E-05	NA	NA	4.36E-06	NA	NA	1.57E-03
Area III	Area III FF	AAB-401	Endosulfan II	NP	0.000055	0.000155787	NA	NA	8.55E-06	NA	NA	ND
Area III	Area III FF	AAB-401	Endrin	NP	0.00005	5.34968E-05	NA	NA	2.97E-06	NA	NA	ND
Area III	Area III FF	AAB-401	gamma-Chlordane	NP	0.000045	0.00142	NA	NA	7.74E-05	NA	NA	8.56E-04
Area III	Area III FF	AAB-401	Heptachlor	NP	0.000045	8.63828E-05	NA	NA	4.76E-06	NA	NA	ND
Area III	Area III FF	AAB-401	Dibutyltin	NP	0.045884735	0.03134	1.29E+00	8.11E+01	1.76E-03	1.36E-03	2.17E-05	1.26E-02
Area III	Area III FF	AAB-401	Monobutyltin	NP	0.0005689	0.0041	NA	NA	2.24E-04	NA	NA	NA
Area III	Area III FF	AAB-401	Tetrabutyltin	NP	0.001348	0.002679241	NA	NA	1.47E-04	NA	NA	NA
Area III	Area III FF	AAB-401	Tributyltin	NP	0.2076	0.11988	1.29E+00	8.11E+01	6.76E-03	5.23E-03	8.33E-05	4.48E-02

ND = Not Detected

Table H-106. Dose Assessment Results for Cormorant in Area VIII Using 95% UCL Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	95 UCL Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII	Area VIII FF	AAB-402	Aluminum	NP	64043.90493	729	NA	NA	1.09E+02	NA	NA	1.95E+03
Area VIII	Area VIII FF	AAB-402	Antimony	NP	2.770611517	0.00365	NA	NA	3.19E-03	NA	NA	1.87E-01
Area VIII	Area VIII FF	AAB-402	Arsenic	NP	9.688741648	2.89	5.90E+00	2.36E+01	1.68E-01	2.84E-02	7.11E-03	2.29E+01
Area VIII	Area VIII FF	AAB-402	Barium	NP	424.3736101	7.01	NA	NA	8.39E-01	NA	NA	2.02E+01
Area VIII	Area VIII FF	AAB-402	Cadmium	NP	0.271	0.036	9.27E-02	1.90E+01	2.25E-03	2.43E-02	1.19E-04	3.69E-01
Area VIII	Area VIII FF	AAB-402	Chromium	NP	290.2201228	3.3	NA	NA	4.93E-01	NA	NA	2.46E+01
Area VIII	Area VIII FF	AAB-402	Cobalt	NP	18.8	0.341	NA	NA	3.88E-02	NA	NA	3.63E+00
Area VIII	Area VIII FF	AAB-402	Copper	NP	41.0853617	5.53	2.79E+00	6.92E+01	3.46E-01	1.24E-01	4.99E-03	1.48E+01
Area VIII	Area VIII FF	AAB-402	Iron	NP	39354.32839	557	NA	NA	7.28E+01	NA	NA	2.80E+03
Area VIII	Area VIII FF	AAB-402	Lead	NP	24.68630306	0.598	2.55E-02	1.01E+01	5.92E-02	2.33E+00	5.84E-03	3.76E+00
Area VIII	Area VIII FF	AAB-402	Manganese	NP	534.4577428	17.4	NA	NA	1.52E+00	NA	NA	5.74E+01
Area VIII	Area VIII FF	AAB-402	Mercury	P	0.263858018	0.326	4.32E-02	1.99E-01	1.80E-02	4.18E-01	9.05E-02	1.74E-01
Area VIII	Area VIII FF	AAB-402	Molybdenum	NP	0.946984703	0.082	NA	NA	5.49E-03	NA	NA	3.04E+00
Area VIII	Area VIII FF	AAB-402	Nickel	NP	97.5	1.55	1.69E+00	6.83E+01	1.90E-01	1.12E-01	2.78E-03	9.60E+00
Area VIII	Area VIII FF	AAB-402	Selenium	NP	0.460371196	1.75	2.50E-01	1.01E+00	9.59E-02	3.84E-01	9.49E-02	5.34E+00
Area VIII	Area VIII FF	AAB-402	Silver	NP	0.279660096	0.038	NA	NA	2.37E-03	NA	NA	2.52E-01
Area VIII	Area VIII FF	AAB-402	Vanadium	NP	162	3.24	NA	NA	3.51E-01	NA	NA	1.15E+01
Area VIII	Area VIII FF	AAB-402	Zinc	NP	108.5601235	66.9	1.92E+01	1.92E+02	3.76E+00	1.96E-01	1.96E-02	1.26E+02
Area VIII	Area VIII FF	AAB-402	HMW PAH	NP	1.695	0.0356	NA	NA	3.77E-03	NA	NA	3.62E-01
Area VIII	Area VIII FF	AAB-402	LMW PAH	NP	0.1971	0.06644	NA	NA	3.83E-03	NA	NA	4.21E-02
Area VIII	Area VIII FF	AAB-402	Total PCBs	P	0.03312	1.55848	1.04E-01	1.26E+00	8.50E-02	8.15E-01	6.73E-02	6.86E-02
Area VIII	Area VIII FF	AAB-402	Total 4,4'-DDx	P	0.003537581	0.08389	7.76E-03	6.65E-01	4.58E-03	5.89E-01	6.88E-03	1.19E-02
Area VIII	Area VIII FF	AAB-402	alpha-Chlordane	NP	0.00015	0.00329	NA	NA	1.79E-04	NA	NA	1.03E-03
Area VIII	Area VIII FF	AAB-402	Dieldrin	NP	0.00006	0.01575	NA	NA	8.58E-04	NA	NA	1.57E-03
Area VIII	Area VIII FF	AAB-402	Endosulfan II	NP	0.00006	NA	NA	NA	NA	NA	NA	ND
Area VIII	Area VIII FF	AAB-402	Endrin	NP	0.000055	NA	NA	NA	NA	NA	NA	ND
Area VIII	Area VIII FF	AAB-402	gamma-Chlordane	NP	0.00005	0.00341	NA	NA	1.86E-04	NA	NA	8.56E-04
Area VIII	Area VIII FF	AAB-402	Heptachlor	NP	0.00005	NA	NA	NA	NA	NA	NA	ND
Area VIII	Area VIII FF	AAB-402	Dibutyltin	NP	0.005359	0.00847	1.29E+00	8.11E+01	4.67E-04	3.62E-04	5.76E-06	1.26E-02
Area VIII	Area VIII FF	AAB-402	Monobutyltin	NP	0.000647	0.002334191	NA	NA	1.28E-04	NA	NA	NA
Area VIII	Area VIII FF	AAB-402	Tetrabutyltin	NP	0.001533	0.002382545	NA	NA	1.31E-04	NA	NA	NA
Area VIII	Area VIII FF	AAB-402	Tributyltin	NP	0.006816	0.03758	1.29E+00	8.11E+01	2.06E-03	1.59E-03	2.53E-05	4.48E-02

ND = Not Detected

Table H-107. Dose Assessment Results for Cormorant in Area IX Using 95% UCL Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	95 UCL Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX	Area IX FF	AAB-403	Aluminum	NP	71724.37802	694	NA	NA	1.15E+02	NA	NA	1.95E+03
Area IX	Area IX FF	AAB-403	Antimony	NP	2.761362399	0.00365	NA	NA	3.18E-03	NA	NA	1.87E-01
Area IX	Area IX FF	AAB-403	Arsenic	NP	12.67680359	0.04575	5.90E+00	2.36E+01	1.62E-02	2.74E-03	6.84E-04	2.29E+01
Area IX	Area IX FF	AAB-403	Barium	NP	441.5727674	5.17	NA	NA	7.58E-01	NA	NA	2.02E+01
Area IX	Area IX FF	AAB-403	Cadmium	NP	0.387259145	0.022	9.27E-02	1.90E+01	1.62E-03	1.74E-02	8.52E-05	3.69E-01
Area IX	Area IX FF	AAB-403	Chromium	NP	429.1491769	2.9	NA	NA	6.21E-01	NA	NA	2.46E+01
Area IX	Area IX FF	AAB-403	Cobalt	NP	20.81378072	0.358	NA	NA	4.19E-02	NA	NA	3.63E+00
Area IX	Area IX FF	AAB-403	Copper	NP	84.32659919	6.26	2.79E+00	6.92E+01	4.32E-01	1.55E-01	6.24E-03	1.48E+01
Area IX	Area IX FF	AAB-403	Iron	NP	47289.76104	515	NA	NA	7.90E+01	NA	NA	2.80E+03
Area IX	Area IX FF	AAB-403	Lead	NP	54.48184174	0.795	2.55E-02	1.01E+01	1.02E-01	4.01E+00	1.01E-02	3.76E+00
Area IX	Area IX FF	AAB-403	Manganese	NP	570.7259357	11.4	NA	NA	1.24E+00	NA	NA	5.74E+01
Area IX	Area IX FF	AAB-403	Mercury	P	0.518136731	0.254	4.32E-02	1.99E-01	1.44E-02	3.33E-01	7.22E-02	1.74E-01
Area IX	Area IX FF	AAB-403	Molybdenum	NP	1.631866783	0.11	NA	NA	7.75E-03	NA	NA	3.04E+00
Area IX	Area IX FF	AAB-403	Nickel	NP	135.1810252	1.85	1.69E+00	6.83E+01	2.47E-01	1.46E-01	3.61E-03	9.60E+00
Area IX	Area IX FF	AAB-403	Selenium	NP	0.377799991	2.36	2.50E-01	1.01E+00	1.29E-01	5.17E-01	1.28E-01	5.34E+00
Area IX	Area IX FF	AAB-403	Silver	NP	0.427807563	0.036	NA	NA	2.42E-03	NA	NA	2.52E-01
Area IX	Area IX FF	AAB-403	Vanadium	NP	163.2266378	2.01	NA	NA	2.85E-01	NA	NA	1.15E+01
Area IX	Area IX FF	AAB-403	Zinc	NP	162.0348868	60.5	1.92E+01	1.92E+02	3.47E+00	1.80E-01	1.80E-02	1.26E+02
Area IX	Area IX FF	AAB-403	HMW PAH	NP	1.661436916	0.00872	NA	NA	2.27E-03	NA	NA	3.62E-01
Area IX	Area IX FF	AAB-403	LMW PAH	NP	0.191501124	0.0075	NA	NA	6.15E-04	NA	NA	4.21E-02
Area IX	Area IX FF	AAB-403	Total PCBs	P	0.338947423	3.13276	1.04E-01	1.26E+00	1.71E-01	1.64E+00	1.35E-01	6.86E-02
Area IX	Area IX FF	AAB-403	Total 4,4'-DDx	P	0.004258348	0.09025	7.76E-03	6.65E-01	4.92E-03	6.34E-01	7.40E-03	1.19E-02
Area IX	Area IX FF	AAB-403	alpha-Chlordane	NP	0.000361605	0.00401	NA	NA	2.19E-04	NA	NA	1.03E-03
Area IX	Area IX FF	AAB-403	Dieldrin	NP	0.00044	0.00593	NA	NA	3.24E-04	NA	NA	1.57E-03
Area IX	Area IX FF	AAB-403	Endosulfan II	NP	0.00006	NA	NA	NA	NA	NA	NA	ND
Area IX	Area IX FF	AAB-403	Endrin	NP	0.00005	NA	NA	NA	NA	NA	NA	ND
Area IX	Area IX FF	AAB-403	gamma-Chlordane	NP	0.000376961	0.00338	NA	NA	1.85E-04	NA	NA	8.56E-04
Area IX	Area IX FF	AAB-403	Heptachlor	NP	0.00005	NA	NA	NA	NA	NA	NA	ND
Area IX	Area IX FF	AAB-403	Dibutyltin	NP	0.016067765	0.00953	1.29E+00	8.11E+01	5.37E-04	4.16E-04	6.62E-06	1.26E-02
Area IX	Area IX FF	AAB-403	Monobutyltin	NP	0.002688	0.002358744	NA	NA	1.31E-04	NA	NA	NA
Area IX	Area IX FF	AAB-403	Tetrabutyltin	NP	0.001495	0.002407607	NA	NA	1.33E-04	NA	NA	NA
Area IX	Area IX FF	AAB-403	Tributyltin	NP	0.06591	0.02613	1.29E+00	8.11E+01	1.49E-03	1.16E-03	1.84E-05	4.48E-02

ND = Not Detected

Table H-108. Dose Assessment Results for Cormorant in Area X Using 95% UCL Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	95 UCL Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X	Area X FF	AAB-465	Aluminum	NP	73918.03301	499	NA	NA	1.07E+02	NA	NA	1.95E+03
Area X	Area X FF	AAB-465	Antimony	NP	4.685818638	0.00365	NA	NA	5.25E-03	NA	NA	1.87E-01
Area X	Area X FF	AAB-465	Arsenic	NP	11.38892099	0.04575	5.90E+00	2.36E+01	1.48E-02	2.50E-03	6.25E-04	2.29E+01
Area X	Area X FF	AAB-465	Barium	NP	621.186943	4.29	NA	NA	9.03E-01	NA	NA	2.02E+01
Area X	Area X FF	AAB-465	Cadmium	NP	0.515101289	0.025	9.27E-02	1.90E+01	1.92E-03	2.07E-02	1.01E-04	3.69E-01
Area X	Area X FF	AAB-465	Chromium	NP	285.8002973	1.65	NA	NA	3.98E-01	NA	NA	2.46E+01
Area X	Area X FF	AAB-465	Cobalt	NP	17.99060138	0.282	NA	NA	3.48E-02	NA	NA	3.63E+00
Area X	Area X FF	AAB-465	Copper	NP	188.5794627	5.86	2.79E+00	6.92E+01	5.23E-01	1.87E-01	7.55E-03	1.48E+01
Area X	Area X FF	AAB-465	Iron	NP	47800	413	NA	NA	7.40E+01	NA	NA	2.80E+03
Area X	Area X FF	AAB-465	Lead	NP	97.95479048	1.16	2.55E-02	1.01E+01	1.69E-01	6.63E+00	1.66E-02	3.76E+00
Area X	Area X FF	AAB-465	Manganese	NP	486.842767	8.56	NA	NA	9.91E-01	NA	NA	5.74E+01
Area X	Area X FF	AAB-465	Mercury	P	0.859238218	0.219	4.32E-02	1.99E-01	1.29E-02	2.98E-01	6.45E-02	1.74E-01
Area X	Area X FF	AAB-465	Molybdenum	NP	1.228077263	0.003835	NA	NA	1.53E-03	NA	NA	3.04E+00
Area X	Area X FF	AAB-465	Nickel	NP	123.7680416	1.11	1.69E+00	6.83E+01	1.94E-01	1.15E-01	2.84E-03	9.60E+00
Area X	Area X FF	AAB-465	Selenium	NP	0.415208384	2.21	2.50E-01	1.01E+00	1.21E-01	4.84E-01	1.20E-01	5.34E+00
Area X	Area X FF	AAB-465	Silver	NP	0.539351914	0.028	NA	NA	2.11E-03	NA	NA	2.52E-01
Area X	Area X FF	AAB-465	Vanadium	NP	157.6925319	2.34	NA	NA	2.97E-01	NA	NA	1.15E+01
Area X	Area X FF	AAB-465	Zinc	NP	212.9942996	55.3	1.92E+01	1.92E+02	3.24E+00	1.69E-01	1.69E-02	1.26E+02
Area X	Area X FF	AAB-465	HMW PAH	NP	2.730736335	0.0065	NA	NA	3.30E-03	NA	NA	3.62E-01
Area X	Area X FF	AAB-465	LMW PAH	NP	0.366410452	0.00591	NA	NA	7.17E-04	NA	NA	4.21E-02
Area X	Area X FF	AAB-465	Total PCBs	P	1.608782277	7.14942	1.04E-01	1.26E+00	3.91E-01	3.75E+00	3.10E-01	6.86E-02
Area X	Area X FF	AAB-465	Total 4,4'-DDx	P	0.019342636	0.17836	7.76E-03	6.65E-01	9.74E-03	1.25E+00	1.47E-02	1.19E-02
Area X	Area X FF	AAB-465	alpha-Chlordane	NP	0.002126102	0.00463	NA	NA	2.55E-04	NA	NA	1.03E-03
Area X	Area X FF	AAB-465	Dieldrin	NP	0.004770724	0.0178	NA	NA	9.75E-04	NA	NA	1.57E-03
Area X	Area X FF	AAB-465	Endosulfan II	NP	0.0007	0.000119687	NA	NA	7.28E-06	NA	NA	ND
Area X	Area X FF	AAB-465	Endrin	NP	0.0006	4.11003E-05	NA	NA	2.89E-06	NA	NA	ND
Area X	Area X FF	AAB-465	gamma-Chlordane	NP	0.003819858	0.00678	NA	NA	3.74E-04	NA	NA	8.56E-04
Area X	Area X FF	AAB-465	Heptachlor	NP	0.00213	6.63657E-05	NA	NA	5.91E-06	NA	NA	ND
Area X	Area X FF	AAB-465	Dibutyltin	NP	0.023980358	0.00672	1.29E+00	8.11E+01	3.92E-04	3.04E-04	4.83E-06	1.26E-02
Area X	Area X FF	AAB-465	Monobutyltin	NP	0.003295	0.00163	NA	NA	9.24E-05	NA	NA	NA
Area X	Area X FF	AAB-465	Tetrabutyltin	NP	0.001545	0.002251627	NA	NA	1.24E-04	NA	NA	NA
Area X	Area X FF	AAB-465	Tributyltin	NP	0.048497887	0.02122	1.29E+00	8.11E+01	1.21E-03	9.36E-04	1.49E-05	4.48E-02

ND = Not Detected

Table H-109. HPS Site-wide Dose Assessment Results Using 95% UCL Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	95 UCL Sediment Conc (dry wt mg/kg)	95 UCL Site-wide Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	All FF	NA	Aluminum	NP	69476.31087	729	NA	NA	1.15E+02	NA	NA	1.95E+03
Site-wide	All FF	NA	Antimony	NP	3.770864736	NA	NA	NA	NA	NA	NA	1.87E-01
Site-wide	All FF	NA	Arsenic	NP	11.92194433	2.91	5.90E+00	2.36E+01	1.71E-01	2.90E-02	7.26E-03	2.29E+01
Site-wide	All FF	NA	Barium	NP	518.4237215	6.693011472	NA	NA	9.23E-01	NA	NA	2.02E+01
Site-wide	All FF	NA	Cadmium	NP	0.432019848	0.047733462	9.27E-02	1.90E+01	3.07E-03	3.31E-02	1.62E-04	3.69E-01
Site-wide	All FF	NA	Chromium	NP	284.863806	3.295531686	NA	NA	4.87E-01	NA	NA	2.46E+01
Site-wide	All FF	NA	Cobalt	NP	17.66938276	0.380504567	NA	NA	3.98E-02	NA	NA	3.63E+00
Site-wide	All FF	NA	Copper	NP	206.0845862	7.075969084	2.79E+00	6.92E+01	6.08E-01	2.18E-01	8.78E-03	1.48E+01
Site-wide	All FF	NA	Iron	NP	44186.09651	557	NA	NA	7.80E+01	NA	NA	2.80E+03
Site-wide	All FF	NA	Lead	NP	84.51495224	1.085357875	2.55E-02	1.01E+01	1.50E-01	5.90E+00	1.48E-02	3.76E+00
Site-wide	All FF	NA	Manganese	NP	481.0401649	16.21304327	NA	NA	1.40E+00	NA	NA	5.74E+01
Site-wide	All FF	NA	Mercury	P	1.195232083	0.296273978	4.32E-02	1.99E-01	1.74E-02	4.03E-01	8.74E-02	1.74E-01
Site-wide	All FF	NA	Molybdenum	NP	1.108782961	0.123906477	NA	NA	7.95E-03	NA	NA	3.04E+00
Site-wide	All FF	NA	Nickel	NP	132.5319188	2.579938169	1.69E+00	6.83E+01	2.83E-01	1.68E-01	4.15E-03	9.60E+00
Site-wide	All FF	NA	Selenium	NP	0.373553049	2.687977231	2.50E-01	1.01E+00	1.47E-01	5.88E-01	1.45E-01	5.34E+00
Site-wide	All FF	NA	Silver	NP	0.385078912	0.039	NA	NA	2.54E-03	NA	NA	2.52E-01
Site-wide	All FF	NA	Vanadium	NP	145.5985777	3.084315823	NA	NA	3.25E-01	NA	NA	1.15E+01
Site-wide	All FF	NA	Zinc	NP	167.6590595	66.76411539	1.92E+01	1.92E+02	3.82E+00	1.99E-01	1.99E-02	1.26E+02
Site-wide	All FF	NA	HMW PAH	NP	3.306376346	0.036241779	NA	NA	5.54E-03	NA	NA	3.62E-01
Site-wide	All FF	NA	LMW PAH	NP	0.44590478	0.070204804	NA	NA	4.31E-03	NA	NA	4.21E-02
Site-wide	All FF	NA	Total PCBs	P	1.371804111	7.149	1.04E-01	1.26E+00	3.91E-01	3.75E+00	3.10E-01	6.86E-02
Site-wide	All FF	NA	Total 4,4'-DDx	P	0.012305185	0.1784	7.76E-03	6.65E-01	9.73E-03	1.25E+00	1.46E-02	1.19E-02
Site-wide	All FF	NA	alpha-Chlordane	NP	0.001431881	0.00463	NA	NA	2.54E-04	NA	NA	1.03E-03
Site-wide	All FF	NA	Dieldrin	NP	0.00201221	0.01622117	NA	NA	8.86E-04	NA	NA	1.57E-03
Site-wide	All FF	NA	Endosulfan II	NP	0.0007	0.155	NA	NA	8.45E-03	NA	NA	ND
Site-wide	All FF	NA	Endrin	NP	0.0006	0.055	NA	NA	3.00E-03	NA	NA	ND
Site-wide	All FF	NA	gamma-Chlordane	NP	0.002467095	0.005641143	NA	NA	3.10E-04	NA	NA	8.56E-04
Site-wide	All FF	NA	Heptachlor	NP	0.00213	0.085	NA	NA	4.63E-03	NA	NA	ND
Site-wide	All FF	NA	Dibutyltin	NP	0.023860433	0.03134	1.29E+00	8.11E+01	1.73E-03	1.34E-03	2.14E-05	1.26E-02
Site-wide	All FF	NA	Monobutyltin	NP	0.003295	0.006094804	NA	NA	3.36E-04	NA	NA	NA
Site-wide	All FF	NA	Tetrabutyltin	NP	0.001545	13.77	NA	NA	7.50E-01	NA	NA	NA
Site-wide	All FF	NA	Tributyltin	NP	0.065347886	0.1199	1.29E+00	8.11E+01	6.60E-03	5.11E-03	8.14E-05	4.48E-02

ND = Not Detected

Table H-110. Dose Assessment Results for Cormorant in Area I Using Average of Sediment Data and Average of Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area I	Area I FF	AAB-400	Aluminum	NP	69216.66667	699	NA	NA	1.13E+02	NA	NA	1.95E+03
Area I	Area I FF	AAB-400	Antimony	NP	0.909	0.00365	NA	NA	1.18E-03	NA	NA	1.87E-01
Area I	Area I FF	AAB-400	Arsenic	NP	10.49833333	0.04575	5.90E+00	2.36E+01	1.38E-02	2.34E-03	5.85E-04	2.29E+01
Area I	Area I FF	AAB-400	Barium	NP	469.3092455	6.52	NA	NA	8.61E-01	NA	NA	2.02E+01
Area I	Area I FF	AAB-400	Cadmium	NP	0.225166667	0.0287	9.27E-02	1.90E+01	1.81E-03	1.95E-02	9.53E-05	3.69E-01
Area I	Area I FF	AAB-400	Chromium	NP	205.8333333	3.04	NA	NA	3.88E-01	NA	NA	2.46E+01
Area I	Area I FF	AAB-400	Cobalt	NP	16.8	0.392	NA	NA	3.95E-02	NA	NA	3.63E+00
Area I	Area I FF	AAB-400	Copper	NP	58.85	7.75	2.79E+00	6.92E+01	4.86E-01	1.74E-01	7.02E-03	1.48E+01
Area I	Area I FF	AAB-400	Iron	NP	41833.33333	475	NA	NA	7.10E+01	NA	NA	2.80E+03
Area I	Area I FF	AAB-400	Lead	NP	41.11666667	0.969	2.55E-02	1.01E+01	9.71E-02	3.81E+00	9.58E-03	3.76E+00
Area I	Area I FF	AAB-400	Manganese	NP	428	15.7	NA	NA	1.32E+00	NA	NA	5.74E+01
Area I	Area I FF	AAB-400	Mercury	P	0.3115	0.255	4.32E-02	1.99E-01	1.42E-02	3.29E-01	7.14E-02	1.74E-01
Area I	Area I FF	AAB-400	Molybdenum	NP	1.027833333	0.0812	NA	NA	5.53E-03	NA	NA	3.04E+00
Area I	Area I FF	AAB-400	Nickel	NP	126.35	3.15	1.69E+00	6.83E+01	3.08E-01	1.83E-01	4.51E-03	9.60E+00
Area I	Area I FF	AAB-400	Selenium	NP	0.336833333	2.96	2.50E-01	1.01E+00	1.62E-01	6.47E-01	1.60E-01	5.34E+00
Area I	Area I FF	AAB-400	Silver	NP	0.279333333	0.0394	NA	NA	2.45E-03	NA	NA	2.52E-01
Area I	Area I FF	AAB-400	Vanadium	NP	136.1666667	2.97	NA	NA	3.09E-01	NA	NA	1.15E+01
Area I	Area I FF	AAB-400	Zinc	NP	122.3333333	67.5	1.92E+01	1.92E+02	3.81E+00	1.98E-01	1.98E-02	1.26E+02
Area I	Area I FF	AAB-400	HMW PAH	NP	1.778758333	0.03759	NA	NA	3.97E-03	NA	NA	3.62E-01
Area I	Area I FF	AAB-400	LMW PAH	NP	0.241111814	0.02103	NA	NA	1.41E-03	NA	NA	4.21E-02
Area I	Area I FF	AAB-400	Total PCBs	P	0.038736667	1.88908	1.04E-01	1.26E+00	1.03E-01	9.88E-01	8.15E-02	6.86E-02
Area I	Area I FF	AAB-400	Total 4,4'-DDx	P	0.002931667	0.08068	7.76E-03	6.65E-01	4.40E-03	5.67E-01	6.62E-03	1.19E-02
Area I	Area I FF	AAB-400	alpha-Chlordane	NP	0.000173653	0.00422	NA	NA	2.30E-04	NA	NA	1.03E-03
Area I	Area I FF	AAB-400	Dieldrin	NP	5.33333E-05	0.00623	NA	NA	3.40E-04	NA	NA	1.57E-03
Area I	Area I FF	AAB-400	Endosulfan II	NP	5.33333E-05	NA	NA	NA	NA	NA	NA	ND
Area I	Area I FF	AAB-400	Endrin	NP	4.83333E-05	NA	NA	NA	NA	NA	NA	ND
Area I	Area I FF	AAB-400	gamma-Chlordane	NP	5.83333E-05	0.00401	NA	NA	2.19E-04	NA	NA	8.56E-04
Area I	Area I FF	AAB-400	Heptachlor	NP	0.000045	NA	NA	NA	NA	NA	NA	ND
Area I	Area I FF	AAB-400	Dibutyltin	NP	0.002690796	0.01152	1.29E+00	8.11E+01	6.31E-04	4.88E-04	7.78E-06	1.26E-02
Area I	Area I FF	AAB-400	Monobutyltin	NP	0.000562698	0.005412252	NA	NA	2.96E-04	NA	NA	NA
Area I	Area I FF	AAB-400	Tetrabutyltin	NP	0.001332872	0.00552437	NA	NA	3.02E-04	NA	NA	NA
Area I	Area I FF	AAB-400	Tributyltin	NP	0.00358201	0.04537	1.29E+00	8.11E+01	2.48E-03	1.92E-03	3.05E-05	4.48E-02

ND = Not Detected

Table H-111. Dose Assessment Results for Cormorant in Area III Using Average of Sediment Data and Average of Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area III	Area III FF	AAB-401	Aluminum	NP	66062.5	210	NA	NA	8.26E+01	NA	NA	1.95E+03
Area III	Area III FF	AAB-401	Antimony	NP	1.9633125	0.00365	NA	NA	2.32E-03	NA	NA	1.87E-01
Area III	Area III FF	AAB-401	Arsenic	NP	11.79	2.91	5.90E+00	2.36E+01	1.71E-01	2.90E-02	7.25E-03	2.29E+01
Area III	Area III FF	AAB-401	Barium	NP	461.0625	5.21	NA	NA	7.81E-01	NA	NA	2.02E+01
Area III	Area III FF	AAB-401	Cadmium	NP	0.279625	0.058	9.27E-02	1.90E+01	3.46E-03	3.73E-02	1.83E-04	3.69E-01
Area III	Area III FF	AAB-401	Chromium	NP	237.5625	2.53	NA	NA	3.94E-01	NA	NA	2.46E+01
Area III	Area III FF	AAB-401	Cobalt	NP	17.43125	0.242	NA	NA	3.20E-02	NA	NA	3.63E+00
Area III	Area III FF	AAB-401	Copper	NP	176.9502533	4.94	2.79E+00	6.92E+01	4.60E-01	1.65E-01	6.64E-03	1.48E+01
Area III	Area III FF	AAB-401	Iron	NP	41030.43719	195	NA	NA	5.49E+01	NA	NA	2.80E+03
Area III	Area III FF	AAB-401	Lead	NP	47.20625	0.272	2.55E-02	1.01E+01	6.57E-02	2.58E+00	6.48E-03	3.76E+00
Area III	Area III FF	AAB-401	Manganese	NP	506.9375	9.9	NA	NA	1.09E+00	NA	NA	5.74E+01
Area III	Area III FF	AAB-401	Mercury	P	0.851573951	0.213	4.32E-02	1.99E-01	1.25E-02	2.90E-01	6.28E-02	1.74E-01
Area III	Area III FF	AAB-401	Molybdenum	NP	0.9460625	0.131	NA	NA	8.16E-03	NA	NA	3.04E+00
Area III	Area III FF	AAB-401	Nickel	NP	112.79375	1.52	1.69E+00	6.83E+01	2.04E-01	1.21E-01	2.99E-03	9.60E+00
Area III	Area III FF	AAB-401	Selenium	NP	0.338833115	1.96	2.50E-01	1.01E+00	1.07E-01	4.29E-01	1.06E-01	5.34E+00
Area III	Area III FF	AAB-401	Silver	NP	0.2741875	0.025	NA	NA	1.66E-03	NA	NA	2.52E-01
Area III	Area III FF	AAB-401	Vanadium	NP	131	1.51	NA	NA	2.23E-01	NA	NA	1.15E+01
Area III	Area III FF	AAB-401	Zinc	NP	128.38125	56.5	1.92E+01	1.92E+02	3.22E+00	1.67E-01	1.67E-02	1.26E+02
Area III	Area III FF	AAB-401	HMW PAH	NP	3.976578125	0.02347	NA	NA	5.57E-03	NA	NA	3.62E-01
Area III	Area III FF	AAB-401	LMW PAH	NP	0.638923125	0.08196	NA	NA	5.15E-03	NA	NA	4.21E-02
Area III	Area III FF	AAB-401	Total PCBs	P	0.391764788	1.59528	1.04E-01	1.26E+00	8.74E-02	8.38E-01	6.92E-02	6.86E-02
Area III	Area III FF	AAB-401	Total 4,4'-DDx	P	0.002525625	0.09712	7.76E-03	6.65E-01	5.29E-03	6.82E-01	7.96E-03	1.19E-02
Area III	Area III FF	AAB-401	alpha-Chlordane	NP	0.000113125	0.00148	NA	NA	8.08E-05	NA	NA	1.03E-03
Area III	Area III FF	AAB-401	Dieldrin	NP	4.65625E-05	7.89483E-05	NA	NA	4.35E-06	NA	NA	1.57E-03
Area III	Area III FF	AAB-401	Endosulfan II	NP	0.0000475	0.000155787	NA	NA	8.54E-06	NA	NA	ND
Area III	Area III FF	AAB-401	Endrin	NP	0.0000425	5.34968E-05	NA	NA	2.96E-06	NA	NA	ND
Area III	Area III FF	AAB-401	gamma-Chlordane	NP	0.0000375	0.00142	NA	NA	7.74E-05	NA	NA	8.56E-04
Area III	Area III FF	AAB-401	Heptachlor	NP	0.00003875	8.63828E-05	NA	NA	4.75E-06	NA	NA	ND
Area III	Area III FF	AAB-401	Dibutyltin	NP	0.019007596	0.03134	1.29E+00	8.11E+01	1.73E-03	1.34E-03	2.13E-05	1.26E-02
Area III	Area III FF	AAB-401	Monobutyltin	NP	0.000487145	0.0041	NA	NA	2.24E-04	NA	NA	NA
Area III	Area III FF	AAB-401	Tetrabutyltin	NP	0.001153909	0.002679241	NA	NA	1.47E-04	NA	NA	NA
Area III	Area III FF	AAB-401	Tributyltin	NP	0.065210772	0.11988	1.29E+00	8.11E+01	6.60E-03	5.11E-03	8.14E-05	4.48E-02

ND = Not Detected

Table H-112. Dose Assessment Results for Cormorant in Area VIII Using Average of Sediment Data and Average of Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area VIII	Area VIII FF	AAB-402	Aluminum	NP	55050	729	NA	NA	9.91E+01	NA	NA	1.95E+03
Area VIII	Area VIII FF	AAB-402	Antimony	NP	1.213875	0.00365	NA	NA	1.51E-03	NA	NA	1.87E-01
Area VIII	Area VIII FF	AAB-402	Arsenic	NP	8.12	2.89	5.90E+00	2.36E+01	1.66E-01	2.82E-02	7.04E-03	2.29E+01
Area VIII	Area VIII FF	AAB-402	Barium	NP	391.5	7.01	NA	NA	8.04E-01	NA	NA	2.02E+01
Area VIII	Area VIII FF	AAB-402	Cadmium	NP	0.23375	0.036	9.27E-02	1.90E+01	2.21E-03	2.39E-02	1.17E-04	3.69E-01
Area VIII	Area VIII FF	AAB-402	Chromium	NP	235.625	3.3	NA	NA	4.34E-01	NA	NA	2.46E+01
Area VIII	Area VIII FF	AAB-402	Cobalt	NP	15.5125	0.341	NA	NA	3.53E-02	NA	NA	3.63E+00
Area VIII	Area VIII FF	AAB-402	Copper	NP	31.0625	5.53	2.79E+00	6.92E+01	3.35E-01	1.20E-01	4.84E-03	1.48E+01
Area VIII	Area VIII FF	AAB-402	Iron	NP	33350	557	NA	NA	6.63E+01	NA	NA	2.80E+03
Area VIII	Area VIII FF	AAB-402	Lead	NP	21.3625	0.598	2.55E-02	1.01E+01	5.56E-02	2.18E+00	5.49E-03	3.76E+00
Area VIII	Area VIII FF	AAB-402	Manganese	NP	494.625	17.4	NA	NA	1.48E+00	NA	NA	5.74E+01
Area VIII	Area VIII FF	AAB-402	Mercury	P	0.159834681	0.326	4.32E-02	1.99E-01	1.79E-02	4.15E-01	8.99E-02	1.74E-01
Area VIII	Area VIII FF	AAB-402	Molybdenum	NP	0.738125	0.082	NA	NA	5.26E-03	NA	NA	3.04E+00
Area VIII	Area VIII FF	AAB-402	Nickel	NP	74.0625	1.55	1.69E+00	6.83E+01	1.64E-01	9.75E-02	2.41E-03	9.60E+00
Area VIII	Area VIII FF	AAB-402	Selenium	NP	0.18725	1.75	2.50E-01	1.01E+00	9.56E-02	3.83E-01	9.47E-02	5.34E+00
Area VIII	Area VIII FF	AAB-402	Silver	NP	0.1866375	0.038	NA	NA	2.27E-03	NA	NA	2.52E-01
Area VIII	Area VIII FF	AAB-402	Vanadium	NP	114.7125	3.24	NA	NA	3.00E-01	NA	NA	1.15E+01
Area VIII	Area VIII FF	AAB-402	Zinc	NP	90.5375	66.9	1.92E+01	1.92E+02	3.74E+00	1.95E-01	1.95E-02	1.26E+02
Area VIII	Area VIII FF	AAB-402	HMW PAH	NP	0.83446524	0.0356	NA	NA	2.84E-03	NA	NA	3.62E-01
Area VIII	Area VIII FF	AAB-402	LMW PAH	NP	0.101438828	0.06644	NA	NA	3.73E-03	NA	NA	4.21E-02
Area VIII	Area VIII FF	AAB-402	Total PCBs	P	0.023205	1.55848	1.04E-01	1.26E+00	8.49E-02	8.15E-01	6.72E-02	6.86E-02
Area VIII	Area VIII FF	AAB-402	Total 4,4'-DDx	P	0.001188907	0.08389	7.76E-03	6.65E-01	4.57E-03	5.89E-01	6.88E-03	1.19E-02
Area VIII	Area VIII FF	AAB-402	alpha-Chlordane	NP	0.000066875	0.00329	NA	NA	1.79E-04	NA	NA	1.03E-03
Area VIII	Area VIII FF	AAB-402	Dieldrin	NP	0.000040625	0.01575	NA	NA	8.58E-04	NA	NA	1.57E-03
Area VIII	Area VIII FF	AAB-402	Endosulfan II	NP	0.000040625	NA	NA	NA	NA	NA	NA	ND
Area VIII	Area VIII FF	AAB-402	Endrin	NP	0.000038125	NA	NA	NA	NA	NA	NA	ND
Area VIII	Area VIII FF	AAB-402	gamma-Chlordane	NP	3.18131E-05	0.00341	NA	NA	1.86E-04	NA	NA	8.56E-04
Area VIII	Area VIII FF	AAB-402	Heptachlor	NP	0.00003375	NA	NA	NA	NA	NA	NA	ND
Area VIII	Area VIII FF	AAB-402	Dibutyltin	NP	0.002137441	0.00847	1.29E+00	8.11E+01	4.64E-04	3.59E-04	5.72E-06	1.26E-02
Area VIII	Area VIII FF	AAB-402	Monobutyltin	NP	0.000432966	0.002334191	NA	NA	1.28E-04	NA	NA	NA
Area VIII	Area VIII FF	AAB-402	Tetrabutyltin	NP	0.001025573	0.002382545	NA	NA	1.31E-04	NA	NA	NA
Area VIII	Area VIII FF	AAB-402	Tributyltin	NP	0.002478814	0.03758	1.29E+00	8.11E+01	2.05E-03	1.59E-03	2.53E-05	4.48E-02

ND = Not Detected

Table H-113. Dose Assessment Results for Cormorant in Area IX Using Average of Sediment Data and Average of Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area IX	Area IX FF	AAB-403	Aluminum	NP	64816.66667	694	NA	NA	1.08E+02	NA	NA	1.95E+03
Area IX	Area IX FF	AAB-403	Antimony	NP	2.016166667	0.00365	NA	NA	2.37E-03	NA	NA	1.87E-01
Area IX	Area IX FF	AAB-403	Arsenic	NP	11.31666667	0.04575	5.90E+00	2.36E+01	1.47E-02	2.49E-03	6.22E-04	2.29E+01
Area IX	Area IX FF	AAB-403	Barium	NP	392.3333333	5.17	NA	NA	7.05E-01	NA	NA	2.02E+01
Area IX	Area IX FF	AAB-403	Cadmium	NP	0.333833333	0.022	9.27E-02	1.90E+01	1.56E-03	1.68E-02	8.22E-05	3.69E-01
Area IX	Area IX FF	AAB-403	Chromium	NP	320	2.9	NA	NA	5.03E-01	NA	NA	2.46E+01
Area IX	Area IX FF	AAB-403	Cobalt	NP	19.33333333	0.358	NA	NA	4.03E-02	NA	NA	3.63E+00
Area IX	Area IX FF	AAB-403	Copper	NP	69.4	6.26	2.79E+00	6.92E+01	4.16E-01	1.49E-01	6.01E-03	1.48E+01
Area IX	Area IX FF	AAB-403	Iron	NP	44916.66667	515	NA	NA	7.65E+01	NA	NA	2.80E+03
Area IX	Area IX FF	AAB-403	Lead	NP	40.53333333	0.795	2.55E-02	1.01E+01	8.70E-02	3.42E+00	8.58E-03	3.76E+00
Area IX	Area IX FF	AAB-403	Manganese	NP	494.5	11.4	NA	NA	1.15E+00	NA	NA	5.74E+01
Area IX	Area IX FF	AAB-403	Mercury	P	0.431833333	0.254	4.32E-02	1.99E-01	1.43E-02	3.31E-01	7.17E-02	1.74E-01
Area IX	Area IX FF	AAB-403	Molybdenum	NP	1.35	0.11	NA	NA	7.45E-03	NA	NA	3.04E+00
Area IX	Area IX FF	AAB-403	Nickel	NP	115.3166667	1.85	1.69E+00	6.83E+01	2.25E-01	1.34E-01	3.30E-03	9.60E+00
Area IX	Area IX FF	AAB-403	Selenium	NP	0.320666667	2.36	2.50E-01	1.01E+00	1.29E-01	5.16E-01	1.28E-01	5.34E+00
Area IX	Area IX FF	AAB-403	Silver	NP	0.325333333	0.036	NA	NA	2.31E-03	NA	NA	2.52E-01
Area IX	Area IX FF	AAB-403	Vanadium	NP	151.6666667	2.01	NA	NA	2.73E-01	NA	NA	1.15E+01
Area IX	Area IX FF	AAB-403	Zinc	NP	142.5	60.5	1.92E+01	1.92E+02	3.45E+00	1.79E-01	1.79E-02	1.26E+02
Area IX	Area IX FF	AAB-403	HMW PAH	NP	1.331778333	0.00872	NA	NA	1.91E-03	NA	NA	3.62E-01
Area IX	Area IX FF	AAB-403	LMW PAH	NP	0.142203333	0.0075	NA	NA	5.62E-04	NA	NA	4.21E-02
Area IX	Area IX FF	AAB-403	Total PCBs	P	0.22659	3.13276	1.04E-01	1.26E+00	1.71E-01	1.64E+00	1.35E-01	6.86E-02
Area IX	Area IX FF	AAB-403	Total 4,4'-DDx	P	0.003260833	0.09025	7.76E-03	6.65E-01	4.92E-03	6.34E-01	7.40E-03	1.19E-02
Area IX	Area IX FF	AAB-403	alpha-Chlordane	NP	0.00027	0.00401	NA	NA	2.19E-04	NA	NA	1.03E-03
Area IX	Area IX FF	AAB-403	Dieldrin	NP	0.000115	0.00593	NA	NA	3.23E-04	NA	NA	1.57E-03
Area IX	Area IX FF	AAB-403	Endosulfan II	NP	5.16667E-05	NA	NA	NA	NA	NA	NA	ND
Area IX	Area IX FF	AAB-403	Endrin	NP	4.41667E-05	NA	NA	NA	NA	NA	NA	ND
Area IX	Area IX FF	AAB-403	gamma-Chlordane	NP	0.0002325	0.00338	NA	NA	1.84E-04	NA	NA	8.56E-04
Area IX	Area IX FF	AAB-403	Heptachlor	NP	0.0000425	NA	NA	NA	NA	NA	NA	ND
Area IX	Area IX FF	AAB-403	Dibutyltin	NP	0.010319618	0.00953	1.29E+00	8.11E+01	5.30E-04	4.11E-04	6.54E-06	1.26E-02
Area IX	Area IX FF	AAB-403	Monobutyltin	NP	0.000903375	0.002358744	NA	NA	1.30E-04	NA	NA	NA
Area IX	Area IX FF	AAB-403	Tetrabutyltin	NP	0.001262056	0.002407607	NA	NA	1.33E-04	NA	NA	NA
Area IX	Area IX FF	AAB-403	Tributyltin	NP	0.021077563	0.02613	1.29E+00	8.11E+01	1.45E-03	1.12E-03	1.78E-05	4.48E-02

ND = Not Detected

Table H-114. Dose Assessment Results for Cormorant in Area X Using Average of Sediment Data and Average of Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Area X	Area X FF	AAB-465	Aluminum	NP	64434.78261	499	NA	NA	9.66E+01	NA	NA	1.95E+03
Area X	Area X FF	AAB-465	Antimony	NP	3.183163327	0.00365	NA	NA	3.63E-03	NA	NA	1.87E-01
Area X	Area X FF	AAB-465	Arsenic	NP	10.68565217	0.04575	5.90E+00	2.36E+01	1.40E-02	2.37E-03	5.93E-04	2.29E+01
Area X	Area X FF	AAB-465	Barium	NP	511.9565217	4.29	NA	NA	7.86E-01	NA	NA	2.02E+01
Area X	Area X FF	AAB-465	Cadmium	NP	0.454608696	0.025	9.27E-02	1.90E+01	1.85E-03	2.00E-02	9.77E-05	3.69E-01
Area X	Area X FF	AAB-465	Chromium	NP	228.0434783	1.65	NA	NA	3.36E-01	NA	NA	2.46E+01
Area X	Area X FF	AAB-465	Cobalt	NP	16.92608696	0.282	NA	NA	3.36E-02	NA	NA	3.63E+00
Area X	Area X FF	AAB-465	Copper	NP	121.3956522	5.86	2.79E+00	6.92E+01	4.50E-01	1.62E-01	6.50E-03	1.48E+01
Area X	Area X FF	AAB-465	Iron	NP	40152.17391	413	NA	NA	6.58E+01	NA	NA	2.80E+03
Area X	Area X FF	AAB-465	Lead	NP	85.20869565	1.16	2.55E-02	1.01E+01	1.55E-01	6.09E+00	1.53E-02	3.76E+00
Area X	Area X FF	AAB-465	Manganese	NP	431.5652174	8.56	NA	NA	9.32E-01	NA	NA	5.74E+01
Area X	Area X FF	AAB-465	Mercury	P	0.708613664	0.219	4.32E-02	1.99E-01	1.27E-02	2.94E-01	6.37E-02	1.74E-01
Area X	Area X FF	AAB-465	Molybdenum	NP	1.136478261	0.003835	NA	NA	1.43E-03	NA	NA	3.04E+00
Area X	Area X FF	AAB-465	Nickel	NP	113.1762543	1.11	1.69E+00	6.83E+01	1.82E-01	1.08E-01	2.67E-03	9.60E+00
Area X	Area X FF	AAB-465	Selenium	NP	0.322217391	2.21	2.50E-01	1.01E+00	1.21E-01	4.84E-01	1.20E-01	5.34E+00
Area X	Area X FF	AAB-465	Silver	NP	0.482869565	0.028	NA	NA	2.05E-03	NA	NA	2.52E-01
Area X	Area X FF	AAB-465	Vanadium	NP	132.1478261	2.34	NA	NA	2.70E-01	NA	NA	1.15E+01
Area X	Area X FF	AAB-465	Zinc	NP	202.1778151	55.3	1.92E+01	1.92E+02	3.23E+00	1.68E-01	1.68E-02	1.26E+02
Area X	Area X FF	AAB-465	HMW PAH	NP	2.343774429	0.0065	NA	NA	2.88E-03	NA	NA	3.62E-01
Area X	Area X FF	AAB-465	LMW PAH	NP	0.279574624	0.00591	NA	NA	6.23E-04	NA	NA	4.21E-02
Area X	Area X FF	AAB-465	Total PCBs	P	1.137025207	7.14942	1.04E-01	1.26E+00	3.91E-01	3.75E+00	3.09E-01	6.86E-02
Area X	Area X FF	AAB-465	Total 4,4'-DDx	P	0.014594469	0.17836	7.76E-03	6.65E-01	9.73E-03	1.25E+00	1.46E-02	1.19E-02
Area X	Area X FF	AAB-465	alpha-Chlordane	NP	0.00138759	0.00463	NA	NA	2.54E-04	NA	NA	1.03E-03
Area X	Area X FF	AAB-465	Dieldrin	NP	0.001727727	0.0178	NA	NA	9.72E-04	NA	NA	1.57E-03
Area X	Area X FF	AAB-465	Endosulfan II	NP	0.00008	0.000119687	NA	NA	6.61E-06	NA	NA	ND
Area X	Area X FF	AAB-465	Endrin	NP	7.02273E-05	4.11003E-05	NA	NA	2.32E-06	NA	NA	ND
Area X	Area X FF	AAB-465	gamma-Chlordane	NP	0.002231062	0.00678	NA	NA	3.72E-04	NA	NA	8.56E-04
Area X	Area X FF	AAB-465	Heptachlor	NP	0.000161591	6.63657E-05	NA	NA	3.79E-06	NA	NA	ND
Area X	Area X FF	AAB-465	Dibutyltin	NP	0.016738459	0.00672	1.29E+00	8.11E+01	3.84E-04	2.98E-04	4.74E-06	1.26E-02
Area X	Area X FF	AAB-465	Monobutyltin	NP	0.000764646	0.00163	NA	NA	8.96E-05	NA	NA	NA
Area X	Area X FF	AAB-465	Tetrabutyltin	NP	0.001226494	0.002251627	NA	NA	1.24E-04	NA	NA	NA
Area X	Area X FF	AAB-465	Tributyltin	NP	0.023836639	0.02122	1.29E+00	8.11E+01	1.18E-03	9.15E-04	1.46E-05	4.48E-02

ND = Not Detected

Table H-115. HPS Site-Wide Dose Assessment Results for Cormorant Using Average of Sediment Data and Forage Fish Data

Exposure Parameters

ASSUMPTIONS	DC Cormorant	Units
Body Weight	1.67	kg
Prey Ingestion Rate	0.091	kg/day
Sediment Ingestion Rate	0.0018	kg/day
Site Use Factor	1	unitless

Data

VS Area	Station ID	Sample ID	COPEC	P/NP	Mean Sediment Conc (dry wt mg/kg)	Mean Site-wide Forage Fish Tissue Conc (dry wt mg/kg)	TRV low (mg/kg/day)	TRV high (mg/kg/day)	Dose (mg/kg/day)	HQ low	HQ high	Tissue Reference: 90%ile (mg/kg)
Site-wide	All FF	NA	Aluminum	NP	64128.81356	566.2	NA	NA	1.00E+02	NA	NA	1.95E+03
Site-wide	All FF	NA	Antimony	NP	2.227932203	0.0153	NA	NA	3.24E-03	NA	NA	1.87E-01
Site-wide	All FF	NA	Arsenic	NP	10.68237288	1.654484781	5.90E+00	2.36E+01	1.02E-01	1.72E-02	4.30E-03	2.29E+01
Site-wide	All FF	NA	Barium	NP	465.3220339	5.64	NA	NA	8.09E-01	NA	NA	2.02E+01
Site-wide	All FF	NA	Cadmium	NP	0.34159322	0.034	9.27E-02	1.90E+01	2.22E-03	2.40E-02	1.17E-04	3.69E-01
Site-wide	All FF	NA	Chromium	NP	238.7457627	2.684	NA	NA	4.04E-01	NA	NA	2.46E+01
Site-wide	All FF	NA	Cobalt	NP	17.10338983	0.323	NA	NA	3.60E-02	NA	NA	3.63E+00
Site-wide	All FF	NA	Copper	NP	117.4745763	6.068	2.79E+00	6.92E+01	4.57E-01	1.64E-01	6.60E-03	1.48E+01
Site-wide	All FF	NA	Iron	NP	40123.72881	431	NA	NA	6.67E+01	NA	NA	2.80E+03
Site-wide	All FF	NA	Lead	NP	57.21864407	0.7588	2.55E-02	1.01E+01	1.03E-01	4.05E+00	1.02E-02	3.76E+00
Site-wide	All FF	NA	Manganese	NP	466.5932203	12.592	NA	NA	1.19E+00	NA	NA	5.74E+01
Site-wide	All FF	NA	Mercury	P	0.647932203	0.2534	4.32E-02	1.99E-01	1.45E-02	3.36E-01	7.27E-02	1.74E-01
Site-wide	All FF	NA	Molybdenum	NP	1.041491525	0.0857	NA	NA	5.79E-03	NA	NA	3.04E+00
Site-wide	All FF	NA	Nickel	NP	109.3830508	1.836	1.69E+00	6.83E+01	2.18E-01	1.29E-01	3.19E-03	9.60E+00
Site-wide	All FF	NA	Selenium	NP	0.309847458	2.248	2.50E-01	1.01E+00	1.23E-01	4.92E-01	1.22E-01	5.34E+00
Site-wide	All FF	NA	Silver	NP	0.349391525	0.0332	NA	NA	2.19E-03	NA	NA	2.52E-01
Site-wide	All FF	NA	Vanadium	NP	131.8661017	2.414	NA	NA	2.74E-01	NA	NA	1.15E+01
Site-wide	All FF	NA	Zinc	NP	153.2077473	61.34	1.92E+01	1.92E+02	3.51E+00	1.82E-01	1.82E-02	1.26E+02
Site-wide	All FF	NA	HMW PAH	NP	2.408213627	0.022376	NA	NA	3.81E-03	NA	NA	3.62E-01
Site-wide	All FF	NA	LMW PAH	NP	0.344144685	0.036568	NA	NA	2.36E-03	NA	NA	4.21E-02
Site-wide	All FF	NA	Total PCBs	P	0.583609492	2.981925961	1.04E-01	1.26E+00	1.63E-01	1.56E+00	1.29E-01	6.86E-02
Site-wide	All FF	NA	Total 4,4'-DDx	P	0.007014998	0.10606	7.76E-03	6.65E-01	5.79E-03	7.46E-01	8.70E-03	1.19E-02
Site-wide	All FF	NA	alpha-Chlordane	NP	0.000675635	0.003526	NA	NA	1.93E-04	NA	NA	1.03E-03
Site-wide	All FF	NA	Dieldrin	NP	0.000691207	0.009158	NA	NA	5.00E-04	NA	NA	1.57E-03
Site-wide	All FF	NA	Endosulfan II	NP	5.99138E-05	0.000142	NA	NA	7.80E-06	NA	NA	ND
Site-wide	All FF	NA	Endrin	NP	5.31897E-05	0.000049	NA	NA	2.73E-06	NA	NA	ND
Site-wide	All FF	NA	gamma-Chlordane	NP	0.000927458	0.0038	NA	NA	2.08E-04	NA	NA	8.56E-04
Site-wide	All FF	NA	Heptachlor	NP	8.56897E-05	0.000078	NA	NA	4.34E-06	NA	NA	ND
Site-wide	All FF	NA	Dibutyltin	NP	0.013134667	0.013144874	1.29E+00	8.11E+01	7.30E-04	5.66E-04	9.01E-06	1.26E-02
Site-wide	All FF	NA	Monobutyltin	NP	0.000635805	0.004452	NA	NA	2.43E-04	NA	NA	NA
Site-wide	All FF	NA	Tetrabutyltin	NP	0.001194001	0.012448	NA	NA	6.80E-04	NA	NA	NA
Site-wide	All FF	NA	Tributyltin	NP	0.029868928	0.048647629	1.29E+00	8.11E+01	2.68E-03	2.08E-03	3.31E-05	4.48E-02

ND = Not Detected

APPENDIX I

Toxicity Identification Evaluation
(Battelle)

Appendix I-1. Battelle TIE

1.0 OVERVIEW

A Toxicity Identification Evaluation (TIE) study was conducted on selected Hunters Point Shipyard (HPS) surface sediment grab samples by the Battelle Sequim Laboratory (BSL). Figure 1 is the original experimental design that was included in the VS Work Plan (Battelle et al., 2001a). This experimental design was modified as experiments progressed, as described below. The original experimental design was intended to evaluate whether ammonia was the primary cause of observed sublethal effects in sea urchin larvae embryo exposures conducted in support of the Validation Study (*i.e.*, the sediment-water interface [SWI] test). Four testing scenarios were included in the original experimental design (see Figure 1):

1. Removal of ammonia from interstitial water prior to creation of suspended particulate phase (SPP) and testing using an intermittent-flow system [Steps A and C]
2. Removal of ammonia from SPP using zeolite prior to testing [Step D]
3. No removal of ammonia from interstitial water or SPP prior to testing [Steps B and E]
4. Spiking of manipulated SPP to original ammonia concentrations followed by testing [Step G].

This design assumed that the 12 HPS stations identified for the TIE would contain interstitial water ammonia concentrations exceeding the sea urchin no observed effect concentration (NOEC), and that ammonia would potentially mask the effects related to contaminants of potential environmental concern (COPECs) during larval testing. Chemical analyses of 100% (*i.e.*, undiluted) SPP were included in the original design to assess COPEC concentrations in both unmanipulated and manipulated scenarious (see Figure 1). A total of 15 sediment samples from 12 HPS stations were included in the original experimental design (Table 1). These samples were evaluated to determine whether they should be included in the actual TIE tests, based on the factors discussed in Section 2.1.

Table 1. Proposed Sampling Locations for TIE

Station Designation	Surface (0-5 cm)	Subsurface (5-10 cm)
PA-38	√	
PA-39	√	
PA-40	√	√
PA-41	√	√
EW-33	√	
OR-24	√	
SB-18	√	
SB-19	√	
SB-20	√	√
SB-21	√	
SB-22	√	
SB-23	√	

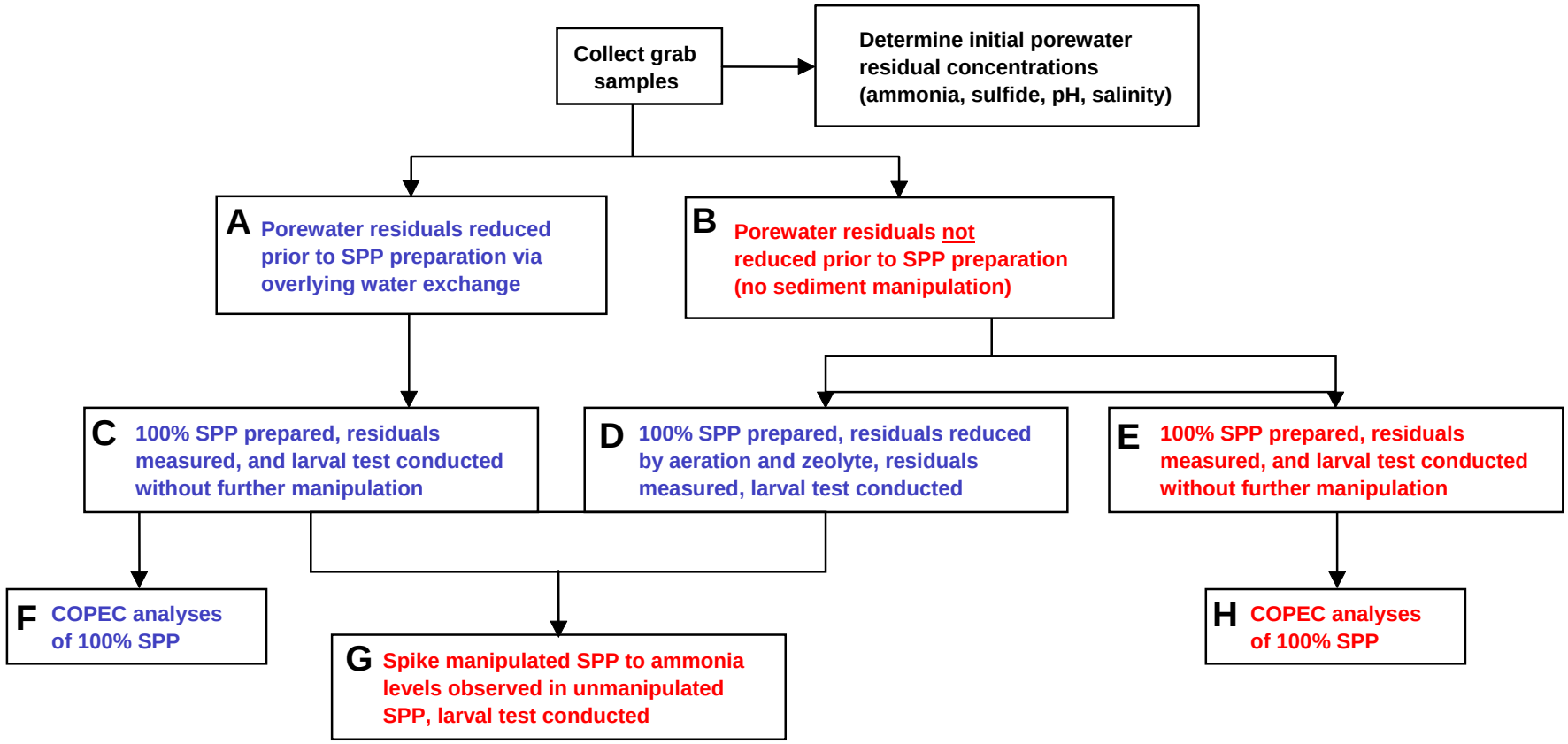

Figure 1. Original Experimental Design for Modified TIE Evaluation

2.0 INITIAL STUDY RESULTS

Under the original experimental design, candidate stations were screened to ensure that the sediments selected for TIE testing would produce adverse effects to *S. purpuratus* larvae due either to COPECs, ammonia, or both. The initial screening TIE work conducted following the original experimental design is described below.

2.1 Station Screening Evaluations

Prior to TIE test initiation, porewater ammonia levels were evaluated in each sediment sample, and 100% SPP was prepared and measured to determine whether ammonia levels exceeded the NOEC of 0.07 mg/L unionized ammonia. Results of initial and 100% SPP ammonia concentrations are presented in Table 2. Results of SWI testing then were evaluated to determine whether adverse effects had been observed in larval urchin tests. These data are also presented in Table 2, and show that in most cases the percentage of normal larvae observed in the SWI tests exceeded 80%. Based on these data, sediment from seven of the stations appeared to merit further TIE investigation. Adverse effects were neither observed nor expected in the sediments from the other stations based on porewater and SPP ammonia levels, and on the results of the SWI larval testing. The stations selected for further TIE investigation either were suspected of producing adverse effects in SPP evaluations; produced <80% normal development in SWI testing; or, in the case of Station SB-20, where located near other sites were adverse effects were either suspected or documented from SWI testing.

Table 2. Summary of Initial TIE Station Screening Evaluation

Station	Bulk Porewater Salinity (‰)	Bulk Porewater Ammonia (mg/L, total)	100% SPP Ammonia (mg/L, total)	100% SPP pH	100% SPP Unionized Ammonia (mg/L)	SWIC Mean Percent Normal	Included in Final TIE Evaluation
PA-38	30	4.8	2.16	7.52	0.052	88.4	-
PA-39	28	6.0	2.34	7.58	0.030	96.0	-
PA-40 (0-5 cm)	28	4.2	2.70	7.67	0.042	97.7	-
PA-40 (5-10 cm)	28	6.4	no data	7.22	no data	not tested	-
PA-41 (0-5 cm)	28	6.9	3.03	7.59	0.040	93.2	-
PA-41 (5-10 cm)	28	7.8	3.25	7.65	0.048	not tested	-
EW-33	30	26.2	7.65	7.63	**0.107**[a]	**53.3**[b]	√
OR-24	27	9.2	15.90	7.72	**0.273**	**76.8**	√
SB-18	30	7.8	3.64	7.64	0.052	87.3	-
SB-19	30	5.4	2.74	7.60	0.036	**74.9**	√
SB-20 (0-5 cm)	29	17.0	2.33	7.70	0.038	87.9	√
SB-20 (5-10 cm)	28	7.0	1.61	7.84	0.036	not tested	-
SB-21	28	25.0	11.0	7.63	**0.154**	92.4	√
SB-22	30	15.0	3.84	7.86	**0.091**	90.6	√
SB-23	30	25.0	10.0	7.65	**0.147**	85.7	√
PC-63[c]	27	3.1	no data	no data	no data	98.1	-

[a] Exceeds purple urchin NOEC for unionized ammonia of 0.07 mg/L (SWRCB, 1998a).
[b] < 80% normal development.
[c] Paradise Cove was not included in the original study design.

2.2 Effectiveness of Purging

Based on the relationship between ammonia concentrations measured in bulk porewater and 100% SPP, it was expected that sediment porewater ammonia levels would have to be reduced to <10 mg/L in order to ensure that the unionized NOEC of 0.07 mg/L reported in SWRCB (1998) would not be exceeded (Figure 2).

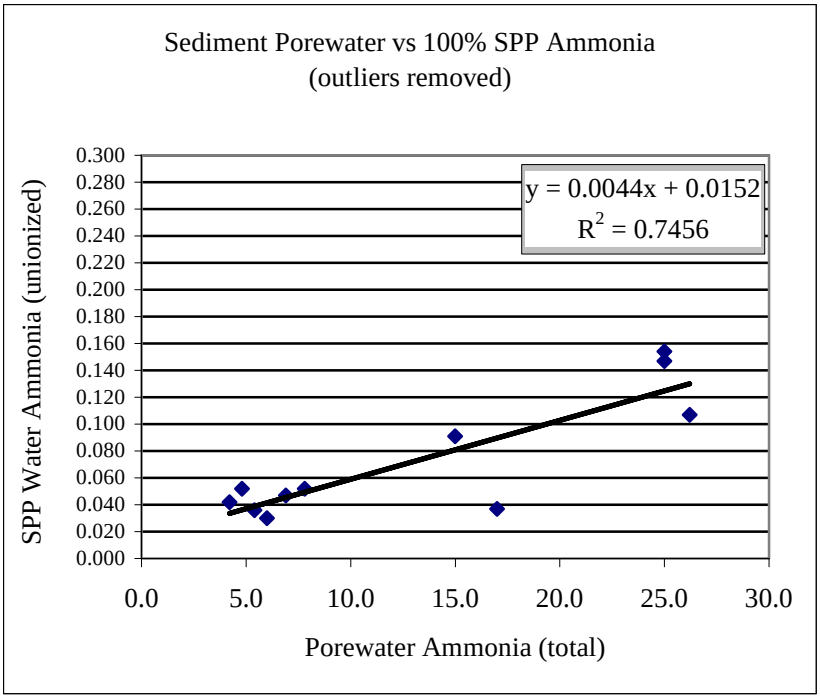

Figure 2. Relationship Between Sediment Porewater Total Ammonia and SPP Water Unionized Ammonia Concentrations

Purging of ammonia from porewater was accomplished using an intermittent-flow system that was operated twice daily, resulting in two volume exchanges per day. Test sediments with the highest initial porewater ammonia concentrations (i.e., EW-33, SB-21, SB-23) were purged first. Purging did not lower porewater ammonia levels to acceptable levels as described above until Day 25 (Figure 3); thus, this purging approach was not practical for TIE testing and was abandoned in subsequent evaluations. The reason for unacceptably slow and ineffective purging is not known, but it is possible that the biotic communities within the exposure jars reached an equilibrium, with ammonia production equalling ammonia removal. Typically, marine sediments do not require purging to this extent. For example, *E. estuarius* test requirements suggest a NOEC for this species of <60 mg/L total ammonia.

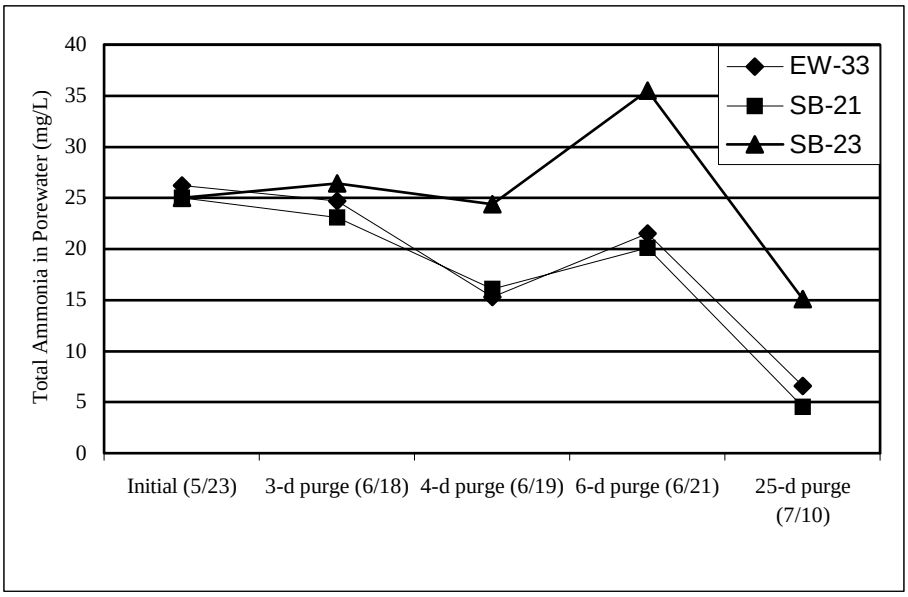

Figure 3. **Results of Sediment Purging Experiment**

2.3 Effectiveness of Zeolite Amendments

Prior to TIE test initiation, an experiment was conducted to determine whether zeolite would be effective in reducing ammonia levels in SPP. During this test, zeolite in two physical forms (large and small aggregates) was exposed to three concentrations of ammonia-spiked seawater (15, 30, and 60 mg/L total ammonia). Total ammonia concentrations were monitored at test initiation, and at 4-hour and 24-hour intervals. Concentrations observed over time are presented in Figure 4, and show zeolite had little effect in reducing total ammonia concentrations.

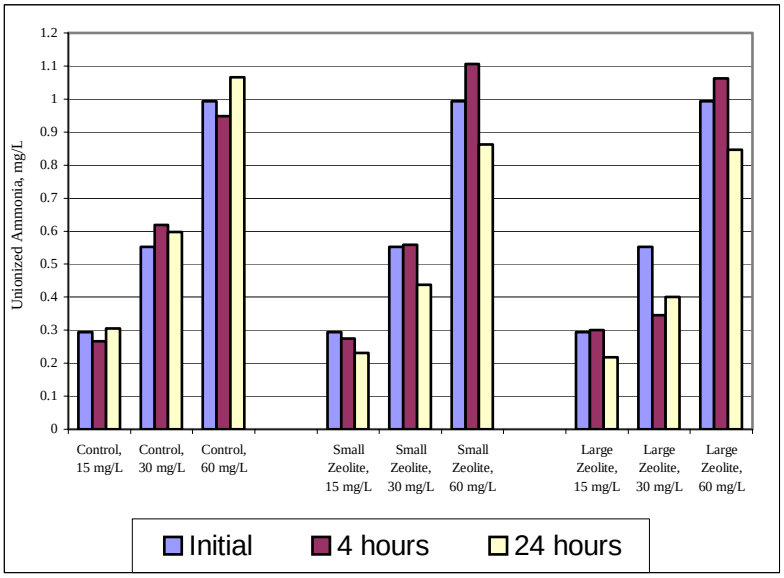

Figure 4. Results of Zeolite Experiment Using Ammonia-Spiked Seawater

2.4 Conclusions and Revisions to Experimental Design

During initial stages of TIE testing, the following conclusions were reached regarding the originally proposed experimental design:

- Only a subset of stations required testing, based on SWI test results and observed interstitial water ammonia concentrations.
- Zeolite was ineffective at reducing total ammonia concentrations in ammonia-spiked seawater and would not be useful in removing ammonia from SPP water prior to testing
- Intermittant-flow purging of sediment to reduce interstitial water ammonia to levels that would produce NOEC concentrations in SPP water was either very slow or ineffective. Target threshold levels were not reached, even after more than 20 days of purging.

3.0 REVISED EXPERIMENTAL DESIGN

Because it was not possible to effectively remove or reduce ammonia levels to the *S. purpuratus* NOEC in SPP water, an alternative experimental design was developed. The revised design tested unmanipulated sediment and evaluated the influence of ammonia in SPP water based on the dose-response relationship observed in ammonia reference-toxicant tests. By measuring ammonia levels in each SPP dilution and reference toxicant concentration, it would be possible to determine whether the dose-response observed in the SPP test was similar to that observed in ammonia-only reference toxicant exposures (e.g., Sediment 1 in Figure 5). If a response was observed that fell below the expected dose-response, a factor other than ammonia could be considered to influence the observed toxicity (e.g., Sediment 2 in Figure 5).

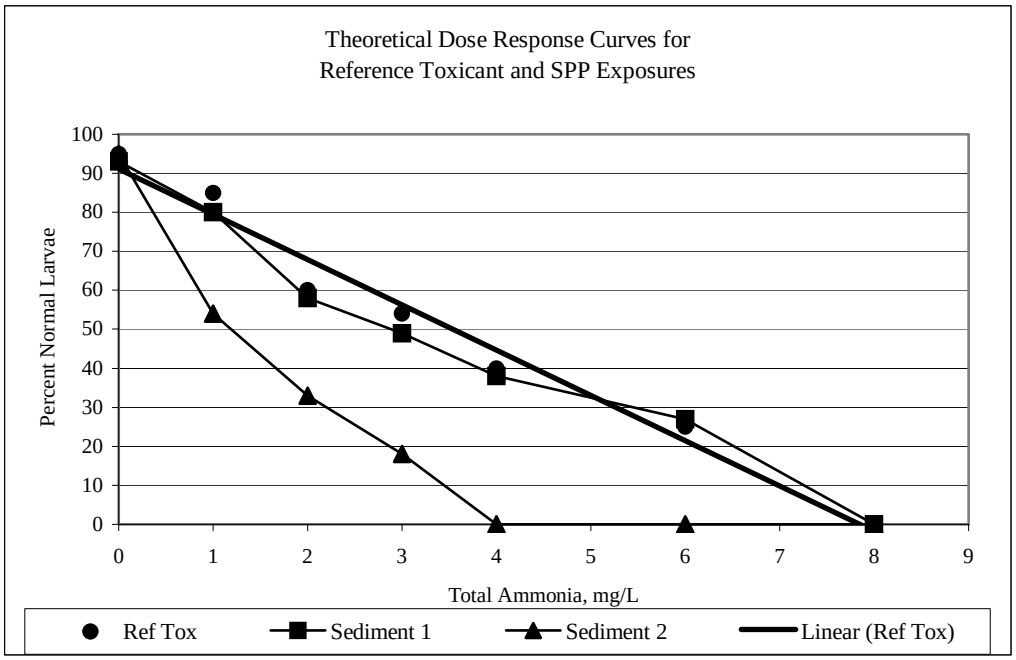

Figure 5. Depiction of Dose-Response Evaluation for Test Sediments Relative to Reference Toxicant Response

The final experimental design eliminated the use of intermittent-flow purging or zeolite to reduce porewater ammonia prior to testing. During analysis of Batch 1 data, it was observed that ammonia levels in the 50% and 100% concentrations were high enough to kill all larvae or cause 100% abnormality. The concentration series for Batches 2 and 3 were subsequently modified to increase the likelihood of observing a dose-response relationship. The final experimental design is presented in Table 3, and includes chemistry analyses on 100% SPP to assess the potential contribution of COPECs on observed larval survival and abnormality.

Table 3. Final Experimental Design for Battelle TIE Testing

TIE Test Batch	Stations Tested	SPP Concentrations	Test Volume (mL)	Comments
Batch 1	EW-33 SB-21 SB-23	0%, 10%, 50%, 100%	500 mL	100% abnormality in 50% and 100% treatments. Chemistry analysis on 100% SPP.
Batch 2	OR-24 SB-22 SB-19 SB-20 (0-5 cm)	0%, 5%, 10% 20%, 40%, 80%	500 mL	Dose-response observed. Chemistry analysis on 100% SPP.
Batch 3	EW-33 SB-21 SB-23 (After 25-day purge)	0%, 5%, 10% 20%, 40%, 80%	10 mL	Dose-response observed. Tested in scintillation vials. Chemistry analysis on 100% SPP.

4.0 RESULTS FOR REVISED EXPERIMENTAL DESIGN

Results for the three batches of TIE tests are presented below.

4.1 Results of Batch 1 Testing

Samples from HPS Stations EW-33, SB-21, and SB-23 were tested in the first batch of TIE larval bioassays. The results of Batch 1 TIE testing are presented in Figure 6. During this test, the selected SPP concentrations (0%, 10%, 50%, and 100%) did not produce a useful dose-response profile because adverse effects were observed in 50% and 100% concentrations.

4.2 Results of Batch 2 Testing

Samples from HPS Stations SB-19, SB-20, SB-22, and OR-24 were tested in the second batch of TIE larval bioassays. Results for Batch 2 testing are presented in Figure 7. For this test batch, the concentration series was altered to encompass effects expected to occur at lower percentages of SPP, with a final concentration series of 0%, 5%, 10%, 20%, 40%, and 80% SPP. This concentration series produced reasonable dose-response relationships. Results indicated that one station, SB-19, produced toxicity not completely attributable to ammonia because it fell well below the dose-response line for ammonia based on reference toxicant results. In contrast, Stations OR-24, SB-22, and SB-20 fell along the ammonia dose-response line, suggesting that the observed toxicity in SPP prepared with sediment from these stations is due primarily to ammonia.

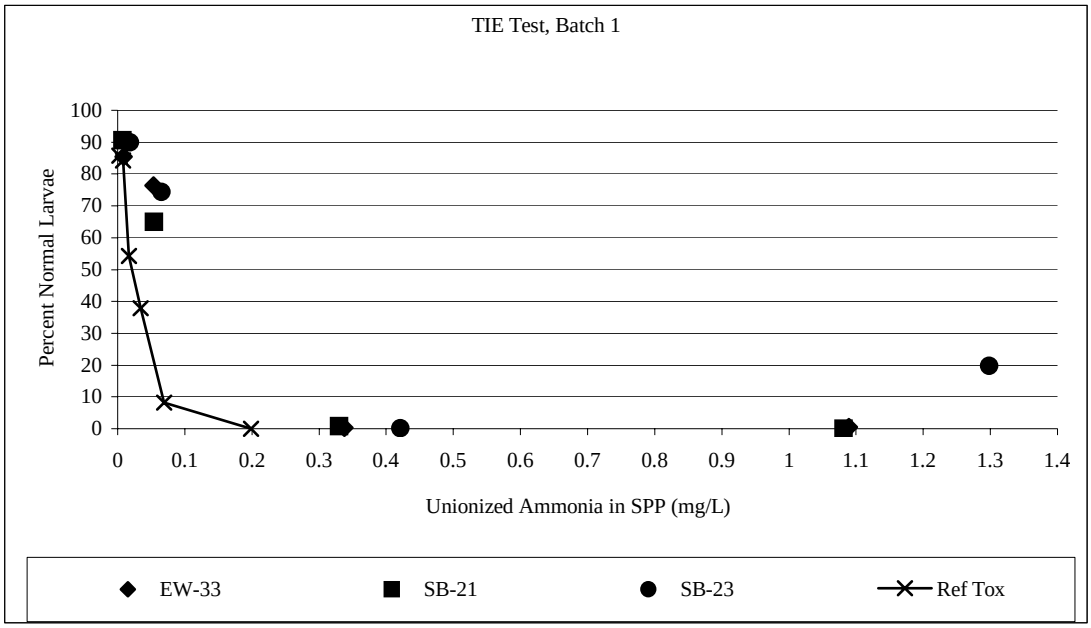

Figure 6. Results for TIE Batch 1 Testing

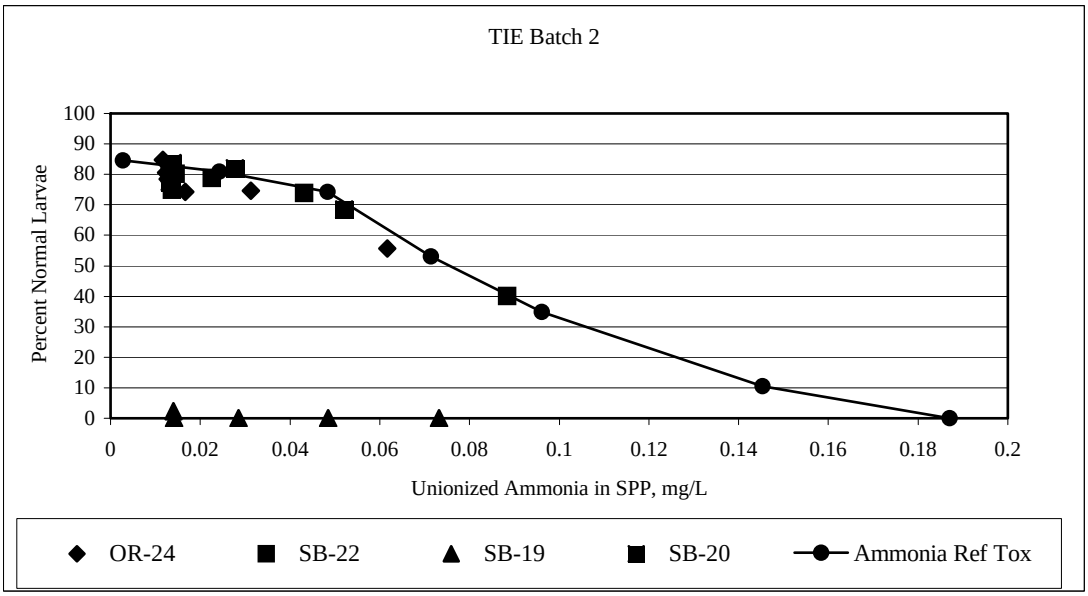

Figure 7. Results for Tie Batch 2 Testing

4.3 Results of Batch 3 Testing

Figure 8 presents the results of Batch 3 testing, which was a retest of Batch 1 sediments using the same SPP concentration series as Batch 2: 0%, 5%, 10%, 20%, 40%, and 80% SPP. In this batch, the dose-response profiles for Stations EW-33 and SB-23 suggested that COPECs might be contributing to observed toxicity. This effect is less pronounced for Station SB-21. Further discussion concerning the dose-response observed in this test batch is provided in Section 4.4.

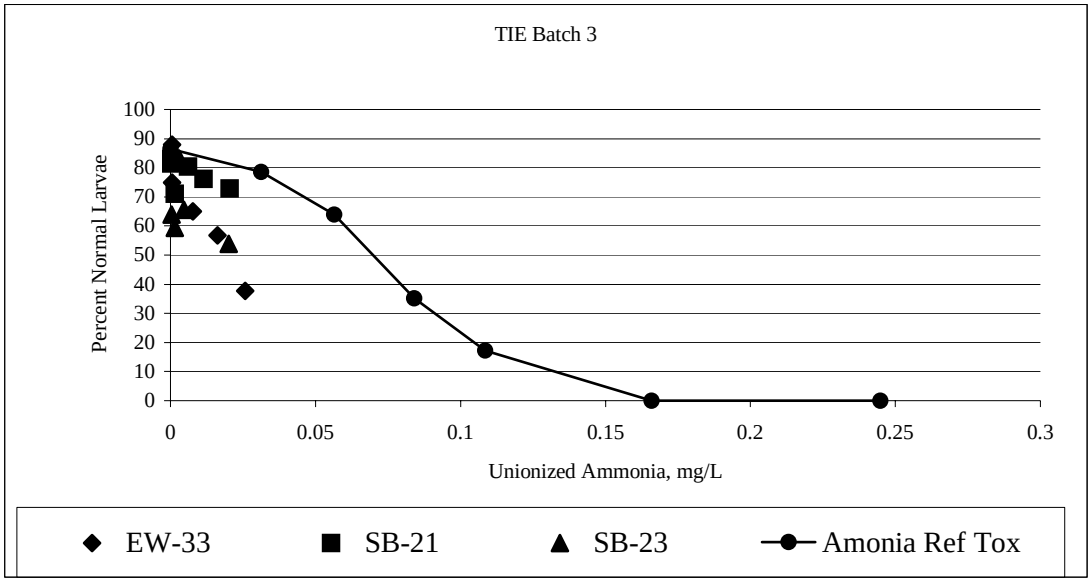

Figure 8. Results for Batch 3 TIE Test

4.4 Relationship Between SPP Toxicity and SPP Water Chemistry

Summary information for analytical chemistry conducted on 100% SPP samples for each TIE test sediment are presented in Table 4. Although a full suite of COPEC chemistry analyses were conducted, a subset representing metals, PAHs, pesticides, and PCBs are presented in this section, as many COPECs were undetected. The highest COPEC concentrations were observed in SPP created from the sediment sample from Station SB-19. This station also produced the most pronounced adverse effect observed in the TIE test, with essentially no normal larvae in any SPP concentration except the control. Inspection of the COPEC concentrations associated with this station shows at least two metals (cadmium and copper) at concentrations in the SPP water at levels well above EC50 concentrations determined during reference toxicant exposures. Thus, acute toxicity observed in SB-19 SPP likely is associated with those metals. The undisturbed SWI cores from SB-19 were not acutely toxic to *S. purpuratus* larvae, suggesting that the difference in exposure scenario (SPP vs. SWIC) resulted in a difference in observed toxicity. The mechanism for toxicity observed in Stations SB-23 and EW-33 is less clear, though it is possible that cadmium could be a contributing factor in addition to ammonia.

Table 4. COPEC concentrations in 100% SPP for TIE Stations

Analyte	SB-19	SB-20	SB-21	SB-22	SB-23	EW-33	OR-24
Metals (µg/L)							
Silver	0.110	0.0381	0.039	0.0219	0.0308	0.0227	0.0307
Aluminum	330	137	390	155	233	151	240
Arsenic	2.11	4.83	3.45	3.57	5.01	5.61	13.3
Barium	40.1	16.6	18.1	17.2	17.3	28.3	19.7
Cadmium[(a)]	9.95	0.0229	0.0268	0.0362	0.0249	0.0335	0.0237
Cobalt	12.0	0.433	0.923	0.478	0.435	1.01	0.514
Chromium	1.90	0.420	0.967	0.615	0.794	0.208	0.344
Copper[(b)]	473	0.780	3.79	0.955	3.69	0.648	0.878
Iron	244	99.2	239	132	265	437	151
Mercury	0.445	0.004	0.0218	0.0042	0.0182	0.0077	0.0041
Manganese	2,980	597	1280	871	473	4.10	716
Molybdenum	17.6	12.1	14.5	14.7	13.7	19.4	15.5
Nickel	18.8	1.41	2.16	1.43	1.90	2.08	2.01
Lead	3.30	0.898	2.66	0.978	2.32	0.614	0.832
Antimony	3.50	1.8	5.23	4.03	7.19	6.50	3.25
Selenium	0.304	0.096	0.163	0.103	0.188	0.144	0.0988
Vanadium	9.92	3.76	6.14 J	5.43	6.44	3.27	3.08
Zinc	91.4	2.08	5.45	2.74	2.60	3.03	2.36
Organics (ng/L)							
Aroclor 1260	2,305	362 U	209 J	68 J	264	176 U	177 U
Fluoranthene	19.48	4.46 J	14.02	3.52 J	23.0	6.21 J	3.21 J
Pyrene	23.52	5.44 J	19.28 J	6.02 J	21.76	5.9 J	1.02 U
4,4'-DDT	0.35 U	0.73 U	0.67 U	0.35 U	0.36 U	0.35 U	0.36 U
TBT	23.5	22.2 U	11.1 U	11.1 U	20.8	0 U	11.1 U

[(a)] Mean EC50 for cadmium reference toxicant exposures (MSL and PERL) was <0.06 µg/L
[(b)] Mean EC50 for copper reference toxicant exposures (MSL and PERL) was 7.42 mg/L

4.5 Observed Ammonia Dose-Response Relationships

Figure 9 presents the dose-response profiles with 95% confidence intervals for larvae of *S. purpuratus* developed for ammonia in reference toxicant tests conducted by BSL and Pacific Ecorisk Laboratory (PERL). These dose-response curves are expressed in terms of total ammonia, as the water quality measurements needed to convert data to the unionized form of ammonia were not always available. The utility of this dose-response relationship is illustrated in Figure 9. Comparison of the dose response for Batch 3 SPP Stations EW-33, SB-21, and SB-23 shows that all three stations produced a response that fell below the lower confidence limit developed from reference toxicant evaluations, suggesting toxicants other than ammonia might be influencing observed toxicity. This dose-response relationship also suggests that adverse effects might be suspected whenever total ammonia concentrations exceed 2 mg/L, because this concentration can reduce the percentage of normal larvae approximately 20% relative to control. This dose-response relationship also may be used to determine whether ammonia could be suspected of influencing the SWI bioassay results.

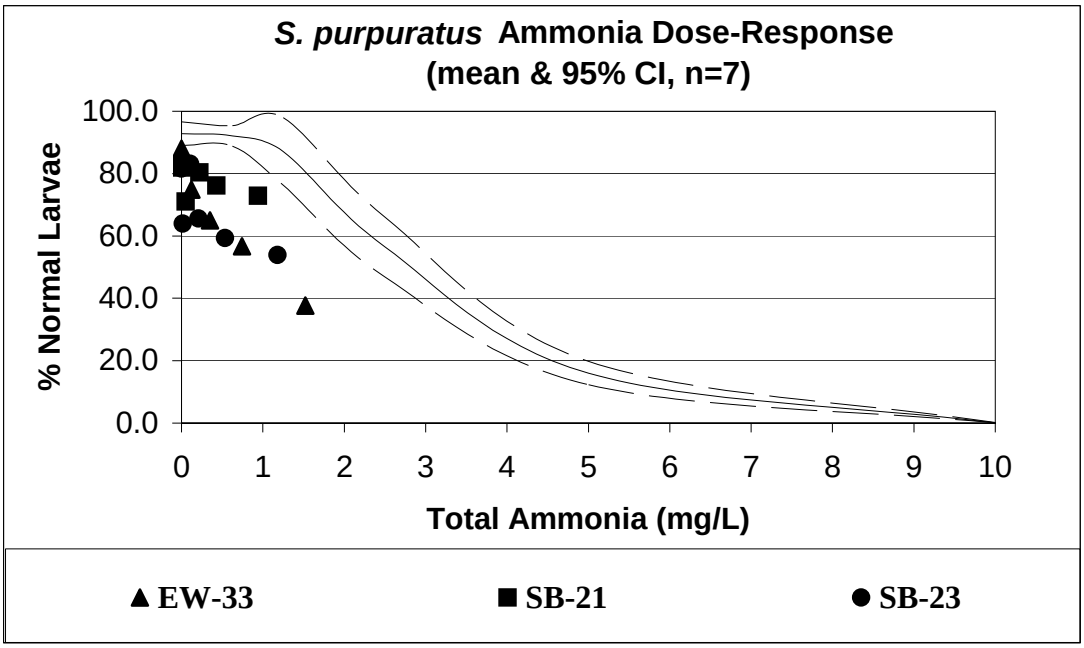

Figure 9. **Ammonia Dose-Response Relationship for MSL and PERL Laboratory Reference Toxicant Exposures with HPS Batch 3 Stations Included**

Appendix I-2. Review and Comparison of Battelle and SAIC/EFANE TIE Evaluations

Overview

Toxicity identification and evaluation (TIE) tests were conducted on sediment samples from a subset of stations at Hunters Point Shipyard (HPS). Two environmental media were assessed: suspended-particulate-phase (SPP) testing conducted by Battelle as part of the HPS Parcel F Validation Study, and porewater testing conducted by Science Applications International Corporation/U.S. Navy Engineering Field Activity Northeast (SAIC/EFANE). It was hoped that TIE evaluations would provide useful ancillary information to support the weight-of-evidence (WOE) approach developed for HPS. Study designs were different but complementary. Battelle's study design assumed that ammonia was the primary cause of larval abnormality associated with HPS stations with historically high levels of this constituent. The subsequent TIE investigation was designed to better understand the effect of ammonia. TIE testing conducted by SAIC/EFANE attempted to determine the relative contribution to observed toxicity due to the presence of multiple environmental constituents; including ammonia, sulfides, metals, or organics. Sediment from stations expected to exhibit ammonia effects were included in both Battelle and SAIC/EFANE studies, but EFANE also selected stations expected to produce contaminant-related toxicity to assess TIE contaminant removal steps inherent in the design. Thus, some HPS stations were included in both studies, and some were not. Stations included in each study and the summary results are presented in Table 1.

Species Selection and Data Comparability

Battelle's TIE included one species, the purple urchin *Strongylocentrotus purpuratus*. SAIC/EFANE also tested this species, but included in their overall design the use of additional species (the fish, *Menidia menidia*, and the sand dollar, *Dendraster excentricus*). The exposure media assessed by the studies were very different, and this must be considered when comparing results. Battelle created a SPP media, which is a mixture of HPS sediment and water resulting in an elutriate that was then diluted to create a dose-response. This test medium was intended to provide information concerning potential toxicity associated with sediment removal or disturbance during storm events. SAIC/EFANE used sediment porewater as their test media, thus producing a worse-case scenario for exposure. Further, the environmental relevance of this test is questionable, because urchin larvae are not infaunal organisms. SAIC/EFANE discussed this issue in their report (see Appendix I.4).

Comparative Results

The complete results of the SAIC/EFANE study are provided in Appendix I.4. The comparative results for Battelle and SAIC/EFANE tests are presented in Table 1 for the species common to both tests, *S. purpuratus*. In all, 11 HPS samples underwent TIE testing using *S. purpuratus*, and six samples were evaluated by both approaches. Most samples represented surficial sediment (0-5 cm); two tested by SAIC/EFANE represented deeper material (5-10 cm). In general, the results of the two TIE studies were consistent, and identified ammonia as the predominant source of toxicity in both SPP and porewater exposures. Both studies also identified metals as a primary or suspected contributor to observed toxicity at some stations, and the SAIC/EFANE study, by virtue of its experimental design, was able to identify particular classes of metals that might have contributed to observed toxicity. SAIC/EFANE also observed low dissolved oxygen levels in some of their porewater tests; this phenomenon was also observed in some of the sediment-water interface (SWI) exposures conducted by Pacific EcoRisk Laboratory (PERL) in support of the Validation Study.

Uncertainty

Use of *S. purpuratus* from a common supplier for both TIE studies and the SWI test removed uncertainty associated with test organism source. However, several sources of uncertainty associated with both TIE evaluations must be considered when assessing the use of these data as ancillary data. Primary sources of uncertainty include:

- Whether the given exposure scenarios (SPP and sediment porewater) are reasonable environmental surrogates. Porewater exposures of non-infaunal organisms raises questions of environmental relevance and subsequent use of data.

- The effect of test organism sensitivity on study results. Although *S. purpuratus* were obtained from the same supplier, it is not possible to assess the similarities of test organism sensitivities as SAIC/EFANE did not provide this information in their report.

- The effect of sub-optimal control survival in SAIC/EFANE *S. purpuratus* tests on summary results. The observed dose-response may under or over-estimate actual toxicity, or the test results might be considered inappropriate for decision-making.

Summary

The Battelle and SAIC/EFANE TIE studies employed different experimental approaches designed to identify the potential contributors to observed larval toxicity. Both studies complemented the SWI exposure that was included in the WOE scoring for HPS, and the results provide useful ancillary information when assessing the SWI testing results and subsequent WOE scores. The studies identified similar trends in toxicity drivers, suggesting that ammonia was the predominant source of toxicity, followed by metals at selected locations. In summary, it appears that both TIE studies were successful and achieved their stated goals.

Table 1. Stations Tested and Summary Result for Each Study

	Primary Toxicity Driver(s) Associated with Observed Dose-response (Urchin Tests)	
HPS Station	**Battelle TIE**	**SAIC/EFANE**
Area III, Point Avisadero		
PA-41 (0-5cm)	NA	Ammonia primary metals secondary
PA-41 (5-10cm)	NA	Ammonia primary metals secondary
Area VII, Eastern Wetland		
EW-33	Ammonia primary COPECs suspected	Ammonia primary metals secondary
Area IX, Oil Reclamation Area		
OR-24	Ammonia	Ammonia primary metals secondary
Area X, South Basin		
SB-18	NA	Ammonia primary metals secondary (Al, Cu, Zn)
SB-19	Cd, Cu primary, ammonia secondary	NA
SB-20 (0-5cm)	Ammonia	Ammonia primary, metals secondary
SB-20 (5-10cm)	NA	Metals primary, ammonia and particulates secondary
SB-21	Ammonia primary metals suspected	Ammonia
SB-22	Ammonia	Ammonia primary, metals secondary
SB-23	Ammonia primary metals suspected	Ammonia primary, metals secondary

NA = Not applicable (not evaluated).

Table I-1. Metals in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Sample ID No.	Central File Number	Media	Metals in TIE water samples (µg/L)					
					Ag	Al	As	Ba	Cd	Co
Eastern Wetland Area VIII	EW-33	AAB-124-W	1658-246	Water	0.0227	151	5.61	28.3	0.0335	1.01
Oil Reclamation Area IX	OR-24	AAB-125-W	1658-249	Water	0.0307	240	13.3	19.7	0.0237	0.514
South Basin Area X	SB-19	AAB-101-W	1658-247	Water	0.110	330	2.11	40.1	9.95 [a]	12.0 [a]
South Basin Area X	SB-20	AAB-109-W	1658-250r1	Water	0.0381	137	4.83	16.6	0.0229	0.433
South Basin Area X	SB-21	AAB-102-W	1658-244r1	Water	0.0387	323	3.44	18.1	0.0234	0.907
South Basin Area X	SB-22	AAB-111-W	1658-245r1	Water	0.0219	155	3.57	17.2	0.0362	0.478
South Basin Area X	SB-23	AAB-099-W	1658-248	Water	0.0308	233	5.01	17.3	0.0249	0.435

Area_Name	Station_ID	Sample ID No.	Central File Number	Media	Metals in TIE water samples (µg/L)					
					Cr	Cu	Fe	Hg	Mn	Mo
Eastern Wetland Area VIII	EW-33	AAB-124-W	1658-246	Water	0.208	0.648	437	0.00774	410	19.4
Oil Reclamation Area IX	OR-24	AAB-125-W	1658-249	Water	0.344	0.878	151	0.00414	716	15.5
South Basin Area X	SB-19	AAB-101-W	1658-247	Water	1.90	473 [a]	244	0.445	2980 [a]	17.6
South Basin Area X	SB-20	AAB-109-W	1658-250r1	Water	0.420	0.780	99.2	0.00404	597	12.1
South Basin Area X	SB-21	AAB-102-W	1658-244r1	Water	0.951	3.79	232	0.0218	1250	14.5
South Basin Area X	SB-22	AAB-111-W	1658-245r1	Water	0.615	0.955	132	0.00421	871	14.7
South Basin Area X	SB-23	AAB-099-W	1658-248	Water	0.794	3.69	265	0.0182	473	13.7

Area_Name	Station_ID	Sample ID No.	Central File Number	Media	Metals in TIE water samples (µg/L)					
					Ni	Pb	Sb	Se	V	Zn
Eastern Wetland Area VIII	EW-33	AAB-124-W	1658-246	Water	2.08	0.614	6.50	0.144	3.27	3.03
Oil Reclamation Area IX	OR-24	AAB-125-W	1658-249	Water	2.01	0.832	3.25	0.0988	3.08	2.36
South Basin Area X	SB-19	AAB-101-W	1658-247	Water	18.8	3.30	3.50	0.304	9.92	91.4
South Basin Area X	SB-20	AAB-109-W	1658-250r1	Water	1.41	0.887	1.80	0.0964	3.76	2.08
South Basin Area X	SB-21	AAB-102-W	1658-244r1	Water	2.16	2.66	5.23	0.163	6.02	5.45
South Basin Area X	SB-22	AAB-111-W	1658-245r1	Water	1.43	0.978	4.03	0.103	5.43	2.74
South Basin Area X	SB-23	AAB-099-W	1658-248	Water	1.90	2.32	7.19	0.188	6.44	2.60

[b] FePd analytical batch ID - 073101-5000a

[c] ICV true concentration = 6.0µg/L

N Outside accuracy DQO (±25%)

* Outside presision DQO (SRM = ±20%; Dup = <30%)

Table I-2. Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls in TIE water samples (ng/L)													
					Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)	
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	10.11	U		0.87	U		1.09	U		0.92	U		0.91	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	10.21	U		0.88	U		1.1	U		0.93	U		0.92	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	10.11	U		0.87	U		1.09	U		0.92	U		9.02	J	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	20.87	U		1.81	U		2.26	U		1.9	U		1.87	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	19.2	U		1.66	U		2.08	U		1.74	U		1.72	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	10.11	U		0.87	U		1.09	U		0.92	U		0.91	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	10.32	U		0.89	U		1.12	U		0.94	U		1.87	J	

					Polychlorinated Biphenyls in TIE water samples (ng/L)													
					Cl4(66)			Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110)	
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.94	U		1.34	U	UJ	0.72	U		0.36	U		0.61	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.95	U		1.35	U	UJ	0.73	U		0.37	U		0.61	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	0.94	U		1.34	U	UJ	72.36			0.36	U		32.35		
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	1.94	U		2.76	U	UJ	1.49	U		0.75	U		1.25	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	1.79	U		2.54	U	UJ	7.22	J		0.69	U		3.38	J	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	0.94	U		1.34	U	UJ	2.36	J		0.36	U		1.25	J	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	0.96	U		1.37	U	UJ	9.86	J		0.37	U		3.64	J	

					Polychlorinated Biphenyls in TIE water samples (ng/L)													
					Cl5(118)			Cl5(126)			Cl6(128)			Cl6(129)			Cl6(138)	
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.55	U		0.78	U		0.88	U		0.72	U		0.84	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.55	U		0.78	U		0.89	U		0.73	U		0.85	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	16.07			0.78	U		13.92	J		0.72	U		224.44		
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	1.13	U		1.6	U		1.83	U		1.5	U		1.73	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	2.2	J		1.47	U		1.68	U		1.38	U		17.89	J	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	0.91	J		0.78	U		0.88	U		0.72	U		4.8	J	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	2.51	J		0.79	U		1.33	J		0.74	U		22.27		

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.

Table I-2. Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls in TIE water samples (ng/L)														
					Cl6(153)			Cl7(170)			Cl7(180)			Cl7(187)			Cl8(195)		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.67	U		0.64	U		0.61	U		0.66	J		0.69	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	2.45	J		0.65	U		1.61	J		1.01	J		0.69	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	393.21			110.79			237.34			118.07			17.82		
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	1.39	U		1.32	U		1.25	U		1.06	J		1.42	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	27.55			9.4	J		17.69	J		10.55	J		1.77	J	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	7.19	J		6.9	J		3.99	J		2.54	J		0.69	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	34.49			12.04	J		22.6			13.67	J		2.17	J	

					Polychlorinated Biphenyls in TIE water samples (ng/L)					
					Cl9(206)			Cl10(209)		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.77	U		0.8	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.78	U		0.81	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	5.84	J		0.48	J	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	1.59	U		1.65	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	0.78	J		1.52	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	0.77	U		0.8	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	0.9	J		0.82	U	

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.

Table I-3. Polychlorinated Biphenyls as Aroclors in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Polychlorinated Biphenyls as Aroclors in TIE water samples (ng/L)											
					Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	175.47	U		175.47	U		175.47	U		175.47	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	177.34	U		177.34	U		177.34	U		177.34	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	175.47	U		175.47	U		175.47	U		175.47	U	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	362.39	U		362.39	U		362.39	U		362.39	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	333.4	U		333.4	U		333.4	U		333.4	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	175.47	U		175.47	U		175.47	U		175.47	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	179.25	U		179.25	U		179.25	U		179.25	U	

					Polychlorinated Biphenyls as Aroclors in TIE water samples (ng/L)								
					Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	175.47	U		175.47	U		175.47	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	177.34	U		177.34	U		177.34	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	175.47	U		175.47	U		2,305.45		
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	362.39	U		362.39	U		362.39	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	333.4	U		333.4	U		208.63	J	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	175.47	U		175.47	U		68.16	J	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	179.25	U		179.25	U		264.08		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.

Table I-4. Chlorinated Pesticides in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Chlorinated Pesticides in TIE water samples (ng/L)														
					2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.47	U		1.08	U		1.25	U		0.38	U		0.53	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.48	U		1.09	U		1.27	U		0.38	U		0.54	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	0.47	U		1.08	U		1.25	U		3.21	J		0.53	U	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	0.97	U		2.23	U		2.59	U		0.78	U		1.09	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	0.9	U		2.05	U		2.38	U		0.71	U		1.01	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	0.47	U		1.08	U		1.25	U		0.38	U		0.53	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	0.48	U		1.1	U		1.28	U		0.38	U		0.54	U	

					Chlorinated Pesticides in TIE water samples (ng/L)														
					4,4'-DDT			*a*-Chlordane			Dieldrin			Endosulfan II			Endrin		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.35	U		0.68	U		0.62	U		0.32	U		0.62	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.36	U		0.69	U		0.62	U		0.33	U		0.63	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	0.35	U		0.68	U		0.62	U		0.32	U		0.62	U	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	0.73	U		1.41	U		1.28	U		0.67	U		1.28	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	0.67	U		1.29	U		1.17	U		0.61	U		1.18	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	0.35	U		0.68	U		0.62	U		0.32	U		0.62	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	0.36	U		0.7	U		0.63	U		0.33	U		0.63	U	

					Chlorinated Pesticides in TIE water samples (ng/L)					
					g-Chlordane			Heptachlor		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	0.68	U	UJ	0.74	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.69	U	UJ	0.75	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	0.88	J	J	0.74	U	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	1.41	U	UJ	1.53	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	1.29	U	UJ	1.41	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	0.88	J	J	0.74	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	0.7	U	UJ	0.76	U	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

Table I-5. Polycyclic Aromatic Hydrocarbons in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Polycyclic Aromatic Hydrocarbons in TIE water samples (ng/L)																
					2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	3.59	J	U	3.42	J		0.56	J		1.68	J	U	3.22	J		15.31	J	U
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	3.29	J	U	1.51	J		0.88	U		0.42	J	U	1.17	J	U	15.32	J	U
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	3.62	J	U	1.46	J		2.68	J		2.1	J		1.55	J	U	15.7	J	U
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	4.19	J	U	1.83	J		1.8	U		0.71	J	U	1.24	J	U	44.17		UJ
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	4.29	J	U	7.49	J		1.47	J		1.1	J	U	3.21	J		21.74	J	U
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	2.81	J	U	1.1	J		0.87	U		0.73	U		0.84	J	U	14.75	J	U
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	2.8	J	U	12.97	J		0.89	U		2.41	J		6.98	J		11.94	J	U

					Polycyclic Aromatic Hydrocarbons in TIE water samples (ng/L)														
					Phenanthrene			Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	6.26	J	U	0.74	J	U	1.36	J	U	1.38	J	U	1.38	J	U
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	2.23	J	U	0.46	J	U	1.38	U		1.04	J	U	1.2	J	U
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	9.02	J		5.39	J		9.86	J		11.58	J		12.19	J	
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	2.91	J	U	1.95	J	UJ	2.82	U		1.87	U		1.76	J	U
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	6.22	J	U	2.43	J	U	6.28	J		5.82	J	U	6.56	J	U
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	2.28	J	U	0.66	J	U	2.63	J	U	1.61	J	U	1.82	J	U
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	14.27	J		2.29	J	U	4.88	J		4.61	J	U	5.21	J	U

					Polycyclic Aromatic Hydrocarbons in TIE water samples (ng/L)																
					Benzo(k)fluoranthene			Chrysene			Dibenz(ah)anthracene			Fluoranthene			Indeno(123-cd)pyrene			Pyrene		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-313	1.04	J	U	1.57	J	U	2.2	U		6.21	J	U	0.93	J	U	5.9	J	U
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-313	0.85	J	U	1.19	J	U	2.22	U		3.21	J	U	0.61	J	U	1.02	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-313	10.14	J		18.9			1.38	J		19.48			8.18	J		23.52		U
South Basin Area X	SB-20	AAB-109-W	WATER	01-313	1.88	U		2.29	J	U	4.53	U		4.46	J	U	3.97	U		5.44	J	U
South Basin Area X	SB-21	AAB-102-W	WATER	01-313	5.57	J		7.47	J	U	4.17	U		14.02	J		3.68	J	U	19.28	J	U
South Basin Area X	SB-22	AAB-111-W	WATER	01-313	1.31	J	U	1.73	J	U	2.2	U		3.52	J	U	1.24	J	U	6.02	J	U
South Basin Area X	SB-23	AAB-099-W	WATER	01-313	3.89	J		8.55	J		2.24	U		23.04			3.3	J	U	21.76		U

U The value was less than the IDL or the analyte was not detected.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
J Estimated value.

Table I-6. Butyltins in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Butyltins in TIE water samples (ng/L)											
					Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ID	Client_ Samp_ ID	Media	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Eastern Wetland Area VIII	EW-33	AAB-124-W	WATER	01-314	0	U		7.90	U		0	U		7.74	U	
Oil Reclamation Area IX	OR-24	AAB-125-W	WATER	01-314	10.62	U		7.90	U		11.08	U		7.74	U	
South Basin Area X	SB-19	AAB-101-W	WATER	01-314	10.62	U		10.39			23.50			7.74	U	
South Basin Area X	SB-20	AAB-109-W	WATER	01-314	21.24	U		15.79	U		22.16	U		15.49	U	
South Basin Area X	SB-21	AAB-102-W	WATER	01-314	10.62	U		7.90	U		11.08	U		7.74	U	
South Basin Area X	SB-22	AAB-111-W	WATER	01-314	10.62	U		7.90	U		11.08	U		7.74	U	
South Basin Area X	SB-23	AAB-099-W	WATER	01-314	10.62	U		7.76	J		20.82			7.74	U	

U The value was less than the IDL or the analyte was not detected.

J Estimated value.

Table I-7. Quality Control Data for Metals in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Sample ID No.	Central File Number	Media	Ag	Al	As	Ba	Cd	Co	Cr	Cu	Fe	Hg
Procedural Blanks (ug/L)														
		Blank		Water	0.0125 U	9.54 U	0.03 U	0.0289 U	0.0104 U	0.00346 U	0.0656	0.131	2.25 U	0.000168 U
Laboratory Control Samples (percent recoveries)														
		Blank Spike		Water	80%	103%	99%	101%	92%	84%	92%	96%	106%	96%
Standard Reference Material (percent difference)														
		CASS-4 r1		Water	--	--	9%	NA	0%	20%	25% *	7%	--	--
		1640 Direct -1		Water	--		--	6%	9%	5%	2%	12%	--	--
		1641 Direct -2		Water	--		--	3%	6%	4%	3%	5%	--	--
		1642 Direct -3		Water	--		--	1%	8%	4%	8%	1%	--	--
		1643d		Water	8%	30% *	--	--	--	--	--	--	10%	--
		1641d		Water	--	--	--	--	--	--	--	--	--	1%
Analytical duplicates (relative percent difference)														
South Basin Area X	SB-21	AAB-102-P	1658-244r1	Water	0.0387	323	3.44	18.1	0.0234	0.907	0.951	3.79	232	0.0218
South Basin Area X	SB-21	AAB-102-P	1658-244r2	Water	0.0342	390	3.45	16.8	0.0268	0.923	0.967	3.77	239	--
RPD					**12%**	**19%**	**0%**	**7%**	**14%**	**2%**	**2%**	**0%**	**3%**	**--**
South Basin Area X	SB-22	AAB-111-P	1658-245r1	Water	0.0219	155	3.57	17.2	0.0362	0.478	0.615	0.955	132	0.00421
South Basin Area X	SB-22	AAB-111-P	1658-245r2	Water	--	--	--	--	--	--	--	--		0.00397
RPD					--	--	--	--	--	--	--	--	--	**6%**
South Basin Area X	SB-20	AAB-109-P	1658-250r1	Water	0.0381	137	4.83	16.6	0.0229	0.433	0.420	0.780	99.2	0.00404
South Basin Area X	SB-20	AAB-109-P	1658-250r2	Water	--	--	--	--	0.0175	0.412	0.400	0.750	--	--
RPD					--	--	--	--	**26%**	**5%**	**5%**	**4%**	--	--
Matrix Spikes (percent recovery)														
		MS		Water	--	--	--	111%	89%	95%	100%	90%	--	--
		MS		Water	81%	111%	94%	--	--	--	--	--	96%	--
		MS		Water	--	--	--	--	--	--	--	--	--	85%

(a) TRM analytical batch ID - 080201-5000a
(b) FePd analytical batch ID - 073101-5000a
(c) ICV true concentration = 6.0µg/L
N Outside accuracy DQO (±25%)
* Outside presision DQO (SRM = ±20%; Dup = <30%)

Table I-7. Quality Control Data for Metals in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ID	Sample ID No.	Central File Number	Media	Mn	Mo	Ni	Pb	Sb	Se	V	Zn
Procedural Blanks (ug/L)												
		Blank		Water	0.297 U	0.0188 U	0.0369 U	0.0164 U	0.0127 U	0.063 U	0.0961	0.167
Laboratory Control Samples (percent recoveries)												
		Blank Spike		Water	100%	106%	93%	98%	104%	100%	67% N	92%
Standard Reference Material (percent difference)												
		CASS-4 r1		Water	24% *	24% *	5%	87% *	--	--	13%	1%
		1640 Direct -1		Water	3%	5%	4%	16%	7%	--	1%	23% *
		1641 Direct -2		Water	4%	3%	1%	18%	6%	--	2%	18%
		1642 Direct -3		Water	5%	3%	6%	16%	4%	--	5%	10%
		1643d		Water	6%	--	--	--	--	4%	--	--
		1641d		Water	--	--	--	--	--	--	--	--
Analytical duplicates (relative percent difference)												
South Basin Area X	SB-21	AAB-102-P	1658-244r1	Water	1250	14.5	2.16	2.66	5.23	0.163	6.02	5.45
South Basin Area X	SB-21	AAB-102-P	1658-244r2	Water	1280	14.0	2.15	2.62	5.15	0.138	6.14	5.09
RPD					**2%**	**3%**	**1%**	**2%**	**2%**	**17%**	**2%**	**7%**
South Basin Area X	SB-22	AAB-111-P	1658-245r1	Water	871	14.7	1.43	0.978	4.03	0.103	5.43	2.74
South Basin Area X	SB-22	AAB-111-P	1658-245r2	Water	--	--	--	--	--	--	--	--
RPD					--	--	--	--	--	--	--	--
South Basin Area X	SB-20	AAB-109-P	1658-250r1	Water	597	12.1	1.41	0.887	1.80	0.0964	3.76	2.08
South Basin Area X	SB-20	AAB-109-P	1658-250r2	Water	--		1.35	0.898	--		3.64	2.02
RPD					--	--	**4%**	**1%**	--	--	**3%**	**3%**
Matrix Spikes (percent recovery)												
		MS		Water	--	112%	88%	92%	108%	99%	80%	75%
		MS		Water	116%	--	--	--	--	--	--	--
		MS		Water	--	--	--	--	--	--	--	--

[a] TRM analytical batch ID - 080201-5000a
[b] FePd analytical batch ID - 073101-5000a
[c] ICV true concentration = 6.0µg/L
N Outside accuracy DQO (±25%)
* Outside presision DQO (SRM = ±20%; Dup = <30%)

Table I-8. Quality Control Data for Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Cl2(8)			Cl3(18)			Cl3(28)			Cl4(44)			Cl4(52)			Cl4(66)		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																						
		BDO-ZA59PB	01-313	PB	9.6	U		0.83	U		1.04	U		0.87	U		0.86	U		0.89	U	
Laboratory Control Samples (percent recovery)																						
		BDO-ZA60LCS	01-313	LCS	66.01			47.04			66.25			69.96			69.57			73.25		
Standard Reference Material (percent difference)																						
		NIST1493_2260-01-313	01-313	SRM	13.96			29.51			8.44			0.3			1			3.66		
Analytical duplicates (relative percent difference)																						
South Basin Area X	SB-20	AAB-109-W	01-313	SA	20.87	U		1.81	U		2.26	U		1.9	U		1.87	U		1.94	U	
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	20.87	U		1.81	U		2.26	U		1.9	U		1.87	U		1.94	U	
RPD					***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Matrix Spike (percent recovery)																						
South Basin Area X	SB-21	AAB-102-W	01-313	MS	68.64			50.44			71.91			76.94			78.27			81.29		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
N Value is not within control limits.

Table I-8. Quality Control Data for Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Cl4(77)			Cl5(101)			Cl5(105)			Cl5(110)			Cl5(118)			Cl5(126)		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																						
		BDO-ZA59PB	01-313	PB	1.27	U		0.69	U		0.35	U		0.58	U		0.52	U		0.74	U	
Laboratory Control Samples (percent recovery)																						
		BDO-ZA60LCS	01-313	LCS	93.04			75.17			77.15			78.66			78.66			79.13		
Standard Reference Material (percent difference)																						
		NIST1493_2260-01-313	01-313	SRM	51.55	N		9.44			5.42						13.43			5.59		
Analytical duplicates (relative percent difference)																						
South Basin Area X	SB-20	AAB-109-W	01-313	SA	2.76	U	UJ	1.49	U		0.75	U		1.25	U		1.13	U		1.6	U	
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	2.76	U		1.49	U		0.75	U		1.25	U		1.13	U		1.6	U	
RPD					***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Matrix Spike (percent recovery)																						
South Basin Area X	SB-21	AAB-102-W	01-313	MS	99.06			80.56			85.72			86.88			87.14			78.04		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
N Value is not within control limits.

Table I-8. Quality Control Data for Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Cl6(128)			Cl6(129)			Cl6(138)			Cl6(153)			Cl7(170)			Cl7(180)		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																						
		BDO-ZA59PB	01-313	PB	0.84	U		0.69	U		0.8	U		0.64	U		0.61	U		0.58	U	
Laboratory Control Samples (percent recovery)																						
		BDO-ZA60LCS	01-313	LCS	78.85			77.86			77.52			76.63			80.27			78.65		
Standard Reference Material (percent difference)																						
		NIST1493_2260-01-313	01-313	SRM	10.02						10.06			7.02			9.26			9.19		
Analytical duplicates (relative percent difference)																						
South Basin Area X	SB-20	AAB-109-W	01-313	SA	1.83	U		1.5	U		1.73	U		1.39	U		1.32	U		1.25	U	
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	1.83	U		1.5	U		1.73	U		1.39	U		1.32	U		1.25	U	
RPD					***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		
Matrix Spike (percent recovery)																						
South Basin Area X	SB-21	AAB-102-W	01-313	MS	87.95			90.74			82.85			80.91			89.06			87.14		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
N Value is not within control limits.

Table I-8. Quality Control Data for Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Cl7(187)			Cl8(195)			Cl9(206)			Cl10(209)		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																
		BDO-ZA59PB	01-313	PB	0.52	U		0.65	U		0.73	U		0.76	U	
Laboratory Control Samples (percent recovery)																
		BDO-ZA60LCS	01-313	LCS	77.58			79.51			68.73			77.94		
Standard Reference Material (percent difference)																
		NIST1493_2260-01-313	01-313	SRM	12.08			5.82			7.24			8.75		
Analytical duplicates (relative percent difference)																
South Basin Area X	SB-20	AAB-109-W	01-313	SA	1.06	J		1.42	U		1.59	U		1.65	U	
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	1.26	J		1.42	U		1.59	U		1.65	U	
RPD					***17***			***NA***			***NA***			***NA***		
Matrix Spike (percent recovery)																
South Basin Area X	SB-21	AAB-102-W	01-313	MS	83.88			87.6			75.38			85.91		

U The value was less than the IDL or the analyte was not detected.
J Estimated value.
UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
N Value is not within control limits.

Table I-9. Surrogate Recoveries for Polychlorinated Biphenyls as Congeners in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Surrogate Recoveries (percent)					
					Cl3(34)			Cl5(112)		
Area_Name	Station_ID	Client_ Samp_ ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank										
		BDO-ZA59PB	01-313	PB	66.77			74.3		
Laboratory Control Samples										
		BDO-ZA60LCS	01-313	LCS	83.95			74.31		
Standard Reference Material										
		NIST1493_2260-01-313	01-313	SRM	75.4			75.99		
Analytical duplicates										
South Basin Area X	SB-20	AAB-109-W	01-313	SA	64.06			69.77		
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	64.99			73.24		
RPD					***1***			***5***		
Matrix Spike										
South Basin Area X	SB-21	AAB-102-W	01-313	MS	83.28			77.42		
Eastern Wetland Area VIII	EW-33	AAB-124-W	01-313	SA	71.39			78.78		
Oil Reclamation Area IX	OR-24	AAB-125-W	01-313	SA	53.35			58.78		
South Basin Area X	SB-19	AAB-101-W	01-313	SA	71.29			74.09		
South Basin Area X	SB-20	AAB-109-W	01-313	SA	64.06			69.77		
South Basin Area X	SB-21	AAB-102-W	01-313	SA	73.03			80.75		
South Basin Area X	SB-22	AAB-111-W	01-313	SA	72.76			77.21		
South Basin Area X	SB-23	AAB-099-W	01-313	SA	61.76			67.12		

N Value is not within control limits.

Table I-10. Quality Control Data for Polychlorinated Biphenyls as Aroclors in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Aroclor 1016			Aroclor 1221			Aroclor 1232			Aroclor 1242			Aroclor 1248			Aroclor 1254			Aroclor 1260		
Area_Name	Station_ ID	Client_ Samp_ID	Field_ QC_ Code	Lab_ Batch	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																									
		BDO-ZA59PB	PB	01-313	166.7	U		166.7	U		166.7	U		166.7	U		166.7	U		166.7	U		166.7	U	
Analytical Duplicates (ng/L)																									
South Basin Area X	SB-20	AAB-109-W	SA	01-313	362.39	U		362.39	U		362.39	U		362.39	U		362.39	U		362.39	U		362.39	U	
South Basin Area X	SB-20	AAB-109-W	QADU	01-313	362.39	U		362.39	U		362.39	U		362.39	U		362.39	U		362.39	U		362.39	U	
RPD					***NA***			***NA***			***NA***			***NA***			***NA***			***NA***			***NA***		

U The value was less than the IDL or the analyte was not detected.
NA Not applicable.

Table I-11. Quality Control Data for Chlorinated Pesticides in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					2,4'-DDD			2,4'-DDE			2,4'-DDT			4,4'-DDD			4,4'-DDE			4,4'-DDT	
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Procedural Blanks (ng/L)																					
		BDO-ZA59PB	01-313	PB	0.45	U		1.02	U		1.19	U		0.36	U		0.5	U		0.33	U
Laboratory Control Samples (percent recoveries)																					
		BDO-ZA60LCS	01-313	LCS	71.9			70.97			51.79			76.08			69.16			76.34	
Analytical duplicates (relative percent difference)																					
South Basin Area X	SB-20	AAB-109-W	01-313	SA	0.97	U		2.23	U		2.59	U		0.78	U		1.09	U		0.73	U
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	0.97	U		2.23	U		2.59	U		0.78	U		1.09	U		0.73	U
RPD					***NA***			***NA***			***NA***			***NA***			***NA***			***NA***	
Matrix Spike (percent recoveries)																					
South Basin Area X	SB-21	AAB-102-W	01-313	MS	80.91			77.35			57.92			82.92			73.76			82.91	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

N Value is not within control limits.

Table I-11. Quality Control Data for Chlorinated Pesticides in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					a-Chlordane			Dieldrin			Endosulfan II			Endrin			g-Chlordane			He
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result
Procedural Blanks (ng/L)																					
		BDO-ZA59PB	01-313	PB		0.65	U		0.59	U		0.31	U		0.59	U		0.65	U		0.7
Laboratory Control Samples (percent recoveries)																					
		BDO-ZA60LCS	01-313	LCS		65.47			66.79			55.21			68.6			38.2	N		59.57
Analytical duplicates (relative percent difference)																					
South Basin Area X	SB-20	AAB-109-W	01-313	SA		1.41	U		1.28	U		0.67	U		1.28	U		1.41	U	UJ	1.53
South Basin Area X	SB-20	AAB-109-W	01-313	QADU		1.41	U		1.28	U		0.67	U		1.28	U		1.41	U		1.53
RPD						***NA***			***NA***			***NA***			***NA***			***NA***			***NA***
Matrix Spike (percent recoveries)																					
South Basin Area X	SB-21	AAB-102-W	01-313	MS		71.34			72.05			70.93			74.93			41.38			66

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

N Value is not within control limits.

Table I-11. Quality Control Data for Chlorinated Pesticides in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					ptachlor	
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Lab Qual	Final Qual
Procedural Blanks (ng/L)						
		BDO-ZA59PB	01-313	PB	U	
Laboratory Control Samples (percent recoveries)						
		BDO-ZA60LCS	01-313	LCS		
Analytical duplicates (relative percent difference)						
South Basin Area X	SB-20	AAB-109-W	01-313	SA	U	
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	U	
RPD						
Matrix Spike (percent recoveries)						
South Basin Area X	SB-21	AAB-102-W	01-313	MS		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

N Value is not within control limits.

Table I-12. Quality Control Data for Polycyclic Aromatic Hydrocarbons in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					2-Methyl naphthalene			Acenaphthene			Acenaphthylene			Anthracene			Fluorene			Naphthalene			Phenanthr	
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual
Procedural Blank (ng/L)																								
		BDO-ZA59PB	01-313	PB	1.97	J		1.07	U		0.83	U		0.38	J		0.47	J		9.73	J		1.26	J
Laboratory Control Sample (percent recoveries)																								
		BDO-ZA60LCS	01-313	LCS	68.97			64.2			62.54			63.22			64.2			68.87			59.75	
Standard Reference Material (percent difference)																								
		NIST_1493_2260_01_313	01-313	SRM	11.74			4.52			5.62			7.76			2.42			2.61			1.81	
Analytical duplicates (relative percent difference)																								
South Basin Area X	SB-20	AAB-109-W	01-313	SA	4.19	J	U	1.83	J		1.8	U		0.71	J	U	1.24	J	U	44.17		UJ	2.91	J
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	3.62	J		2.31	J		1.8	U		0.55	J		1.68	J		20.76	J		2.59	J
RPD					***15***			***23***			***NA***			***25***			***30***			***72***			***12***	
Matrix Spikes (percent recoveries)																								
South Basin Area X	SB-21	AAB-102-W	01-313	MS	63.22			64.9			65.6			68.5			66.51			60.21			64.93	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

N Value is not within control limits.

Table I-12. Quality Control Data for Polycyclic Aromatic Hydrocarbons in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	ene Final Qual
Procedural Blank (ng/L)					
		BDO-ZA59PB	01-313	PB	
Laboratory Control Sample (percent recoveries)					
		BDO-ZA60LCS	01-313	LCS	
Standard Reference Material (percent difference)					
		NIST_1493_2260_01_313	01-313	SRM	
Analytical duplicates (relative percent difference)					
South Basin Area X	SB-20	AAB-109-W	01-313	SA	U
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	
RPD					
Matrix Spikes (percent recoveries)					
South Basin Area X	SB-21	AAB-102-W	01-313	MS	

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

N Value is not within control limits.

Table I-12. Quality Control Data for Polycyclic Aromatic Hydrocarbons in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(ghi)perylene			Benzo(k)fluoranthene			Chrysene		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																						
		BDO-ZA59PB	01-313	PB	0.78	J		0.65	J		1.17	J		1.42	J		0.76	J		1.55	J	
Laboratory Control Sample (percent recoveries)																						
		BDO-ZA60LCS	01-313	LCS	69.17			65.07			69.03			64.64			71.7			73.48		
Standard Reference Material (percent difference)																						
		NIST_1493_2260_01_313	01-313	SRM	14.21			17.19			16.34			23.37			10.26			3.3		
Analytical duplicates (relative percent difference)																						
South Basin Area X	SB-20	AAB-109-W	01-313	SA	1.95	J	UJ	2.82	U		1.87	U		1.76	J	U	1.88	U		2.29	J	U
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	0.79	J		2.82	U		1.87	U		1.65	J		1.88	U		2.41	J	
RPD					***85***			***NA***			***NA***			***6***			***NA***			***5***		
Matrix Spikes (percent recoveries)																						
South Basin Area X	SB-21	AAB-102-W	01-313	MS	78.56			74.43			75.08			71			78.12			78.66		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

N Value is not within control limits.

Table I-12. Quality Control Data for Polycyclic Aromatic Hydrocarbons in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Dibenz(ah)anthracene Result	Lab Qual	Final Qual	Fluoranthene Result	Lab Qual	Final Qual	Indeno(123-cd)pyrene Result	Lab Qual	Final Qual	Pyrene Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																
		BDO-ZA59PB	01-313	PB	2.09	U		2.51	J		0.88	J		6.34	J	
Laboratory Control Sample (percent recoveries)																
		BDO-ZA60LCS	01-313	LCS	68.64			72.41			64.81			71.4		
Standard Reference Material (percent difference)																
		NIST_1493_2260_01_313	01-313	SRM	23.69			10			28.93			11.45		
Analytical duplicates (relative percent difference)																
South Basin Area X	SB-20	AAB-109-W	01-313	SA	4.53	U		4.46	J	U	3.97	U		5.44	J	U
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	4.53	U		4.72	J		3.97	U		6.9	J	
RPD					***NA***			***6***			***NA***			***24***		
Matrix Spikes (percent recoveries)																
South Basin Area X	SB-21	AAB-102-W	01-313	MS	74.78			77.23			70.41			77.16		

U The value was less than the IDL or the analyte was not detected.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

J Estimated value.

N Value is not within control limits.

Table I-13. Surrogate Recoveries for Polycyclic Aromatic Hydrocarbons in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Surrogate Recoveries (percent)								
					Chrysene-d12			Naphthalene-d8			Phenanthrene-d10		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank													
		BDO-ZA59PB	01-313	PB	76.71			72.67			61.93		
Laboratory Control Sample													
		BDO-ZA60LCS	01-313	LCS	79.11			74.95			63.2		
Standard Reference Material													
		NIST_1493_2260_01_313	01-313	SRM	79.94			76.29			65.22		
Analytical duplicates													
South Basin Area X	SB-20	AAB-109-W	01-313	SA	67.42			56.89			55.74		
South Basin Area X	SB-20	AAB-109-W	01-313	QADU	70.74			60.66			56.11		
RPD					***5***			***6***			***1***		
Matrix Spikes													
South Basin Area X	SB-21	AAB-102-W	01-313	MS	82.57			65.36			67.33		
Eastern Wetland Area VIII	EW-33	AAB-124-W	01-313	SA	74.54			60.82			60.35		
Oil Reclamation Area IX	OR-24	AAB-125-W	01-313	SA	55.34			42.92			39.13	N	
South Basin Area X	SB-19	AAB-101-W	01-313	SA	71.37			57.74			64.34		
South Basin Area X	SB-20	AAB-109-W	01-313	SA	67.42			56.89			55.74		
South Basin Area X	SB-21	AAB-102-W	01-313	SA	76.56			64.07			63.68		
South Basin Area X	SB-22	AAB-111-W	01-313	SA	72.62			59.51			62.4		
South Basin Area X	SB-23	AAB-099-W	01-313	SA	66.86			39.43	N		51.52		

N Value is not within control limits.

Table I-14. Quality Control Data for Butyltins in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Monobutyltin			Dibutyltin			Tributyltin			Tetrabutyltin		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual	Result	Lab Qual	Final Qual
Procedural Blank (ng/L)																
		BDO-ZA63PB	01-314	PB	10.62	U		7.896	U		11.081	U		7.743	U	
Laboratory Control Sample (percent recoveries)																
		BDO-ZA64LCS	01-314	LCS	0			71.93			95.47			68.61		
		BDO-ZA65LCSD	01-314	LCSD	0			84.5			113.93			65.95		
Analytical duplicates (relative percent difference)																
South Basin Area X	SB-20	AAB-109-W	01-314	SA	21.24	U		15.79	U		22.16	U		15.49	U	
South Basin Area X	SB-20	AAB-109-W	01-314	QADU	21.24	U		15.792	U		22.162	U		15.486	U	
RPD					***NA***			***NA***			***NA***			***NA***		

U The value was less than the IDL or the analyte was not detected.

Table I-15. Surrogate Recoveries for Butyltins in TIE Water Samples, Hunters Point Shipyard Parcel F Validation Study

					Surrogate Recoveries (percent)		
					TBT (SIS)		
Area_Name	Station_ ID	Client_ Samp_ID	Lab_ Batch	Field_ QC_ Code	Result	Lab Qual	Final Qual
Procedural Blank							
		BDO-ZA63PB	01-314	PB	56.7		
Laboratory Control Sample							
		BDO-ZA64LCS	01-314	LCS	61.43		
		BDO-ZA65LCSD	01-314	LCSD	62.07		
Analytical duplicates							
South Basin Area X	SB-20	AAB-109-W	01-314	SA	52.72		
South Basin Area X	SB-20	AAB-109-W	01-314	QADU	56.02		
RPD					***6***		
Eastern Wetland Area VIII	EW-33	AAB-124-W	01-314	WATER	53.15		
Oil Reclamation Area IX	OR-24	AAB-125-W	01-314	WATER	65.37		
South Basin Area X	SB-19	AAB-101-W	01-314	WATER	56.27		
South Basin Area X	SB-20	AAB-109-W	01-314	WATER	52.72		
South Basin Area X	SB-21	AAB-102-W	01-314	WATER	54.82		
South Basin Area X	SB-22	AAB-111-W	01-314	WATER	52.99		
South Basin Area X	SB-23	AAB-099-W	01-314	WATER	65.28		

APPENDIX J

Human Health Risk Assessment

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Appendix J. Human Health Risk Assessment

The human health risk assessment to define the FS footprint in the HPS Parcel F Validation Study was performed in four essential steps that constitute the basic framework for all risk assessments, as summarized below.

J.1 DATA EVALUATION

The first step of the human health risk assessment process is an evaluation of the available data to: (1) characterize the site, (2) develop a data set for use in the risk assessment, and (3) identify media-specific chemicals. A review of available data is conducted to characterize the site in order to define the nature and extent of environmental contamination and identify site-related COPCs.

J.2 EXPOSURE ASSESSMENT

The exposure assessment includes an assessment of the magnitude, frequency, duration, and routes of theoretical human exposure to site-related COPCs. In this step, both current and hypothetical future site uses and considered, and complete exposure pathways to actual or probable human receptors that would come in contact with site-related COPCs are identified and evaluated.

An exposure pathway defines the most probable path in which a receptor may come in contact with the contaminated media. In order for an exposure pathway to be complete, the following four elements must be present:

- A source and mechanism of chemical release;
- A retention or transport medium;
- A point of contact between the human receptor and the medium; and
- A route of exposure for the potential human receptor at the contact point.

A complete exposure pathway from the source of chemicals in the environment (i.e., from sediment) to human receptors must exist in order for chemical intake to occur. If all exposure pathways are incomplete for human receptors, no chemical intake occurs and, hence, no human health effects are associated with site-related COPCs.

Estimates of chemical concentrations at points of potential human exposure are necessary for evaluating chemical intakes by potentially exposed individuals. The concentrations of chemicals in the exposure medium at the exposure point are termed “exposure point concentrations” (EPCs). Development of long-term (chronic) EPCs using short-term monitoring data requires an underlying assumption that the chemical concentrations found in the sediments and in *M. nasuta* tissue data will remain constant for an indefinite time to simulate future conditions at HPS. The result of the general assumption of steady-state conditions to sources and bioaccumulative contaminant uptake is a conservative estimation of long-term exposure concentrations.

EPCs are developed for both the Reasonable Maximum Exposure (RME) and the Central Tendency Exposure (CTE). U.S. EPA (1992) defines the concentration used to estimate the RME as the 95% UCL of the arithmetic mean or maximum observed concentration, whichever is lower. This is a conservative estimate of exposure that is within the range of possible exposure but higher than the average exposure. The estimate considers the upper bound situation described by the 90th or 95th percentile of the actual distribution of all input parameters. Using the RME approach, individual parameters used in quantifying exposure may not be at their maximum values, but when combined will result in an estimation of the RME (U.S. EPA,

1989). The CTE is typically defined as the average exposure, therefore, a measure of central tendency (e.g., arithmetic mean, geometric mean, median, etc.) is often used.

Intake is estimated by combining exposure point concentrations with the variables that describe exposure:

- Rate of contact with the medium the constituent;
- Frequency of contact;
- Duration of contact; and
- Body weight of the exposure individual

Intake of individual chemical as a result of exposure was estimated following U.S. EPA (1989) guidance and using U.S. EPA standard default parameters (U.S. EPA, 1991) and literature-derived values regarding conservative exposure conditions. An intake factor is the concentration of a chemical in a quantity of a medium (e.g., seafood tissue) taken into the body through an exposure route (e.g., ingestion) and available for absorption. It is expressed in units of milligram (mg) of chemical per kilogram (kg) body weight per day (mg/kg-day).

Intake of chemical that result in carcinogenic effects is calculated by averaging the dose over a lifetime (70 years × 365 days/year) because carcinogenicity is not assumed to have a threshold mechanism (U.S. EPA, 1986). The intake factor for carcinogenic effects is termed lifetime average daily dose (LADD). The equation used to calculate the LADD for consumption of shellfish is as follows:

$$LADD = C_t \times (IR \times FI \times EF \times ED)/(BW \times AT_c) \quad \text{(J-1)}$$

where:

C_t	=	*M. nasuta* tissue concentration (mg/kg)
ED	=	Exposure duration (years)
EF	=	Exposure frequency (days/year)
IR	=	Shellfish ingestion rate (kg/day)
FI	=	Fraction ingested from source (unitless)
BW	=	Body weight (kg)
AT_c	=	Averaging time for carcinogenic effects (70 years × 365 days/year).

For sediment exposures, the LADD is defined as follows:

$$LADD = C_t \times ([IR + SA \times AF \times DAF] \times CF \times FI \times EF \times ED)/(BW \times AT_c) \quad \text{(J-2)}$$

where:

C_t	=	surface sediment concentration (mg/kg)
ED	=	Exposure duration (years)
EF	=	Exposure frequency (days/year)
IR	=	Sediment ingestion rate (kg/day)
SA	=	Surface area of exposed skin (cm^2/day)
DAF	=	Dermal absorption factor (unitless)
AF	=	Adherence factor (mg/ cm^2)
FI	=	Fraction ingested from source (unitless)
CF	=	Conversion factor (kg/mg)
BW	=	Body weight (kg)
AT_c	=	Averaging time for carcinogenic effects (70 years × 365 days/year).

Intake of constituents that produce noncarcinogenic effects is averaged over the period of exposure (ED × 365 days/year). The intake factor for exposure durations equal to or longer than 7 years is termed the chronic average daily dose (ADD). The equation to calculate ADD is as follows:

$$ADD = C_t \times (IR \times FI \times EF \times ED)/(BW \times AT_{nc}) \quad \text{(J-3)}$$

where:

C_t	=	*M. nasuta* tissue concentration (mg/kg)
ED	=	Exposure duration (years)
EF	=	Exposure frequency (days/year)
IR	=	Ingestion rate (kg/day)
FI	=	Fraction ingested from source (unitless)
BW	=	Body weight (kg)
AT_{nc}	=	Averaging time for noncarcinogenic effects (ED × 365 days/year).

For sediment exposures, the ADD is defined as follows:

$$LADD = C_t \times ([IR + SA \times AF \times DAF] \times CF \times FI \times EF \times ED)/(BW \times AT_{nc}) \quad \text{(J-4)}$$

where:

C_t	=	surface sediment concentration (mg/kg)
ED	=	Exposure duration (years)
EF	=	Exposure frequency (days/year)
IR	=	Sediment ingestion rate (kg/day)
SA	=	Surface area of exposed skin (cm^2/day)
DAF	=	Dermal absorption factor (unitless)
AF	=	Adherence factor (mg/ cm^2)
FI	=	Fraction ingested from source (unitless)
CF	=	Conversion factor (kg/mg)
BW	=	Body weight (kg)
AT_{nc}	=	Averaging time for noncarcinogenic effects (70 years × 365 days/year).

J.3 TOXICITY ASSESSMENT

The toxicity assessment provides a review of available information to identify the nature and degree of toxicity and to characterize the relationship between the magnitude of exposure and the magnitude of potential adverse health effects on receptors for each COPC. For the purpose of this assessment, COPC are evaluated as carcinogens and/or noncarcinogens.

J.3.1 Carcinogenic Effects

Carcinogens are agents that induce cancer. Numerical estimates of cancer potency are presented as cancer slope factors (CSFs). The CSF defines the cancer risk due to constant lifetime exposure (24 hours a day for 365 days per year) to one unit of carcinogen (in units of risk per mg/kg/day). CSFs are derived by calculating the 95% UCL on the slope of the linearized portion of the dose-response curve obtained from a multistage (nonlinear) cancer model. Use of the 95% UCL of the slope means that there is only a 5% chance that the probability of a response could be greater then the estimated value for the experimental data used. This is a conservative approach and is likely to overestimate the actual risk given that

the actual risk is expected to be between zero and the calculated value. Carcinogenic slope factors assume no threshold for effects such that exposure to any level of concentration is likely to produce a carcinogenic effect.

Each CSF is accompanied by the associated U.S. EPA WOE classification. The classification describes the likelihood, based on the weight of evidence, that a chemical will cause cancer in humans. Classifications are developed using the approach detailed in the *Guidelines for Carcinogen Risk Assessment* [51 FR 33992]). The five general classifications currently used by the U.S. EPA are listed below:

> **Group A - Human Carcinogen.** Sufficient evidence from human epidemiological studies exists to support a causal association between exposure and cancer.
>
> **Group B - Probable Human Carcinogen.** This group consists of (1) compounds for which limited evidence of carcinogenicity in humans exists based on epidemiological studies (B1 carcinogens), and (2) compounds for which sufficient evidence of carcinogenicity in animals exists; however, adequate evidence of carcinogenicity in humans is not available (B2 carcinogens).
>
> **Group C - Possible Human Carcinogen.** This includes those compounds for which there is limited evidence of carcinogenicity in animals.
>
> **Group D - Not Classifiable as a Human Carcinogen.** This includes those compounds for which there is inadequate animal evidence of carcinogenicity.
>
> **Group E - Evidence of Noncarcinogenicity in Humans.** This includes compounds for which there is no evidence for carcinogenicity in at least two adequate animal test in difference species, or in both adequate epidemiological and animal studies.

The majority of the COPCs at HPS were classified as Class B2 carcinogen based on animal studies.

J.3.2 Noncarcinogenic Effects

Noncarcinogenic effects were evaluated using reference doses (RfDs) developed by the U.S. EPA. RfDs are expressed as acceptable daily doses in milligrams of compound per kilogram of body weight per day (mg/kg-day). The RfD is a health-based criterion based on the assumption that thresholds exist for non-carcinogenic toxic effects (e.g., liver or kidney damage) based on a length of time of exposure (chronic and subchronic). In general, the chronic RfD is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime of exposure (U.S. EPA, 1989). Chronic RfDs are specifically developed to be protective for long-term exposure between 7 years and a lifetime to a compound. Chronic RfDs were used in this assessment to evaluate the noncarcinogenic effects associated with exposure to site-related COPCs. are presented for each COPC, as appropriate, in Table 9-3.

J.4 RISK CHARACTERIZATION

Risk characterization involves the estimating the magnitude of the potential adverse health effects of the hazardous chemicals under investigation and making summary judgments about the nature of the human health threat to the defined receptor populations. It combines the results of the dose-response (toxicity) and exposure assessment. During the risk characterization, estimates of cancer risk and the potential for noncarcinogenic effects are determined.

J.4.1 Estimation of Cancer Risk

The excess cancer risk was estimated using the following linear dose-response relation where risk is directly related to intake (U.S. EPA, 1989):

$$\text{Risk} = \text{CSF} \times \text{LADD} \tag{J-5}$$

where:

Risk	=	Excess lifetime cancer risk (probability)
CSF	=	Cancer Slope Factor $(\text{mg/kg-day})^{-1}$
LADD	=	Lifetime average daily dose (mg/kg-day).

Only LADDs are used in conjunction with cancer slope factors to obtain excess lifetime cancer risk estimates as slope factors are based on average lifetime exposures. Slope factors are derived for specific routes of exposure, so only oral toxicity values were applied in this assessment. Cancer risks from exposure to multiple carcinogens were assumed to be additive (U.S. EPA, 1989).

Risks are estimated as probabilities for constituents, which elicit a carcinogenic response. The excess lifetime cancer risk is the incremental increase in the probability of getting cancer compared to the reference probability or that with no exposure to HPS COPCs. A risk of 1×10^{-6} for example, represents the probability that one person in one million persons exposed to a carcinogen over a lifetime (70 years) will develop cancer.

J.4.2 Estimation of Noncarcinogenic Hazard Quotients

The potential for noncarcinogenic health effects is estimated by comparing average daily dose (ADD) of a compound with the chronic reference dose (RfD) based on the oral route of exposure. The ratio of the intake to reference dose (ADD/RfD) for an individual chemical is termed the hazard quotient (HQ). A HQ greater than benchmark of 1 indicates the potential for adverse health effects, as the RfD is exceeded by the intake (U.S. EPA, 1986). These ratios are calculated for each chemical that elicits a noncarcinogenic health effect when an oral RfD is available for the chemical. HQs less then the benchmark hazard level indicate that no adverse health effects are predicted from exposure to COPCs at HPS for future residents and current recreational users. HQs greater than one indicate that exposure to that contaminant may cause adverse health effects in exposed populations. It is important to note, however, that the level of concern associated with exposure to noncarcinogenic compounds does not increase linearly as the HQ exceed 1.

Typically, chemical-specific HQs are summed to calculate pathway hazard index (HI) values. The HI is calculated by summing all HQs for all noncarcinogenic constituents through an exposure pathway:

$$\begin{aligned} \text{HI} &= \text{HQ}_1 + \text{HQ}_2 + \ldots + \text{HQ}_j \\ &= (\text{ADD}_1/\text{RfD}_1) + (\text{ADD}_2/\text{RfD}_2) + \ldots + (\text{ADD}_j/\text{RfD}_j) \end{aligned} \tag{J-6}$$

where:

HQ_j	=	Hazard quotient of the jth chemical
ADD_j	=	Average daily dose of the jth chemical
RfD_j	=	Reference dose for the jth chemical.

This approach can result in the situation where HI values exceed 1 even when no chemical-specific HQs exceeds one (i.e., adverse systemic health effects would be expected to occur only if the receptor were exposed to several contaminants simultaneously). In this case, chemicals are segregated by similar effect on a target organ, and a separate HI value for each effect/target organ is calculated (U.S. EPA, 1989). If any of the separate HI values exceed one, adverse, noncarcinogenic health effects are possible.

Table J-1a. Summary of *M. nasuta* Tissue Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
Eastern Wetland Area	2,4'-DDD	0	8	0%	1.00E-05	4.50E-05	2.75E-05	1.41E-05
	2,4'-DDE	0	8	0%	3.50E-05	5.50E-05	4.25E-05	8.02E-06
	2,4'-DDT	0	8	0%	1.50E-05	5.50E-05	3.31E-05	1.65E-05
	2-Methylnaphthalene	0	8	0%	6.00E-05	1.35E-04	1.10E-04	2.59E-05
	Acenaphthene	6	8	75%	2.50E-05	2.80E-04	1.70E-04	8.22E-05
	Acenaphthylene	6	8	75%	3.50E-05	4.10E-04	2.34E-04	1.15E-04
	a-Chlordane	8	8	100%	3.00E-05	2.20E-04	1.39E-04	5.87E-05
	Ag	4	8	50%	1.25E-02	6.00E-02	2.68E-02	1.57E-02
	Al	8	8	100%	1.18E+02	3.26E+02	2.09E+02	7.48E+01
	Anthracene	7	8	88%	1.00E-04	3.19E-03	1.43E-03	8.94E-04
	As	8	8	100%	3.02E+00	5.02E+00	3.81E+00	7.16E-01
	Ba	8	8	100%	1.25E+00	3.08E+00	1.99E+00	6.21E-01
	Benzo(a)anthracene	7	8	88%	2.60E-04	5.51E-03	3.00E-03	1.50E-03
	Benzo(a)pyrene	8	8	100%	6.20E-04	4.47E-03	3.25E-03	1.20E-03
	Benzo(b)fluoranthene	8	8	100%	5.70E-04	5.25E-03	4.00E-03	1.55E-03
	Benzo(g,h,i)perylene	7	8	88%	2.05E-04	4.37E-03	2.79E-03	1.32E-03
	Benzo(k)fluoranthene	8	8	100%	8.80E-04	5.05E-03	3.90E-03	1.40E-03
	Cd	8	8	100%	3.40E-02	2.32E-01	7.24E-02	6.78E-02
	Chrysene	8	8	100%	7.90E-04	8.44E-03	4.68E-03	2.19E-03
	Co	8	8	100%	2.54E-01	4.80E-01	3.54E-01	6.82E-02
	Cr	8	8	100%	1.28E+00	3.75E+00	2.21E+00	7.83E-01
	Cu	8	8	100%	1.53E+00	5.02E+00	2.83E+00	1.37E+00
	DBT	8	8	100%	1.02E-03	1.66E-03	1.39E-03	1.80E-04
	Dibenz(a,h)anthracene	6	8	75%	1.00E-05	2.40E-04	1.51E-04	9.22E-05
	Dieldrin	8	8	100%	3.00E-05	4.50E-04	2.30E-04	1.37E-04
	Endosulfan II	0	8	0%	2.00E-05	4.00E-05	3.00E-05	8.02E-06
	Endrin	0	8	0%	5.00E-06	3.50E-05	2.13E-05	1.27E-05
	Fe	8	8	100%	2.06E+02	4.15E+02	3.16E+02	7.19E+01
	Fluoranthene	8	8	100%	2.29E-03	2.05E-02	1.13E-02	5.40E-03
	Fluorene	6	8	75%	3.50E-05	4.00E-04	2.77E-04	1.34E-04
	g-Chlordane	8	8	100%	4.00E-05	2.20E-04	1.40E-04	5.18E-05
	Heptachlor	0	8	0%	1.00E-05	3.50E-05	2.25E-05	9.64E-06
	Hg	4	8	50%	1.05E-02	3.10E-02	1.81E-02	7.52E-03
	Indeno(1,2,3-cd)pyrene	7	8	88%	9.50E-05	2.30E-03	1.49E-03	6.92E-04
	MBT	1	8	13%	8.70E-04	6.34E-03	2.96E-03	1.53E-03
	Mn	8	8	100%	2.83E+00	5.71E+00	4.61E+00	9.22E-01
	Mo	8	8	100%	3.44E-01	7.82E-01	5.00E-01	1.44E-01
	Naphthalene	0	8	0%	1.95E-04	5.45E-04	3.21E-04	1.09E-04
	Ni	8	8	100%	7.83E-01	1.60E+00	1.17E+00	2.98E-01
	Pb	8	8	100%	2.97E-01	8.98E-01	5.46E-01	2.53E-01
	Phenanthrene	7	8	88%	1.85E-04	3.14E-03	1.90E-03	9.04E-04
	Pyrene	8	8	100%	2.39E-03	1.64E-02	1.16E-02	4.35E-03
	Sb	8	8	100%	1.60E-02	5.00E-02	2.99E-02	1.35E-02
	Se	8	8	100%	6.70E-01	9.44E-01	8.00E-01	1.01E-01
	TBT	8	8	100%	2.86E-03	4.89E-03	4.13E-03	6.77E-04
	Total Congeners	8	8	100%	4.14E-03	6.47E-02	3.37E-02	1.98E-02
	Total Dioxin	2	2	100%	4.32E-04	4.46E-04	4.39E-04	---
	TTBT	0	8	0%	5.34E-03	1.44E-02	7.17E-03	3.00E-03
	V	8	8	100%	7.91E-01	1.55E+00	1.17E+00	2.23E-01
	Zn	8	8	100%	1.25E+01	2.63E+01	1.83E+01	4.37E+00

Table J-1a. Summary of *M. nasuta* Tissue Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
India Basin Area I	2,4'-DDD	0	6	0%	1.00E-05	4.00E-05	2.75E-05	1.41E-05
	2,4'-DDE	0	6	0%	3.50E-05	5.50E-05	4.33E-05	8.16E-06
	2,4'-DDT	0	6	0%	1.50E-05	5.00E-05	3.50E-05	1.58E-05
	2-Methylnaphthalene	0	6	0%	8.50E-05	2.30E-04	1.45E-04	5.94E-05
	Acenaphthene	4	6	67%	6.50E-05	4.30E-04	2.57E-04	1.45E-04
	Acenaphthylene	4	6	67%	1.25E-04	8.70E-04	4.63E-04	2.86E-04
	a-Chlordane	5	6	83%	1.00E-05	3.00E-04	1.68E-04	1.04E-04
	Ag	3	6	50%	1.65E-02	2.21E-01	5.45E-02	8.18E-02
	Al	6	6	100%	1.02E+02	3.55E+02	2.35E+02	1.06E+02
	Anthracene	6	6	100%	1.46E-03	1.01E-02	3.99E-03	3.18E-03
	As	6	6	100%	2.92E+00	3.63E+00	3.23E+00	2.91E-01
	Ba	6	6	100%	1.23E+00	3.72E+00	2.24E+00	9.11E-01
	Benzo(a)anthracene	6	6	100%	2.94E-03	1.81E-02	7.30E-03	5.51E-03
	Benzo(a)pyrene	6	6	100%	3.08E-03	1.02E-02	5.64E-03	2.68E-03
	Benzo(b)fluoranthene	6	6	100%	3.20E-03	1.40E-02	6.92E-03	3.72E-03
	Benzo(g,h,i)perylene	6	6	100%	1.85E-03	4.83E-03	3.21E-03	1.02E-03
	Benzo(k)fluoranthene	6	6	100%	4.03E-03	1.36E-02	6.77E-03	3.58E-03
	Cd	6	6	100%	3.10E-02	5.60E-02	3.98E-02	9.28E-03
	Chrysene	6	6	100%	4.74E-03	2.37E-02	9.80E-03	7.03E-03
	Co	6	6	100%	2.28E-01	3.86E-01	3.19E-01	6.50E-02
	Cr	6	6	100%	8.04E-01	1.89E+00	1.30E+00	3.78E-01
	Cu	6	6	100%	1.47E+00	2.50E+00	2.09E+00	3.93E-01
	DBT	6	6	100%	9.20E-04	2.04E-03	1.44E-03	4.24E-04
	Dibenz(a,h)anthracene	3	6	50%	1.00E-05	4.20E-04	1.82E-04	1.98E-04
	Dieldrin	6	6	100%	1.30E-04	5.10E-04	2.30E-04	1.44E-04
	Endosulfan II	0	6	0%	2.00E-05	4.00E-05	3.00E-05	8.37E-06
	Endrin	0	6	0%	5.00E-06	3.50E-05	2.17E-05	1.33E-05
	Fe	6	6	100%	1.93E+02	4.09E+02	2.92E+02	7.93E+01
	Fluoranthene	6	6	100%	1.03E-02	6.10E-02	2.43E-02	1.85E-02
	Fluorene	4	6	67%	8.50E-05	6.20E-04	3.38E-04	1.96E-04
	g-Chlordane	6	6	100%	6.00E-05	2.90E-04	1.45E-04	7.92E-05
	Heptachlor	0	6	0%	1.00E-05	3.50E-05	2.33E-05	1.08E-05
	Hg	3	6	50%	1.00E-02	2.10E-02	1.55E-02	5.04E-03
	Indeno(1,2,3-cd)pyrene	6	6	100%	8.30E-04	3.20E-03	1.99E-03	8.04E-04
	MBT	0	6	0%	2.36E-03	2.94E-03	2.64E-03	2.15E-04
	Mn	6	6	100%	2.35E+00	5.37E+00	3.53E+00	1.13E+00
	Mo	6	6	100%	3.63E-01	4.69E-01	4.20E-01	4.25E-02
	Naphthalene	0	6	0%	2.60E-04	9.15E-04	4.48E-04	2.46E-04
	Ni	6	6	100%	8.43E-01	2.86E+00	1.33E+00	7.55E-01
	Pb	6	6	100%	3.01E-01	4.46E-01	3.74E-01	5.37E-02
	Phenanthrene	6	6	100%	1.22E-03	4.45E-03	2.43E-03	1.16E-03
	Pyrene	6	6	100%	1.30E-02	6.71E-02	2.77E-02	1.99E-02
	Sb	6	6	100%	1.60E-02	2.80E-02	2.02E-02	4.07E-03
	Se	6	6	100%	4.82E-01	8.24E-01	6.72E-01	1.46E-01
	TBT	6	6	100%	2.89E-03	9.97E-03	5.18E-03	2.50E-03
	Total Congeners	6	6	100%	8.72E-03	2.00E-02	1.28E-02	5.30E-03
	TTBT	0	6	0%	5.36E-03	6.70E-03	6.01E-03	4.93E-04
	V	6	6	100%	6.96E-01	1.43E+00	1.03E+00	2.70E-01
	Zn	6	6	100%	1.05E+01	2.00E+01	1.49E+01	3.33E+00

Table J-1a. Summary of *M. nasuta* Tissue Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
Oil Reclamation Area	2,4'-DDD	0	23	0%	1.00E-05	6.00E-05	3.43E-05	1.16E-05
	2,4'-DDE	0	23	0%	3.50E-05	7.00E-05	4.59E-05	1.02E-05
	2,4'-DDT	0	23	0%	1.50E-05	7.00E-05	4.11E-05	1.32E-05
	2-Methylnaphthalene	2	23	9%	1.30E-04	6.50E-04	2.09E-04	1.12E-04
	Acenaphthene	16	23	70%	8.50E-05	1.01E-03	2.37E-04	1.91E-04
	Acenaphthylene	17	23	74%	1.10E-04	9.00E-04	4.03E-04	2.15E-04
	a-Chlordane	23	23	100%	9.00E-05	2.69E-03	6.12E-04	5.16E-04
	Ag	4	23	17%	3.50E-03	4.10E-02	2.25E-02	1.01E-02
	Al	23	23	100%	3.14E+01	4.59E+02	2.54E+02	9.51E+01
	Anthracene	23	23	100%	4.70E-04	3.40E-03	1.60E-03	8.48E-04
	As	23	23	100%	2.00E+00	3.97E+00	3.24E+00	4.84E-01
	Ba	23	23	100%	4.67E-01	6.04E+00	2.62E+00	1.14E+00
	Benzo(a)anthracene	23	23	100%	3.90E-04	8.13E-03	4.55E-03	1.96E-03
	Benzo(a)pyrene	23	23	100%	4.40E-04	1.65E-02	6.75E-03	3.01E-03
	Benzo(b)fluoranthene	23	23	100%	6.30E-04	1.55E-02	7.81E-03	3.04E-03
	Benzo(g,h,i)perylene	23	23	100%	4.30E-04	9.65E-03	4.75E-03	1.86E-03
	Benzo(k)fluoranthene	23	23	100%	6.20E-04	1.65E-02	8.66E-03	3.28E-03
	Cd	23	23	100%	2.50E-02	8.40E-02	4.45E-02	1.50E-02
	Chrysene	23	23	100%	1.95E-03	1.66E-02	7.48E-03	3.74E-03
	Co	23	23	100%	1.47E-01	4.80E-01	3.25E-01	8.08E-02
	Cr	23	23	100%	4.60E-01	3.52E+00	1.74E+00	7.32E-01
	Cu	23	23	100%	2.07E+00	4.43E+00	3.20E+00	6.91E-01
	DBT	21	23	91%	1.03E-03	9.61E-03	2.68E-03	2.06E-03
	Dibenz(a,h)anthracene	20	23	87%	1.00E-05	9.40E-04	3.37E-04	2.19E-04
	Dieldrin	21	23	91%	3.00E-05	4.69E-03	9.40E-04	9.66E-04
	Endosulfan II	0	23	0%	2.00E-05	5.50E-05	3.35E-05	8.85E-06
	Endrin	0	23	0%	5.00E-06	4.50E-05	2.78E-05	9.98E-06
	Fe	23	23	100%	1.07E+02	6.28E+02	3.43E+02	1.08E+02
	Fluoranthene	23	23	100%	3.25E-03	5.39E-02	1.79E-02	1.30E-02
	Fluorene	18	23	78%	9.00E-05	6.50E-04	3.01E-04	1.67E-04
	g-Chlordane	23	23	100%	9.00E-05	3.74E-03	8.50E-04	7.35E-04
	Heptachlor	0	23	0%	1.00E-05	4.50E-05	2.72E-05	8.37E-06
	Hg	19	23	83%	1.15E-02	3.10E-02	2.15E-02	5.35E-03
	Indeno(1,2,3-cd)pyrene	23	23	100%	1.90E-04	7.30E-03	3.10E-03	1.56E-03
	MBT	0	23	0%	2.29E-03	3.94E-03	2.74E-03	4.46E-04
	Mn	23	23	100%	2.20E+00	6.72E+00	3.92E+00	1.25E+00
	Mo	23	23	100%	3.04E-01	5.63E-01	4.35E-01	6.64E-02
	Naphthalene	1	23	4%	2.90E-04	1.98E-03	5.44E-04	3.47E-04
	Ni	23	23	100%	3.51E-01	1.84E+00	1.21E+00	3.60E-01
	Pb	23	23	100%	3.76E-01	2.35E+00	1.15E+00	4.45E-01
	Phenanthrene	21	23	91%	9.70E-04	6.50E-03	2.55E-03	1.47E-03
	Pyrene	21	23	91%	2.80E-03	8.08E-02	2.27E-02	1.64E-02
	Sb	23	23	100%	1.90E-02	2.31E-01	4.41E-02	4.33E-02
	Se	23	23	100%	3.47E-01	9.33E-01	6.88E-01	1.60E-01
	TBT	23	23	100%	2.11E-03	3.41E-02	9.00E-03	8.07E-03
	Total Congeners	23	23	100%	1.01E-01	6.61E-01	2.67E-01	1.52E-01
	Total Dioxin	2	2	100%	4.15E-04	8.97E-04	6.56E-04	---
	TTBT	0	23	0%	5.21E-03	8.97E-03	6.25E-03	1.02E-03
	V	23	23	100%	4.05E-01	1.84E+00	1.08E+00	3.47E-01
	Zn	23	23	100%	9.91E+00	2.40E+01	1.69E+01	4.03E+00

Table J-1a. Summary of *M. nasuta* Tissue Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
Point Avisadero Area	2,4'-DDD	0	16	0%	1.00E-05	5.50E-05	3.25E-05	1.25E-05
	2,4'-DDE	0	16	0%	3.00E-05	7.00E-05	4.41E-05	1.07E-05
	2,4'-DDT	0	16	0%	1.50E-05	6.50E-05	3.88E-05	1.40E-05
	2-Methylnaphthalene	0	16	0%	8.00E-05	2.35E-04	1.47E-04	4.04E-05
	Acenaphthene	15	16	94%	1.00E-04	4.90E-04	2.63E-04	8.36E-05
	Acenaphthylene	15	16	94%	1.55E-04	6.90E-04	4.57E-04	1.44E-04
	a-Chlordane	15	16	94%	1.00E-05	1.60E-04	1.07E-04	3.74E-05
	Ag	3	16	19%	9.50E-03	4.50E-02	1.75E-02	8.38E-03
	Al	16	16	100%	1.94E+02	4.48E+02	2.83E+02	7.45E+01
	Anthracene	16	16	100%	1.06E-03	5.02E-03	2.65E-03	1.22E-03
	As	16	16	100%	2.61E+00	3.89E+00	3.38E+00	3.44E-01
	Ba	16	16	100%	1.93E+00	4.87E+00	2.91E+00	9.37E-01
	Benzo(a)anthracene	16	16	100%	1.78E-03	9.81E-03	4.86E-03	2.20E-03
	Benzo(a)pyrene	16	16	100%	1.92E-03	7.10E-03	4.84E-03	1.34E-03
	Benzo(b)fluoranthene	16	16	100%	2.01E-03	7.07E-03	4.72E-03	1.31E-03
	Benzo(g,h,i)perylene	16	16	100%	1.19E-03	4.63E-03	2.73E-03	9.40E-04
	Benzo(k)fluoranthene	16	16	100%	2.69E-03	8.25E-03	5.57E-03	1.55E-03
	Cd	16	16	100%	3.00E-02	6.30E-02	4.58E-02	8.87E-03
	Chrysene	16	16	100%	2.60E-03	1.25E-02	6.67E-03	2.66E-03
	Co	16	16	100%	2.97E-01	4.87E-01	4.01E-01	5.39E-02
	Cr	16	16	100%	8.33E-01	5.28E+00	2.67E+00	1.43E+00
	Cu	16	16	100%	1.71E+00	3.21E+01	6.58E+00	7.78E+00
	DBT	16	16	100%	1.20E-03	2.00E-02	5.83E-03	5.36E-03
	Dibenz(a,h)anthracene	14	16	88%	1.00E-05	3.10E-04	1.78E-04	8.25E-05
	Dieldrin	12	16	75%	2.50E-05	3.00E-04	1.26E-04	7.21E-05
	Endosulfan II	0	16	0%	2.00E-05	5.00E-05	3.22E-05	8.56E-06
	Endrin	0	16	0%	5.00E-06	4.50E-05	2.59E-05	1.08E-05
	Fe	16	16	100%	2.84E+02	6.33E+02	4.35E+02	1.14E+02
	Fluoranthene	16	16	100%	7.20E-03	3.08E-02	1.74E-02	6.48E-03
	Fluorene	15	16	94%	1.30E-04	7.00E-04	3.89E-04	1.41E-04
	g-Chlordane	14	16	88%	2.00E-05	1.90E-04	1.08E-04	5.25E-05
	Heptachlor	0	16	0%	1.00E-05	4.50E-05	2.63E-05	9.40E-06
	Hg	13	16	81%	1.00E-02	6.63E-01	8.71E-02	1.66E-01
	Indeno(1,2,3-cd)pyrene	16	16	100%	6.00E-04	3.66E-03	1.71E-03	8.34E-04
	MBT	2	16	13%	1.34E-03	5.49E-03	2.61E-03	8.72E-04
	Mn	16	16	100%	3.49E+00	1.00E+01	6.52E+00	2.24E+00
	Mo	16	16	100%	3.22E-01	5.48E-01	4.29E-01	5.91E-02
	Naphthalene	0	16	0%	2.15E-04	6.25E-04	4.03E-04	1.18E-04
	Ni	16	16	100%	1.01E+00	2.25E+00	1.38E+00	3.26E-01
	Pb	16	16	100%	2.91E-01	9.26E-01	4.74E-01	1.65E-01
	Phenanthrene	15	16	94%	9.90E-04	5.87E-03	2.74E-03	1.22E-03
	Pyrene	15	16	94%	8.79E-03	3.81E-02	2.09E-02	8.37E-03
	Sb	16	16	100%	1.70E-02	3.80E-02	2.35E-02	5.70E-03
	Se	16	16	100%	4.32E-01	9.22E-01	6.48E-01	1.46E-01
	TBT	16	16	100%	4.80E-03	2.09E-01	5.59E-02	5.64E-02
	Total Congeners	16	16	100%	7.08E-03	6.59E-02	1.92E-02	1.57E-02
	TTBT	0	16	0%	5.44E-03	1.25E-02	6.22E-03	1.73E-03
	V	16	16	100%	8.83E-01	1.95E+00	1.39E+00	3.46E-01
	Zn	16	16	100%	1.21E+01	2.12E+01	1.69E+01	2.50E+00

Table J-1a. Summary of *M. nasuta* Tissue Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
South Basin Area X	2,4'-DDD	0	23	0%	1.00E-05	6.00E-05	3.43E-05	1.16E-05
	2,4'-DDE	0	23	0%	3.50E-05	7.00E-05	4.59E-05	1.02E-05
	2,4'-DDT	0	23	0%	1.50E-05	7.00E-05	4.11E-05	1.32E-05
	2-Methylnaphthalene	2	23	9%	1.30E-04	6.50E-04	2.09E-04	1.12E-04
	Acenaphthene	16	23	70%	8.50E-05	1.01E-03	2.37E-04	1.91E-04
	Acenaphthylene	17	23	74%	1.10E-04	9.00E-04	4.03E-04	2.15E-04
	a-Chlordane	23	23	100%	9.00E-05	2.69E-03	6.12E-04	5.16E-04
	Ag	4	23	17%	3.50E-03	4.10E-02	2.25E-02	1.01E-02
	Al	23	23	100%	3.14E+01	4.59E+02	2.54E+02	9.51E+01
	Anthracene	23	23	100%	4.70E-04	3.40E-03	1.60E-03	8.48E-04
	As	23	23	100%	2.00E+00	3.97E+00	3.24E+00	4.84E-01
	Ba	23	23	100%	4.67E-01	6.04E+00	2.62E+00	1.14E+00
	Benzo(a)anthracene	23	23	100%	3.90E-04	8.13E-03	4.55E-03	1.96E-03
	Benzo(a)pyrene	23	23	100%	4.40E-04	1.65E-02	6.75E-03	3.01E-03
	Benzo(b)fluoranthene	23	23	100%	6.30E-04	1.55E-02	7.81E-03	3.04E-03
	Benzo(g,h,i)perylene	23	23	100%	4.30E-04	9.65E-03	4.75E-03	1.86E-03
	Benzo(k)fluoranthene	23	23	100%	6.20E-04	1.65E-02	8.66E-03	3.28E-03
	Cd	23	23	100%	2.50E-02	8.40E-02	4.45E-02	1.50E-02
	Chrysene	23	23	100%	1.95E-03	1.66E-02	7.48E-03	3.74E-03
	Co	23	23	100%	1.47E-01	4.80E-01	3.25E-01	8.08E-02
	Cr	23	23	100%	4.60E-01	3.52E+00	1.74E+00	7.32E-01
	Cu	23	23	100%	2.07E+00	4.43E+00	3.20E+00	6.91E-01
	DBT	21	23	91%	1.03E-03	9.61E-03	2.68E-03	2.06E-03
	Dibenz(a,h)anthracene	20	23	87%	1.00E-05	9.40E-04	3.37E-04	2.19E-04
	Dieldrin	21	23	91%	3.00E-05	4.69E-03	9.40E-04	9.66E-04
	Endosulfan II	0	23	0%	2.00E-05	5.50E-05	3.35E-05	8.85E-06
	Endrin	0	23	0%	5.00E-06	4.50E-05	2.78E-05	9.98E-06
	Fe	23	23	100%	1.07E+02	6.28E+02	3.43E+02	1.08E+02
	Fluoranthene	23	23	100%	3.25E-03	5.39E-02	1.79E-02	1.30E-02
	Fluorene	18	23	78%	9.00E-05	6.50E-04	3.01E-04	1.67E-04
	g-Chlordane	23	23	100%	9.00E-05	3.74E-03	8.50E-04	7.35E-04
	Heptachlor	0	23	0%	1.00E-05	4.50E-05	2.72E-05	8.37E-06
	Hg	19	23	83%	1.15E-02	3.10E-02	2.15E-02	5.35E-03
	Indeno(1,2,3-cd)pyrene	23	23	100%	1.90E-04	7.30E-03	3.10E-03	1.56E-03
	MBT	0	23	0%	2.29E-03	3.94E-03	2.74E-03	4.46E-04
	Mn	23	23	100%	2.20E+00	6.72E+00	3.92E+00	1.25E+00
	Mo	23	23	100%	3.04E-01	5.63E-01	4.35E-01	6.64E-02
	Naphthalene	1	23	4%	2.90E-04	1.98E-03	5.44E-04	3.47E-04
	Ni	23	23	100%	3.51E-01	1.84E+00	1.21E+00	3.60E-01
	Pb	23	23	100%	3.76E-01	2.35E+00	1.15E+00	4.45E-01
	Phenanthrene	21	23	91%	9.70E-04	6.50E-03	2.55E-03	1.47E-03
	Pyrene	21	23	91%	2.80E-03	8.08E-02	2.27E-02	1.64E-02
	Sb	23	23	100%	1.90E-02	2.31E-01	4.41E-02	4.33E-02
	Se	23	23	100%	3.47E-01	9.33E-01	6.88E-01	1.60E-01
	TBT	23	23	100%	2.11E-03	3.41E-02	9.00E-03	8.07E-03
	Total Congeners	23	23	100%	1.01E-01	6.61E-01	2.67E-01	1.52E-01
	Total Dioxin	2	2	100%	5.08E-04	1.04E-03	7.72E-04	---
	TTBT	0	23	0%	5.21E-03	8.97E-03	6.25E-03	1.02E-03
	V	23	23	100%	4.05E-01	1.84E+00	1.08E+00	3.47E-01
	Zn	23	23	100%	9.91E+00	2.40E+01	1.69E+01	4.03E+00

Note: all concentrations are presented on wet weight basis

Table J-1b. Summary of Surface Sediment Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
Eastern Wetland Area	a-Chlordane	3	8	38%	2.50E-05	1.50E-04	6.69E-05	5.91E-05
	g-Chlordane	1	8	13%	2.00E-05	5.00E-05	3.19E-05	1.13E-05
	DBT	3	8	38%	6.00E-04	5.36E-03	2.14E-03	2.13E-03
	Dieldrin	0	8	0%	3.00E-05	6.00E-05	4.06E-05	1.37E-05
	Endosulfan II	0	8	0%	3.00E-05	6.00E-05	4.06E-05	1.37E-05
	Endrin	0	8	0%	3.00E-05	5.50E-05	3.81E-05	1.16E-05
	Heptachlor	0	8	0%	2.50E-05	5.00E-05	3.38E-05	1.13E-05
	Total Congeners	8	8	100%	6.25E-03	2.70E-02	1.36E-02	6.53E-03
	2,4'-DDD	0	8	0%	3.50E-05	6.50E-05	4.50E-05	1.41E-05
	2,4'-DDE	0	8	0%	4.00E-05	8.00E-05	5.44E-05	1.88E-05
	2,4'-DDT	0	8	0%	4.00E-05	7.50E-05	5.25E-05	1.63E-05
	2-Methylnaphthalene	8	8	100%	1.59E-03	6.39E-03	3.59E-03	1.94E-03
	4,4'-DDD	6	8	75%	3.00E-05	1.03E-03	4.61E-04	4.09E-04
	4,4'-DDE	8	8	100%	2.00E-04	1.19E-03	5.89E-04	4.24E-04
	4,4'-DDT	3	8	38%	3.00E-05	5.30E-04	1.40E-04	1.87E-04
	Acenaphthene	8	8	100%	6.80E-04	6.24E-03	2.77E-03	2.41E-03
	Acenaphthylene	8	8	100%	1.09E-03	8.54E-03	4.57E-03	3.00E-03
	Ag	7	8	88%	3.30E-02	3.97E-01	1.87E-01	1.39E-01
	Al	8	8	100%	4.20E+04	7.49E+04	5.51E+04	1.34E+04
	Anthracene	8	8	100%	2.91E-03	4.32E-02	2.05E-02	1.70E-02
	As	8	8	100%	5.18E+00	1.11E+01	8.12E+00	2.34E+00
	Ba	8	8	100%	3.32E+02	4.58E+02	3.92E+02	4.91E+01
	Benzo(a)anthracene	8	8	100%	1.09E-02	1.28E-01	6.12E-02	4.79E-02
	Benzo(a)pyrene	8	8	100%	2.16E-02	1.97E-01	9.64E-02	6.99E-02
	Benzo(b)fluoranthene	8	8	100%	1.36E-02	1.18E-01	5.90E-02	4.38E-02
	Benzo(g,h,i)perylene	8	8	100%	2.11E-02	1.66E-01	8.35E-02	6.09E-02
	Benzo(k)fluoranthene	8	8	100%	1.56E-02	1.29E-01	6.30E-02	4.49E-02
	Cd	8	8	100%	1.84E-01	2.71E-01	2.34E-01	3.75E-02
	Chrysene	8	8	100%	1.64E-02	1.56E-01	7.47E-02	5.69E-02
	Co	8	8	100%	1.27E+01	1.88E+01	1.55E+01	2.81E+00
	Cr	8	8	100%	1.58E+02	4.00E+02	2.36E+02	8.15E+01
	Cu	8	8	100%	1.20E+01	5.28E+01	3.11E+01	1.50E+01
	Dibenz(a,h)anthracene	8	8	100%	1.49E-03	1.56E-02	8.09E-03	6.08E-03
	Fe	8	8	100%	2.21E+04	4.65E+04	3.34E+04	8.96E+03
	Fluoranthene	8	8	100%	3.71E-02	2.76E-01	1.35E-01	9.44E-02
	Fluorene	8	8	100%	1.29E-03	8.61E-03	4.32E-03	3.03E-03
	Hg	8	8	100%	8.08E-02	2.86E-01	1.61E-01	8.62E-02
	Indeno(1,2,3-cd)pyrene	8	8	100%	1.72E-02	1.50E-01	7.45E-02	5.59E-02
	MBT	0	8	0%	3.17E-04	6.47E-04	4.33E-04	1.45E-04
	Mn	8	8	100%	4.28E+02	5.79E+02	4.95E+02	5.95E+01
	Mo	8	8	100%	3.81E-01	1.17E+00	7.38E-01	3.12E-01
	Naphthalene	6	8	75%	3.51E-03	1.60E-02	8.53E-03	4.84E-03
	Ni	8	8	100%	5.96E+01	9.75E+01	7.41E+01	1.63E+01
	Pb	8	8	100%	1.57E+01	2.98E+01	2.14E+01	4.96E+00
	Phenanthrene	8	8	100%	1.18E-02	1.33E-01	5.77E-02	4.61E-02
	Pyrene	8	8	100%	4.64E-02	3.59E-01	1.79E-01	1.25E-01
	Sb	8	8	100%	6.42E-01	3.64E+00	1.21E+00	1.01E+00
	Se	3	8	38%	6.30E-02	4.71E-01	1.87E-01	1.77E-01
	TBT	3	8	38%	4.27E-04	6.82E-03	2.48E-03	2.88E-03
	TTBT	0	8	0%	7.52E-04	1.53E-03	1.03E-03	3.44E-04
	V	8	8	100%	8.14E+01	1.62E+02	1.15E+02	3.53E+01
	Zn	8	8	100%	4.70E+01	1.27E+02	9.05E+01	2.69E+01

Table J-1b. Summary of Surface Sediment Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
India Basin Area I	a-Chlordane	6	6	100%	7.00E-05	5.00E-04	1.82E-04	1.72E-04
	g-Chlordane	1	6	17%	4.00E-05	1.40E-04	5.83E-05	4.01E-05
	DBT	1	6	17%	1.01E-03	1.09E-02	2.69E-03	4.00E-03
	Dieldrin	0	6	0%	5.00E-05	5.50E-05	5.33E-05	2.58E-06
	Endosulfan II	0	6	0%	5.00E-05	5.50E-05	5.33E-05	2.58E-06
	Endrin	0	6	0%	4.50E-05	5.00E-05	4.83E-05	2.58E-06
	Heptachlor	0	6	0%	4.50E-05	4.50E-05	4.50E-05	0.00E+00
	Total Congeners	6	6	100%	6.58E-03	7.11E-02	2.48E-02	2.71E-02
	2,4'-DDD	0	6	0%	5.50E-05	6.00E-05	5.83E-05	2.58E-06
	2,4'-DDE	0	6	0%	7.00E-05	7.50E-05	7.33E-05	2.58E-06
	2,4'-DDT	0	6	0%	6.50E-05	7.00E-05	6.83E-05	2.58E-06
	2-Methylnaphthalene	6	6	100%	6.17E-03	1.30E-02	8.00E-03	2.67E-03
	4,4'-DDD	6	6	100%	6.60E-04	1.92E-03	1.19E-03	4.44E-04
	4,4'-DDE	6	6	100%	8.90E-04	1.84E-03	1.27E-03	3.29E-04
	4,4'-DDT	5	6	83%	5.00E-05	8.30E-04	4.72E-04	2.91E-04
	Acenaphthene	6	6	100%	4.92E-03	1.18E-02	7.68E-03	2.47E-03
	Acenaphthylene	6	6	100%	7.36E-03	1.32E-02	1.03E-02	2.29E-03
	Ag	6	6	100%	2.53E-01	3.21E-01	2.79E-01	2.54E-02
	Al	6	6	100%	6.35E+04	7.25E+04	6.92E+04	3.51E+03
	Anthracene	6	6	100%	3.45E-02	2.28E-01	7.79E-02	7.41E-02
	As	6	6	100%	9.69E+00	1.14E+01	1.05E+01	5.82E-01
	Ba	6	6	100%	4.38E+02	5.33E+02	4.69E+02	3.28E+01
	Benzo(a)anthracene	6	6	100%	9.78E-02	2.36E-01	1.34E-01	5.34E-02
	Benzo(a)pyrene	6	6	100%	1.70E-01	2.99E-01	2.04E-01	4.99E-02
	Benzo(b)fluoranthene	6	6	100%	1.14E-01	2.65E-01	1.52E-01	5.77E-02
	Benzo(g,h,i)perylene	6	6	100%	1.50E-01	2.21E-01	1.70E-01	2.79E-02
	Benzo(k)fluoranthene	6	6	100%	1.05E-01	2.55E-01	1.44E-01	5.68E-02
	Cd	6	6	100%	2.00E-01	2.64E-01	2.25E-01	2.45E-02
	Chrysene	6	6	100%	1.26E-01	3.75E-01	1.87E-01	9.62E-02
	Co	6	6	100%	1.53E+01	2.14E+01	1.68E+01	2.32E+00
	Cr	6	6	100%	1.56E+02	3.19E+02	2.06E+02	7.08E+01
	Cu	6	6	100%	4.00E+01	1.17E+02	5.89E+01	3.00E+01
	Dibenz(a,h)anthracene	6	6	100%	1.67E-02	4.28E-02	2.41E-02	1.04E-02
	Fe	6	6	100%	3.98E+04	4.37E+04	4.18E+04	1.36E+03
	Fluoranthene	6	6	100%	2.18E-01	4.19E-01	2.72E-01	7.57E-02
	Fluorene	6	6	100%	8.45E-03	3.27E-02	1.46E-02	9.12E-03
	Hg	6	6	100%	2.41E-01	4.07E-01	3.12E-01	6.10E-02
	Indeno(1,2,3-cd)pyrene	6	6	100%	1.36E-01	2.24E-01	1.60E-01	3.34E-02
	MBT	0	6	0%	5.37E-04	5.89E-04	5.63E-04	2.31E-05
	Mn	6	6	100%	4.11E+02	4.50E+02	4.28E+02	1.45E+01
	Mo	6	6	100%	7.63E-01	1.63E+00	1.03E+00	3.23E-01
	Naphthalene	6	6	100%	1.22E-02	1.93E-02	1.42E-02	2.75E-03
	Ni	6	6	100%	8.36E+01	2.32E+02	1.26E+02	6.17E+01
	Pb	6	6	100%	2.16E+01	1.26E+02	4.11E+01	4.17E+01
	Phenanthrene	6	6	100%	7.88E-02	1.67E-01	1.11E-01	3.18E-02
	Pyrene	6	6	100%	2.89E-01	4.37E-01	3.32E-01	5.57E-02
	Sb	6	6	100%	7.00E-01	1.24E+00	9.09E-01	2.11E-01
	Se	6	6	100%	2.73E-01	4.30E-01	3.37E-01	6.10E-02
	TBT	1	6	17%	7.23E-04	1.77E-02	3.58E-03	6.93E-03
	TTBT	0	6	0%	1.27E-03	1.40E-03	1.33E-03	5.46E-05
	V	6	6	100%	1.21E+02	1.41E+02	1.36E+02	7.68E+00
	Zn	6	6	100%	1.11E+02	1.36E+02	1.22E+02	9.31E+00

Table J-1b. Summary of Surface Sediment Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
Oil Reclamation Area I	a-Chlordane	6	6	100%	1.40E-04	4.10E-04	2.70E-04	1.11E-04
	g-Chlordane	5	6	83%	4.50E-05	4.20E-04	2.33E-04	1.76E-04
	DBT	6	6	100%	2.69E-03	2.08E-02	1.03E-02	6.99E-03
	Dieldrin	1	6	17%	4.00E-05	4.40E-04	1.15E-04	1.59E-04
	Endosulfan II	0	6	0%	4.00E-05	6.00E-05	5.17E-05	7.53E-06
	Endrin	0	6	0%	3.50E-05	5.00E-05	4.42E-05	5.85E-06
	Heptachlor	0	6	0%	3.50E-05	5.00E-05	4.25E-05	6.12E-06
	Total Congeners	6	6	100%	4.39E-02	2.13E-01	1.24E-01	6.53E-02
	2,4'-DDD	0	6	0%	4.50E-05	6.00E-05	5.42E-05	7.36E-06
	2,4'-DDE	0	6	0%	5.50E-05	8.00E-05	6.83E-05	9.31E-06
	2,4'-DDT	0	6	0%	5.00E-05	7.50E-05	6.42E-05	9.70E-06
	2-Methylnaphthalene	6	6	100%	5.23E-03	9.85E-03	7.32E-03	1.62E-03
	4,4'-DDD	6	6	100%	9.10E-04	3.08E-03	1.89E-03	9.43E-04
	4,4'-DDE	6	6	100%	3.30E-04	1.50E-03	9.82E-04	4.00E-04
	4,4'-DDT	5	6	83%	5.50E-05	7.80E-04	3.94E-04	3.15E-04
	Acenaphthene	6	6	100%	2.13E-03	7.62E-03	4.06E-03	2.07E-03
	Acenaphthylene	6	6	100%	4.71E-03	1.02E-02	7.28E-03	2.18E-03
	Ag	6	6	100%	1.20E-01	4.35E-01	3.25E-01	1.25E-01
	Al	6	6	100%	5.20E+04	7.30E+04	6.48E+04	8.40E+03
	Anthracene	6	6	100%	1.14E-02	6.09E-02	2.81E-02	1.73E-02
	As	6	6	100%	8.90E+00	1.36E+01	1.13E+01	1.65E+00
	Ba	6	6	100%	2.93E+02	4.58E+02	3.92E+02	5.99E+01
	Benzo(a)anthracene	6	6	100%	5.13E-02	1.51E-01	9.10E-02	3.55E-02
	Benzo(a)pyrene	6	6	100%	1.09E-01	2.04E-01	1.58E-01	4.63E-02
	Benzo(b)fluoranthene	6	6	100%	6.83E-02	1.49E-01	1.07E-01	3.33E-02
	Benzo(g,h,i)perylene	6	6	100%	1.13E-01	1.93E-01	1.50E-01	3.73E-02
	Benzo(k)fluoranthene	6	6	100%	7.30E-02	1.69E-01	1.12E-01	3.45E-02
	Cd	6	6	100%	2.23E-01	3.99E-01	3.34E-01	6.49E-02
	Chrysene	6	6	100%	7.07E-02	2.62E-01	1.39E-01	6.74E-02
	Co	6	6	100%	1.75E+01	2.26E+01	1.93E+01	1.80E+00
	Cr	6	6	100%	1.67E+02	4.64E+02	3.20E+02	1.33E+02
	Cu	6	6	100%	5.51E+01	9.75E+01	6.94E+01	1.81E+01
	Dibenz(a,h)anthracene	6	6	100%	8.82E-03	2.48E-02	1.61E-02	5.95E-03
	Fe	6	6	100%	4.12E+04	4.87E+04	4.49E+04	2.88E+03
	Fluoranthene	6	6	100%	1.32E-01	2.91E-01	1.89E-01	6.14E-02
	Fluorene	6	6	100%	3.27E-03	1.13E-02	6.65E-03	2.77E-03
	Hg	6	6	100%	3.03E-01	6.02E-01	4.32E-01	1.05E-01
	Indeno(1,2,3-cd)pyrene	6	6	100%	8.99E-02	1.81E-01	1.30E-01	4.04E-02
	MBT	1	6	17%	4.00E-04	2.69E-03	9.03E-04	8.78E-04
	Mn	6	6	100%	3.86E+02	6.24E+02	4.95E+02	9.27E+01
	Mo	6	6	100%	8.30E-01	1.71E+00	1.35E+00	3.43E-01
	Naphthalene	6	6	100%	1.04E-02	1.59E-02	1.34E-02	2.28E-03
	Ni	6	6	100%	9.49E+01	1.60E+02	1.15E+02	2.41E+01
	Pb	6	6	100%	1.19E+01	6.01E+01	4.05E+01	1.70E+01
	Phenanthrene	6	6	100%	4.04E-02	1.35E-01	7.54E-02	3.30E-02
	Pyrene	6	6	100%	1.71E-01	3.28E-01	2.41E-01	7.11E-02
	Sb	6	6	100%	5.87E-01	3.17E+00	2.02E+00	9.06E-01
	Se	6	6	100%	2.33E-01	4.06E-01	3.21E-01	6.95E-02
	TBT	6	6	100%	3.30E-03	6.59E-02	2.16E-02	2.33E-02
	TTBT	0	6	0%	9.48E-04	1.50E-03	1.26E-03	2.12E-04
	V	6	6	100%	1.34E+02	1.71E+02	1.52E+02	1.41E+01
	Zn	6	6	100%	1.14E+02	1.79E+02	1.43E+02	2.37E+01

Table J-1b. Summary of Surface Sediment Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
Point Avisadero Area II	a-Chlordane	13	20	65%	3.00E-05	3.70E-04	1.09E-04	8.91E-05
	g-Chlordane	0	20	0%	3.50E-05	4.50E-05	3.80E-05	3.40E-06
	DBT	11	19	58%	8.86E-04	5.74E-02	1.70E-02	1.67E-02
	Dieldrin	0	20	0%	4.00E-05	5.50E-05	4.73E-05	4.13E-06
	Endosulfan II	0	20	0%	4.50E-05	6.00E-05	4.88E-05	4.55E-06
	Endrin	0	20	0%	4.00E-05	5.00E-05	4.30E-05	3.40E-06
	Heptachlor	0	20	0%	3.50E-05	5.00E-05	4.00E-05	4.29E-06
	Total Congeners	19	19	100%	5.98E-03	1.23E+00	1.69E-01	3.02E-01
	2,4'-DDD	1	20	5%	4.50E-05	8.40E-04	9.15E-05	1.76E-04
	2,4'-DDE	0	20	0%	6.00E-05	8.00E-05	6.55E-05	5.83E-06
	2,4'-DDT	0	20	0%	5.50E-05	7.50E-05	6.13E-05	5.59E-06
	2-Methylnaphthalene	19	19	100%	4.13E-03	2.04E-02	1.02E-02	4.83E-03
	4,4'-DDD	20	20	100%	5.70E-04	1.74E-03	1.11E-03	3.61E-04
	4,4'-DDE	20	20	100%	4.80E-04	1.54E-03	1.04E-03	3.46E-04
	4,4'-DDT	12	20	60%	4.00E-05	8.40E-04	2.48E-04	2.38E-04
	Acenaphthene	19	19	100%	4.44E-03	1.82E-01	2.95E-02	3.90E-02
	Acenaphthylene	19	19	100%	6.98E-03	5.81E-02	2.23E-02	1.53E-02
	Ag	19	19	100%	1.77E-01	4.34E-01	2.74E-01	5.36E-02
	Al	19	19	100%	5.91E+04	7.20E+04	6.69E+04	3.89E+03
	Anthracene	19	19	100%	3.63E-02	4.89E-01	1.32E-01	1.05E-01
	As	19	19	100%	8.74E+00	1.82E+01	1.17E+01	1.89E+00
	Ba	19	19	100%	4.04E+02	5.68E+02	4.63E+02	3.69E+01
	Benzo(a)anthracene	19	19	100%	8.13E-02	6.01E-01	3.00E-01	1.60E-01
	Benzo(a)pyrene	19	19	100%	1.24E-01	7.54E-01	4.03E-01	2.00E-01
	Benzo(b)fluoranthene	19	19	100%	8.58E-02	5.50E-01	2.73E-01	1.34E-01
	Benzo(g,h,i)perylene	19	19	100%	1.07E-01	5.52E-01	3.01E-01	1.42E-01
	Benzo(k)fluoranthene	19	19	100%	8.34E-02	5.46E-01	2.75E-01	1.35E-01
	Cd	19	19	100%	1.85E-01	7.60E-01	2.76E-01	1.26E-01
	Chrysene	19	19	100%	1.04E-01	7.15E-01	3.51E-01	1.83E-01
	Co	19	19	100%	1.40E+01	2.16E+01	1.74E+01	1.65E+00
	Cr	19	19	100%	1.62E+02	3.91E+02	2.26E+02	7.40E+01
	Cu	19	19	100%	3.27E+01	1.05E+03	1.72E+02	2.53E+02
	Dibenz(a,h)anthracene	19	19	100%	1.22E-02	9.48E-02	4.71E-02	2.54E-02
	Fe	19	19	100%	3.87E+04	4.65E+04	4.12E+04	1.86E+03
	Fluoranthene	19	19	100%	1.86E-01	1.21E+00	6.27E-01	3.10E-01
	Fluorene	19	19	100%	8.20E-03	9.24E-02	3.09E-02	2.24E-02
	Hg	19	19	100%	1.45E-01	7.47E+00	9.04E-01	1.63E+00
	Indeno(1,2,3-cd)pyrene	19	19	100%	9.98E-02	5.36E-01	2.96E-01	1.42E-01
	MBT	0	19	0%	4.30E-04	5.87E-04	4.97E-04	4.06E-05
	Mn	19	19	100%	4.23E+02	6.15E+02	4.99E+02	4.61E+01
	Mo	19	19	100%	6.11E-01	1.47E+00	9.50E-01	1.99E-01
	Naphthalene	19	19	100%	7.72E-03	4.57E-02	2.11E-02	1.01E-02
	Ni	19	19	100%	8.40E+01	2.50E+02	1.09E+02	4.92E+01
	Pb	19	19	100%	1.81E+01	2.75E+02	4.38E+01	5.97E+01
	Phenanthrene	19	19	100%	7.28E-02	7.63E-01	3.25E-01	2.15E-01
	Pyrene	19	19	100%	2.25E-01	1.47E+00	7.39E-01	3.79E-01
	Sb	19	19	100%	5.54E-01	1.68E+01	1.77E+00	3.66E+00
	Se	19	19	100%	2.22E-01	8.55E-01	3.70E-01	1.39E-01
	TBT	12	19	63%	6.31E-04	2.08E-01	5.78E-02	6.06E-02
	TTBT	0	19	0%	1.02E-03	1.39E-03	1.18E-03	9.63E-05
	V	19	19	100%	1.08E+02	1.57E+02	1.33E+02	1.15E+01
	Zn	19	19	100%	9.08E+01	3.22E+02	1.25E+02	5.45E+01

Table J-1b. Summary of Surface Sediment Concentrations from HPS Stations

Area	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
South Basin Area X	a-Chlordane	24	24	100%	2.00E-04	5.47E-03	1.40E-03	1.43E-03
	g-Chlordane	24	24	100%	1.70E-04	1.05E-02	2.21E-03	2.49E-03
	DBT	23	23	100%	2.72E-03	5.12E-02	1.63E-02	1.14E-02
	Dieldrin	15	24	63%	3.50E-05	1.04E-02	1.59E-03	2.23E-03
	Endosulfan II	0	24	0%	3.00E-05	7.00E-04	7.75E-05	1.33E-04
	Endrin	0	24	0%	3.00E-05	6.00E-04	6.79E-05	1.14E-04
	Heptachlor	1	24	4%	2.50E-05	2.13E-03	1.52E-04	4.37E-04
	Total Congeners	23	23	100%	5.67E-02	2.59E+00	5.98E-01	6.24E-01
	2,4'-DDD	0	24	0%	3.50E-05	7.00E-04	8.15E-05	1.32E-04
	2,4'-DDE	0	24	0%	4.00E-05	9.00E-04	1.02E-04	1.70E-04
	2,4'-DDT	0	24	0%	4.00E-05	9.00E-04	9.81E-05	1.71E-04
	2-Methylnaphthalene	23	23	100%	3.70E-03	4.90E-02	1.82E-02	9.28E-03
	4,4'-DDD	24	24	100%	9.70E-04	4.36E-02	7.90E-03	1.08E-02
	4,4'-DDE	22	24	92%	3.50E-05	1.84E-02	5.47E-03	4.21E-03
	4,4'-DDT	21	24	88%	3.00E-05	3.60E-03	9.68E-04	8.56E-04
	Acenaphthene	23	23	100%	1.08E-03	2.13E-02	7.59E-03	4.22E-03
	Acenaphthylene	23	23	100%	2.26E-03	4.37E-02	1.19E-02	8.80E-03
	Ag	23	23	100%	1.39E-01	7.09E-01	4.83E-01	1.58E-01
	Al	23	23	100%	3.91E+04	7.41E+04	6.44E+04	1.04E+04
	Anthracene	23	23	100%	6.99E-03	2.34E-01	5.18E-02	5.43E-02
	As	23	23	100%	5.86E+00	1.43E+01	1.07E+01	1.96E+00
	Ba	23	23	100%	4.00E+02	8.93E+02	5.12E+02	1.20E+02
	Benzo(a)anthracene	23	23	100%	2.58E-02	6.29E-01	1.81E-01	1.33E-01
	Benzo(a)pyrene	23	23	100%	5.32E-02	6.32E-01	2.69E-01	1.25E-01
	Benzo(b)fluoranthene	23	23	100%	3.47E-02	4.84E-01	2.01E-01	9.95E-02
	Benzo(g,h,i)perylene	23	23	100%	5.54E-02	3.84E-01	2.39E-01	8.26E-02
	Benzo(k)fluoranthene	23	23	100%	4.08E-02	5.00E-01	2.07E-01	1.04E-01
	Cd	23	23	100%	2.19E-01	8.45E-01	4.55E-01	1.69E-01
	Chrysene	23	23	100%	3.94E-02	7.44E-01	2.45E-01	1.66E-01
	Co	23	23	100%	1.05E+01	2.19E+01	1.69E+01	2.97E+00
	Cr	23	23	100%	1.67E+02	4.51E+02	2.28E+02	6.35E+01
	Cu	23	23	100%	6.61E+01	3.19E+02	1.21E+02	7.39E+01
	Dibenz(a,h)anthracene	23	23	100%	4.03E-03	1.04E-01	3.62E-02	2.21E-02
	Fe	23	23	100%	1.57E+04	4.78E+04	4.02E+04	8.96E+03
	Fluoranthene	23	23	100%	5.97E-02	9.53E-01	3.25E-01	1.92E-01
	Fluorene	23	23	100%	2.02E-03	8.15E-02	1.47E-02	1.71E-02
	Hg	23	23	100%	2.32E-01	1.47E+00	7.07E-01	3.20E-01
	Indeno(1,2,3-cd)pyrene	23	23	100%	4.39E-02	4.13E-01	2.17E-01	8.43E-02
	MBT	3	23	13%	3.27E-04	3.30E-03	7.46E-04	6.61E-04
	Mn	23	23	100%	2.71E+02	5.80E+02	4.32E+02	6.08E+01
	Mo	23	23	100%	7.04E-01	1.83E+00	1.14E+00	2.56E-01
	Naphthalene	22	23	96%	7.70E-03	5.87E-02	2.97E-02	1.35E-02
	Ni	23	23	100%	7.25E+01	1.99E+02	1.13E+02	2.86E+01
	Pb	23	23	100%	1.10E+01	1.42E+02	8.52E+01	3.56E+01
	Phenanthrene	23	23	100%	2.20E-02	6.68E-01	1.49E-01	1.42E-01
	Pyrene	23	23	100%	7.98E-02	1.06E+00	3.90E-01	2.05E-01
	Sb	23	23	100%	4.85E-01	1.06E+01	3.16E+00	2.52E+00
	Se	22	23	96%	6.30E-02	4.57E-01	3.22E-01	1.02E-01
	TBT	23	23	100%	3.08E-03	1.29E-01	2.38E-02	2.71E-02
	TTBT	0	23	0%	7.73E-04	1.55E-03	1.23E-03	2.58E-04
	V	23	23	100%	5.09E+01	1.72E+02	1.32E+02	2.81E+01
	Zn	23	23	100%	1.64E+02	2.97E+02	2.02E+02	3.03E+01

Table J-2a. Summary of *M. nasuta* Tissue Concentrations from Reference Stations

Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
2,4'-DDD	0	25	0%	1.00E-05	6.50E-05	3.48E-05	1.25E-05
2,4'-DDE	0	25	0%	3.50E-05	8.00E-05	4.58E-05	1.12E-05
2,4'-DDT	0	25	0%	1.50E-05	7.50E-05	4.10E-05	1.39E-05
2-Methylnaphthalene	0	25	0%	8.50E-05	2.00E-04	1.36E-04	3.13E-05
4,4'-DDD	25	25	100%	1.70E-04	7.50E-04	4.60E-04	1.35E-04
4,4'-DDE	25	25	100%	4.20E-04	1.29E-03	7.93E-04	2.33E-04
4,4'-DDT	1	25	4%	1.00E-05	3.70E-04	4.44E-05	6.85E-05
Acenaphthene	20	25	80%	8.00E-05	2.70E-04	1.59E-04	5.06E-05
Acenaphthylene	20	25	80%	1.00E-04	5.40E-04	2.63E-04	1.13E-04
a-Chlordane	22	25	88%	3.50E-05	2.00E-04	9.98E-05	4.79E-05
Ag	9	25	36%	1.05E-02	4.20E-02	2.13E-02	7.69E-03
Al	25	25	100%	4.96E+01	4.56E+02	2.46E+02	9.57E+01
Anthracene	25	25	100%	3.20E-04	2.21E-03	1.01E-03	5.25E-04
As	25	25	100%	2.72E+00	6.47E+00	3.50E+00	7.76E-01
Ba	25	25	100%	8.08E-01	5.36E+00	2.60E+00	9.80E-01
Benzo(a)anthracene	25	25	100%	1.07E-03	4.19E-03	2.20E-03	8.48E-04
Benzo(a)pyrene	25	25	100%	1.75E-03	5.68E-03	3.37E-03	1.18E-03
Benzo(b)fluoranthene	25	25	100%	1.30E-03	5.09E-03	3.09E-03	1.18E-03
Benzo(g,h,i)perylene	25	25	100%	8.00E-04	4.78E-03	2.61E-03	1.25E-03
Benzo(k)fluoranthene	25	25	100%	1.76E-03	6.33E-03	3.58E-03	1.21E-03
Cd	20	20	100%	3.40E-02	3.53E-01	6.24E-02	6.92E-02
Chrysene	25	25	100%	1.77E-03	7.95E-03	3.77E-03	1.70E-03
Co	25	25	100%	2.89E-01	7.56E-01	4.70E-01	1.13E-01
Cr	25	25	100%	6.70E-01	8.31E+00	2.21E+00	1.78E+00
Cu	25	25	100%	1.61E+00	4.93E+00	2.26E+00	6.33E-01
DBT	23	24	96%	1.05E-03	9.35E-03	1.78E-03	1.65E-03
Dibenz(a,h)anthracene	14	25	56%	1.00E-05	3.20E-04	1.06E-04	9.83E-05
Dieldrin	19	25	76%	3.50E-05	3.60E-04	1.30E-04	8.47E-05
Endosulfan II	0	25	0%	2.00E-05	6.00E-05	3.28E-05	9.36E-06
Endrin	0	25	0%	5.00E-06	5.00E-05	2.76E-05	1.05E-05
Fe	25	25	100%	1.24E+02	6.92E+02	3.45E+02	1.38E+02
Fluoranthene	25	25	100%	3.86E-03	1.72E-02	8.52E-03	3.89E-03
Fluorene	20	25	80%	1.05E-04	4.40E-04	2.26E-04	8.74E-05
g-Chlordane	21	25	84%	2.00E-05	1.60E-04	7.90E-05	4.15E-05
Heptachlor	0	25	0%	1.00E-05	5.00E-05	2.70E-05	8.90E-06
Hg	16	25	64%	9.00E-03	5.40E-02	1.97E-02	1.01E-02
Indeno(1,2,3-cd)pyrene	25	25	100%	4.70E-04	2.87E-03	1.56E-03	7.86E-04
MBT	0	24	0%	2.35E-03	5.54E-03	3.04E-03	8.99E-04
Mn	25	25	100%	4.08E+00	1.25E+01	7.17E+00	2.23E+00
Mo	25	25	100%	3.66E-01	8.95E-01	4.55E-01	1.02E-01
Naphthalene	0	25	0%	2.50E-04	9.95E-04	4.63E-04	1.68E-04
Ni	25	25	100%	7.52E-01	2.13E+00	1.24E+00	3.67E-01
Pb	25	25	100%	2.10E-01	8.80E-01	4.33E-01	1.67E-01
Phenanthrene	20	25	80%	6.30E-04	4.62E-03	2.05E-03	1.20E-03
Pyrene	20	25	80%	3.12E-03	2.25E-02	9.66E-03	6.15E-03
Sb	24	25	96%	7.00E-03	4.20E-02	2.41E-02	7.44E-03
Se	25	25	100%	4.66E-01	1.15E+00	7.31E-01	1.64E-01
TBT	24	24	100%	2.02E-03	1.24E-02	3.88E-03	2.48E-03
Total Congeners	20	20	100%	4.66E-03	1.16E-02	6.95E-03	2.28E-03
Total Dioxin	4	4	100%	6.31E-04	6.62E-04	6.44E-04	1.30E-05
TTBT	0	24	0%	5.35E-03	1.26E-02	6.92E-03	2.05E-03
V	25	25	100%	5.84E-01	2.50E+00	1.32E+00	5.12E-01
Zn	25	25	100%	1.26E+01	3.17E+01	1.68E+01	4.21E+00

Note: Reference levels were estimated for total congeners (PCBs) excluding the data collected from Alameda Buoy while data collected from Alcatraz Environs were excluded for cadmium.

Table J-2b. Summary of Surface Sediment Concentrations from Reference Stations

Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
a-Chlordane	2	6	33%	2.00E-05	1.20E-04	4.42E-05	3.79E-05
g-Chlordane	0	6	0%	2.50E-05	5.00E-05	3.67E-05	9.83E-06
DBT	1	5	20%	6.71E-04	1.32E-03	1.05E-03	2.69E-04
Dieldrin	0	6	0%	3.00E-05	6.00E-05	4.58E-05	1.11E-05
Endosulfan II	0	6	0%	3.00E-05	6.50E-05	4.75E-05	1.29E-05
Endrin	0	6	0%	2.50E-05	5.50E-05	4.08E-05	1.11E-05
Heptachlor	0	6	0%	2.50E-05	5.50E-05	4.00E-05	1.10E-05
Total Congeners	5	5	100%	7.70E-04	2.16E-02	7.54E-03	8.37E-03
2,4'-DDD	0	6	0%	3.50E-05	7.00E-05	5.08E-05	1.36E-05
2,4'-DDE	0	6	0%	4.00E-05	8.50E-05	6.25E-05	1.70E-05
2,4'-DDT	0	6	0%	4.00E-05	8.00E-05	5.92E-05	1.46E-05
2-Methyl naphthalene	5	5	100%	1.17E-03	7.15E-03	3.85E-03	2.70E-03
4,4'-DDD	5	6	83%	3.00E-05	3.11E-03	1.08E-03	1.14E-03
4,4'-DDE	5	6	83%	3.00E-05	9.30E-04	5.15E-04	3.44E-04
4,4'-DDT	1	6	17%	3.00E-05	1.65E-03	3.11E-04	6.56E-04
Acenaphthene	5	5	100%	1.04E-03	1.24E-02	4.04E-03	4.72E-03
Acenaphthylene	5	5	100%	1.02E-03	1.20E-02	5.49E-03	4.01E-03
Ag	4	5	80%	3.30E-02	5.38E-01	2.56E-01	1.97E-01
Al	5	5	100%	4.43E+04	7.59E+04	6.43E+04	1.27E+04
Anthracene	5	5	100%	2.73E-03	4.25E-02	1.70E-02	1.51E-02
As	5	5	100%	6.69E+00	1.21E+01	1.01E+01	2.14E+00
Ba	5	5	100%	4.05E+02	5.01E+02	4.45E+02	4.04E+01
Benzo(a)anthracene	5	5	100%	1.25E-02	1.25E-01	5.48E-02	4.20E-02
Benzo(a)pyrene	5	5	100%	2.33E-02	2.40E-01	1.07E-01	8.31E-02
Benzo(b)fluoranthene	5	5	100%	1.67E-02	1.47E-01	6.78E-02	5.12E-02
Benzo(ghi)perylene	5	5	100%	2.09E-02	2.21E-01	1.01E-01	8.11E-02
Benzo(k)fluoranthene	5	5	100%	1.45E-02	1.45E-01	6.60E-02	4.94E-02
Cd	5	5	100%	1.56E-01	8.41E-01	3.63E-01	2.92E-01
Chrysene	5	5	100%	1.54E-02	1.40E-01	6.93E-02	4.46E-02
Co	5	5	100%	1.03E+01	2.26E+01	1.73E+01	4.43E+00
Cr	5	5	100%	1.03E+02	1.76E+02	1.54E+02	2.92E+01
Cu	5	5	100%	1.65E+01	4.79E+01	3.33E+01	1.44E+01
Dibenz(ah)anthracene	5	5	100%	2.06E-03	2.45E-02	1.03E-02	8.89E-03
Diesel Range Organics	2	5	40%	3.90E+00	4.60E+01	1.80E+01	1.88E+01
Fe	5	5	100%	2.06E+04	4.95E+04	3.89E+04	1.08E+04
Fluoranthene	5	5	100%	3.42E-02	3.06E-01	1.35E-01	1.02E-01
Fluorene	5	5	100%	1.06E-03	1.09E-02	4.76E-03	3.77E-03
Hg	5	5	100%	2.52E-02	3.84E-01	2.15E-01	1.57E-01
Indeno(123-cd)pyrene	5	5	100%	2.10E-02	2.00E-01	9.05E-02	7.21E-02
MBT	0	5	0%	3.12E-04	6.87E-04	4.77E-04	1.50E-04
Mn	5	5	100%	3.90E+02	6.34E+02	5.21E+02	9.94E+01
Mo	5	5	100%	2.93E-01	8.51E-01	6.42E-01	2.50E-01
Naphthalene	5	5	100%	3.17E-03	1.65E-02	8.75E-03	5.65E-03
Ni	5	5	100%	3.98E+01	1.01E+02	7.84E+01	2.31E+01
Pb	5	5	100%	1.23E+01	2.97E+01	2.15E+01	7.47E+00
Phenanthrene	5	5	100%	1.42E-02	1.42E-01	5.74E-02	4.97E-02
Pyrene	5	5	100%	4.49E-02	3.83E-01	1.75E-01	1.26E-01
Sb	5	5	100%	3.61E-01	9.29E-01	6.63E-01	2.65E-01
Se	4	5	80%	6.30E-02	4.98E-01	2.78E-01	1.85E-01
TBT	1	5	20%	4.78E-04	4.04E-03	1.37E-03	1.50E-03
TTBT	0	5	0%	7.40E-04	1.63E-03	1.13E-03	3.55E-04
V	5	5	100%	6.27E+01	1.59E+02	1.30E+02	3.85E+01
Zn	5	5	100%	4.25E+01	1.30E+02	9.48E+01	3.42E+01

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
Eastern Wetland Area	EW-30	a-Chlordane	3.4E-08	1.7E-09	1.2E-04	2.1E-05	0.00%	0.00%
		g-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	6.1E-07	3.1E-08	1.8E-03	3.0E-04	0.00%	0.01%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	4.2E-08	2.1E-09	4.8E-05	8.0E-06	0.00%	0.00%
		Total Congeners	6.9E-05	3.5E-06	---	---	0.35%	---
		2,4'-DDD	3.2E-09	1.6E-10	---	---	0.00%	---
		2,4'-DDE	5.5E-09	2.7E-10	---	---	0.00%	---
		2,4'-DDT	5.5E-09	2.7E-10	7.5E-05	1.3E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.6E-06	2.7E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.4E-03	5.6E-04	---	0.03%
		Al	---	---	9.0E-02	1.5E-02	---	0.71%
		Anthracene	---	---	7.3E-06	1.2E-06	---	0.00%
		As	2.2E-03	1.1E-04	1.1E+01	1.9E+00	11.37%	89.74%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.9E-06	9.7E-08	---	---	0.01%	---
		Benzo(a)pyrene	1.4E-05	6.9E-07	---	---	0.07%	---
		Benzo(b)fluoranthene	1.9E-06	9.3E-08	---	---	0.01%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-06	8.9E-08	---	---	0.01%	---
		Cd	1.1E-05	5.5E-07	1.3E-01	2.2E-02	0.06%	1.05%
		Chrysene	3.0E-07	1.5E-08	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	1.1E-04	5.5E-06	4.5E-01	7.6E-02	0.57%	3.55%
		Cu	---	---	9.3E-02	1.6E-02	---	0.73%
		Dibenz(a,h)anthracene	2.3E-07	1.1E-08	---	---	0.00%	---
		Dioxin 2,3,7,8 -TCDD	1.7E-02	8.5E-04	---	---	87.53%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.5E-04	5.9E-05	---	0.00%
		Fluorene	---	---	6.3E-06	1.1E-06	---	0.00%
		Hg	---	---	2.1E-01	3.5E-02	---	1.66%
		Indeno(1,2,3-cd)pyrene	5.3E-07	2.6E-08	---	---	0.00%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.2E-05	2.0E-06	---	0.00%
		Ni	---	---	5.5E-02	9.2E-03	---	0.43%
		Pb	2.2E-06	1.1E-07	---	---	0.01%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.7E-04	6.2E-05	---	0.00%
		Sb	---	---	7.7E-02	1.3E-02	---	0.60%
		Se	---	---	1.3E-01	2.2E-02	---	1.01%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.0E-02	1.0E-02	---	0.47%
	EW-30 Total		1.9E-02	9.7E-04	1.3E+01	2.1E+00		
	EW-31	a-Chlordane	4.6E-08	2.3E-09	1.6E-04	2.7E-05	0.00%	0.00%
		g-Chlordane	4.2E-08	2.1E-09	1.5E-04	2.5E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.5E-06	7.5E-08	4.4E-03	7.3E-04	0.10%	0.05%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	3.2E-05	1.6E-06	---	---	2.11%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.5E-06	4.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.2E-03	3.7E-04	---	0.03%
		Al	---	---	8.1E-02	1.4E-02	---	1.02%
		Anthracene	---	---	2.2E-06	3.7E-07	---	0.00%
		As	1.4E-03	7.0E-05	7.2E+00	1.2E+00	91.46%	90.75%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	7.6E-07	3.8E-08	---	---	0.05%	---
		Benzo(a)pyrene	1.2E-05	5.8E-07	---	---	0.76%	---
		Benzo(b)fluoranthene	1.3E-06	6.3E-08	---	---	0.08%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.2E-06	6.0E-08	---	---	0.08%	---
		Cd	3.9E-06	2.0E-07	4.8E-02	8.0E-03	0.26%	0.60%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Chrysene	1.2E-07	6.2E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.6E-05	3.8E-06	3.1E-01	5.2E-02	4.99%	3.91%
		Cu	---	---	2.8E-02	4.7E-03	---	0.36%
		Dibenz(a,h)anthracene	2.3E-07	1.1E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-04	2.1E-05	---	0.00%
		Fluorene	---	---	3.8E-06	6.3E-07	---	0.00%
		Hg	---	---	7.5E-02	1.3E-02	---	0.95%
		Indeno(1,2,3-cd)pyrene	5.5E-07	2.8E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.6E-06	1.4E-06	---	0.00%
		Ni	---	---	2.7E-02	4.5E-03	---	0.34%
		Pb	7.8E-07	3.9E-08	---	---	0.05%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.0E-04	3.4E-05	---	0.00%
		Sb	---	---	3.1E-02	5.1E-03	---	0.39%
		Se	---	---	1.0E-01	1.7E-02	---	1.25%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.9E-02	4.8E-03	---	0.36%
	EW-31 Total		1.5E-03	7.6E-05	8.0E+00	1.3E+00		
	EW-32	a-Chlordane	6.5E-08	3.2E-09	2.3E-04	3.9E-05	0.00%	0.00%
		g-Chlordane	5.0E-08	2.5E-09	1.8E-04	3.0E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.6E-06	8.2E-08	4.8E-03	8.0E-04	0.11%	0.06%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	3.1E-05	1.5E-06	---	---	2.09%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.7E-06	4.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.3E-03	8.9E-04	---	0.07%
		Al	---	---	1.3E-01	2.1E-02	---	1.68%
		Anthracene	---	---	4.0E-06	6.6E-07	---	0.00%
		As	1.3E-03	6.7E-05	6.9E+00	1.1E+00	91.08%	89.83%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.3E-06	6.4E-08	---	---	0.09%	---
		Benzo(a)pyrene	1.6E-05	7.9E-07	---	---	1.08%	---
		Benzo(b)fluoranthene	1.7E-06	8.6E-08	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.6E-06	8.2E-08	---	---	0.11%	---
		Cd	3.8E-06	1.9E-07	4.7E-02	7.8E-03	0.26%	0.61%
		Chrysene	1.6E-07	8.1E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.1E-05	3.6E-06	2.9E-01	4.9E-02	4.89%	3.81%
		Cu	---	---	3.6E-02	6.1E-03	---	0.47%
		Dibenz(a,h)anthracene	2.9E-07	1.4E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.9E-04	3.1E-05	---	0.00%
		Fluorene	---	---	6.2E-06	1.0E-06	---	0.00%
		Hg	---	---	7.2E-02	1.2E-02	---	0.94%
		Indeno(1,2,3-cd)pyrene	7.7E-07	3.8E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.2E-06	---	0.00%
		Ni	---	---	3.4E-02	5.7E-03	---	0.44%
		Pb	1.0E-06	5.0E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.0E-04	5.0E-05	---	0.00%
		Sb	---	---	3.4E-02	5.7E-03	---	0.45%
		Se	---	---	9.2E-02	1.5E-02	---	1.20%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.3E-02	5.5E-03	---	0.43%
	EW-32 Total		1.5E-03	7.3E-05	7.7E+00	1.3E+00		
	EW-33	a-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		g-Chlordane	5.7E-08	2.9E-09	2.1E-04	3.4E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	8.0E-07	4.0E-08	2.3E-03	3.9E-04	0.00%	0.02%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	6.7E-05	3.4E-06	---	---	0.36%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.1E-06	3.4E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.5E-03	5.8E-04	---	0.03%
		Al	---	---	2.1E-01	3.5E-02	---	1.75%
		Anthracene	---	---	4.2E-06	6.9E-07	---	0.00%
		As	2.0E-03	9.9E-05	1.0E+01	1.7E+00	10.58%	86.54%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-06	5.6E-08	---	---	0.01%	---
		Benzo(a)pyrene	1.1E-05	5.6E-07	---	---	0.06%	---
		Benzo(b)fluoranthene	1.3E-06	6.5E-08	---	---	0.01%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-06	7.7E-08	---	---	0.01%	---
		Cd	2.6E-05	1.3E-06	3.2E-01	5.3E-02	0.14%	2.68%
		Chrysene	1.8E-07	9.1E-09	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	1.3E-04	6.5E-06	5.3E-01	8.8E-02	0.69%	4.46%
		Cu	---	---	6.6E-02	1.1E-02	---	0.56%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Dioxin 2,3,7,8 -TCDD	1.7E-02	8.3E-04	---	---	88.13%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.7E-04	4.5E-05	---	0.00%
		Fluorene	---	---	6.9E-06	1.1E-06	---	0.00%
		Hg	---	---	1.9E-01	3.2E-02	---	1.62%
		Indeno(1,2,3-cd)pyrene	3.7E-07	1.8E-08	---	---	0.00%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.6E-06	1.6E-06	---	0.00%
		Ni	---	---	4.7E-02	7.8E-03	---	0.39%
		Pb	2.0E-06	9.8E-08	---	---	0.01%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.4E-04	5.6E-05	---	0.00%
		Sb	---	---	8.6E-02	1.4E-02	---	0.72%
		Se	---	---	1.1E-01	1.8E-02	---	0.89%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-02	6.5E-03	---	0.33%
	EW-33 Total		1.9E-02	9.4E-04	1.2E+01	2.0E+00		
	EW-34	a-Chlordane	6.5E-08	3.2E-09	2.3E-04	3.9E-05	0.00%	0.00%
		g-Chlordane	6.1E-08	3.1E-09	2.2E-04	3.7E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	2.1E-06	1.1E-07	6.2E-03	1.0E-03	0.10%	0.06%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	2.3E-05	3.8E-06	---	0.00%
		Heptachlor	1.8E-08	9.0E-10	2.1E-05	3.4E-06	0.00%	0.00%
		Total Congeners	6.6E-05	3.3E-06	---	---	3.15%	---
		2,4'-DDD	1.1E-09	5.3E-11	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.2E-06	5.3E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.7E-03	4.6E-04	---	0.03%
		Al	---	---	1.1E-01	1.9E-02	---	1.06%
		Anthracene	---	---	3.3E-06	5.6E-07	---	0.00%
		As	1.9E-03	9.3E-05	9.7E+00	1.6E+00	89.22%	89.72%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-06	5.6E-08	---	---	0.05%	---
		Benzo(a)pyrene	1.5E-05	7.3E-07	---	---	0.70%	---
		Benzo(b)fluoranthene	1.8E-06	9.1E-08	---	---	0.09%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-06	8.7E-08	---	---	0.08%	---
		Cd	5.4E-06	2.7E-07	6.6E-02	1.1E-02	0.26%	0.61%
		Chrysene	1.9E-07	9.4E-09	---	---	0.01%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Co	---	---	---	---	---	---
		Cr	1.3E-04	6.5E-06	5.3E-01	8.9E-02	6.23%	4.94%
		Cu	---	---	3.3E-02	5.5E-03	---	0.31%
		Dibenz(a,h)anthracene	2.9E-07	1.4E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-04	3.1E-05	---	0.00%
		Fluorene	---	---	5.5E-06	9.1E-07	---	0.00%
		Hg	---	---	1.1E-01	1.8E-02	---	1.02%
		Indeno(1,2,3-cd)pyrene	8.1E-07	4.1E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.1E-06	1.5E-06	---	0.00%
		Ni	---	---	3.8E-02	6.4E-03	---	0.36%
		Pb	1.2E-06	6.2E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.6E-04	4.4E-05	---	0.00%
		Sb	---	---	6.3E-02	1.1E-02	---	0.59%
		Se	---	---	9.7E-02	1.6E-02	---	0.90%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-02	7.2E-03	---	0.40%
	EW-34 Total		2.1E-03	1.0E-04	1.1E+01	1.8E+00		
	EW-35	a-Chlordane	8.4E-08	4.2E-09	3.0E-04	5.0E-05	0.00%	0.00%
		g-Chlordane	8.4E-08	4.2E-09	3.0E-04	5.0E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.1E-06	5.6E-08	3.3E-03	5.5E-04	0.06%	0.04%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	3.0E-05	1.5E-06	---	---	1.75%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.1E-06	1.8E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.7E-03	2.9E-04	---	0.02%
		Al	---	---	1.5E-01	2.5E-02	---	1.61%
		Anthracene	---	---	2.2E-06	3.7E-07	---	0.00%
		As	1.5E-03	7.7E-05	8.0E+00	1.3E+00	88.44%	86.61%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.6E-07	4.3E-08	---	---	0.05%	---
		Benzo(a)pyrene	9.7E-06	4.9E-07	---	---	0.56%	---
		Benzo(b)fluoranthene	1.3E-06	6.7E-08	---	---	0.08%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.1E-06	5.7E-08	---	---	0.07%	---
		Cd	5.0E-06	2.5E-07	6.2E-02	1.0E-02	0.29%	0.67%
		Chrysene	1.3E-07	6.5E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.5E-04	7.5E-06	6.1E-01	1.0E-01	8.60%	6.65%
		Cu	---	---	4.2E-02	7.0E-03	---	0.45%
		Dibenz(a,h)anthracene	2.2E-07	1.1E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-04	3.0E-05	---	0.00%
		Fluorene	---	---	2.2E-06	3.7E-07	---	0.00%
		Hg	---	---	1.2E-01	2.1E-02	---	1.34%
		Indeno(1,2,3-cd)pyrene	5.2E-07	2.6E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.9E-06	1.7E-06	---	0.00%
		Ni	---	---	3.4E-02	5.7E-03	---	0.37%
		Pb	8.5E-07	4.3E-08	---	---	0.05%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.0E-04	4.9E-05	---	0.00%
		Sb	---	---	3.1E-02	5.1E-03	---	0.34%
		Se	---	---	1.2E-01	2.1E-02	---	1.34%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.0E-02	8.3E-03	---	0.54%
	EW-35 Total		1.74E-03	8.69E-05	9.20E+00	1.53E+00		
	EW-36	a-Chlordane	6.5E-08	3.2E-09	2.3E-04	3.9E-05	0.00%	0.00%
		g-Chlordane	6.5E-08	3.2E-09	2.3E-04	3.9E-05	0.00%	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		DBT	---	---	---	---	---	---
		Dieldrin	7.1E-07	3.5E-08	2.1E-03	3.4E-04	0.04%	0.02%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	9.5E-05	4.8E-06	---	---	4.73%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.1E-06	3.4E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	8.2E-03	1.4E-03	---	0.08%
		Al	---	---	2.2E-01	3.7E-02	---	2.16%
		Anthracene	---	---	2.8E-06	4.7E-07	---	0.00%
		As	1.7E-03	8.4E-05	8.7E+00	1.4E+00	83.47%	84.18%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.3E-06	6.5E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.3E-05	6.5E-07	---	---	0.65%	---
		Benzo(b)fluoranthene	1.8E-06	8.9E-08	---	---	0.09%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-06	8.3E-08	---	---	0.08%	---
		Cd	5.9E-06	3.0E-07	7.3E-02	1.2E-02	0.29%	0.70%
		Chrysene	2.1E-07	1.0E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.1E-04	1.0E-05	8.6E-01	1.4E-01	10.42%	8.30%
		Cu	---	---	8.5E-02	1.4E-02	---	0.82%
		Dibenz(a,h)anthracene	1.8E-07	9.0E-09	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.2E-04	3.7E-05	---	0.00%
		Fluorene	---	---	6.5E-06	1.1E-06	---	0.00%
		Hg	---	---	1.0E-01	1.7E-02	---	1.00%
		Indeno(1,2,3-cd)pyrene	6.2E-07	3.1E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-05	3.1E-06	---	0.00%
		Ni	---	---	5.3E-02	8.9E-03	---	0.52%
		Pb	2.1E-06	1.0E-07	---	---	0.10%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.0E-04	5.1E-05	---	0.00%
		Sb	---	---	6.0E-02	1.0E-02	---	0.58%
		Se	---	---	1.2E-01	2.1E-02	---	1.19%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.5E-02	7.5E-03	---	0.44%
	EW-36 Total		2.0E-03	1.0E-04	1.0E+01	1.7E+00		
	EW-37	a-Chlordane	1.1E-08	5.7E-10	4.1E-05	6.9E-06	0.00%	0.00%
		g-Chlordane	1.5E-08	7.6E-10	5.5E-05	9.1E-06	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.4E-07	7.1E-09	4.1E-04	6.9E-05	0.01%	0.00%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	6.1E-06	3.0E-07	---	---	0.39%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.9E-07	4.8E-08	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.3E-03	3.8E-04	---	0.03%
		Al	---	---	1.5E-01	2.6E-02	---	1.83%
		Anthracene	---	---	2.3E-07	3.8E-08	---	0.00%
		As	1.4E-03	7.1E-05	7.4E+00	1.2E+00	91.94%	88.07%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.2E-08	4.6E-09	---	---	0.01%	---
		Benzo(a)pyrene	2.2E-06	1.1E-07	---	---	0.14%	---
		Benzo(b)fluoranthene	2.0E-07	1.0E-08	---	---	0.01%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.1E-07	1.6E-08	---	---	0.02%	---
		Cd	3.8E-06	1.9E-07	4.7E-02	7.8E-03	0.24%	0.56%
		Chrysene	2.8E-08	1.4E-09	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	1.1E-04	5.6E-06	4.6E-01	7.6E-02	7.18%	5.43%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Cu	---	---	3.5E-02	5.9E-03	---	0.42%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.9E-05	6.5E-06	---	0.00%
		Fluorene	---	---	6.0E-07	1.0E-07	---	0.00%
		Hg	---	---	1.0E-01	1.7E-02	---	1.23%
		Indeno(1,2,3-cd)pyrene	3.4E-08	1.7E-09	---	---	0.00%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	6.7E-06	1.1E-06	---	0.00%
		Ni	---	---	3.4E-02	5.6E-03	---	0.40%
		Pb	7.4E-07	3.7E-08	---	---	0.05%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.5E-05	9.1E-06	---	0.00%
		Sb	---	---	2.7E-02	4.6E-03	---	0.33%
		Se	---	---	1.1E-01	1.8E-02	---	1.26%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.7E-02	6.1E-03	---	0.44%
	EW-37 Total		1.6E-03	7.8E-05	8.4E+00	1.4E+00		
India Basin Area I	IB-54	a-Chlordane	7.6E-08	3.8E-09	2.7E-04	4.6E-05	0.01%	0.00%
		g-Chlordane	2.3E-08	1.1E-09	8.2E-05	1.4E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	6.1E-07	3.1E-08	1.8E-03	3.0E-04	0.04%	0.02%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.4E-05	6.9E-07	---	---	0.99%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.3E-06	2.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.4E-03	7.3E-04	---	0.06%
		Al	---	---	1.0E-01	1.7E-02	---	1.41%
		Anthracene	---	---	5.0E-06	8.3E-07	---	0.00%
		As	1.3E-03	6.5E-05	6.8E+00	1.1E+00	93.93%	91.68%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.6E-06	7.9E-08	---	---	0.11%	---
		Benzo(a)pyrene	1.4E-05	7.1E-07	---	---	1.02%	---
		Benzo(b)fluoranthene	1.8E-06	9.0E-08	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-06	7.6E-08	---	---	0.11%	---
		Cd	4.2E-06	2.1E-07	5.2E-02	8.7E-03	0.30%	0.70%
		Chrysene	2.1E-07	1.1E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	4.5E-05	2.2E-06	1.8E-01	3.1E-02	3.22%	2.48%
		Cu	---	---	4.2E-02	7.0E-03	---	0.57%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.7E-04	4.5E-05	---	0.00%
		Fluorene	---	---	2.8E-06	4.7E-07	---	0.00%
		Hg	---	---	6.9E-02	1.1E-02	---	0.93%
		Indeno(1,2,3-cd)pyrene	6.5E-07	3.2E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.2E-05	1.9E-06	---	0.00%
		Ni	---	---	2.9E-02	4.8E-03	---	0.39%
		Pb	8.2E-07	4.1E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.6E-04	7.6E-05	---	0.01%
		Sb	---	---	2.7E-02	4.6E-03	---	0.37%
		Se	---	---	6.9E-02	1.2E-02	---	0.94%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.2E-02	5.4E-03	---	0.44%
	IB-54 Total		1.4E-03	7.0E-05	7.4E+00	1.2E+00		
	IB-55	a-Chlordane	1.1E-07	5.7E-09	4.1E-04	6.9E-05	0.01%	0.01%
		g-Chlordane	1.1E-07	5.5E-09	4.0E-04	6.6E-05	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.4E-06	1.2E-07	7.0E-03	1.2E-03	0.17%	0.10%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	2.8E-05	1.4E-06	---	---	2.00%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.1E-06	5.1E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.0E-02	5.1E-03	---	0.41%
		Al	---	---	7.0E-02	1.2E-02	---	0.95%
		Anthracene	---	---	7.0E-06	1.2E-06	---	0.00%
		As	1.3E-03	6.4E-05	6.7E+00	1.1E+00	91.69%	90.92%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.9E-06	9.4E-08	---	---	0.13%	---
		Benzo(a)pyrene	1.7E-05	8.6E-07	---	---	1.22%	---
		Benzo(b)fluoranthene	2.1E-06	1.1E-07	---	---	0.15%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.1E-06	1.1E-07	---	---	0.15%	---
		Cd	3.5E-06	1.7E-07	4.3E-02	7.1E-03	0.25%	0.58%
		Chrysene	2.6E-07	1.3E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	5.7E-05	2.8E-06	2.3E-01	3.9E-02	4.05%	3.17%
		Cu	---	---	2.7E-02	4.5E-03	---	0.37%
		Dibenz(a,h)anthracene	2.9E-07	1.4E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.0E-04	5.0E-05	---	0.00%
		Fluorene	---	---	5.1E-06	8.6E-07	---	0.00%
		Hg	---	---	7.2E-02	1.2E-02	---	0.98%
		Indeno(1,2,3-cd)pyrene	7.7E-07	3.8E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.9E-06	1.5E-06	---	0.00%
		Ni	---	---	3.4E-02	5.6E-03	---	0.46%
		Pb	1.0E-06	5.2E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.2E-04	7.0E-05	---	0.01%
		Sb	---	---	3.3E-02	5.4E-03	---	0.44%
		Se	---	---	9.3E-02	1.6E-02	---	1.27%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.4E-02	4.0E-03	---	0.33%
	IB-55 Total		1.4E-03	7.0E-05	7.3E+00	1.2E+00		
	IB-56	a-Chlordane	4.2E-08	2.1E-09	1.5E-04	2.5E-05	0.00%	0.00%
		g-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	8.9E-07	4.5E-08	2.6E-03	4.3E-04	0.06%	0.03%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	1.3E-05	6.4E-07	---	---	0.80%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	4.0E-09	2.0E-10	5.5E-05	9.1E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	7.4E-07	1.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.3E-03	3.8E-04	---	0.03%
		Al	---	---	2.1E-01	3.4E-02	---	2.36%
		Anthracene	---	---	3.3E-06	5.6E-07	---	0.00%
		As	1.5E-03	7.4E-05	7.7E+00	1.3E+00	93.25%	88.70%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-06	5.2E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.1E-05	5.4E-07	---	---	0.68%	---
		Benzo(b)fluoranthene	1.1E-06	5.6E-08	---	---	0.07%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.4E-06	7.1E-08	---	---	0.09%	---
		Cd	6.3E-06	3.1E-07	7.7E-02	1.3E-02	0.39%	0.88%
		Chrysene	1.7E-07	8.4E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.2E-05	3.6E-06	2.9E-01	4.9E-02	4.50%	3.38%
		Cu	---	---	4.3E-02	7.2E-03	---	0.50%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-04	2.9E-05	---	0.00%
		Fluorene	---	---	1.5E-06	2.4E-07	---	0.00%
		Hg	---	---	1.3E-01	2.2E-02	---	1.50%
		Indeno(1,2,3-cd)pyrene	2.9E-07	1.5E-08	---	---	0.02%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.8E-06	1.6E-06	---	0.00%
		Ni	---	---	4.1E-02	6.9E-03	---	0.47%
		Pb	9.5E-07	4.8E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.0E-04	5.0E-05	---	0.00%
		Sb	---	---	3.4E-02	5.7E-03	---	0.39%
		Se	---	---	1.1E-01	1.9E-02	---	1.30%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-02	6.6E-03	---	0.45%
	IB-56 Total		1.6E-03	8.0E-05	8.7E+00	1.4E+00		
	IB-57	a-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		g-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	6.6E-07	3.3E-08	1.9E-03	3.2E-04	0.04%	0.02%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	4.2E-08	2.1E-09	4.8E-05	8.0E-06	0.00%	0.00%
		Total Congeners	1.5E-05	7.5E-07	---	---	0.91%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.5E-09	2.7E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	4.5E-06	7.4E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.6E-03	4.3E-04	---	0.03%
		Al	---	---	2.4E-01	4.1E-02	---	2.70%
		Anthracene	---	---	5.5E-06	9.2E-07	---	0.00%
		As	1.5E-03	7.6E-05	7.8E+00	1.3E+00	91.09%	87.12%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.8E-06	9.0E-08	---	---	0.11%	---
		Benzo(a)pyrene	1.5E-05	7.4E-07	---	---	0.89%	---
		Benzo(b)fluoranthene	2.0E-06	1.0E-07	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-06	9.1E-08	---	---	0.11%	---
		Cd	4.0E-06	2.0E-07	4.9E-02	8.2E-03	0.24%	0.55%
		Chrysene	2.4E-07	1.2E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.1E-04	5.3E-06	4.3E-01	7.2E-02	6.37%	4.81%
		Cu	---	---	4.6E-02	7.7E-03	---	0.51%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.9E-04	4.8E-05	---	0.00%
		Fluorene	---	---	7.0E-06	1.2E-06	---	0.00%
		Hg	---	---	1.4E-01	2.3E-02	---	1.52%
		Indeno(1,2,3-cd)pyrene	5.4E-07	2.7E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.1E-05	5.2E-06	---	0.00%
		Ni	---	---	9.8E-02	1.6E-02	---	1.09%
		Pb	1.1E-06	5.6E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.4E-04	7.4E-05	---	0.00%
		Sb	---	---	4.8E-02	8.0E-03	---	0.53%
		Se	---	---	6.6E-02	1.1E-02	---	0.73%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.3E-02	5.4E-03	---	0.36%
	IB-57 Total		1.7E-03	8.3E-05	9.0E+00	1.5E+00		
	IB-58	a-Chlordane	3.8E-09	1.9E-10	1.4E-05	2.3E-06	0.00%	0.00%
		g-Chlordane	5.7E-08	2.9E-09	2.1E-04	3.4E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.2E-06	5.9E-08	3.4E-03	5.7E-04	0.07%	0.04%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	1.3E-05	6.7E-07	---	---	0.77%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.1E-06	5.1E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.9E-03	4.8E-04	---	0.03%
		Al	---	---	1.2E-01	2.0E-02	---	1.29%
		Anthracene	---	---	1.1E-05	1.8E-06	---	0.00%
		As	1.6E-03	8.0E-05	8.3E+00	1.4E+00	92.53%	90.98%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.8E-06	1.4E-07	---	---	0.16%	---
		Benzo(a)pyrene	2.6E-05	1.3E-06	---	---	1.52%	---
		Benzo(b)fluoranthene	2.6E-06	1.3E-07	---	---	0.15%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.7E-06	1.3E-07	---	---	0.15%	---
		Cd	5.0E-06	2.5E-07	6.2E-02	1.0E-02	0.29%	0.68%
		Chrysene	3.6E-07	1.8E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	7.3E-05	3.6E-06	3.0E-01	4.9E-02	4.20%	3.26%
		Cu	---	---	3.3E-02	5.4E-03	---	0.36%
		Dibenz(a,h)anthracene	4.8E-07	2.4E-08	---	---	0.03%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	4.2E-04	7.0E-05	---	0.00%
		Fluorene	---	---	7.7E-06	1.3E-06	---	0.00%
		Hg	---	---	8.6E-02	1.4E-02	---	0.94%
		Indeno(1,2,3-cd)pyrene	1.1E-06	5.6E-08	---	---	0.07%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.8E-05	3.0E-06	---	0.00%
		Ni	---	---	3.5E-02	5.8E-03	---	0.38%
		Pb	7.5E-07	3.8E-08	---	---	0.04%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.4E-04	1.1E-04	---	0.01%
		Sb	---	---	3.3E-02	5.4E-03	---	0.36%
		Se	---	---	1.1E-01	1.8E-02	---	1.17%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.6E-02	7.6E-03	---	0.50%
	IB-58 Total		1.7E-03	8.6E-05	9.1E+00	1.5E+00		
	IB-59	a-Chlordane	9.6E-08	4.8E-09	3.4E-04	5.7E-05	0.01%	0.00%
		g-Chlordane	3.4E-08	1.7E-09	1.2E-04	2.1E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	7.5E-07	3.8E-08	2.2E-03	3.7E-04	0.05%	0.03%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	2.9E-05	1.5E-06	---	---	1.95%	---
		2,4'-DDD	2.5E-09	1.2E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	4.9E-06	8.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.4E-03	4.0E-04	---	0.03%
		Al	---	---	2.3E-01	3.8E-02	---	2.85%
		Anthracene	---	---	2.3E-05	3.8E-06	---	0.00%
		As	1.3E-03	6.7E-05	6.9E+00	1.2E+00	88.59%	87.31%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	6.4E-06	3.2E-07	---	---	0.42%	---
		Benzo(a)pyrene	3.6E-05	1.8E-06	---	---	2.38%	---
		Benzo(b)fluoranthene	4.9E-06	2.5E-07	---	---	0.33%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	4.8E-06	2.4E-07	---	---	0.32%	---
		Cd	3.7E-06	1.8E-07	4.5E-02	7.5E-03	0.24%	0.57%
		Chrysene	8.4E-07	4.2E-08	---	---	0.06%	---
		Co	---	---	---	---	---	---
		Cr	8.3E-05	4.2E-06	3.4E-01	5.7E-02	5.50%	4.28%
		Cu	---	---	4.1E-02	6.9E-03	---	0.52%
		Dibenz(a,h)anthracene	5.1E-07	2.5E-08	---	---	0.03%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.0E-03	1.7E-04	---	0.01%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fluorene	---	---	1.1E-05	1.8E-06	---	0.00%
		Hg	---	---	1.4E-01	2.4E-02	---	1.81%
		Indeno(1,2,3-cd)pyrene	8.4E-07	4.2E-08	---	---	0.06%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.1E-06	---	0.00%
		Ni	---	---	3.8E-02	6.3E-03	---	0.48%
		Pb	9.2E-07	4.6E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-03	2.6E-04	---	0.02%
		Sb	---	---	3.3E-02	5.4E-03	---	0.41%
		Se	---	---	1.0E-01	1.7E-02	---	1.31%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.0E-02	5.0E-03	---	0.37%
	IB-59 Total		1.5E-03	7.6E-05	8.0E+00	1.3E+00		
Oil Reclamation Area	OR-24	a-Chlordane	9.6E-08	4.8E-09	3.4E-04	5.7E-05	0.00%	0.00%
		g-Chlordane	1.3E-07	6.5E-09	4.7E-04	7.8E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.0E-06	5.2E-08	3.0E-03	5.0E-04	0.00%	0.03%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	3.0E-04	1.5E-05	---	---	0.81%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.3E-06	3.8E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.5E-03	4.1E-04	---	0.02%
		Al	---	---	4.0E-01	6.7E-02	---	3.46%
		Anthracene	---	---	3.2E-06	5.4E-07	---	0.00%
		As	1.8E-03	8.9E-05	9.2E+00	1.5E+00	4.86%	79.90%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.9E-06	9.3E-08	---	---	0.01%	---
		Benzo(a)pyrene	2.3E-05	1.2E-06	---	---	0.06%	---
		Benzo(b)fluoranthene	2.7E-06	1.4E-07	---	---	0.01%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.5E-06	1.7E-07	---	---	0.01%	---
		Cd	2.0E-05	1.0E-06	2.5E-01	4.2E-02	0.06%	2.17%
		Chrysene	4.3E-07	2.1E-08	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	2.5E-04	1.3E-05	1.0E+00	1.7E-01	0.69%	9.00%
		Cu	---	---	8.1E-02	1.4E-02	---	0.70%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Dioxin 2,3,7,8 -TCDD	3.4E-02	1.7E-03	---	---	93.47%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	4.0E-04	6.6E-05	---	0.00%
		Fluorene	---	---	5.1E-06	8.6E-07	---	0.00%
		Hg	---	---	2.0E-01	3.3E-02	---	1.72%
		Indeno(1,2,3-cd)pyrene	7.9E-07	4.0E-08	---	---	0.00%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.7E-05	2.9E-06	---	0.00%
		Ni	---	---	8.5E-02	1.4E-02	---	0.73%
		Pb	3.6E-06	1.8E-07	---	---	0.01%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.5E-04	9.2E-05	---	0.00%
		Sb	---	---	9.8E-02	1.6E-02	---	0.84%
		Se	---	---	1.2E-01	1.9E-02	---	1.00%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.7E-02	7.8E-03	---	0.40%
	OR-24 Total		3.7E-02	1.8E-03	1.2E+01	1.9E+00		
	OR-25	a-Chlordane	9.6E-08	4.8E-09	3.4E-04	5.7E-05	0.01%	0.00%
		g-Chlordane	1.1E-07	5.5E-09	4.0E-04	6.6E-05	0.01%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.1E-06	5.4E-08	3.2E-03	5.3E-04	0.06%	0.04%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Total Congeners	1.3E-04	6.7E-06	---	---	7.65%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	4.0E-09	2.0E-10	5.5E-05	9.1E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.0E-06	1.7E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.2E-03	5.3E-04	---	0.04%
		Al	---	---	2.3E-01	3.9E-02	---	2.64%
		Anthracene	---	---	3.5E-06	5.8E-07	---	0.00%
		As	1.5E-03	7.5E-05	7.8E+00	1.3E+00	85.14%	87.95%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.9E-06	9.5E-08	---	---	0.11%	---
		Benzo(a)pyrene	2.8E-05	1.4E-06	---	---	1.61%	---
		Benzo(b)fluoranthene	2.5E-06	1.2E-07	---	---	0.14%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.0E-06	1.5E-07	---	---	0.17%	---
		Cd	4.9E-06	2.5E-07	6.0E-02	1.0E-02	0.28%	0.68%
		Chrysene	2.6E-07	1.3E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	8.2E-05	4.1E-06	3.3E-01	5.6E-02	4.64%	3.78%
		Cu	---	---	4.6E-02	7.7E-03	---	0.52%
		Dibenz(a,h)anthracene	3.4E-07	1.7E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.4E-04	4.0E-05	---	0.00%
		Fluorene	---	---	2.3E-06	3.9E-07	---	0.00%
		Hg	---	---	1.3E-01	2.2E-02	---	1.48%
		Indeno(1,2,3-cd)pyrene	1.1E-06	5.5E-08	---	---	0.06%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-05	1.9E-06	---	0.00%
		Ni	---	---	4.2E-02	7.0E-03	---	0.47%
		Pb	1.6E-06	7.9E-08	---	---	0.09%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.3E-04	7.2E-05	---	0.00%
		Sb	---	---	4.5E-02	7.4E-03	---	0.51%
		Se	---	---	1.3E-01	2.1E-02	---	1.44%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-02	6.4E-03	---	0.44%
	OR-25 Total		1.8E-03	8.8E-05	8.8E+00	1.5E+00		
	OR-26	a-Chlordane	1.0E-07	5.2E-09	3.7E-04	6.2E-05	0.00%	0.00%
		g-Chlordane	1.1E-07	5.3E-09	3.8E-04	6.4E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	9.4E-07	4.7E-08	2.7E-03	4.6E-04	0.01%	0.03%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	2.0E-04	9.8E-06	---	---	1.10%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.4E-06	2.3E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.1E-03	3.4E-04	---	0.02%
		Al	---	---	1.9E-01	3.1E-02	---	1.90%
		Anthracene	---	---	2.7E-06	4.6E-07	---	0.00%
		As	1.5E-03	7.7E-05	8.0E+00	1.3E+00	8.63%	80.73%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.2E-06	5.9E-08	---	---	0.01%	---
		Benzo(a)pyrene	1.3E-05	6.4E-07	---	---	0.07%	---
		Benzo(b)fluoranthene	1.7E-06	8.4E-08	---	---	0.01%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-06	8.6E-08	---	---	0.01%	---
		Cd	3.2E-05	1.6E-06	4.0E-01	6.7E-02	0.18%	4.03%
		Chrysene	2.0E-07	1.0E-08	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	2.1E-04	1.0E-05	8.5E-01	1.4E-01	1.17%	8.61%
		Cu	---	---	6.1E-02	1.0E-02	---	0.62%
		Dibenz(a,h)anthracene	1.9E-07	9.6E-09	---	---	0.00%	---
		Dioxin 2,3,7,8 -TCDD	1.6E-02	7.9E-04	---	---	88.80%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.0E-04	3.4E-05	---	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fluorene	---	---	3.8E-06	6.3E-07	---	0.00%
		Hg	---	---	1.2E-01	1.9E-02	---	1.18%
		Indeno(1,2,3-cd)pyrene	6.2E-07	3.1E-08	---	---	0.00%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.2E-06	---	0.00%
		Ni	---	---	5.6E-02	9.3E-03	---	0.57%
		Pb	2.1E-06	1.1E-07	---	---	0.01%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.4E-04	5.7E-05	---	0.00%
		Sb	---	---	7.0E-02	1.2E-02	---	0.71%
		Se	---	---	1.2E-01	1.9E-02	---	1.17%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-02	7.2E-03	---	0.43%
	OR-26 Total		1.8E-02	8.9E-04	9.9E+00	1.6E+00		
	OR-27	a-Chlordane	8.4E-08	4.2E-09	3.0E-04	5.0E-05	0.00%	0.00%
		g-Chlordane	1.0E-07	5.2E-09	3.7E-04	6.2E-05	0.01%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	9.4E-07	4.7E-08	2.7E-03	4.6E-04	0.05%	0.03%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	2.3E-04	1.2E-05	---	---	13.06%	---
		2,4'-DDD	2.5E-09	1.2E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.5E-06	2.5E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.1E-03	8.5E-04	---	0.06%
		Al	---	---	1.8E-01	3.1E-02	---	2.22%
		Anthracene	---	---	1.6E-06	2.6E-07	---	0.00%
		As	1.4E-03	6.8E-05	7.0E+00	1.2E+00	75.83%	84.21%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	7.4E-07	3.7E-08	---	---	0.04%	---
		Benzo(a)pyrene	1.3E-05	6.5E-07	---	---	0.73%	---
		Benzo(b)fluoranthene	1.2E-06	6.0E-08	---	---	0.07%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-06	9.1E-08	---	---	0.10%	---
		Cd	3.8E-06	1.9E-07	4.7E-02	7.8E-03	0.21%	0.56%
		Chrysene	1.3E-07	6.3E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.7E-04	8.7E-06	7.1E-01	1.2E-01	9.76%	8.56%
		Cu	---	---	5.6E-02	9.4E-03	---	0.68%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.3E-04	2.1E-05	---	0.00%
		Fluorene	---	---	3.1E-06	5.1E-07	---	0.00%
		Hg	---	---	7.9E-02	1.3E-02	---	0.95%
		Indeno(1,2,3-cd)pyrene	3.9E-07	2.0E-08	---	---	0.02%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	5.1E-02	8.5E-03	---	0.61%
		Pb	1.8E-06	9.2E-08	---	---	0.10%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.2E-04	3.7E-05	---	0.00%
		Sb	---	---	5.0E-02	8.3E-03	---	0.60%
		Se	---	---	9.5E-02	1.6E-02	---	1.14%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.1E-02	5.2E-03	---	0.38%
	OR-27 Total		1.8E-03	8.9E-05	8.3E+00	1.4E+00		
	OR-28	a-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		g-Chlordane	6.1E-08	3.1E-09	2.2E-04	3.7E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	8.0E-07	4.0E-08	2.3E-03	3.9E-04	0.05%	0.03%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	7.8E-05	3.9E-06	---	---	5.16%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.1E-06	1.9E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.5E-03	4.2E-04	---	0.03%
		Al	---	---	1.2E-01	2.0E-02	---	1.50%
		Anthracene	---	---	2.1E-06	3.4E-07	---	0.00%
		As	1.4E-03	6.8E-05	7.0E+00	1.2E+00	89.51%	89.57%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.2E-07	4.6E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.4E-05	7.0E-07	---	---	0.93%	---
		Benzo(b)fluoranthene	1.5E-06	7.3E-08	---	---	0.10%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-06	8.6E-08	---	---	0.11%	---
		Cd	1.1E-05	5.7E-07	1.4E-01	2.3E-02	0.75%	1.79%
		Chrysene	1.3E-07	6.6E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	4.8E-05	2.4E-06	2.0E-01	3.3E-02	3.19%	2.52%
		Cu	---	---	4.4E-02	7.3E-03	---	0.56%
		Dibenz(a,h)anthracene	1.7E-07	8.4E-09	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.3E-04	2.1E-05	---	0.00%
		Fluorene	---	---	3.6E-06	6.0E-07	---	0.00%
		Hg	---	---	1.1E-01	1.8E-02	---	1.40%
		Indeno(1,2,3-cd)pyrene	5.3E-07	2.6E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	2.9E-02	4.8E-03	---	0.37%
		Pb	9.5E-07	4.8E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.3E-04	3.9E-05	---	0.00%
		Sb	---	---	4.1E-02	6.9E-03	---	0.53%
		Se	---	---	9.8E-02	1.6E-02	---	1.25%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.5E-02	5.8E-03	---	0.44%
	OR-28 Total		1.5E-03	7.5E-05	7.8E+00	1.3E+00		
	OR-29	a-Chlordane	1.1E-07	5.3E-09	3.8E-04	6.4E-05	0.00%	0.00%
		g-Chlordane	1.3E-07	6.5E-09	4.7E-04	7.8E-05	0.01%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.5E-06	7.3E-08	4.3E-03	7.1E-04	0.06%	0.04%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.8E-04	9.2E-06	---	---	7.90%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.2E-06	2.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.8E-03	4.7E-04	---	0.02%
		Al	---	---	1.9E-01	3.1E-02	---	1.66%
		Anthracene	---	---	2.1E-06	3.5E-07	---	0.00%
		As	1.8E-03	9.0E-05	9.4E+00	1.6E+00	77.51%	82.97%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.2E-06	5.8E-08	---	---	0.05%	---
		Benzo(a)pyrene	1.6E-05	8.2E-07	---	---	0.71%	---
		Benzo(b)fluoranthene	1.9E-06	9.6E-08	---	---	0.08%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-06	9.9E-08	---	---	0.09%	---
		Cd	3.9E-06	2.0E-07	4.8E-02	8.0E-03	0.17%	0.43%
		Chrysene	2.2E-07	1.1E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	3.1E-04	1.5E-05	1.3E+00	2.1E-01	13.30%	11.24%
		Cu	---	---	4.1E-02	6.9E-03	---	0.37%
		Dibenz(a,h)anthracene	4.2E-07	2.1E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.0E-04	3.3E-05	---	0.00%
		Fluorene	---	---	2.4E-06	4.0E-07	---	0.00%
		Hg	---	---	1.6E-01	2.6E-02	---	1.40%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Indeno(1,2,3-cd)pyrene	9.0E-07	4.5E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.1E-06	---	0.00%
		Ni	---	---	4.0E-02	6.6E-03	---	0.35%
		Pb	1.3E-06	6.5E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.0E-04	5.0E-05	---	0.00%
		Sb	---	---	3.9E-02	6.6E-03	---	0.35%
		Se	---	---	9.7E-02	1.6E-02	---	0.86%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.4E-02	5.6E-03	---	0.30%
	OR-29 Total		2.3E-03	1.2E-04	1.1E+01	1.9E+00		
Point Avisadero Area	PA-38	a-Chlordane	3.1E-08	1.5E-09	1.1E-04	1.8E-05	0.00%	0.00%
		g-Chlordane	1.5E-08	7.6E-10	5.5E-05	9.1E-06	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.2E-07	5.9E-09	3.4E-04	5.7E-05	0.01%	0.00%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	4.6E-05	7.6E-06	---	0.00%
		Heptachlor	2.4E-08	1.2E-09	2.7E-05	4.6E-06	0.00%	0.00%
		Total Congeners	9.7E-05	4.8E-06	---	---	5.66%	---
		2,4'-DDD	1.8E-09	8.8E-11	---	---	0.00%	---
		2,4'-DDE	3.0E-09	1.5E-10	---	---	0.00%	---
		2,4'-DDT	3.0E-09	1.5E-10	4.1E-05	6.9E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.0E-06	5.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.0E-03	5.0E-04	---	0.03%
		Al	---	---	1.4E-01	2.3E-02	---	1.58%
		Anthracene	---	---	1.1E-05	1.9E-06	---	0.00%
		As	1.5E-03	7.5E-05	7.7E+00	1.3E+00	87.47%	89.47%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	3.1E-06	1.5E-07	---	---	0.18%	---
		Benzo(a)pyrene	2.0E-05	1.0E-06	---	---	1.20%	---
		Benzo(b)fluoranthene	1.9E-06	9.4E-08	---	---	0.11%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.6E-06	1.3E-07	---	---	0.16%	---
		Cd	7.0E-06	3.5E-07	8.6E-02	1.4E-02	0.41%	1.00%
		Chrysene	4.1E-07	2.0E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	8.0E-05	4.0E-06	3.3E-01	5.5E-02	4.69%	3.78%
		Cu	---	---	6.1E-02	1.0E-02	---	0.71%
		Dibenz(a,h)anthracene	1.6E-07	7.8E-09	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.1E-04	8.5E-05	---	0.01%
		Fluorene	---	---	6.3E-06	1.1E-06	---	0.00%
		Hg	---	---	7.5E-02	1.3E-02	---	0.87%
		Indeno(1,2,3-cd)pyrene	3.1E-07	1.5E-08	---	---	0.02%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	7.5E-06	1.3E-06	---	0.00%
		Ni	---	---	4.5E-02	7.4E-03	---	0.51%
		Pb	1.0E-06	5.0E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	8.7E-04	1.5E-04	---	0.01%
		Sb	---	---	3.3E-02	5.4E-03	---	0.38%
		Se	---	---	1.1E-01	1.8E-02	---	1.27%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.2E-02	5.3E-03	---	0.37%
	PA-38 Total		1.7E-03	8.5E-05	8.7E+00	1.4E+00		
	PA-39	a-Chlordane	5.0E-08	2.5E-09	1.8E-04	3.0E-05	0.00%	0.00%
		g-Chlordane	1.1E-08	5.7E-10	4.1E-05	6.9E-06	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.6E-07	8.2E-09	4.8E-04	8.0E-05	0.01%	0.00%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	6.3E-05	3.1E-06	---	---	3.46%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.9E-06	4.8E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.6E-03	2.7E-04	---	0.02%
		Al	---	---	1.6E-01	2.6E-02	---	1.44%
		Anthracene	---	---	1.1E-05	1.9E-06	---	0.00%
		As	1.7E-03	8.3E-05	8.7E+00	1.4E+00	91.94%	79.04%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	3.5E-06	1.7E-07	---	---	0.19%	---
		Benzo(a)pyrene	2.2E-05	1.1E-06	---	---	1.21%	---
		Benzo(b)fluoranthene	2.4E-06	1.2E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.7E-06	1.4E-07	---	---	0.15%	---
		Cd	3.9E-06	2.0E-07	4.8E-02	8.0E-03	0.22%	0.44%
		Chrysene	4.4E-07	2.2E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	4.7E-05	2.3E-06	1.9E-01	3.2E-02	2.56%	1.74%
		Cu	---	---	4.4E-02	7.3E-03	---	0.40%
		Dibenz(a,h)anthracene	2.2E-07	1.1E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.3E-04	8.8E-05	---	0.00%
		Fluorene	---	---	6.3E-06	1.1E-06	---	0.00%
		Hg	---	---	1.6E+00	2.7E-01	---	14.97%
		Indeno(1,2,3-cd)pyrene	4.9E-07	2.5E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.2E-06	---	0.00%
		Ni	---	---	4.2E-02	7.0E-03	---	0.38%
		Pb	9.2E-07	4.6E-08	---	---	0.05%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	8.0E-04	1.3E-04	---	0.01%
		Sb	---	---	4.3E-02	7.1E-03	---	0.39%
		Se	---	---	8.0E-02	1.3E-02	---	0.73%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.7E-02	7.9E-03	---	0.43%
	PA-39 Total		1.8E-03	9.1E-05	1.1E+01	1.8E+00		
	PA-40	a-Chlordane	5.7E-08	2.9E-09	2.1E-04	3.4E-05	0.00%	0.00%
		g-Chlordane	1.5E-08	7.6E-10	5.5E-05	9.1E-06	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	7.1E-07	3.5E-08	2.1E-03	3.4E-04	0.04%	0.02%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	4.6E-05	7.6E-06	---	0.00%
		Heptachlor	2.4E-08	1.2E-09	2.7E-05	4.6E-06	0.00%	0.00%
		Total Congeners	1.7E-05	8.3E-07	---	---	1.00%	---
		2,4'-DDD	1.8E-09	8.8E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.0E-09	1.5E-10	4.1E-05	6.9E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.4E-06	5.7E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.7E-03	4.5E-04	---	0.03%
		Al	---	---	2.0E-01	3.4E-02	---	2.29%
		Anthracene	---	---	1.0E-05	1.7E-06	---	0.00%
		As	1.5E-03	7.7E-05	7.9E+00	1.3E+00	92.50%	89.28%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.8E-06	1.4E-07	---	---	0.17%	---
		Benzo(a)pyrene	2.5E-05	1.3E-06	---	---	1.51%	---
		Benzo(b)fluoranthene	2.5E-06	1.2E-07	---	---	0.15%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.9E-06	1.5E-07	---	---	0.18%	---
		Cd	4.7E-06	2.3E-07	5.8E-02	9.6E-03	0.28%	0.65%
		Chrysene	3.6E-07	1.8E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	6.6E-05	3.3E-06	2.7E-01	4.5E-02	3.99%	3.04%
		Cu	---	---	5.2E-02	8.6E-03	---	0.58%
		Dibenz(a,h)anthracene	3.7E-07	1.9E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	4.2E-04	6.9E-05	---	0.00%
		Fluorene	---	---	8.1E-06	1.3E-06	---	0.00%
		Hg	---	---	1.7E-01	2.9E-02	---	1.93%
		Indeno(1,2,3-cd)pyrene	1.1E-06	5.3E-08	---	---	0.06%	---
		MBT	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.8E-05	3.0E-06	---	0.00%
		Ni	---	---	4.5E-02	7.4E-03	---	0.50%
		Pb	1.1E-06	5.6E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.6E-04	1.1E-04	---	0.01%
		Sb	---	---	4.1E-02	6.9E-03	---	0.46%
		Se	---	---	6.8E-02	1.1E-02	---	0.76%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-02	6.4E-03	---	0.43%
	PA-40 Total		1.7E-03	8.3E-05	8.9E+00	1.5E+00		
	PA-41	a-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		g-Chlordane	7.3E-08	3.6E-09	2.6E-04	4.3E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	2.4E-07	1.2E-08	6.9E-04	1.1E-04	0.01%	0.01%
		Endosulfan II	---	---	5.7E-06	9.5E-07	---	0.00%
		Endrin	---	---	1.0E-04	1.7E-05	---	0.00%
		Heptachlor	5.4E-08	2.7E-09	6.2E-05	1.0E-05	0.00%	0.00%
		Total Congeners	3.9E-05	1.9E-06	---	---	2.24%	---
		2,4'-DDD	3.9E-09	1.9E-10	---	---	0.00%	---
		2,4'-DDE	7.0E-09	3.5E-10	---	---	0.00%	---
		2,4'-DDT	6.5E-09	3.2E-10	8.9E-05	1.5E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.0E-06	5.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.5E-03	2.5E-04	---	0.02%
		Al	---	---	2.4E-01	3.9E-02	---	2.50%
		Anthracene	---	---	5.3E-06	8.9E-07	---	0.00%
		As	1.5E-03	7.7E-05	8.0E+00	1.3E+00	89.73%	85.39%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.7E-06	8.7E-08	---	---	0.10%	---
		Benzo(a)pyrene	1.7E-05	8.7E-07	---	---	1.01%	---
		Benzo(b)fluoranthene	1.8E-06	9.2E-08	---	---	0.11%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.2E-06	1.1E-07	---	---	0.13%	---
		Cd	5.0E-06	2.5E-07	6.2E-02	1.0E-02	0.29%	0.66%
		Chrysene	2.5E-07	1.2E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.1E-04	5.4E-06	4.4E-01	7.3E-02	6.23%	4.68%
		Cu	---	---	1.1E-01	1.9E-02	---	1.19%
		Dibenz(a,h)anthracene	2.3E-07	1.1E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.5E-04	4.1E-05	---	0.00%
		Fluorene	---	---	6.5E-06	1.1E-06	---	0.00%
		Hg	---	---	3.1E-01	5.1E-02	---	3.28%
		Indeno(1,2,3-cd)pyrene	5.2E-07	2.6E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-05	3.1E-06	---	0.00%
		Ni	---	---	4.7E-02	7.9E-03	---	0.50%
		Pb	1.4E-06	7.0E-08	---	---	0.08%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.9E-04	1.1E-04	---	0.01%
		Sb	---	---	4.6E-02	7.7E-03	---	0.49%
		Se	---	---	8.4E-02	1.4E-02	---	0.89%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.5E-02	5.9E-03	---	0.37%
	PA-41 Total		1.7E-03	8.6E-05	9.4E+00	1.6E+00		
	PA-42	a-Chlordane	3.1E-08	1.5E-09	1.1E-04	1.8E-05	0.00%	0.00%
		g-Chlordane	6.9E-08	3.4E-09	2.5E-04	4.1E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.9E-07	9.4E-09	5.5E-04	9.1E-05	0.01%	0.01%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	4.2E-08	2.1E-09	4.8E-05	8.0E-06	0.00%	0.00%
		Total Congeners	3.6E-05	1.8E-06	---	---	2.21%	---
		2,4'-DDD	3.2E-09	1.6E-10	---	---	0.00%	---
		2,4'-DDE	5.5E-09	2.7E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Acenaphthene	---	---	3.1E-06	5.1E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.5E-03	4.1E-04	---	0.03%
		Al	---	---	2.4E-01	4.0E-02	---	2.64%
		Anthracene	---	---	4.9E-06	8.2E-07	---	0.00%
		As	1.5E-03	7.3E-05	7.6E+00	1.3E+00	89.31%	83.56%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-06	7.1E-08	---	---	0.09%	---
		Benzo(a)pyrene	1.4E-05	6.9E-07	---	---	0.85%	---
		Benzo(b)fluoranthene	1.3E-06	6.4E-08	---	---	0.08%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.6E-06	8.1E-08	---	---	0.10%	---
		Cd	5.4E-06	2.7E-07	6.6E-02	1.1E-02	0.33%	0.72%
		Chrysene	2.1E-07	1.0E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.1E-04	5.6E-06	4.6E-01	7.7E-02	6.87%	5.07%
		Cu	---	---	2.9E-01	4.8E-02	---	3.16%
		Dibenz(a,h)anthracene	2.2E-07	1.1E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.5E-04	4.1E-05	---	0.00%
		Fluorene	---	---	6.2E-06	1.0E-06	---	0.00%
		Hg	---	---	2.1E-01	3.4E-02	---	2.26%
		Indeno(1,2,3-cd)pyrene	3.7E-07	1.9E-08	---	---	0.02%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	5.8E-02	9.6E-03	---	0.64%
		Pb	1.7E-06	8.6E-08	---	---	0.10%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.3E-04	7.2E-05	---	0.00%
		Sb	---	---	6.5E-02	1.1E-02	---	0.72%
		Se	---	---	8.0E-02	1.3E-02	---	0.88%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.8E-02	4.6E-03	---	0.30%
	PA-42 Total		1.6E-03	8.2E-05	9.1E+00	1.5E+00		
	PA-43	a-Chlordane	3.8E-08	1.9E-09	1.4E-04	2.3E-05	0.00%	0.00%
		g-Chlordane	3.1E-08	1.5E-09	1.1E-04	1.8E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	7.5E-07	3.8E-08	2.2E-03	3.7E-04	0.05%	0.03%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	1.2E-05	5.9E-07	---	---	0.76%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.2E-06	3.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.3E-03	2.2E-04	---	0.02%
		Al	---	---	1.7E-01	2.8E-02	---	2.00%
		Anthracene	---	---	2.4E-06	4.0E-07	---	0.00%
		As	1.4E-03	7.0E-05	7.3E+00	1.2E+00	90.93%	87.66%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	6.3E-07	3.1E-08	---	---	0.04%	---
		Benzo(a)pyrene	6.8E-06	3.4E-07	---	---	0.44%	---
		Benzo(b)fluoranthene	7.1E-07	3.5E-08	---	---	0.05%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.5E-07	4.7E-08	---	---	0.06%	---
		Cd	4.4E-06	2.2E-07	5.3E-02	8.9E-03	0.28%	0.65%
		Chrysene	9.2E-08	4.6E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.1E-04	5.6E-06	4.6E-01	7.7E-02	7.31%	5.56%
		Cu	---	---	3.2E-02	5.3E-03	---	0.38%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-04	2.1E-05	---	0.00%
		Fluorene	---	---	3.4E-06	5.7E-07	---	0.00%
		Hg	---	---	1.2E-01	1.9E-02	---	1.41%
		Indeno(1,2,3-cd)pyrene	2.1E-07	1.1E-08	---	---	0.01%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Naphthalene	---	---	1.3E-05	2.1E-06	---	0.00%
		Ni	---	---	3.6E-02	6.0E-03	---	0.43%
		Pb	7.3E-07	3.6E-08	---	---	0.05%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.0E-04	3.3E-05	---	0.00%
		Sb	---	---	2.9E-02	4.9E-03	---	0.35%
		Se	---	---	8.7E-02	1.5E-02	---	1.05%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.7E-02	6.2E-03	---	0.45%
	PA-43 Total		1.5E-03	7.7E-05	8.3E+00	1.4E+00		
	PA-44	a-Chlordane	4.2E-08	2.1E-09	1.5E-04	2.5E-05	0.00%	0.00%
		g-Chlordane	5.0E-08	2.5E-09	1.8E-04	3.0E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	4.7E-07	2.4E-08	1.4E-03	2.3E-04	0.02%	0.01%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	2.5E-05	1.3E-06	---	---	1.30%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.1E-06	1.9E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.9E-03	3.1E-04	---	0.01%
		Al	---	---	2.5E-01	4.2E-02	---	1.70%
		Anthracene	---	---	3.6E-06	6.0E-07	---	0.00%
		As	1.6E-03	7.9E-05	8.2E+00	1.4E+00	81.92%	55.66%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-06	5.6E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.5E-05	7.6E-07	---	---	0.79%	---
		Benzo(b)fluoranthene	1.4E-06	6.9E-08	---	---	0.07%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-06	9.1E-08	---	---	0.09%	---
		Cd	5.8E-06	2.9E-07	7.1E-02	1.2E-02	0.30%	0.49%
		Chrysene	1.9E-07	9.3E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.9E-04	1.5E-05	1.2E+00	2.0E-01	15.33%	8.22%
		Cu	---	---	1.9E-01	3.2E-02	---	1.31%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.6E-04	4.4E-05	---	0.00%
		Fluorene	---	---	2.2E-06	3.7E-07	---	0.00%
		Hg	---	---	4.5E+00	7.6E-01	---	30.97%
		Indeno(1,2,3-cd)pyrene	4.4E-07	2.2E-08	---	---	0.02%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.0E-05	1.7E-06	---	0.00%
		Ni	---	---	4.3E-02	7.1E-03	---	0.29%
		Pb	1.2E-06	6.2E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.9E-04	6.5E-05	---	0.00%
		Sb	---	---	4.1E-02	6.9E-03	---	0.28%
		Se	---	---	1.1E-01	1.8E-02	---	0.72%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.8E-02	8.1E-03	---	0.33%
	PA-44 Total		1.9E-03	9.6E-05	1.5E+01	2.4E+00		
	PA-45	a-Chlordane	2.7E-08	1.3E-09	9.6E-05	1.6E-05	0.00%	0.00%
		g-Chlordane	4.6E-08	2.3E-09	1.6E-04	2.7E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	4.7E-07	2.4E-08	1.4E-03	2.3E-04	0.03%	0.02%
		Endosulfan II	---	---	5.1E-06	8.6E-07	---	0.00%
		Endrin	---	---	9.1E-05	1.5E-05	---	0.00%
		Heptachlor	4.8E-08	2.4E-09	5.5E-05	9.1E-06	0.00%	0.00%
		Total Congeners	3.7E-05	1.8E-06	---	---	2.69%	---
		2,4'-DDD	3.5E-09	1.8E-10	---	---	0.00%	---
		2,4'-DDE	6.0E-09	3.0E-10	---	---	0.00%	---
		2,4'-DDT	6.0E-09	3.0E-10	8.2E-05	1.4E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.3E-06	3.8E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Ag	---	---	1.8E-03	3.0E-04	---	0.02%
		Al	---	---	1.3E-01	2.2E-02	---	1.71%
		Anthracene	---	---	5.9E-06	9.9E-07	---	0.00%
		As	1.1E-03	5.7E-05	6.0E+00	9.9E-01	84.66%	76.51%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.9E-06	9.3E-08	---	---	0.14%	---
		Benzo(a)pyrene	1.8E-05	8.8E-07	---	---	1.30%	---
		Benzo(b)fluoranthene	1.7E-06	8.3E-08	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.2E-06	1.1E-07	---	---	0.16%	---
		Cd	3.4E-06	1.7E-07	4.1E-02	6.9E-03	0.25%	0.53%
		Chrysene	2.5E-07	1.3E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	1.4E-04	7.1E-06	5.8E-01	9.7E-02	10.51%	7.50%
		Cu	---	---	1.3E-01	2.1E-02	---	1.64%
		Dibenz(a,h)anthracene	2.2E-07	1.1E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.8E-04	4.6E-05	---	0.00%
		Fluorene	---	---	5.3E-06	8.9E-07	---	0.00%
		Hg	---	---	7.7E-01	1.3E-01	---	9.95%
		Indeno(1,2,3-cd)pyrene	4.7E-07	2.3E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.1E-05	3.6E-06	---	0.00%
		Ni	---	---	4.2E-02	7.0E-03	---	0.54%
		Pb	9.3E-07	4.7E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.3E-04	3.8E-05	---	0.00%
		Sb	---	---	3.1E-02	5.1E-03	---	0.40%
		Se	---	---	5.9E-02	9.9E-03	---	0.76%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.3E-02	5.6E-03	---	0.43%
	PA-45 Total		1.4E-03	6.8E-05	7.8E+00	1.3E+00		
	PA-46	a-Chlordane	3.8E-08	1.9E-09	1.4E-04	2.3E-05	0.00%	0.00%
		g-Chlordane	4.6E-08	2.3E-09	1.6E-04	2.7E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	7.1E-07	3.5E-08	2.1E-03	3.4E-04	0.04%	0.02%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	2.2E-05	1.1E-06	---	---	1.22%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.5E-06	4.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.0E-03	5.0E-04	---	0.03%
		Al	---	---	1.5E-01	2.5E-02	---	1.56%
		Anthracene	---	---	4.8E-06	8.1E-07	---	0.00%
		As	1.6E-03	7.8E-05	8.1E+00	1.3E+00	85.42%	83.76%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-06	5.6E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.6E-05	8.1E-07	---	---	0.89%	---
		Benzo(b)fluoranthene	1.6E-06	8.0E-08	---	---	0.09%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-06	8.5E-08	---	---	0.09%	---
		Cd	4.8E-06	2.4E-07	5.9E-02	9.8E-03	0.26%	0.61%
		Chrysene	1.6E-07	8.1E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.1E-04	1.1E-05	8.8E-01	1.5E-01	11.76%	9.11%
		Cu	---	---	1.5E-01	2.6E-02	---	1.59%
		Dibenz(a,h)anthracene	3.1E-07	1.6E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.6E-04	2.7E-05	---	0.00%
		Fluorene	---	---	1.1E-05	1.8E-06	---	0.00%
		Hg	---	---	8.2E-02	1.4E-02	---	0.86%
		Indeno(1,2,3-cd)pyrene	6.8E-07	3.4E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.9E-06	1.5E-06	---	0.00%
		Ni	---	---	5.1E-02	8.6E-03	---	0.53%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Pb	1.5E-06	7.7E-08	---	---	0.09%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.8E-04	6.4E-05	---	0.00%
		Sb	---	---	4.3E-02	7.1E-03	---	0.45%
		Se	---	---	1.1E-01	1.8E-02	---	1.11%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.5E-02	5.8E-03	---	0.36%
	PA-46 Total		1.8E-03	9.1E-05	9.6E+00	1.6E+00		
	PA-47	a-Chlordane	3.4E-08	1.7E-09	1.2E-04	2.1E-05	0.00%	0.00%
		g-Chlordane	3.8E-08	1.9E-09	1.4E-04	2.3E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	4.7E-07	2.4E-08	1.4E-03	2.3E-04	0.03%	0.01%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	2.5E-05	1.3E-06	---	---	1.53%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.3E-06	5.5E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.6E-03	2.7E-04	---	0.02%
		Al	---	---	2.4E-01	4.0E-02	---	2.38%
		Anthracene	---	---	5.1E-06	8.5E-07	---	0.00%
		As	1.3E-03	6.7E-05	7.0E+00	1.2E+00	81.54%	69.08%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.5E-06	7.6E-08	---	---	0.09%	---
		Benzo(a)pyrene	1.9E-05	9.6E-07	---	---	1.16%	---
		Benzo(b)fluoranthene	2.1E-06	1.1E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.3E-06	1.2E-07	---	---	0.14%	---
		Cd	6.1E-06	3.1E-07	7.5E-02	1.3E-02	0.37%	0.75%
		Chrysene	1.9E-07	9.3E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.4E-04	1.2E-05	9.9E-01	1.7E-01	14.78%	9.88%
		Cu	---	---	5.9E-01	9.9E-02	---	5.91%
		Dibenz(a,h)anthracene	3.1E-07	1.6E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.0E-04	5.0E-05	---	0.00%
		Fluorene	---	---	7.7E-06	1.3E-06	---	0.00%
		Hg	---	---	9.1E-01	1.5E-01	---	9.06%
		Indeno(1,2,3-cd)pyrene	7.7E-07	3.9E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.5E-05	2.5E-06	---	0.00%
		Ni	---	---	7.7E-02	1.3E-02	---	0.77%
		Pb	2.3E-06	1.2E-07	---	---	0.14%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.9E-04	8.2E-05	---	0.00%
		Sb	---	---	4.8E-02	8.0E-03	---	0.48%
		Se	---	---	1.2E-01	2.1E-02	---	1.23%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.1E-02	6.9E-03	---	0.41%
	PA-47 Total		1.6E-03	8.2E-05	1.0E+01	1.7E+00		
	PA-48	a-Chlordane	6.1E-08	3.1E-09	2.2E-04	3.7E-05	0.00%	0.00%
		g-Chlordane	5.0E-08	2.5E-09	1.8E-04	3.0E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	7.1E-07	3.5E-08	2.1E-03	3.4E-04	0.04%	0.02%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.4E-05	6.9E-07	---	---	0.73%	---
		2,4'-DDD	2.5E-09	1.2E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.7E-06	4.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.9E-03	3.2E-04	---	0.02%
		Al	---	---	1.3E-01	2.2E-02	---	1.34%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Anthracene	---	---	4.6E-06	7.6E-07	---	0.00%
		As	1.7E-03	8.6E-05	8.9E+00	1.5E+00	91.22%	89.08%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.3E-06	6.5E-08	---	---	0.07%	---
		Benzo(a)pyrene	1.3E-05	6.4E-07	---	---	0.69%	---
		Benzo(b)fluoranthene	1.2E-06	6.2E-08	---	---	0.07%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-06	7.5E-08	---	---	0.08%	---
		Cd	5.5E-06	2.7E-07	6.7E-02	1.1E-02	0.29%	0.67%
		Chrysene	1.9E-07	9.3E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.3E-04	6.3E-06	5.2E-01	8.6E-02	6.73%	5.19%
		Cu	---	---	5.4E-02	9.0E-03	---	0.54%
		Dibenz(a,h)anthracene	1.8E-07	9.0E-09	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.6E-04	4.3E-05	---	0.00%
		Fluorene	---	---	5.5E-06	9.1E-07	---	0.00%
		Hg	---	---	1.4E-01	2.3E-02	---	1.38%
		Indeno(1,2,3-cd)pyrene	3.5E-07	1.7E-08	---	---	0.02%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	3.5E-02	5.8E-03	---	0.35%
		Pb	7.9E-07	3.9E-08	---	---	0.04%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.8E-04	6.3E-05	---	0.00%
		Sb	---	---	2.9E-02	4.9E-03	---	0.29%
		Se	---	---	7.4E-02	1.2E-02	---	0.74%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.7E-02	6.1E-03	---	0.37%
	PA-48 Total		1.9E-03	9.4E-05	1.0E+01	1.7E+00		
	PA-49	a-Chlordane	4.6E-08	2.3E-09	1.6E-04	2.7E-05	0.00%	0.00%
		g-Chlordane	4.2E-08	2.1E-09	1.5E-04	2.5E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	6.1E-07	3.1E-08	1.8E-03	3.0E-04	0.03%	0.02%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.4E-05	7.0E-07	---	---	0.76%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.7E-06	4.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.6E-03	4.3E-04	---	0.03%
		Al	---	---	2.2E-01	3.7E-02	---	2.28%
		Anthracene	---	---	4.5E-06	7.5E-07	---	0.00%
		As	1.6E-03	8.0E-05	8.3E+00	1.4E+00	86.60%	83.93%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-06	7.0E-08	---	---	0.08%	---
		Benzo(a)pyrene	1.4E-05	6.8E-07	---	---	0.74%	---
		Benzo(b)fluoranthene	1.4E-06	7.2E-08	---	---	0.08%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-06	7.5E-08	---	---	0.08%	---
		Cd	6.6E-06	3.3E-07	8.1E-02	1.3E-02	0.36%	0.82%
		Chrysene	2.0E-07	1.0E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.0E-04	1.0E-05	8.4E-01	1.4E-01	11.13%	8.52%
		Cu	---	---	6.3E-02	1.0E-02	---	0.64%
		Dibenz(a,h)anthracene	2.0E-07	1.0E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.6E-04	4.4E-05	---	0.00%
		Fluorene	---	---	6.5E-06	1.1E-06	---	0.00%
		Hg	---	---	1.4E-01	2.4E-02	---	1.46%
		Indeno(1,2,3-cd)pyrene	5.7E-07	2.8E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.2E-06	---	0.00%
		Ni	---	---	5.0E-02	8.4E-03	---	0.51%
		Pb	1.4E-06	6.8E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Pyrene	---	---	3.7E-04	6.1E-05	---	0.00%
		Sb	---	---	5.1E-02	8.6E-03	---	0.52%
		Se	---	---	8.4E-02	1.4E-02	---	0.85%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.0E-02	6.7E-03	---	0.41%
	PA-49 Total		1.8E-03	9.2E-05	9.8E+00	1.6E+00		
	PA-50	a-Chlordane	3.8E-09	1.9E-10	1.4E-05	2.3E-06	0.00%	0.00%
		g-Chlordane	5.0E-08	2.5E-09	1.8E-04	3.0E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	1.4E-06	7.1E-08	4.1E-03	6.9E-04	0.07%	0.04%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	1.0E-05	5.2E-07	---	---	0.55%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.5E-06	4.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.2E-03	1.0E-03	---	0.06%
		Al	---	---	1.8E-01	2.9E-02	---	1.76%
		Anthracene	---	---	4.1E-06	6.8E-07	---	0.00%
		As	1.6E-03	8.0E-05	8.3E+00	1.4E+00	83.56%	82.32%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-06	5.0E-08	---	---	0.05%	---
		Benzo(a)pyrene	1.1E-05	5.6E-07	---	---	0.58%	---
		Benzo(b)fluoranthene	1.2E-06	6.1E-08	---	---	0.06%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.2E-06	5.9E-08	---	---	0.06%	---
		Cd	5.5E-06	2.7E-07	6.7E-02	1.1E-02	0.29%	0.67%
		Chrysene	1.5E-07	7.4E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.8E-04	1.4E-05	1.1E+00	1.9E-01	14.67%	11.41%
		Cu	---	---	4.6E-02	7.7E-03	---	0.46%
		Dibenz(a,h)anthracene	2.0E-07	1.0E-08	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.0E-04	3.4E-05	---	0.00%
		Fluorene	---	---	4.6E-06	7.7E-07	---	0.00%
		Hg	---	---	6.9E-02	1.1E-02	---	0.68%
		Indeno(1,2,3-cd)pyrene	5.0E-07	2.5E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	7.4E-06	1.2E-06	---	0.00%
		Ni	---	---	5.2E-02	8.6E-03	---	0.51%
		Pb	1.1E-06	5.3E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.1E-04	5.1E-05	---	0.00%
		Sb	---	---	3.9E-02	6.6E-03	---	0.39%
		Se	---	---	1.3E-01	2.1E-02	---	1.26%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.2E-02	7.0E-03	---	0.42%
	PA-50 Total		1.9E-03	9.5E-05	1.0E+01	1.7E+00		
	PA-51	a-Chlordane	4.2E-08	2.1E-09	1.5E-04	2.5E-05	0.00%	0.00%
		g-Chlordane	7.6E-09	3.8E-10	2.7E-05	4.6E-06	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	6.1E-07	3.1E-08	1.8E-03	3.0E-04	0.04%	0.02%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	4.6E-05	7.6E-06	---	0.00%
		Heptachlor	2.4E-08	1.2E-09	2.7E-05	4.6E-06	0.00%	0.00%
		Total Congeners	1.2E-05	6.1E-07	---	---	0.73%	---
		2,4'-DDD	1.8E-09	8.8E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.0E-09	1.5E-10	4.1E-05	6.9E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.8E-06	6.3E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.8E-03	3.0E-04	---	0.02%
		Al	---	---	1.6E-01	2.6E-02	---	1.77%
		Anthracene	---	---	4.7E-06	7.8E-07	---	0.00%
		As	1.6E-03	7.8E-05	8.1E+00	1.3E+00	92.45%	90.21%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.5E-06	7.6E-08	---	---	0.09%	---
		Benzo(a)pyrene	2.3E-05	1.1E-06	---	---	1.36%	---
		Benzo(b)fluoranthene	1.9E-06	9.4E-08	---	---	0.11%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.2E-06	1.1E-07	---	---	0.13%	---
		Cd	4.8E-06	2.4E-07	5.9E-02	9.8E-03	0.28%	0.66%
		Chrysene	2.2E-07	1.1E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.8E-05	3.9E-06	3.2E-01	5.3E-02	4.65%	3.58%
		Cu	---	---	3.7E-02	6.1E-03	---	0.41%
		Dibenz(a,h)anthracene	3.1E-07	1.6E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.9E-04	4.8E-05	---	0.00%
		Fluorene	---	---	7.9E-06	1.3E-06	---	0.00%
		Hg	---	---	1.2E-01	1.9E-02	---	1.30%
		Indeno(1,2,3-cd)pyrene	1.3E-06	6.5E-08	---	---	0.08%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.5E-05	2.5E-06	---	0.00%
		Ni	---	---	4.0E-02	6.7E-03	---	0.45%
		Pb	8.5E-07	4.2E-08	---	---	0.05%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.3E-04	7.1E-05	---	0.00%
		Sb	---	---	3.1E-02	5.1E-03	---	0.34%
		Se	---	---	6.7E-02	1.1E-02	---	0.75%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.2E-02	7.0E-03	---	0.47%
	PA-51 Total		1.7E-03	8.4E-05	9.0E+00	1.5E+00		
	PA-52	a-Chlordane	4.2E-08	2.1E-09	1.5E-04	2.5E-05	0.00%	0.00%
		g-Chlordane	5.3E-08	2.7E-09	1.9E-04	3.2E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	8.9E-07	4.5E-08	2.6E-03	4.3E-04	0.05%	0.03%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	1.4E-05	6.9E-07	---	---	0.82%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.9E-06	6.5E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.9E-03	4.8E-04	---	0.03%
		Al	---	---	3.1E-01	5.1E-02	---	3.41%
		Anthracene	---	---	5.2E-06	8.7E-07	---	0.00%
		As	1.4E-03	7.1E-05	7.4E+00	1.2E+00	84.91%	81.66%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.7E-06	8.4E-08	---	---	0.10%	---
		Benzo(a)pyrene	2.0E-05	9.9E-07	---	---	1.18%	---
		Benzo(b)fluoranthene	1.8E-06	9.2E-08	---	---	0.11%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-06	1.0E-07	---	---	0.12%	---
		Cd	5.0E-06	2.5E-07	6.2E-02	1.0E-02	0.30%	0.68%
		Chrysene	2.3E-07	1.1E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.0E-04	1.0E-05	8.4E-01	1.4E-01	12.24%	9.29%
		Cu	---	---	5.7E-02	9.5E-03	---	0.63%
		Dibenz(a,h)anthracene	2.9E-07	1.4E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.1E-04	5.1E-05	---	0.00%
		Fluorene	---	---	7.4E-06	1.2E-06	---	0.00%
		Hg	---	---	1.4E-01	2.4E-02	---	1.60%
		Indeno(1,2,3-cd)pyrene	9.7E-07	4.9E-08	---	---	0.06%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	6.3E-02	1.0E-02	---	0.69%
		Pb	1.1E-06	5.7E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.9E-04	8.2E-05	---	0.01%
		Sb	---	---	4.3E-02	7.1E-03	---	0.48%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Se	---	---	8.9E-02	1.5E-02	---	0.99%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.5E-02	7.6E-03	---	0.50%
	PA-52 Total		1.7E-03	8.4E-05	9.0E+00	1.5E+00		
	PA-53	a-Chlordane	5.7E-08	2.9E-09	2.1E-04	3.4E-05	0.00%	0.00%
		g-Chlordane	6.1E-08	3.1E-09	2.2E-04	3.7E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	9.9E-07	4.9E-08	2.9E-03	4.8E-04	0.07%	0.04%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.5E-05	7.4E-07	---	---	1.10%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	5.6E-06	9.3E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.2E-03	3.7E-04	---	0.03%
		Al	---	---	1.9E-01	3.2E-02	---	2.64%
		Anthracene	---	---	8.5E-06	1.4E-06	---	0.00%
		As	1.2E-03	6.1E-05	6.4E+00	1.1E+00	91.48%	88.12%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.8E-06	9.1E-08	---	---	0.14%	---
		Benzo(a)pyrene	1.9E-05	9.7E-07	---	---	1.44%	---
		Benzo(b)fluoranthene	1.6E-06	8.1E-08	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-06	9.8E-08	---	---	0.15%	---
		Cd	3.9E-06	2.0E-07	4.8E-02	8.0E-03	0.29%	0.66%
		Chrysene	2.5E-07	1.2E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	6.8E-05	3.4E-06	2.8E-01	4.6E-02	5.07%	3.85%
		Cu	---	---	4.0E-02	6.7E-03	---	0.55%
		Dibenz(a,h)anthracene	1.8E-07	9.0E-09	---	---	0.01%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.7E-04	6.2E-05	---	0.01%
		Fluorene	---	---	1.2E-05	2.0E-06	---	0.00%
		Hg	---	---	1.2E-01	1.9E-02	---	1.61%
		Indeno(1,2,3-cd)pyrene	6.1E-07	3.0E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-05	3.1E-06	---	0.00%
		Ni	---	---	3.4E-02	5.7E-03	---	0.48%
		Pb	8.4E-07	4.2E-08	---	---	0.06%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.3E-04	8.8E-05	---	0.01%
		Sb	---	---	3.1E-02	5.1E-03	---	0.43%
		Se	---	---	7.8E-02	1.3E-02	---	1.08%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.5E-02	5.8E-03	---	0.48%
	PA-53 Total		1.3E-03	6.7E-05	7.2E+00	1.2E+00		
South Basin Area X	SB-01	a-Chlordane	1.0E-06	5.1E-08	3.7E-03	6.1E-04	0.05%	0.04%
		g-Chlordane	1.4E-06	7.1E-08	5.1E-03	8.5E-04	0.07%	0.06%
		DBT	---	---	---	---	---	---
		Dieldrin	2.2E-05	1.1E-06	6.4E-02	1.1E-02	1.12%	0.73%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	3.2E-04	1.6E-05	---	---	16.18%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.5E-09	2.7E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.2E-06	3.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.7E-03	4.5E-04	---	0.03%
		Al	---	---	1.5E-01	2.5E-02	---	1.71%
		Anthracene	---	---	2.6E-06	4.4E-07	---	0.00%
		As	1.5E-03	7.5E-05	7.8E+00	1.3E+00	76.48%	88.10%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-06	5.6E-08	---	---	0.06%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Benzo(a)pyrene	2.0E-05	1.0E-06	---	---	1.01%	---
		Benzo(b)fluoranthene	2.5E-06	1.3E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.9E-06	1.4E-07	---	---	0.15%	---
		Cd	4.1E-06	2.1E-07	5.1E-02	8.5E-03	0.21%	0.57%
		Chrysene	1.8E-07	9.0E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	8.5E-05	4.2E-06	3.5E-01	5.8E-02	4.32%	3.93%
		Cu	---	---	5.0E-02	8.4E-03	---	0.57%
		Dibenz(a,h)anthracene	3.3E-07	1.6E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-04	2.4E-05	---	0.00%
		Fluorene	---	---	4.8E-06	8.0E-07	---	0.00%
		Hg	---	---	1.4E-01	2.3E-02	---	1.55%
		Indeno(1,2,3-cd)pyrene	7.1E-07	3.6E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	6.8E-05	1.1E-05	---	0.00%
		Ni	---	---	4.3E-02	7.1E-03	---	0.48%
		Pb	2.9E-06	1.5E-07	---	---	0.15%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.2E-04	7.1E-05	---	0.00%
		Sb	---	---	4.8E-02	8.0E-03	---	0.54%
		Se	---	---	1.0E-01	1.7E-02	---	1.19%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.2E-02	7.1E-03	---	0.48%
	SB-01 Total		2.0E-03	9.8E-05	8.8E+00	1.5E+00		
	SB-02	a-Chlordane	5.6E-07	2.8E-08	2.0E-03	3.4E-04	0.03%	0.03%
		g-Chlordane	8.4E-07	4.2E-08	3.0E-03	5.0E-04	0.05%	0.04%
		DBT	---	---	---	---	---	---
		Dieldrin	9.0E-06	4.5E-07	2.6E-02	4.4E-03	0.55%	0.34%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	2.0E-04	1.0E-05	---	---	12.42%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.4E-06	2.4E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.5E-03	4.1E-04	---	0.03%
		Al	---	---	1.2E-01	2.0E-02	---	1.52%
		Anthracene	---	---	1.7E-06	2.8E-07	---	0.00%
		As	1.3E-03	6.7E-05	6.9E+00	1.2E+00	81.30%	89.47%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.5E-07	4.3E-08	---	---	0.05%	---
		Benzo(a)pyrene	1.7E-05	8.6E-07	---	---	1.04%	---
		Benzo(b)fluoranthene	1.8E-06	9.2E-08	---	---	0.11%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.2E-06	1.1E-07	---	---	0.14%	---
		Cd	3.5E-06	1.7E-07	4.3E-02	7.1E-03	0.21%	0.55%
		Chrysene	1.2E-07	6.0E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	6.4E-05	3.2E-06	2.6E-01	4.4E-02	3.90%	3.39%
		Cu	---	---	3.8E-02	6.4E-03	---	0.49%
		Dibenz(a,h)anthracene	2.8E-07	1.4E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.1E-04	1.8E-05	---	0.00%
		Fluorene	---	---	1.8E-06	3.0E-07	---	0.00%
		Hg	---	---	1.2E-01	1.9E-02	---	1.50%
		Indeno(1,2,3-cd)pyrene	6.0E-07	3.0E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.0E-05	1.7E-06	---	0.00%
		Ni	---	---	2.7E-02	4.5E-03	---	0.35%
		Pb	2.1E-06	1.1E-07	---	---	0.13%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.3E-04	3.8E-05	---	0.00%
		Sb	---	---	3.3E-02	5.4E-03	---	0.42%
		Se	---	---	1.2E-01	2.0E-02	---	1.58%
		TBT	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.3E-02	3.8E-03	---	0.29%
	SB-02 Total		1.6E-03	8.2E-05	7.8E+00	1.3E+00		
	SB-03	a-Chlordane	2.6E-07	1.3E-08	9.5E-04	1.6E-04	0.02%	0.01%
		g-Chlordane	3.6E-07	1.8E-08	1.3E-03	2.1E-04	0.02%	0.02%
		DBT	---	---	---	---	---	---
		Dieldrin	3.5E-06	1.7E-07	1.0E-02	1.7E-03	0.23%	0.14%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.8E-04	8.9E-06	---	---	11.91%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.4E-06	4.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.8E-03	3.0E-04	---	0.02%
		Al	---	---	1.6E-01	2.7E-02	---	2.29%
		Anthracene	---	---	2.4E-06	4.0E-07	---	0.00%
		As	1.2E-03	6.0E-05	6.2E+00	1.0E+00	80.30%	87.28%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-06	7.1E-08	---	---	0.09%	---
		Benzo(a)pyrene	1.8E-05	9.2E-07	---	---	1.22%	---
		Benzo(b)fluoranthene	2.2E-06	1.1E-07	---	---	0.15%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.4E-06	1.2E-07	---	---	0.16%	---
		Cd	3.1E-06	1.6E-07	3.8E-02	6.4E-03	0.21%	0.54%
		Chrysene	2.0E-07	9.8E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	8.2E-05	4.1E-06	3.3E-01	5.6E-02	5.45%	4.68%
		Cu	---	---	4.4E-02	7.4E-03	---	0.62%
		Dibenz(a,h)anthracene	3.0E-07	1.5E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.9E-04	3.2E-05	---	0.00%
		Fluorene	---	---	4.5E-06	7.4E-07	---	0.00%
		Hg	---	---	1.2E-01	2.1E-02	---	1.73%
		Indeno(1,2,3-cd)pyrene	9.2E-07	4.6E-08	---	---	0.06%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-05	3.2E-06	---	0.00%
		Ni	---	---	3.7E-02	6.2E-03	---	0.52%
		Pb	2.1E-06	1.0E-07	---	---	0.14%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.6E-04	6.0E-05	---	0.01%
		Sb	---	---	4.6E-02	7.7E-03	---	0.65%
		Se	---	---	7.6E-02	1.3E-02	---	1.07%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.0E-02	5.0E-03	---	0.42%
	SB-03 Total		1.5E-03	7.5E-05	7.1E+00	1.2E+00		
	SB-04	a-Chlordane	2.2E-07	1.1E-08	8.0E-04	1.3E-04	0.01%	0.01%
		g-Chlordane	2.8E-07	1.4E-08	1.0E-03	1.7E-04	0.02%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.6E-06	1.3E-07	7.7E-03	1.3E-03	0.14%	0.08%
		Endosulfan II	---	---	5.1E-06	8.6E-07	---	0.00%
		Endrin	---	---	9.1E-05	1.5E-05	---	0.00%
		Heptachlor	4.2E-08	2.1E-09	4.8E-05	8.0E-06	0.00%	0.00%
		Total Congeners	1.7E-04	8.6E-06	---	---	9.35%	---
		2,4'-DDD	3.2E-09	1.6E-10	---	---	0.00%	---
		2,4'-DDE	6.0E-09	3.0E-10	---	---	0.00%	---
		2,4'-DDT	5.5E-09	2.7E-10	7.5E-05	1.3E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.1E-06	1.9E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.0E-03	5.0E-04	---	0.03%
		Al	---	---	2.2E-01	3.7E-02	---	2.41%
		Anthracene	---	---	1.6E-06	2.7E-07	---	0.00%
		As	1.5E-03	7.7E-05	8.0E+00	1.3E+00	84.18%	87.96%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-06	5.3E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.5E-05	7.7E-07	---	---	0.84%	---
		Benzo(b)fluoranthene	1.7E-06	8.5E-08	---	---	0.09%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.1E-06	1.0E-07	---	---	0.11%	---
		Cd	3.7E-06	1.8E-07	4.5E-02	7.5E-03	0.20%	0.50%
		Chrysene	1.5E-07	7.3E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	8.9E-05	4.4E-06	3.6E-01	6.1E-02	4.84%	3.99%
		Cu	---	---	4.6E-02	7.7E-03	---	0.51%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.5E-04	2.5E-05	---	0.00%
		Fluorene	---	---	1.9E-06	3.1E-07	---	0.00%
		Hg	---	---	1.6E-01	2.6E-02	---	1.73%
		Indeno(1,2,3-cd)pyrene	8.5E-07	4.2E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.4E-06	---	0.00%
		Ni	---	---	3.5E-02	5.8E-03	---	0.38%
		Pb	2.0E-06	1.0E-07	---	---	0.11%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.8E-04	4.7E-05	---	0.00%
		Sb	---	---	4.8E-02	8.0E-03	---	0.53%
		Se	---	---	1.3E-01	2.1E-02	---	1.40%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.0E-02	6.7E-03	---	0.44%
	SB-04 Total		1.8E-03	9.2E-05	9.1E+00	1.5E+00		
	SB-05	a-Chlordane	1.5E-07	7.3E-09	5.2E-04	8.7E-05	0.01%	0.01%
		g-Chlordane	1.8E-07	9.0E-09	6.4E-04	1.1E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	1.4E-07	7.1E-09	4.1E-04	6.9E-05	0.01%	0.01%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	1.5E-04	7.4E-06	---	---	10.05%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	9.7E-07	1.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.5E-03	5.8E-04	---	0.05%
		Al	---	---	2.3E-01	3.8E-02	---	3.07%
		Anthracene	---	---	1.4E-06	2.3E-07	---	0.00%
		As	1.2E-03	6.1E-05	6.3E+00	1.1E+00	82.98%	86.40%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.5E-07	4.8E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.6E-05	8.1E-07	---	---	1.10%	---
		Benzo(b)fluoranthene	1.5E-06	7.7E-08	---	---	0.10%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-06	1.0E-07	---	---	0.14%	---
		Cd	2.8E-06	1.4E-07	3.4E-02	5.7E-03	0.19%	0.47%
		Chrysene	1.4E-07	6.8E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.6E-05	3.8E-06	3.1E-01	5.2E-02	5.15%	4.24%
		Cu	---	---	5.5E-02	9.2E-03	---	0.75%
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	0.00%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-04	2.0E-05	---	0.00%
		Fluorene	---	---	1.5E-06	2.6E-07	---	0.00%
		Hg	---	---	1.4E-01	2.3E-02	---	1.87%
		Indeno(1,2,3-cd)pyrene	4.8E-07	2.4E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-05	1.9E-06	---	0.00%
		Ni	---	---	4.2E-02	7.0E-03	---	0.58%
		Pb	2.0E-06	1.0E-07	---	---	0.14%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.7E-04	4.6E-05	---	0.00%
		Sb	---	---	4.5E-02	7.4E-03	---	0.61%
		Se	---	---	1.1E-01	1.8E-02	---	1.44%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Zn	---	---	3.6E-02	6.0E-03	---	0.49%
	SB-05 Total		1.5E-03	7.4E-05	7.3E+00	1.2E+00		
	SB-06	a-Chlordane	1.6E-07	7.8E-09	5.6E-04	9.4E-05	0.01%	0.01%
		g-Chlordane	2.0E-07	9.9E-09	7.1E-04	1.2E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.0E-06	1.0E-07	5.9E-03	9.8E-04	0.10%	0.06%
		Endosulfan II	---	---	6.3E-06	1.0E-06	---	0.00%
		Endrin	---	---	1.0E-04	1.7E-05	---	0.00%
		Heptachlor	5.4E-08	2.7E-09	6.2E-05	1.0E-05	0.00%	0.00%
		Total Congeners	2.4E-04	1.2E-05	---	---	11.33%	---
		2,4'-DDD	4.2E-09	2.1E-10	---	---	0.00%	---
		2,4'-DDE	7.0E-09	3.5E-10	---	---	0.00%	---
		2,4'-DDT	7.0E-09	3.5E-10	9.6E-05	1.6E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.4E-06	4.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.7E-03	4.5E-04	---	0.03%
		Al	---	---	1.7E-01	2.9E-02	---	1.72%
		Anthracene	---	---	2.8E-06	4.6E-07	---	0.00%
		As	1.7E-03	8.7E-05	9.1E+00	1.5E+00	83.69%	90.09%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-06	7.0E-08	---	---	0.07%	---
		Benzo(a)pyrene	2.1E-05	1.0E-06	---	---	0.99%	---
		Benzo(b)fluoranthene	2.4E-06	1.2E-07	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.9E-06	1.4E-07	---	---	0.14%	---
		Cd	6.6E-06	3.3E-07	8.1E-02	1.3E-02	0.32%	0.81%
		Chrysene	2.1E-07	1.0E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	6.3E-05	3.2E-06	2.6E-01	4.3E-02	3.04%	2.58%
		Cu	---	---	4.6E-02	7.7E-03	---	0.46%
		Dibenz(a,h)anthracene	3.9E-07	1.9E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-04	3.1E-05	---	0.00%
		Fluorene	---	---	4.3E-06	7.1E-07	---	0.00%
		Hg	---	---	1.9E-01	3.1E-02	---	1.84%
		Indeno(1,2,3-cd)pyrene	1.1E-06	5.6E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.9E-05	4.9E-06	---	0.00%
		Ni	---	---	4.2E-02	6.9E-03	---	0.41%
		Pb	2.3E-06	1.2E-07	---	---	0.11%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.7E-04	6.1E-05	---	0.00%
		Sb	---	---	5.8E-02	9.7E-03	---	0.58%
		Se	---	---	8.7E-02	1.4E-02	---	0.87%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.4E-02	9.1E-03	---	0.54%
	SB-06 Total		2.1E-03	1.0E-04	1.0E+01	1.7E+00		
	SB-07	a-Chlordane	2.1E-07	1.1E-08	7.7E-04	1.3E-04	0.01%	0.01%
		g-Chlordane	2.9E-07	1.5E-08	1.0E-03	1.7E-04	0.02%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.3E-06	1.1E-07	6.6E-03	1.1E-03	0.14%	0.09%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	1.9E-04	9.6E-06	---	---	11.86%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.3E-06	3.8E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.6E-03	9.4E-04	---	0.07%
		Al	---	---	1.4E-01	2.3E-02	---	1.76%
		Anthracene	---	---	1.8E-06	3.0E-07	---	0.00%
		As	1.3E-03	6.6E-05	6.9E+00	1.1E+00	81.88%	89.05%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.1E-07	4.5E-08	---	---	0.06%	---
		Benzo(a)pyrene	1.5E-05	7.7E-07	---	---	0.94%	---
		Benzo(b)fluoranthene	2.1E-06	1.0E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.1E-06	1.1E-07	---	---	0.13%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Cd	4.4E-06	2.2E-07	5.3E-02	8.9E-03	0.27%	0.69%
		Chrysene	1.5E-07	7.4E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.0E-05	3.5E-06	2.9E-01	4.8E-02	4.33%	3.72%
		Cu	---	---	5.2E-02	8.7E-03	---	0.67%
		Dibenz(a,h)anthracene	2.8E-07	1.4E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-04	2.4E-05	---	0.00%
		Fluorene	---	---	3.3E-06	5.4E-07	---	0.00%
		Hg	---	---	7.9E-02	1.3E-02	---	1.02%
		Indeno(1,2,3-cd)pyrene	8.3E-07	4.1E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.5E-05	2.5E-06	---	0.00%
		Ni	---	---	3.7E-02	6.1E-03	---	0.47%
		Pb	2.4E-06	1.2E-07	---	---	0.15%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.6E-04	4.3E-05	---	0.00%
		Sb	---	---	3.8E-02	6.3E-03	---	0.49%
		Se	---	---	1.2E-01	2.1E-02	---	1.60%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.6E-02	4.4E-03	---	0.34%
	SB-07 Total		1.6E-03	8.1E-05	7.7E+00	1.3E+00		
	SB-08	a-Chlordane	1.6E-07	8.2E-09	5.9E-04	9.8E-05	0.01%	0.01%
		g-Chlordane	2.4E-07	1.2E-08	8.6E-04	1.4E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	3.2E-06	1.6E-07	9.2E-03	1.5E-03	0.16%	0.10%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	2.5E-04	1.3E-05	---	---	13.25%	---
		2,4'-DDD	2.5E-09	1.2E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.3E-06	3.8E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.0E-03	6.7E-04	---	0.04%
		Al	---	---	3.0E-01	5.0E-02	---	3.30%
		Anthracene	---	---	3.3E-06	5.5E-07	---	0.00%
		As	1.5E-03	7.6E-05	7.9E+00	1.3E+00	79.22%	86.07%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.5E-06	7.7E-08	---	---	0.08%	---
		Benzo(a)pyrene	2.3E-05	1.2E-06	---	---	1.22%	---
		Benzo(b)fluoranthene	2.3E-06	1.2E-07	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.0E-06	1.5E-07	---	---	0.16%	---
		Cd	5.0E-06	2.5E-07	6.2E-02	1.0E-02	0.26%	0.67%
		Chrysene	2.4E-07	1.2E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.0E-04	5.1E-06	4.2E-01	6.9E-02	5.28%	4.53%
		Cu	---	---	5.4E-02	9.0E-03	---	0.59%
		Dibenz(a,h)anthracene	3.0E-07	1.5E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.7E-04	6.2E-05	---	0.00%
		Fluorene	---	---	2.6E-06	4.3E-07	---	0.00%
		Hg	---	---	1.5E-01	2.5E-02	---	1.65%
		Indeno(1,2,3-cd)pyrene	1.0E-06	5.0E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	4.5E-02	7.5E-03	---	0.49%
		Pb	2.8E-06	1.4E-07	---	---	0.15%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.2E-04	8.7E-05	---	0.01%
		Sb	---	---	9.4E-02	1.6E-02	---	1.03%
		Se	---	---	9.8E-02	1.6E-02	---	1.07%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.0E-02	6.6E-03	---	0.43%
	SB-08 Total		1.9E-03	9.6E-05	9.2E+00	1.5E+00		

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
	SB-09	a-Chlordane	1.6E-07	8.0E-09	5.8E-04	9.6E-05	0.01%	0.01%
		g-Chlordane	2.4E-07	1.2E-08	8.6E-04	1.4E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	1.6E-06	8.0E-08	4.7E-03	7.8E-04	0.09%	0.06%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	4.6E-05	7.6E-06	---	0.00%
		Heptachlor	2.4E-08	1.2E-09	2.7E-05	4.6E-06	0.00%	0.00%
		Total Congeners	2.7E-04	1.4E-05	---	---	15.17%	---
		2,4'-DDD	1.8E-09	8.8E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.0E-09	1.5E-10	4.1E-05	6.9E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.4E-06	4.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.0E-03	6.7E-04	---	0.05%
		Al	---	---	2.0E-01	3.3E-02	---	2.43%
		Anthracene	---	---	4.1E-06	6.9E-07	---	0.00%
		As	1.3E-03	6.4E-05	6.7E+00	1.1E+00	71.25%	83.06%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.5E-06	1.3E-07	---	---	0.14%	---
		Benzo(a)pyrene	5.8E-05	2.9E-06	---	---	3.22%	---
		Benzo(b)fluoranthene	5.5E-06	2.7E-07	---	---	0.30%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	5.7E-06	2.9E-07	---	---	0.32%	---
		Cd	5.2E-06	2.6E-07	6.4E-02	1.1E-02	0.29%	0.80%
		Chrysene	3.3E-07	1.6E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	1.6E-04	7.9E-06	6.5E-01	1.1E-01	8.73%	8.04%
		Cu	---	---	6.3E-02	1.1E-02	---	0.79%
		Dibenz(a,h)anthracene	1.1E-06	5.7E-08	---	---	0.06%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.2E-04	3.7E-05	---	0.00%
		Fluorene	---	---	6.2E-06	1.0E-06	---	0.00%
		Hg	---	---	1.2E-01	1.9E-02	---	1.45%
		Indeno(1,2,3-cd)pyrene	2.6E-06	1.3E-07	---	---	0.14%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.7E-05	4.5E-06	---	0.00%
		Ni	---	---	5.0E-02	8.3E-03	---	0.62%
		Pb	4.3E-06	2.2E-07	---	---	0.24%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.5E-04	1.1E-04	---	0.01%
		Sb	---	---	6.0E-02	1.0E-02	---	0.75%
		Se	---	---	1.2E-01	1.9E-02	---	1.45%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-02	6.5E-03	---	0.48%
	SB-09 Total		1.8E-03	9.0E-05	8.0E+00	1.3E+00		
	SB-10	a-Chlordane	2.0E-07	1.0E-08	7.3E-04	1.2E-04	0.01%	0.01%
		g-Chlordane	3.1E-07	1.6E-08	1.1E-03	1.9E-04	0.02%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	3.3E-06	1.7E-07	9.7E-03	1.6E-03	0.18%	0.11%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	3.0E-04	1.5E-05	---	---	15.76%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.6E-06	4.4E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.4E-03	5.6E-04	---	0.04%
		Al	---	---	3.1E-01	5.2E-02	---	3.46%
		Anthracene	---	---	5.3E-06	8.9E-07	---	0.00%
		As	1.3E-03	6.7E-05	7.0E+00	1.2E+00	71.21%	76.98%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.1E-06	1.1E-07	---	---	0.11%	---
		Benzo(a)pyrene	2.6E-05	1.3E-06	---	---	1.40%	---
		Benzo(b)fluoranthene	2.5E-06	1.3E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.2E-06	1.6E-07	---	---	0.17%	---
		Cd	5.4E-06	2.7E-07	6.6E-02	1.1E-02	0.28%	0.72%
		Chrysene	3.2E-07	1.6E-08	---	---	0.02%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Co	---	---	---	---	---	---
		Cr	2.0E-04	9.8E-06	8.0E-01	1.3E-01	10.35%	8.84%
		Cu	---	---	8.1E-02	1.3E-02	---	0.89%
		Dibenz(a,h)anthracene	3.0E-07	1.5E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.2E-04	8.7E-05	---	0.01%
		Fluorene	---	---	9.8E-06	1.6E-06	---	0.00%
		Hg	---	---	2.0E-01	3.3E-02	---	2.19%
		Indeno(1,2,3-cd)pyrene	7.5E-07	3.8E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.7E-05	2.8E-06	---	0.00%
		Ni	---	---	6.3E-02	1.1E-02	---	0.70%
		Pb	5.9E-06	2.9E-07	---	---	0.31%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	7.0E-04	1.2E-04	---	0.01%
		Sb	---	---	4.0E-01	6.6E-02	---	4.36%
		Se	---	---	1.2E-01	2.0E-02	---	1.32%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.3E-02	5.6E-03	---	0.37%
	SB-10 Total		1.9E-03	9.5E-05	9.1E+00	1.5E+00		
	SB-11	a-Chlordane	2.8E-07	1.4E-08	1.0E-03	1.7E-04	0.01%	0.01%
		g-Chlordane	4.2E-07	2.1E-08	1.5E-03	2.5E-04	0.02%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	6.3E-06	3.2E-07	1.9E-02	3.1E-03	0.27%	0.18%
		Endosulfan II	---	---	4.6E-06	7.6E-07	---	0.00%
		Endrin	---	---	8.0E-05	1.3E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	4.6E-04	2.3E-05	---	---	19.39%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	5.0E-09	2.5E-10	6.9E-05	1.1E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.2E-06	3.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.3E-03	8.9E-04	---	0.05%
		Al	---	---	2.1E-01	3.5E-02	---	2.06%
		Anthracene	---	---	2.6E-06	4.3E-07	---	0.00%
		As	1.8E-03	8.8E-05	9.1E+00	1.5E+00	73.15%	88.00%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.6E-06	8.1E-08	---	---	0.07%	---
		Benzo(a)pyrene	2.9E-05	1.4E-06	---	---	1.20%	---
		Benzo(b)fluoranthene	2.8E-06	1.4E-07	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.8E-06	1.9E-07	---	---	0.16%	---
		Cd	5.6E-06	2.8E-07	6.9E-02	1.1E-02	0.23%	0.66%
		Chrysene	2.5E-07	1.3E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.2E-04	6.1E-06	5.0E-01	8.4E-02	5.13%	4.88%
		Cu	---	---	6.3E-02	1.1E-02	---	0.61%
		Dibenz(a,h)anthracene	4.0E-07	2.0E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.2E-04	3.6E-05	---	0.00%
		Fluorene	---	---	4.3E-06	7.1E-07	---	0.00%
		Hg	---	---	1.0E-01	1.7E-02	---	1.00%
		Indeno(1,2,3-cd)pyrene	1.3E-06	6.6E-08	---	---	0.06%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.5E-05	2.5E-06	---	0.00%
		Ni	---	---	4.7E-02	7.9E-03	---	0.46%
		Pb	3.9E-06	2.0E-07	---	---	0.16%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.9E-04	6.5E-05	---	0.00%
		Sb	---	---	7.5E-02	1.3E-02	---	0.73%
		Se	---	---	9.7E-02	1.6E-02	---	0.94%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.2E-02	7.0E-03	---	0.40%
	SB-11 Total		2.4E-03	1.2E-04	1.0E+01	1.7E+00		
	SB-12	a-Chlordane	2.1E-07	1.1E-08	7.5E-04	1.3E-04	0.01%	0.01%
		g-Chlordane	3.2E-07	1.6E-08	1.2E-03	1.9E-04	0.02%	0.02%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		DBT	---	---	---	---	---	---
		Dieldrin	5.0E-06	2.5E-07	1.5E-02	2.4E-03	0.30%	0.20%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	3.5E-04	1.8E-05	---	---	20.63%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.1E-06	1.9E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.3E-03	2.2E-04	---	0.02%
		Al	---	---	1.7E-01	2.8E-02	---	2.29%
		Anthracene	---	---	2.2E-06	3.6E-07	---	0.00%
		As	1.2E-03	6.2E-05	6.4E+00	1.1E+00	72.81%	87.46%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.2E-06	5.9E-08	---	---	0.07%	---
		Benzo(a)pyrene	2.1E-05	1.0E-06	---	---	1.21%	---
		Benzo(b)fluoranthene	2.3E-06	1.2E-07	---	---	0.14%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.7E-06	1.3E-07	---	---	0.16%	---
		Cd	4.9E-06	2.5E-07	6.0E-02	1.0E-02	0.29%	0.82%
		Chrysene	1.7E-07	8.6E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	7.0E-05	3.5E-06	2.9E-01	4.8E-02	4.13%	3.92%
		Cu	---	---	4.5E-02	7.5E-03	---	0.62%
		Dibenz(a,h)anthracene	3.1E-07	1.6E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-04	3.0E-05	---	0.00%
		Fluorene	---	---	2.1E-06	3.4E-07	---	0.00%
		Hg	---	---	1.2E-01	2.1E-02	---	1.68%
		Indeno(1,2,3-cd)pyrene	9.2E-07	4.6E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.9E-06	1.7E-06	---	0.00%
		Ni	---	---	3.2E-02	5.3E-03	---	0.44%
		Pb	2.6E-06	1.3E-07	---	---	0.15%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.3E-04	5.5E-05	---	0.00%
		Sb	---	---	4.3E-02	7.1E-03	---	0.58%
		Se	---	---	9.8E-02	1.6E-02	---	1.34%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.4E-02	7.4E-03	---	0.60%
	SB-12 Total		1.7E-03	8.5E-05	7.3E+00	1.2E+00		
	SB-13	a-Chlordane	2.0E-07	9.9E-09	7.1E-04	1.2E-04	0.01%	0.01%
		g-Chlordane	2.5E-07	1.3E-08	9.1E-04	1.5E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	3.9E-06	1.9E-07	1.1E-02	1.9E-03	0.18%	0.11%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	4.6E-05	7.6E-06	---	0.00%
		Heptachlor	2.4E-08	1.2E-09	2.7E-05	4.6E-06	0.00%	0.00%
		Total Congeners	3.5E-04	1.7E-05	---	---	15.81%	---
		2,4'-DDD	1.8E-09	8.8E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.0E-09	1.5E-10	4.1E-05	6.9E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	4.9E-06	8.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.0E-03	5.0E-04	---	0.03%
		Al	---	---	2.3E-01	3.9E-02	---	2.34%
		Anthracene	---	---	6.1E-06	1.0E-06	---	0.00%
		As	1.7E-03	8.4E-05	8.7E+00	1.5E+00	76.29%	87.10%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.4E-06	1.2E-07	---	---	0.11%	---
		Benzo(a)pyrene	3.1E-05	1.6E-06	---	---	1.42%	---
		Benzo(b)fluoranthene	3.4E-06	1.7E-07	---	---	0.16%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	4.0E-06	2.0E-07	---	---	0.18%	---
		Cd	7.0E-06	3.5E-07	8.6E-02	1.4E-02	0.32%	0.86%
		Chrysene	3.7E-07	1.8E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	1.2E-04	5.8E-06	4.7E-01	7.9E-02	5.24%	4.73%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Cu	---	---	6.7E-02	1.1E-02	---	0.67%
		Dibenz(a,h)anthracene	6.6E-07	3.3E-08	---	---	0.03%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.5E-04	9.2E-05	---	0.01%
		Fluorene	---	---	7.4E-06	1.2E-06	---	0.00%
		Hg	---	---	1.8E-01	3.0E-02	---	1.78%
		Indeno(1,2,3-cd)pyrene	1.7E-06	8.6E-08	---	---	0.08%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.6E-05	4.3E-06	---	0.00%
		Ni	---	---	6.3E-02	1.0E-02	---	0.63%
		Pb	3.3E-06	1.7E-07	---	---	0.15%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.0E-04	6.6E-05	---	0.00%
		Sb	---	---	6.0E-02	1.0E-02	---	0.60%
		Se	---	---	6.9E-02	1.1E-02	---	0.69%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-02	7.2E-03	---	0.43%
	SB-13 Total		2.2E-03	1.1E-04	1.0E+01	1.7E+00		
	SB-14	a-Chlordane	1.6E-07	8.0E-09	5.8E-04	9.6E-05	0.01%	0.01%
		g-Chlordane	2.8E-07	1.4E-08	9.9E-04	1.6E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	6.8E-06	3.4E-07	2.0E-02	3.3E-03	0.30%	0.20%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	4.1E-04	2.0E-05	---	---	17.95%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.0E-06	5.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.3E-03	8.9E-04	---	0.05%
		Al	---	---	2.2E-01	3.7E-02	---	2.21%
		Anthracene	---	---	5.3E-06	8.8E-07	---	0.00%
		As	1.7E-03	8.4E-05	8.7E+00	1.4E+00	74.15%	87.52%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.1E-06	1.0E-07	---	---	0.09%	---
		Benzo(a)pyrene	2.8E-05	1.4E-06	---	---	1.25%	---
		Benzo(b)fluoranthene	3.4E-06	1.7E-07	---	---	0.15%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.3E-06	1.6E-07	---	---	0.14%	---
		Cd	8.0E-06	4.0E-07	9.9E-02	1.6E-02	0.36%	0.99%
		Chrysene	3.0E-07	1.5E-08	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.2E-04	6.0E-06	5.0E-01	8.3E-02	5.35%	4.98%
		Cu	---	---	6.3E-02	1.1E-02	---	0.64%
		Dibenz(a,h)anthracene	5.5E-07	2.8E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.8E-04	6.3E-05	---	0.00%
		Fluorene	---	---	6.2E-06	1.0E-06	---	0.00%
		Hg	---	---	9.9E-02	1.7E-02	---	1.00%
		Indeno(1,2,3-cd)pyrene	1.6E-06	8.2E-08	---	---	0.07%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-05	2.1E-06	---	0.00%
		Ni	---	---	5.2E-02	8.6E-03	---	0.52%
		Pb	3.0E-06	1.5E-07	---	---	0.13%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.7E-04	9.5E-05	---	0.01%
		Sb	---	---	6.0E-02	1.0E-02	---	0.60%
		Se	---	---	7.0E-02	1.2E-02	---	0.70%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.5E-02	9.2E-03	---	0.55%
	SB-14 Total		2.3E-03	1.1E-04	9.9E+00	1.7E+00		
	SB-15	a-Chlordane	1.9E-07	9.6E-09	6.9E-04	1.1E-04	0.01%	0.01%
		g-Chlordane	2.1E-07	1.1E-08	7.7E-04	1.3E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.2E-06	1.1E-07	6.3E-03	1.1E-03	0.12%	0.08%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	2.8E-04	1.4E-05	---	---	15.32%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	4.0E-09	2.0E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.5E-06	4.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.3E-03	3.9E-04	---	0.03%
		Al	---	---	1.8E-01	2.9E-02	---	2.13%
		Anthracene	---	---	4.4E-06	7.4E-07	---	0.00%
		As	1.4E-03	7.1E-05	7.4E+00	1.2E+00	79.49%	89.97%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.2E-06	1.1E-07	---	---	0.12%	---
		Benzo(a)pyrene	2.6E-05	1.3E-06	---	---	1.43%	---
		Benzo(b)fluoranthene	2.9E-06	1.5E-07	---	---	0.16%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.2E-06	1.6E-07	---	---	0.18%	---
		Cd	3.2E-06	1.6E-07	4.0E-02	6.6E-03	0.18%	0.48%
		Chrysene	2.9E-07	1.5E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	4.9E-05	2.5E-06	2.0E-01	3.4E-02	2.76%	2.46%
		Cu	---	---	4.4E-02	7.4E-03	---	0.54%
		Dibenz(a,h)anthracene	4.3E-07	2.2E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.3E-04	3.8E-05	---	0.00%
		Fluorene	---	---	5.8E-06	9.7E-07	---	0.00%
		Hg	---	---	1.7E-01	2.9E-02	---	2.08%
		Indeno(1,2,3-cd)pyrene	1.2E-06	6.2E-08	---	---	0.07%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.5E-05	2.5E-06	---	0.00%
		Ni	---	---	2.9E-02	4.8E-03	---	0.35%
		Pb	1.9E-06	9.6E-08	---	---	0.11%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.4E-04	7.4E-05	---	0.01%
		Sb	---	---	3.8E-02	6.3E-03	---	0.46%
		Se	---	---	7.9E-02	1.3E-02	---	0.96%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.5E-02	5.8E-03	---	0.43%
	SB-15 Total		1.8E-03	9.0E-05	8.2E+00	1.4E+00		
	SB-16	a-Chlordane	1.5E-07	7.6E-09	5.5E-04	9.1E-05	0.00%	0.01%
		g-Chlordane	1.9E-07	9.7E-09	7.0E-04	1.2E-04	0.00%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.6E-06	1.3E-07	7.5E-03	1.3E-03	0.01%	0.08%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	4.6E-05	7.6E-06	---	0.00%
		Heptachlor	2.4E-08	1.2E-09	2.7E-05	4.6E-06	0.00%	0.00%
		Total Congeners	5.5E-04	2.7E-05	---	---	1.30%	---
		2,4'-DDD	1.8E-09	8.8E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.0E-09	1.5E-10	4.1E-05	6.9E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.4E-06	4.0E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.7E-03	4.6E-04	---	0.03%
		Al	---	---	1.6E-01	2.7E-02	---	1.68%
		Anthracene	---	---	3.5E-06	5.8E-07	---	0.00%
		As	1.6E-03	7.9E-05	8.2E+00	1.4E+00	3.78%	85.86%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-06	6.8E-08	---	---	0.00%	---
		Benzo(a)pyrene	2.3E-05	1.1E-06	---	---	0.05%	---
		Benzo(b)fluoranthene	2.9E-06	1.5E-07	---	---	0.01%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.0E-06	1.5E-07	---	---	0.01%	---
		Cd	6.4E-06	3.2E-07	7.8E-02	1.3E-02	0.02%	0.82%
		Chrysene	2.5E-07	1.3E-08	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	1.5E-04	7.6E-06	6.2E-01	1.0E-01	0.36%	6.52%
		Cu	---	---	6.9E-02	1.1E-02	---	0.72%
		Dibenz(a,h)anthracene	4.9E-07	2.5E-08	---	---	0.00%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Dioxin 2,3,7,8 -TCDD	4.0E-02	2.0E-03	---	---	94.45%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.3E-04	3.9E-05	---	0.00%
		Fluorene	---	---	4.5E-06	7.4E-07	---	0.00%
		Hg	---	---	1.7E-01	2.9E-02	---	1.79%
		Indeno(1,2,3-cd)pyrene	1.3E-06	6.5E-08	---	---	0.00%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-05	2.3E-06	---	0.00%
		Ni	---	---	4.8E-02	8.0E-03	---	0.50%
		Pb	2.9E-06	1.4E-07	---	---	0.01%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.1E-04	3.6E-05	---	0.00%
		Sb	---	---	7.4E-02	1.2E-02	---	0.77%
		Se	---	---	6.4E-02	1.1E-02	---	0.67%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.0E-02	8.4E-03	---	0.53%
	SB-16 Total		4.2E-02	2.1E-03	9.6E+00	1.6E+00		
	SB-17	a-Chlordane	1.8E-07	9.0E-09	6.4E-04	1.1E-04	0.00%	0.01%
		g-Chlordane	2.1E-07	1.1E-08	7.5E-04	1.3E-04	0.00%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.2E-06	1.1E-07	6.4E-03	1.1E-03	0.01%	0.08%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	3.6E-04	1.8E-05	---	---	1.71%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.9E-06	3.2E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.0E-03	3.3E-04	---	0.02%
		Al	---	---	1.1E-01	1.8E-02	---	1.36%
		Anthracene	---	---	3.2E-06	5.4E-07	---	0.00%
		As	1.4E-03	6.9E-05	7.1E+00	1.2E+00	6.44%	88.47%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-06	7.2E-08	---	---	0.01%	---
		Benzo(a)pyrene	2.1E-05	1.1E-06	---	---	0.10%	---
		Benzo(b)fluoranthene	3.2E-06	1.6E-07	---	---	0.02%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.7E-06	1.4E-07	---	---	0.01%	---
		Cd	4.4E-06	2.2E-07	5.3E-02	8.9E-03	0.02%	0.67%
		Chrysene	2.4E-07	1.2E-08	---	---	0.00%	---
		Co	---	---	---	---	---	---
		Cr	8.1E-05	4.1E-06	3.3E-01	5.6E-02	0.38%	4.14%
		Cu	---	---	4.8E-02	7.9E-03	---	0.59%
		Dibenz(a,h)anthracene	4.3E-07	2.2E-08	---	---	0.00%	---
		Dioxin 2,3,7,8 -TCDD	1.9E-02	9.7E-04	---	---	91.28%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.1E-04	5.2E-05	---	0.00%
		Fluorene	---	---	4.1E-06	6.9E-07	---	0.00%
		Hg	---	---	1.3E-01	2.2E-02	---	1.62%
		Indeno(1,2,3-cd)pyrene	1.1E-06	5.6E-08	---	---	0.01%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.2E-05	2.0E-06	---	0.00%
		Ni	---	---	3.2E-02	5.4E-03	---	0.40%
		Pb	1.6E-06	8.1E-08	---	---	0.01%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.5E-04	1.1E-04	---	0.01%
		Sb	---	---	5.7E-02	9.4E-03	---	0.70%
		Se	---	---	1.1E-01	1.8E-02	---	1.31%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.8E-02	8.0E-03	---	0.60%
	SB-17 Total		2.1E-02	1.1E-03	8.0E+00	1.3E+00		
	SB-18	a-Chlordane	2.4E-07	1.2E-08	8.6E-04	1.4E-04	0.01%	0.01%
		g-Chlordane	2.7E-07	1.4E-08	9.7E-04	1.6E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	3.2E-06	1.6E-07	9.2E-03	1.5E-03	0.13%	0.09%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	6.1E-04	3.1E-05	---	---	24.30%	---
		2,4'-DDD	2.5E-09	1.2E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	2.2E-06	3.6E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.7E-03	4.5E-04	---	0.03%
		Al	---	---	2.1E-01	3.4E-02	---	1.99%
		Anthracene	---	---	7.1E-06	1.2E-06	---	0.00%
		As	1.7E-03	8.5E-05	8.8E+00	1.5E+00	67.70%	85.82%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.9E-06	1.4E-07	---	---	0.11%	---
		Benzo(a)pyrene	3.8E-05	1.9E-06	---	---	1.52%	---
		Benzo(b)fluoranthene	4.7E-06	2.4E-07	---	---	0.19%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	5.8E-06	2.9E-07	---	---	0.23%	---
		Cd	6.3E-06	3.1E-07	7.7E-02	1.3E-02	0.25%	0.75%
		Chrysene	5.8E-07	2.9E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	1.3E-04	6.6E-06	5.4E-01	9.0E-02	5.25%	5.26%
		Cu	---	---	7.6E-02	1.3E-02	---	0.74%
		Dibenz(a,h)anthracene	5.9E-07	3.0E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.0E-04	1.3E-04	---	0.01%
		Fluorene	---	---	1.0E-05	1.7E-06	---	0.00%
		Hg	---	---	2.1E-01	3.5E-02	---	2.07%
		Indeno(1,2,3-cd)pyrene	1.3E-06	6.4E-08	---	---	0.05%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.1E-05	3.5E-06	---	0.00%
		Ni	---	---	5.5E-02	9.2E-03	---	0.53%
		Pb	5.0E-06	2.5E-07	---	---	0.20%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.8E-03	3.1E-04	---	0.02%
		Sb	---	---	1.2E-01	2.0E-02	---	1.15%
		Se	---	---	1.1E-01	1.9E-02	---	1.08%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.6E-02	7.6E-03	---	0.44%
	SB-18 Total		2.5E-03	1.3E-04	1.0E+01	1.7E+00		
	SB-19	a-Chlordane	3.4E-08	1.7E-09	1.2E-04	2.1E-05	0.00%	0.00%
		g-Chlordane	3.4E-08	1.7E-09	1.2E-04	2.1E-05	0.00%	0.00%
		DBT	---	---	---	---	---	---
		Dieldrin	2.4E-07	1.2E-08	6.9E-04	1.1E-04	0.02%	0.01%
		Endosulfan II	---	---	5.7E-06	9.5E-07	---	0.00%
		Endrin	---	---	1.0E-04	1.7E-05	---	0.00%
		Heptachlor	5.4E-08	2.7E-09	6.2E-05	1.0E-05	0.00%	0.00%
		Total Congeners	3.5E-04	1.8E-05	---	---	27.77%	---
		2,4'-DDD	3.9E-09	1.9E-10	---	---	0.00%	---
		2,4'-DDE	7.0E-09	3.5E-10	---	---	0.00%	---
		2,4'-DDT	6.5E-09	3.2E-10	8.9E-05	1.5E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.0E-06	1.7E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.8E-04	8.0E-05	---	0.01%
		Al	---	---	2.2E-02	3.6E-03	---	0.42%
		Anthracene	---	---	1.1E-06	1.8E-07	---	0.00%
		As	8.8E-04	4.4E-05	4.6E+00	7.6E-01	69.60%	89.10%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-07	6.9E-09	---	---	0.01%	---
		Benzo(a)pyrene	1.6E-06	7.8E-08	---	---	0.12%	---
		Benzo(b)fluoranthene	2.2E-07	1.1E-08	---	---	0.02%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.2E-07	1.1E-08	---	---	0.02%	---
		Cd	4.0E-06	2.0E-07	4.9E-02	8.2E-03	0.32%	0.96%
		Chrysene	6.9E-08	3.4E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	2.6E-05	1.3E-06	1.1E-01	1.8E-02	2.03%	2.05%
		Cu	---	---	8.2E-02	1.4E-02	---	1.60%
		Dibenz(a,h)anthracene	1.8E-08	9.0E-10	---	---	0.00%	---

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.6E-05	9.3E-06	---	0.00%
		Fluorene	---	---	2.2E-06	3.7E-07	---	0.00%
		Hg	---	---	1.8E-01	3.0E-02	---	3.47%
		Indeno(1,2,3-cd)pyrene	6.7E-08	3.4E-09	---	---	0.01%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.7E-05	2.9E-06	---	0.00%
		Ni	---	---	1.2E-02	2.0E-03	---	0.23%
		Pb	9.4E-07	4.7E-08	---	---	0.07%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.4E-05	1.1E-05	---	0.00%
		Sb	---	---	3.8E-02	6.3E-03	---	0.73%
		Se	---	---	4.8E-02	7.9E-03	---	0.93%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.4E-02	4.0E-03	---	0.47%
	SB-19 Total		1.3E-03	6.3E-05	5.1E+00	8.6E-01		
	SB-20	a-Chlordane	1.7E-07	8.6E-09	6.2E-04	1.0E-04	0.01%	0.01%
		g-Chlordane	2.9E-07	1.4E-08	1.0E-03	1.7E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	9.9E-06	4.9E-07	2.9E-02	4.8E-03	0.46%	0.34%
		Endosulfan II	---	---	2.3E-06	3.8E-07	---	0.00%
		Endrin	---	---	1.1E-05	1.9E-06	---	0.00%
		Heptachlor	1.2E-08	6.0E-10	1.4E-05	2.3E-06	0.00%	0.00%
		Total Congeners	5.9E-04	2.9E-05	---	---	27.12%	---
		2,4'-DDD	7.1E-10	3.5E-11	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	1.5E-09	7.5E-11	2.1E-05	3.4E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.2E-05	1.9E-06	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.3E-03	8.9E-04	---	0.06%
		Al	---	---	1.3E-01	2.1E-02	---	1.50%
		Anthracene	---	---	6.5E-06	1.1E-06	---	0.00%
		As	1.4E-03	7.2E-05	7.5E+00	1.3E+00	66.83%	89.84%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.4E-06	1.2E-07	---	---	0.11%	---
		Benzo(a)pyrene	3.5E-05	1.8E-06	---	---	1.63%	---
		Benzo(b)fluoranthene	4.0E-06	2.0E-07	---	---	0.18%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.9E-06	2.0E-07	---	---	0.18%	---
		Cd	4.1E-06	2.1E-07	5.1E-02	8.5E-03	0.19%	0.61%
		Chrysene	3.5E-07	1.7E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	6.5E-05	3.2E-06	2.6E-01	4.4E-02	2.98%	3.17%
		Cu	---	---	7.4E-02	1.2E-02	---	0.88%
		Dibenz(a,h)anthracene	9.8E-07	4.9E-08	---	---	0.05%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.8E-04	6.4E-05	---	0.00%
		Fluorene	---	---	9.4E-06	1.6E-06	---	0.00%
		Hg	---	---	9.6E-02	1.6E-02	---	1.15%
		Indeno(1,2,3-cd)pyrene	2.2E-06	1.1E-07	---	---	0.10%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.6E-05	2.7E-06	---	0.00%
		Ni	---	---	3.5E-02	5.9E-03	---	0.42%
		Pb	2.7E-06	1.4E-07	---	---	0.13%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.5E-04	1.1E-04	---	0.01%
		Sb	---	---	5.1E-02	8.6E-03	---	0.61%
		Se	---	---	7.2E-02	1.2E-02	---	0.86%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-02	7.1E-03	---	0.51%
	SB-20 Total		2.2E-03	1.1E-04	8.4E+00	1.4E+00		
	SB-21	a-Chlordane	1.5E-07	7.6E-09	5.5E-04	9.1E-05	0.01%	0.01%
		g-Chlordane	1.9E-07	9.6E-09	6.9E-04	1.1E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.9E-06	1.5E-07	8.5E-03	1.4E-03	0.11%	0.10%
		Endosulfan II	---	---	4.0E-06	6.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Heptachlor	3.6E-08	1.8E-09	4.1E-05	6.9E-06	0.00%	0.00%
		Total Congeners	9.5E-04	4.8E-05	---	---	37.24%	---
		2,4'-DDD	2.8E-09	1.4E-10	---	---	0.00%	---
		2,4'-DDE	5.0E-09	2.5E-10	---	---	0.00%	---
		2,4'-DDT	4.5E-09	2.2E-10	6.2E-05	1.0E-05	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	3.9E-06	6.5E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.4E-03	2.3E-04	---	0.02%
		Al	---	---	1.3E-01	2.2E-02	---	1.54%
		Anthracene	---	---	5.1E-06	8.5E-07	---	0.00%
		As	1.4E-03	7.1E-05	7.4E+00	1.2E+00	55.78%	84.79%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.8E-06	8.8E-08	---	---	0.07%	---
		Benzo(a)pyrene	2.0E-05	1.0E-06	---	---	0.79%	---
		Benzo(b)fluoranthene	3.0E-06	1.5E-07	---	---	0.12%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.2E-06	1.6E-07	---	---	0.12%	---
		Cd	3.4E-06	1.7E-07	4.1E-02	6.9E-03	0.13%	0.47%
		Chrysene	4.1E-07	2.1E-08	---	---	0.02%	---
		Co	---	---	---	---	---	---
		Cr	1.4E-04	6.9E-06	5.7E-01	9.4E-02	5.41%	6.49%
		Cu	---	---	7.0E-02	1.2E-02	---	0.80%
		Dibenz(a,h)anthracene	4.2E-07	2.1E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.2E-04	8.6E-05	---	0.01%
		Fluorene	---	---	6.7E-06	1.1E-06	---	0.00%
		Hg	---	---	1.9E-01	3.1E-02	---	2.12%
		Indeno(1,2,3-cd)pyrene	8.5E-07	4.3E-08	---	---	0.03%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.6E-05	2.6E-06	---	0.00%
		Ni	---	---	5.9E-02	9.8E-03	---	0.67%
		Pb	3.5E-06	1.8E-07	---	---	0.14%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	9.5E-04	1.6E-04	---	0.01%
		Sb	---	---	1.3E-01	2.2E-02	---	1.53%
		Se	---	---	8.5E-02	1.4E-02	---	0.98%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-02	6.5E-03	---	0.45%
	SB-21 Total		2.6E-03	1.3E-04	8.7E+00	1.5E+00		
	SB-22	a-Chlordane	1.8E-07	9.0E-09	6.4E-04	1.1E-04	0.01%	0.01%
		g-Chlordane	2.9E-07	1.5E-08	1.0E-03	1.7E-04	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-06	2.2E-07	1.3E-02	2.1E-03	0.20%	0.14%
		Endosulfan II	---	---	3.4E-06	5.7E-07	---	0.00%
		Endrin	---	---	6.9E-05	1.1E-05	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	5.3E-04	2.6E-05	---	---	24.16%	---
		2,4'-DDD	2.5E-09	1.2E-10	---	---	0.00%	---
		2,4'-DDE	4.5E-09	2.2E-10	---	---	0.00%	---
		2,4'-DDT	4.0E-09	2.0E-10	5.5E-05	9.1E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	1.1E-06	1.9E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.4E-03	5.7E-04	---	0.04%
		Al	---	---	1.5E-01	2.5E-02	---	1.69%
		Anthracene	---	---	2.5E-06	4.2E-07	---	0.00%
		As	1.5E-03	7.4E-05	7.7E+00	1.3E+00	68.25%	86.37%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.8E-07	4.9E-08	---	---	0.04%	---
		Benzo(a)pyrene	2.1E-05	1.1E-06	---	---	0.98%	---
		Benzo(b)fluoranthene	2.7E-06	1.4E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.9E-06	1.4E-07	---	---	0.13%	---
		Cd	9.4E-06	4.7E-07	1.2E-01	1.9E-02	0.43%	1.29%
		Chrysene	1.8E-07	8.8E-09	---	---	0.01%	---
		Co	---	---	---	---	---	---
		Cr	1.2E-04	5.9E-06	4.9E-01	8.1E-02	5.45%	5.44%
		Cu	---	---	6.5E-02	1.1E-02	---	0.73%
		Dibenz(a,h)anthracene	3.6E-07	1.8E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-04	2.3E-05	---	0.00%

Table J-3a. Calculated Risk and Hazard via Ingestion of Shellfish for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fluorene	---	---	4.1E-06	6.9E-07	---	0.00%
		Hg	---	---	1.6E-01	2.6E-02	---	1.77%
		Indeno(1,2,3-cd)pyrene	7.7E-07	3.8E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-05	3.1E-06	---	0.00%
		Ni	---	---	4.0E-02	6.7E-03	---	0.45%
		Pb	3.0E-06	1.5E-07	---	---	0.14%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.9E-04	4.9E-05	---	0.00%
		Sb	---	---	7.4E-02	1.2E-02	---	0.83%
		Se	---	---	7.9E-02	1.3E-02	---	0.89%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.0E-02	5.0E-03	---	0.33%
	SB-22 Total		2.2E-03	1.1E-04	8.9E+00	1.5E+00		
	SB-23	a-Chlordane	1.1E-07	5.3E-09	3.8E-04	6.4E-05	0.00%	0.01%
		g-Chlordane	1.4E-07	7.1E-09	5.1E-04	8.5E-05	0.01%	0.01%
		DBT	---	---	---	---	---	---
		Dieldrin	2.4E-06	1.2E-07	7.0E-03	1.2E-03	0.11%	0.10%
		Endosulfan II	---	---	2.9E-06	4.8E-07	---	0.00%
		Endrin	---	---	5.7E-05	9.5E-06	---	0.00%
		Heptachlor	3.0E-08	1.5E-09	3.4E-05	5.7E-06	0.00%	0.00%
		Total Congeners	9.7E-04	4.9E-05	---	---	43.37%	---
		2,4'-DDD	2.1E-09	1.1E-10	---	---	0.00%	---
		2,4'-DDE	3.5E-09	1.7E-10	---	---	0.00%	---
		2,4'-DDT	3.5E-09	1.7E-10	4.8E-05	8.0E-06	0.00%	0.00%
		2-Methylnaphthalene	---	---	---	---	---	---
		Acenaphthene	---	---	4.5E-06	7.4E-07	---	0.00%
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.3E-03	3.9E-04	---	0.03%
		Al	---	---	9.4E-02	1.6E-02	---	1.36%
		Anthracene	---	---	7.8E-06	1.3E-06	---	0.00%
		As	1.2E-03	5.9E-05	6.1E+00	1.0E+00	52.45%	87.93%
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.6E-06	1.3E-07	---	---	0.12%	---
		Benzo(a)pyrene	2.1E-05	1.1E-06	---	---	0.95%	---
		Benzo(b)fluoranthene	3.0E-06	1.5E-07	---	---	0.13%	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.3E-06	1.6E-07	---	---	0.15%	---
		Cd	3.8E-06	1.9E-07	4.7E-02	7.8E-03	0.17%	0.67%
		Chrysene	5.7E-07	2.9E-08	---	---	0.03%	---
		Co	---	---	---	---	---	---
		Cr	5.3E-05	2.6E-06	2.2E-01	3.6E-02	2.36%	3.12%
		Cu	---	---	6.5E-02	1.1E-02	---	0.93%
		Dibenz(a,h)anthracene	3.5E-07	1.7E-08	---	---	0.02%	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	9.2E-04	1.5E-04	---	0.01%
		Fluorene	---	---	1.1E-05	1.9E-06	---	0.00%
		Hg	---	---	1.9E-01	3.1E-02	---	2.67%
		Indeno(1,2,3-cd)pyrene	8.6E-07	4.3E-08	---	---	0.04%	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-05	1.9E-06	---	0.00%
		Ni	---	---	2.9E-02	4.8E-03	---	0.42%
		Pb	2.6E-06	1.3E-07	---	---	0.12%	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.1E-03	1.8E-04	---	0.02%
		Sb	---	---	5.3E-02	8.9E-03	---	0.77%
		Se	---	---	1.1E-01	1.8E-02	---	1.57%
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.6E-02	4.4E-03	---	0.38%
	SB-23 Total		2.2E-03	1.1E-04	6.9E+00	1.2E+00		

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
Eastern Wetland Area	EW-30	a-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	4.2E-07	2.7E-07
		g-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	4.2E-07	2.7E-07
		DBT	---	---	---	---	---	---
		Dieldrin	2.9E-11	1.4E-12	8.5E-08	1.4E-08	7.4E-06	3.9E-06
		Endosulfan II	---	---	7.1E-10	1.1E-10	---	3.3E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	6.5E-07
		Heptachlor	6.3E-12	3.0E-13	7.1E-09	1.1E-09	1.6E-06	3.3E-07
		Total Congeners	2.5E-09	1.3E-10	5.8E-05	9.8E-06	6.3E-04	2.6E-03
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.0E-07	---
		2,4'-DDE	6.6E-13	2.8E-14	---	---	1.7E-07	---
		2,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	1.7E-07	4.2E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.0E-12	1.7E-13	---	---	1.0E-06	---
		4,4'-DDE	3.8E-12	1.6E-13	---	---	9.7E-07	---
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	1.3E-07	3.1E-07
		Acenaphthene	---	---	2.7E-09	4.4E-10	---	1.2E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	7.0E-07	9.1E-08	---	3.2E-05
		Al	---	---	4.8E-03	6.2E-04	---	2.2E-01
		Anthracene	---	---	1.4E-08	1.8E-09	---	6.5E-07
		As	3.8E-07	1.6E-08	2.0E-03	2.7E-04	9.6E-02	9.0E-02
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.5E-09	4.3E-10	---	---	2.1E-03	---
		Benzo(a)pyrene	8.4E-08	4.2E-09	---	---	2.1E-02	---
		Benzo(b)fluoranthene	4.7E-09	2.4E-10	---	---	1.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	5.9E-09	3.0E-10	---	---	1.5E-03	---
		Cd	4.3E-09	1.7E-10	5.2E-05	6.8E-06	1.1E-03	2.4E-03
		Chrysene	9.6E-10	4.8E-11	---	---	2.4E-04	---
		Co	---	---	---	---	---	---
		Cr	3.4E-06	1.3E-07	1.4E-02	1.8E-03	8.7E-01	6.5E-01
		Cu	---	---	9.4E-05	1.2E-05	---	4.3E-03
		Dibenz(a,h)anthracene	2.9E-09	1.4E-10	---	---	7.3E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	7.7E-07	1.3E-07	---	3.5E-05
		Fluorene	---	---	2.1E-08	3.4E-09	---	9.8E-07
		Hg	---	---	8.6E-05	1.1E-05	---	3.9E-03
		Indeno(1,2,3-cd)pyrene	4.3E-09	2.1E-10	---	---	1.1E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.3E-08	5.3E-09	---	1.5E-06
		Ni	---	---	3.3E-04	4.3E-05	---	1.5E-02
		Pb	7.9E-09	3.1E-10	---	---	2.0E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.2E-06	1.9E-07	---	5.5E-05
		Sb	---	---	3.7E-04	4.8E-05	---	1.7E-02
		Se	---	---	1.3E-06	1.7E-07	---	6.1E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.2E-05	4.1E-06	---	1.4E-03
	EW-30 Total		4.0E-06	1.6E-07	2.2E-02	2.9E-03		
	EW-31	a-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	7.5E-07	4.0E-07
		g-Chlordane	1.3E-12	5.6E-14	4.7E-09	6.7E-10	6.0E-07	3.2E-07
		DBT	---	---	---	---	---	---
		Dieldrin	2.9E-11	1.4E-12	8.5E-08	1.4E-08	1.3E-05	5.8E-06
		Endosulfan II	---	---	7.1E-10	1.1E-10	---	4.8E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	9.7E-07
		Heptachlor	6.3E-12	3.0E-13	7.1E-09	1.1E-09	2.8E-06	4.8E-07
		Total Congeners	2.1E-09	1.1E-10	5.0E-05	8.4E-06	9.6E-04	3.4E-03
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.9E-07	---
		2,4'-DDE	6.6E-13	2.8E-14	---	---	3.0E-07	---
		2,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	3.0E-07	6.2E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	3.5E-13	1.5E-14	---	---	1.6E-07	---
		4,4'-DDE	3.3E-12	1.4E-13	---	---	1.5E-06	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	2.3E-07	4.6E-07
		Acenaphthene	---	---	1.6E-09	2.6E-10	---	1.1E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.0E-06	6.5E-07	---	3.4E-04
		Al	---	---	4.4E-03	5.8E-04	---	3.0E-01
		Anthracene	---	---	3.2E-09	4.0E-10	---	2.2E-07
		As	7.6E-07	3.2E-08	3.9E-03	5.5E-04	3.5E-01	2.7E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.6E-09	1.3E-10	---	---	1.2E-03	---
		Benzo(a)pyrene	5.3E-08	2.6E-09	---	---	2.4E-02	---
		Benzo(b)fluoranthene	3.0E-09	1.5E-10	---	---	1.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.0E-09	1.5E-10	---	---	1.4E-03	---
		Cd	3.2E-09	1.2E-10	3.9E-05	5.1E-06	1.4E-03	2.6E-03
		Chrysene	3.2E-10	1.6E-11	---	---	1.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.3E-08	5.6E-03	7.2E-04	6.2E-01	3.8E-01
		Cu	---	---	3.4E-05	4.5E-06	---	2.3E-03
		Dibenz(a,h)anthracene	1.4E-09	6.9E-11	---	---	6.2E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.4E-07	5.7E-08	---	2.3E-05
		Fluorene	---	---	6.7E-09	1.1E-09	---	4.5E-07
		Hg	---	---	1.0E-04	1.4E-05	---	7.1E-03
		Indeno(1,2,3-cd)pyrene	4.6E-09	2.3E-10	---	---	2.1E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.3E-08	5.3E-09	---	2.2E-06
		Ni	---	---	3.3E-04	4.3E-05	---	2.2E-02
		Pb	7.5E-09	2.9E-10	---	---	3.4E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.5E-07	8.8E-08	---	3.7E-05
		Sb	---	---	1.8E-04	2.3E-05	---	1.2E-02
		Se	---	---	1.3E-06	1.7E-07	---	9.1E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	1.7E-05	2.2E-06	---	1.1E-03
	EW-31 Total		2.2E-06	8.9E-08	1.5E-02	1.9E-03		
	EW-32	a-Chlordane	9.9E-12	4.2E-13	3.5E-08	5.0E-09	4.0E-06	1.8E-06
		g-Chlordane	3.3E-12	1.4E-13	1.2E-08	1.7E-09	1.3E-06	6.0E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.9E-11	2.8E-12	1.7E-07	2.7E-08	2.4E-05	8.7E-06
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	7.3E-08
		Endrin	---	---	2.6E-08	4.2E-09	---	1.3E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	5.1E-06	7.3E-07
		Total Congeners	5.1E-09	2.6E-10	1.2E-04	2.0E-05	2.1E-03	6.1E-03
		2,4'-DDD	7.6E-13	3.2E-14	---	---	3.1E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	5.4E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	5.0E-07	8.7E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.2E-11	5.0E-13	---	---	4.9E-06	---
		4,4'-DDE	2.0E-11	8.2E-13	---	---	8.0E-06	---
		4,4'-DDT	5.3E-12	2.2E-13	7.3E-08	1.0E-08	2.2E-06	3.7E-06
		Acenaphthene	---	---	1.5E-08	2.4E-09	---	7.6E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	8.4E-06	1.1E-06	---	4.3E-04
		Al	---	---	7.9E-03	1.0E-03	---	4.1E-01
		Anthracene	---	---	1.2E-08	1.5E-09	---	6.0E-07
		As	8.1E-07	3.4E-08	4.2E-03	5.8E-04	3.3E-01	2.2E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.0E-09	4.0E-10	---	---	3.2E-03	---
		Benzo(a)pyrene	1.3E-07	6.8E-09	---	---	5.5E-02	---
		Benzo(b)fluoranthene	8.7E-09	4.4E-10	---	---	3.5E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	8.7E-09	4.4E-10	---	---	3.5E-03	---
		Cd	4.7E-09	1.8E-10	5.7E-05	7.4E-06	1.9E-03	2.9E-03

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Chrysene	9.8E-10	4.9E-11	---	---	4.0E-04	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.7E-08	6.0E-03	7.7E-04	5.9E-01	3.0E-01
		Cu	---	---	1.5E-04	2.0E-05	---	7.7E-03
		Dibenz(a,h)anthracene	4.2E-09	2.1E-10	---	---	1.7E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.6E-07	1.4E-07	---	4.4E-05
		Fluorene	---	---	3.1E-08	4.9E-09	---	1.6E-06
		Hg	---	---	3.0E-04	3.9E-05	---	1.5E-02
		Indeno(1,2,3-cd)pyrene	1.1E-08	5.6E-10	---	---	4.5E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.2E-08	1.5E-08	---	4.7E-06
		Ni	---	---	5.2E-04	6.7E-05	---	2.6E-02
		Pb	1.1E-08	4.5E-10	---	---	4.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.4E-06	2.3E-07	---	7.3E-05
		Sb	---	---	2.5E-04	3.2E-05	---	1.3E-02
		Se	---	---	8.6E-06	1.1E-06	---	4.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.5E-05	5.8E-06	---	2.3E-03
	EW-32 Total		2.5E-06	1.0E-07	2.0E-02	2.6E-03		
	EW-33	a-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	6.8E-07	3.5E-07
		g-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	6.8E-07	3.5E-07
		DBT	---	---	---	---	---	---
		Dieldrin	2.9E-11	1.4E-12	8.5E-08	1.4E-08	1.2E-05	5.1E-06
		Endosulfan II	---	---	7.1E-10	1.1E-10	---	4.3E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	8.5E-07
		Heptachlor	6.3E-12	3.0E-13	7.1E-09	1.1E-09	2.6E-06	4.3E-07
		Total Congeners	9.2E-09	4.7E-10	2.1E-04	3.6E-05	3.8E-03	1.3E-02
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.7E-07	---
		2,4'-DDE	6.6E-13	2.8E-14	---	---	2.7E-07	---
		2,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	2.7E-07	5.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	3.2E-12	1.3E-13	---	---	1.3E-06	---
		4,4'-DDE	5.1E-12	2.1E-13	---	---	2.1E-06	---
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	2.0E-07	4.1E-07
		Acenaphthene	---	---	3.9E-09	6.2E-10	---	2.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.5E-06	2.0E-07	---	9.3E-05
		Al	---	---	4.6E-03	6.0E-04	---	2.8E-01
		Anthracene	---	---	1.7E-09	2.1E-10	---	1.0E-07
		As	4.5E-07	1.9E-08	2.3E-03	3.2E-04	1.8E-01	1.4E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-09	5.1E-11	---	---	4.2E-04	---
		Benzo(a)pyrene	1.7E-08	8.6E-10	---	---	7.1E-03	---
		Benzo(b)fluoranthene	1.1E-09	5.5E-11	---	---	4.5E-04	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.2E-09	6.2E-11	---	---	5.1E-04	---
		Cd	4.5E-09	1.8E-10	5.6E-05	7.3E-06	1.9E-03	3.4E-03
		Chrysene	1.4E-10	6.9E-12	---	---	5.6E-05	---
		Co	---	---	---	---	---	---
		Cr	1.9E-06	7.5E-08	7.9E-03	1.0E-03	8.0E-01	4.8E-01
		Cu	---	---	5.9E-05	7.7E-06	---	3.6E-03
		Dibenz(a,h)anthracene	4.5E-10	2.2E-11	---	---	1.8E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.5E-07	2.5E-08	---	8.8E-06
		Fluorene	---	---	5.5E-09	8.8E-10	---	3.3E-07
		Hg	---	---	1.5E-04	2.0E-05	---	9.0E-03
		Indeno(1,2,3-cd)pyrene	1.4E-09	6.9E-11	---	---	5.6E-04	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.5E-08	4.0E-09	---	1.5E-06

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Ni	---	---	3.2E-04	4.1E-05	---	1.9E-02
		Pb	7.1E-09	2.8E-10	---	---	2.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.2E-07	3.5E-08	---	1.3E-05
		Sb	---	---	9.6E-04	1.2E-04	---	5.8E-02
		Se	---	---	1.3E-06	1.7E-07	---	8.0E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.8E-05	3.6E-06	---	1.7E-03
	EW-33 Total		2.4E-06	9.6E-08	1.7E-02	2.2E-03		
	EW-34	a-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	5.3E-07	3.1E-07
		g-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	5.3E-07	3.1E-07
		DBT	---	---	---	---	---	---
		Dieldrin	2.9E-11	1.4E-12	8.5E-08	1.4E-08	9.4E-06	4.4E-06
		Endosulfan II	---	---	7.1E-10	1.1E-10	---	3.7E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	7.4E-07
		Heptachlor	6.3E-12	3.0E-13	7.1E-09	1.1E-09	2.0E-06	3.7E-07
		Total Congeners	3.4E-09	1.7E-10	8.0E-05	1.4E-05	1.1E-03	4.1E-03
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.3E-07	---
		2,4'-DDE	6.6E-13	2.8E-14	---	---	2.1E-07	---
		2,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	2.1E-07	4.7E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.5E-12	1.0E-13	---	---	7.9E-07	---
		4,4'-DDE	3.7E-12	1.5E-13	---	---	1.2E-06	---
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	1.6E-07	3.6E-07
		Acenaphthene	---	---	2.4E-09	3.8E-10	---	1.2E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.8E-06	2.3E-07	---	9.3E-05
		Al	---	---	5.3E-03	6.9E-04	---	2.8E-01
		Anthracene	---	---	9.9E-10	1.2E-10	---	5.2E-08
		As	4.8E-07	2.0E-08	2.5E-03	3.4E-04	1.5E-01	1.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.7E-10	4.4E-11	---	---	2.8E-04	---
		Benzo(a)pyrene	2.1E-08	1.0E-09	---	---	6.7E-03	---
		Benzo(b)fluoranthene	1.2E-09	6.0E-11	---	---	3.8E-04	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-09	7.6E-11	---	---	4.9E-04	---
		Cd	3.3E-09	1.3E-10	4.0E-05	5.2E-06	1.0E-03	2.1E-03
		Chrysene	1.3E-10	6.6E-12	---	---	4.2E-05	---
		Co	---	---	---	---	---	---
		Cr	2.6E-06	1.0E-07	1.1E-02	1.4E-03	8.3E-01	5.5E-01
		Cu	---	---	5.7E-05	7.4E-06	---	3.0E-03
		Dibenz(a,h)anthracene	4.0E-10	2.0E-11	---	---	1.3E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-07	2.4E-08	---	7.5E-06
		Fluorene	---	---	4.6E-09	7.4E-10	---	2.4E-07
		Hg	---	---	9.8E-05	1.3E-05	---	5.1E-03
		Indeno(1,2,3-cd)pyrene	1.7E-09	8.5E-11	---	---	5.4E-04	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-07	1.8E-08	---	5.9E-06
		Ni	---	---	3.4E-04	4.4E-05	---	1.7E-02
		Pb	6.7E-09	2.6E-10	---	---	2.1E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.3E-07	3.8E-08	---	1.2E-05
		Sb	---	---	2.3E-04	3.0E-05	---	1.2E-02
		Se	---	---	1.3E-06	1.7E-07	---	6.9E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.0E-05	3.9E-06	---	1.6E-03
	EW-34 Total		3.1E-06	1.2E-07	1.9E-02	2.5E-03		
	EW-35	a-Chlordane	9.9E-12	4.2E-13	3.5E-08	5.0E-09	4.1E-06	1.9E-06
		g-Chlordane	3.0E-12	1.3E-13	1.1E-08	1.5E-09	1.2E-06	5.6E-07
		DBT	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Dieldrin	5.9E-11	2.8E-12	1.7E-07	2.7E-08	2.4E-05	9.0E-06
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	7.5E-08
		Endrin	---	---	2.6E-08	4.2E-09	---	1.4E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	5.2E-06	7.5E-07
		Total Congeners	5.0E-09	2.6E-10	1.2E-04	2.0E-05	2.1E-03	6.2E-03
		2,4'-DDD	7.6E-13	3.2E-14	---	---	3.2E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	5.5E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	5.2E-07	9.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.1E-11	4.6E-13	---	---	4.6E-06	---
		4,4'-DDE	1.8E-11	7.6E-13	---	---	7.6E-06	---
		4,4'-DDT	2.0E-12	8.3E-14	2.7E-08	3.8E-09	8.3E-07	1.4E-06
		Acenaphthene	---	---	1.4E-08	2.2E-09	---	7.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	7.3E-06	9.5E-07	---	3.9E-04
		Al	---	---	7.6E-03	9.8E-04	---	4.0E-01
		Anthracene	---	---	7.1E-09	8.9E-10	---	3.8E-07
		As	7.7E-07	3.2E-08	4.0E-03	5.5E-04	3.2E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	6.5E-09	3.3E-10	---	---	2.7E-03	---
		Benzo(a)pyrene	1.2E-07	6.0E-09	---	---	5.0E-02	---
		Benzo(b)fluoranthene	7.9E-09	4.0E-10	---	---	3.3E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	7.6E-09	3.8E-10	---	---	3.2E-03	---
		Cd	4.4E-09	1.7E-10	5.4E-05	7.1E-06	1.8E-03	2.9E-03
		Chrysene	8.1E-10	4.1E-11	---	---	3.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.7E-08	6.0E-03	7.8E-04	6.1E-01	3.2E-01
		Cu	---	---	1.4E-04	1.8E-05	---	7.5E-03
		Dibenz(a,h)anthracene	3.3E-09	1.7E-10	---	---	1.4E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	6.8E-07	1.1E-07	---	3.6E-05
		Fluorene	---	---	2.6E-08	4.2E-09	---	1.4E-06
		Hg	---	---	2.9E-04	3.8E-05	---	1.5E-02
		Indeno(1,2,3-cd)pyrene	1.0E-08	5.1E-10	---	---	4.2E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	7.9E-08	1.3E-08	---	4.2E-06
		Ni	---	---	5.1E-04	6.6E-05	---	2.7E-02
		Pb	1.1E-08	4.2E-10	---	---	4.4E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.1E-06	1.8E-07	---	6.0E-05
		Sb	---	---	2.2E-04	2.8E-05	---	1.1E-02
		Se	---	---	1.0E-05	1.3E-06	---	5.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-05	5.6E-06	---	2.3E-03
	EW-35 Total		2.4E-06	9.8E-08	1.9E-02	2.5E-03		
	EW-36	a-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	6.2E-07	3.5E-07
		g-Chlordane	1.6E-12	7.0E-14	5.9E-09	8.4E-10	6.2E-07	3.5E-07
		DBT	---	---	---	---	---	---
		Dieldrin	3.4E-11	1.6E-12	1.0E-07	1.6E-08	1.3E-05	5.9E-06
		Endosulfan II	---	---	8.3E-10	1.3E-10	---	4.9E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	8.4E-07
		Heptachlor	7.5E-12	3.6E-13	8.5E-09	1.4E-09	2.8E-06	5.0E-07
		Total Congeners	5.6E-09	2.9E-10	1.3E-04	2.2E-05	2.1E-03	7.7E-03
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.6E-07	---
		2,4'-DDE	7.5E-13	3.1E-14	---	---	2.8E-07	---
		2,4'-DDT	7.5E-13	3.1E-14	1.0E-08	1.4E-09	2.8E-07	6.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.1E-13	1.7E-14	---	---	1.6E-07	---
		4,4'-DDE	8.5E-12	3.5E-13	---	---	3.2E-06	---
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	1.9E-07	4.0E-07
		Acenaphthene	---	---	2.0E-09	3.2E-10	---	1.2E-07
		Acenaphthylene	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Ag	---	---	1.6E-06	2.1E-07	---	9.6E-05
		Al	---	---	5.1E-03	6.6E-04	---	3.0E-01
		Anthracene	---	---	2.2E-09	2.7E-10	---	1.3E-07
		As	4.7E-07	1.9E-08	2.4E-03	3.3E-04	1.8E-01	1.4E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.3E-09	6.7E-11	---	---	5.0E-04	---
		Benzo(a)pyrene	2.6E-08	1.3E-09	---	---	9.9E-03	---
		Benzo(b)fluoranthene	1.6E-09	8.3E-11	---	---	6.2E-04	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-09	9.1E-11	---	---	6.9E-04	---
		Cd	3.4E-09	1.3E-10	4.1E-05	5.4E-06	1.3E-03	2.4E-03
		Chrysene	1.7E-10	8.6E-12	---	---	6.5E-05	---
		Co	---	---	---	---	---	---
		Cr	2.1E-06	8.3E-08	8.7E-03	1.1E-03	8.0E-01	5.1E-01
		Cu	---	---	6.1E-05	8.0E-06	---	3.6E-03
		Dibenz(a,h)anthracene	7.2E-10	3.6E-11	---	---	2.7E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-07	3.0E-08	---	1.1E-05
		Fluorene	---	---	5.8E-09	9.2E-10	---	3.4E-07
		Hg	---	---	9.7E-05	1.3E-05	---	5.7E-03
		Indeno(1,2,3-cd)pyrene	2.2E-09	1.1E-10	---	---	8.5E-04	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.9E-08	4.7E-09	---	1.7E-06
		Ni	---	---	3.4E-04	4.5E-05	---	2.0E-02
		Pb	6.1E-09	2.4E-10	---	---	2.3E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.0E-07	4.8E-08	---	1.8E-05
		Sb	---	---	1.7E-04	2.2E-05	---	1.0E-02
		Se	---	---	1.3E-06	1.7E-07	---	7.8E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	2.4E-05	3.2E-06	---	1.4E-03
	EW-36 Total		2.6E-06	1.0E-07	1.7E-02	2.2E-03		
	EW-37	a-Chlordane	7.2E-12	3.1E-13	2.6E-08	3.7E-09	2.6E-06	1.4E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	9.6E-07	4.9E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.8E-05	7.5E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	6.2E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.1E-06
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	3.7E-06	6.0E-07
		Total Congeners	4.2E-09	2.1E-10	9.8E-05	1.7E-05	1.5E-03	5.1E-03
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.4E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	4.3E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.9E-07	7.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	9.6E-12	4.0E-13	---	---	3.5E-06	---
		4,4'-DDE	1.6E-11	6.5E-13	---	---	5.7E-06	---
		4,4'-DDT	8.8E-12	3.7E-13	1.2E-07	1.7E-08	3.2E-06	6.3E-06
		Acenaphthene	---	---	1.1E-08	1.8E-09	---	6.0E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.2E-06	6.8E-07	---	2.7E-04
		Al	---	---	6.9E-03	9.0E-04	---	3.6E-01
		Anthracene	---	---	1.5E-08	1.8E-09	---	7.7E-07
		As	6.4E-07	2.7E-08	3.3E-03	4.6E-04	2.3E-01	1.7E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-08	5.1E-10	---	---	3.7E-03	---
		Benzo(a)pyrene	1.6E-07	7.9E-09	---	---	5.7E-02	---
		Benzo(b)fluoranthene	9.4E-09	4.7E-10	---	---	3.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.0E-08	5.2E-10	---	---	3.8E-03	---
		Cd	4.5E-09	1.8E-10	5.6E-05	7.2E-06	1.7E-03	2.9E-03
		Chrysene	1.2E-09	6.2E-11	---	---	4.5E-04	---
		Co	---	---	---	---	---	---
		Cr	1.9E-06	7.3E-08	7.7E-03	9.9E-04	6.8E-01	4.0E-01

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Cu	---	---	1.1E-04	1.4E-05	---	5.8E-03
		Dibenz(a,h)anthracene	4.2E-09	2.1E-10	---	---	1.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.1E-06	1.8E-07	---	5.6E-05
		Fluorene	---	---	2.3E-08	3.6E-09	---	1.2E-06
		Hg	---	---	2.3E-04	3.0E-05	---	1.2E-02
		Indeno(1,2,3-cd)pyrene	1.2E-08	6.0E-10	---	---	4.4E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.1E-08	1.3E-08	---	4.2E-06
		Ni	---	---	4.5E-04	5.9E-05	---	2.4E-02
		Pb	8.4E-09	3.3E-10	---	---	3.1E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.7E-06	2.7E-07	---	8.9E-05
		Sb	---	---	1.9E-04	2.4E-05	---	9.8E-03
		Se	---	---	6.5E-06	8.4E-07	---	3.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.7E-05	4.8E-06	---	1.9E-03
	EW-37 Total		2.7E-06	1.1E-07	1.9E-02	2.5E-03		
India Basin Area I	IB-54	a-Chlordane	4.6E-12	2.0E-13	1.7E-08	2.3E-09	2.0E-06	9.0E-07
		g-Chlordane	3.0E-12	1.3E-13	1.1E-08	1.5E-09	1.3E-06	5.8E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	2.3E-05	8.5E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	7.1E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.3E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.9E-06	7.0E-07
		Total Congeners	3.1E-09	1.6E-10	7.2E-05	1.2E-05	1.3E-03	3.9E-03
		2,4'-DDD	7.0E-13	2.9E-14	---	---	3.0E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	5.4E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	5.0E-07	8.7E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.4E-11	5.7E-13	---	---	5.9E-06	---
		4,4'-DDE	2.3E-11	9.4E-13	---	---	9.8E-06	---
		4,4'-DDT	8.1E-12	3.4E-13	1.1E-07	1.5E-08	3.5E-06	6.1E-06
		Acenaphthene	---	---	1.2E-08	1.9E-09	---	6.4E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.2E-06	8.0E-07	---	3.4E-04
		Al	---	---	7.7E-03	1.0E-03	---	4.2E-01
		Anthracene	---	---	1.2E-08	1.5E-09	---	6.4E-07
		As	7.1E-07	2.9E-08	3.7E-03	5.1E-04	3.1E-01	2.0E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	7.8E-09	3.9E-10	---	---	3.4E-03	---
		Benzo(a)pyrene	1.4E-07	6.9E-09	---	---	5.9E-02	---
		Benzo(b)fluoranthene	9.8E-09	4.9E-10	---	---	4.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	8.6E-09	4.3E-10	---	---	3.7E-03	---
		Cd	3.8E-09	1.5E-10	4.6E-05	6.0E-06	1.6E-03	2.5E-03
		Chrysene	1.0E-09	5.0E-11	---	---	4.3E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.5E-08	5.7E-03	7.5E-04	6.1E-01	3.1E-01
		Cu	---	---	1.3E-04	1.7E-05	---	7.1E-03
		Dibenz(a,h)anthracene	4.8E-09	2.4E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.4E-07	1.4E-07	---	4.6E-05
		Fluorene	---	---	3.0E-08	4.8E-09	---	1.6E-06
		Hg	---	---	2.6E-04	3.3E-05	---	1.4E-02
		Indeno(1,2,3-cd)pyrene	1.2E-08	5.8E-10	---	---	5.0E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.2E-08	1.5E-08	---	5.0E-06
		Ni	---	---	5.0E-04	6.4E-05	---	2.7E-02
		Pb	8.9E-09	3.5E-10	---	---	3.9E-03	---
		Phenanthrene	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Pyrene	---	---	1.4E-06	2.2E-07	---	7.5E-05
		Sb	---	---	1.9E-04	2.5E-05	---	1.0E-02
		Se	---	---	6.9E-06	9.0E-07	---	3.8E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-05	5.6E-06	---	2.3E-03
	IB-54 Total		2.3E-06	9.4E-08	1.8E-02	2.4E-03		
	IB-55	a-Chlordane	3.3E-11	1.4E-12	1.2E-07	1.7E-08	8.6E-06	4.9E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	6.9E-07	3.9E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	1.4E-05	6.5E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	5.4E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	9.8E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.0E-06	5.3E-07
		Total Congeners	1.5E-08	7.8E-10	3.6E-04	6.0E-05	4.0E-03	1.5E-02
		2,4'-DDD	7.0E-13	2.9E-14	---	---	1.8E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	3.3E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	3.1E-07	6.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.3E-11	9.3E-13	---	---	5.9E-06	---
		4,4'-DDE	1.8E-11	7.3E-13	---	---	4.6E-06	---
		4,4'-DDT	1.2E-11	5.2E-13	1.7E-07	2.4E-08	3.3E-06	7.1E-06
		Acenaphthene	---	---	2.2E-08	3.5E-09	---	8.9E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.1E-06	7.9E-07	---	2.5E-04
		Al	---	---	6.7E-03	8.7E-04	---	2.8E-01
		Anthracene	---	---	1.9E-08	2.4E-09	---	7.8E-07
		As	7.5E-07	3.1E-08	3.9E-03	5.4E-04	2.0E-01	1.6E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.2E-08	6.0E-10	---	---	3.1E-03	---
		Benzo(a)pyrene	1.7E-07	8.7E-09	---	---	4.6E-02	---
		Benzo(b)fluoranthene	1.3E-08	6.4E-10	---	---	3.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.2E-08	6.0E-10	---	---	3.1E-03	---
		Cd	4.5E-09	1.8E-10	5.6E-05	7.3E-06	1.2E-03	2.3E-03
		Chrysene	1.6E-09	8.0E-11	---	---	4.2E-04	---
		Co	---	---	---	---	---	---
		Cr	2.7E-06	1.1E-07	1.1E-02	1.5E-03	7.2E-01	4.7E-01
		Cu	---	---	1.9E-04	2.4E-05	---	7.8E-03
		Dibenz(a,h)anthracene	8.2E-09	4.1E-10	---	---	2.2E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.1E-06	1.8E-07	---	4.5E-05
		Fluorene	---	---	4.8E-08	7.7E-09	---	2.0E-06
		Hg	---	---	4.3E-04	5.6E-05	---	1.8E-02
		Indeno(1,2,3-cd)pyrene	1.4E-08	6.8E-10	---	---	3.6E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-07	1.8E-08	---	4.6E-06
		Ni	---	---	9.1E-04	1.2E-04	---	3.8E-02
		Pb	4.9E-08	1.9E-09	---	---	1.3E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.7E-06	2.7E-07	---	6.8E-05
		Sb	---	---	2.8E-04	3.7E-05	---	1.2E-02
		Se	---	---	5.8E-06	7.5E-07	---	2.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.6E-05	6.0E-06	---	1.9E-03
	IB-55 Total		3.8E-06	1.5E-07	2.4E-02	3.2E-03		
	IB-56	a-Chlordane	5.3E-12	2.2E-13	1.9E-08	2.7E-09	2.2E-06	1.0E-06
		g-Chlordane	3.0E-12	1.3E-13	1.1E-08	1.5E-09	1.2E-06	5.7E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	2.3E-05	8.4E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	7.0E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.3E-06

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.7E-06	6.9E-07
		Total Congeners	3.0E-09	1.5E-10	7.0E-05	1.2E-05	1.3E-03	3.8E-03
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.9E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	5.2E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	4.9E-07	8.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.2E-11	5.0E-13	---	---	5.1E-06	---
		4,4'-DDE	2.2E-11	9.2E-13	---	---	9.3E-06	---
		4,4'-DDT	1.4E-11	5.7E-13	1.9E-07	2.6E-08	5.8E-06	1.0E-05
		Acenaphthene	---	---	1.5E-08	2.5E-09	---	8.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.7E-06	7.4E-07	---	3.0E-04
		Al	---	---	7.6E-03	9.8E-04	---	4.1E-01
		Anthracene	---	---	1.5E-08	1.9E-09	---	8.0E-07
		As	7.8E-07	3.2E-08	4.0E-03	5.6E-04	3.3E-01	2.2E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.4E-09	4.2E-10	---	---	3.5E-03	---
		Benzo(a)pyrene	1.4E-07	7.1E-09	---	---	5.9E-02	---
		Benzo(b)fluoranthene	9.9E-09	5.0E-10	---	---	4.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.7E-09	4.9E-10	---	---	4.1E-03	---
		Cd	3.9E-09	1.5E-10	4.8E-05	6.3E-06	1.6E-03	2.6E-03
		Chrysene	1.1E-09	5.5E-11	---	---	4.6E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.5E-08	5.7E-03	7.5E-04	5.9E-01	3.1E-01
		Cu	---	---	1.2E-04	1.6E-05	---	6.7E-03
		Dibenz(a,h)anthracene	5.0E-09	2.5E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.7E-07	1.5E-07	---	4.7E-05
		Fluorene	---	---	3.1E-08	5.0E-09	---	1.7E-06
		Hg	---	---	3.3E-04	4.3E-05	---	1.8E-02
		Indeno(1,2,3-cd)pyrene	1.1E-08	5.6E-10	---	---	4.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.7E-08	1.4E-08	---	4.7E-06
		Ni	---	---	4.8E-04	6.2E-05	---	2.5E-02
		Pb	9.8E-09	3.8E-10	---	---	4.1E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.4E-06	2.2E-07	---	7.5E-05
		Sb	---	---	2.1E-04	2.8E-05	---	1.1E-02
		Se	---	---	8.3E-06	1.1E-06	---	4.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-05	5.1E-06	---	2.1E-03
	IB-56 Total		2.4E-06	9.7E-08	1.9E-02	2.5E-03		
	IB-57	a-Chlordane	6.6E-12	2.8E-13	2.4E-08	3.4E-09	2.8E-06	1.3E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	1.1E-06	5.1E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	2.1E-05	7.7E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	6.4E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.2E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.8E-06	6.9E-07
		Total Congeners	2.2E-09	1.1E-10	5.2E-05	8.9E-06	9.5E-04	2.8E-03
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.8E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	5.0E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	4.6E-07	8.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	7.7E-12	3.2E-13	---	---	3.3E-06	---
		4,4'-DDE	1.5E-11	6.1E-13	---	---	6.3E-06	---
		4,4'-DDT	8.3E-13	3.4E-14	1.1E-08	1.6E-09	3.5E-07	6.2E-07
		Acenaphthene	---	---	1.4E-08	2.3E-09	---	7.8E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.4E-06	7.0E-07	---	2.9E-04
		Al	---	---	7.5E-03	9.8E-04	---	4.1E-01
		Anthracene	---	---	1.8E-08	2.2E-09	---	9.6E-07

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		As	7.5E-07	3.1E-08	3.9E-03	5.4E-04	3.2E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.0E-09	4.0E-10	---	---	3.4E-03	---
		Benzo(a)pyrene	1.4E-07	6.8E-09	---	---	5.8E-02	---
		Benzo(b)fluoranthene	9.1E-09	4.6E-10	---	---	3.9E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	8.3E-09	4.2E-10	---	---	3.5E-03	---
		Cd	3.4E-09	1.3E-10	4.2E-05	5.5E-06	1.5E-03	2.3E-03
		Chrysene	1.0E-09	5.2E-11	---	---	4.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.5E-08	5.7E-03	7.5E-04	6.0E-01	3.1E-01
		Cu	---	---	1.1E-04	1.5E-05	---	6.2E-03
		Dibenz(a,h)anthracene	4.5E-09	2.3E-10	---	---	1.9E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	9.1E-07	1.5E-07	---	4.9E-05
		Fluorene	---	---	4.4E-08	7.1E-09	---	2.4E-06
		Hg	---	---	3.6E-04	4.7E-05	---	1.9E-02
		Indeno(1,2,3-cd)pyrene	1.1E-08	5.5E-10	---	---	4.6E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.1E-08	1.5E-08	---	4.9E-06
		Ni	---	---	4.4E-04	5.7E-05	---	2.4E-02
		Pb	8.3E-09	3.2E-10	---	---	3.6E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.4E-06	2.3E-07	---	7.8E-05
		Sb	---	---	2.4E-04	3.1E-05	---	1.3E-02
		Se	---	---	6.1E-06	7.9E-07	---	3.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.2E-05	5.5E-06	---	2.3E-03
	IB-57 Total		2.3E-06	9.5E-08	1.8E-02	2.4E-03		
	IB-58	a-Chlordane	5.3E-12	2.2E-13	1.9E-08	2.7E-09	2.2E-06	1.0E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	1.1E-06	5.2E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	2.1E-05	7.8E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	6.5E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.2E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.8E-06	7.0E-07
		Total Congeners	2.7E-09	1.4E-10	6.3E-05	1.1E-05	1.2E-03	3.5E-03
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.7E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	5.0E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	4.6E-07	8.1E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.1E-11	4.4E-13	---	---	4.5E-06	---
		4,4'-DDE	1.9E-11	7.9E-13	---	---	8.1E-06	---
		4,4'-DDT	4.6E-12	1.9E-13	6.4E-08	8.8E-09	2.0E-06	3.5E-06
		Acenaphthene	---	---	1.8E-08	2.9E-09	---	9.9E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.4E-06	7.1E-07	---	3.0E-04
		Al	---	---	7.4E-03	9.6E-04	---	4.1E-01
		Anthracene	---	---	1.8E-08	2.3E-09	---	1.0E-06
		As	7.9E-07	3.3E-08	4.1E-03	5.7E-04	3.4E-01	2.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.2E-09	4.7E-10	---	---	3.9E-03	---
		Benzo(a)pyrene	1.5E-07	7.4E-09	---	---	6.3E-02	---
		Benzo(b)fluoranthene	9.7E-09	4.9E-10	---	---	4.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.8E-09	4.9E-10	---	---	4.2E-03	---
		Cd	3.5E-09	1.3E-10	4.3E-05	5.5E-06	1.5E-03	2.3E-03
		Chrysene	1.2E-09	6.1E-11	---	---	5.2E-04	---
		Co	---	---	---	---	---	---
		Cr	1.3E-06	5.2E-08	5.5E-03	7.1E-04	5.7E-01	3.0E-01
		Cu	---	---	1.2E-04	1.5E-05	---	6.5E-03
		Dibenz(a,h)anthracene	5.1E-09	2.6E-10	---	---	2.2E-03	---
		Fe	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fluoranthene	---	---	9.7E-07	1.6E-07	---	5.3E-05
		Fluorene	---	---	4.1E-08	6.6E-09	---	2.2E-06
		Hg	---	---	2.7E-04	3.4E-05	---	1.5E-02
		Indeno(1,2,3-cd)pyrene	1.2E-08	5.8E-10	---	---	4.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.9E-08	1.4E-08	---	4.9E-06
		Ni	---	---	4.6E-04	6.0E-05	---	2.5E-02
		Pb	8.6E-09	3.4E-10	---	---	3.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-06	2.4E-07	---	8.3E-05
		Sb	---	---	1.9E-04	2.4E-05	---	1.0E-02
		Se	---	---	6.6E-06	8.5E-07	---	3.6E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.1E-05	5.3E-06	---	2.2E-03
	IB-58 Total		2.3E-06	9.6E-08	1.8E-02	2.4E-03		
	IB-59	a-Chlordane	1.7E-11	7.3E-13	6.1E-08	8.7E-09	4.8E-06	2.6E-06
		g-Chlordane	9.2E-12	3.9E-13	3.3E-08	4.7E-09	2.6E-06	1.4E-06
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	1.5E-05	6.6E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	5.5E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.0E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.2E-06	5.4E-07
		Total Congeners	2.4E-08	1.2E-09	5.6E-04	9.6E-05	6.8E-03	2.4E-02
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.0E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	3.5E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	3.3E-07	6.7E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.7E-11	7.0E-13	---	---	4.8E-06	---
		4,4'-DDE	3.1E-11	1.3E-12	---	---	8.6E-06	---
		4,4'-DDT	7.1E-12	3.0E-13	9.8E-08	1.4E-08	2.0E-06	4.1E-06
		Acenaphthene	---	---	2.8E-08	4.5E-09	---	1.2E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.8E-06	8.8E-07	---	2.9E-04
		Al	---	---	7.0E-03	9.1E-04	---	2.9E-01
		Anthracene	---	---	7.8E-08	9.8E-09	---	3.3E-06
		As	8.4E-07	3.5E-08	4.3E-03	6.0E-04	2.4E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.9E-08	9.5E-10	---	---	5.3E-03	---
		Benzo(a)pyrene	2.4E-07	1.2E-08	---	---	6.7E-02	---
		Benzo(b)fluoranthene	2.1E-08	1.1E-09	---	---	5.9E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-08	1.0E-09	---	---	5.7E-03	---
		Cd	4.1E-09	1.6E-10	5.1E-05	6.6E-06	1.2E-03	2.1E-03
		Chrysene	3.0E-09	1.5E-10	---	---	8.4E-04	---
		Co	---	---	---	---	---	---
		Cr	2.3E-06	9.1E-08	9.6E-03	1.2E-03	6.6E-01	4.0E-01
		Cu	---	---	3.3E-04	4.3E-05	---	1.4E-02
		Dibenz(a,h)anthracene	1.2E-08	5.8E-10	---	---	3.3E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.6E-06	2.7E-07	---	6.8E-05
		Fluorene	---	---	1.2E-07	1.9E-08	---	4.9E-06
		Hg	---	---	3.4E-04	4.4E-05	---	1.4E-02
		Indeno(1,2,3-cd)pyrene	1.8E-08	8.9E-10	---	---	5.0E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-07	2.2E-08	---	5.8E-06
		Ni	---	---	1.2E-03	1.6E-04	---	5.2E-02
		Pb	1.1E-08	4.2E-10	---	---	3.1E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.1E-06	3.3E-07	---	8.7E-05
		Sb	---	---	3.3E-04	4.3E-05	---	1.4E-02
		Se	---	---	9.1E-06	1.2E-06	---	3.8E-04

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.8E-05	6.2E-06	---	2.0E-03
	IB-59 Total		3.5E-06	1.4E-07	2.4E-02	3.2E-03		
Oil Reclamation Area	OR-24	a-Chlordane	2.7E-11	1.1E-12	9.7E-08	1.4E-08	5.5E-06	3.3E-06
		g-Chlordane	2.7E-11	1.1E-12	9.7E-08	1.4E-08	5.5E-06	3.3E-06
		DBT	---	---	---	---	---	---
		Dieldrin	4.3E-10	2.1E-11	1.3E-06	2.0E-07	8.8E-05	4.2E-05
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	3.6E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	6.4E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	1.8E-06	3.4E-07
		Total Congeners	7.2E-08	3.7E-09	1.7E-03	2.9E-04	1.5E-02	5.7E-02
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.1E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	2.1E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	1.9E-07	4.2E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	3.6E-11	1.5E-12	---	---	7.4E-06	---
		4,4'-DDE	5.5E-12	2.3E-13	---	---	1.1E-06	---
		4,4'-DDT	1.3E-11	5.4E-13	1.8E-07	2.5E-08	2.7E-06	6.0E-06
		Acenaphthene	---	---	1.8E-08	2.9E-09	---	6.1E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	7.5E-06	9.8E-07	---	2.5E-04
		Al	---	---	6.1E-03	7.9E-04	---	2.0E-01
		Anthracene	---	---	2.1E-08	2.6E-09	---	7.0E-07
		As	8.0E-07	3.3E-08	4.1E-03	5.7E-04	1.6E-01	1.4E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.2E-08	6.1E-10	---	---	2.5E-03	---
		Benzo(a)pyrene	1.6E-07	8.1E-09	---	---	3.3E-02	---
		Benzo(b)fluoranthene	1.2E-08	6.0E-10	---	---	2.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.3E-08	6.8E-10	---	---	2.8E-03	---
		Cd	5.9E-09	2.3E-10	7.2E-05	9.4E-06	1.2E-03	2.4E-03
		Chrysene	2.1E-09	1.0E-10	---	---	4.3E-04	---
		Co	---	---	---	---	---	---
		Cr	3.7E-06	1.5E-07	1.5E-02	2.0E-03	7.7E-01	5.2E-01
		Cu	---	---	2.8E-04	3.6E-05	---	9.4E-03
		Dibenz(a,h)anthracene	6.7E-09	3.4E-10	---	---	1.4E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.1E-06	1.9E-07	---	3.8E-05
		Fluorene	---	---	4.0E-08	6.5E-09	---	1.4E-06
		Hg	---	---	5.1E-04	6.6E-05	---	1.7E-02
		Indeno(1,2,3-cd)pyrene	1.2E-08	5.9E-10	---	---	2.4E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-07	1.7E-08	---	3.6E-06
		Ni	---	---	8.5E-04	1.1E-04	---	2.9E-02
		Pb	2.3E-08	9.0E-10	---	---	4.8E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.6E-06	2.5E-07	---	5.3E-05
		Sb	---	---	6.3E-04	8.2E-05	---	2.1E-02
		Se	---	---	5.1E-06	6.6E-07	---	1.7E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.3E-05	8.2E-06	---	2.1E-03
	OR-24 Total		4.9E-06	1.9E-07	3.0E-02	3.9E-03		
	OR-25	a-Chlordane	9.2E-12	3.9E-13	3.3E-08	4.7E-09	3.8E-06	1.7E-06
		g-Chlordane	6.6E-12	2.8E-13	2.4E-08	3.4E-09	2.7E-06	1.2E-06
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	2.2E-05	8.1E-06
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	7.3E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.2E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	5.1E-06	7.3E-07
		Total Congeners	1.7E-08	8.8E-10	4.1E-04	6.9E-05	7.1E-03	2.1E-02
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.9E-07	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		2,4'-DDE	1.3E-12	5.5E-14	---	---	5.4E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	5.1E-07	8.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.4E-11	5.6E-13	---	---	5.5E-06	---
		4,4'-DDE	2.0E-11	8.1E-13	---	---	8.0E-06	---
		4,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	3.7E-07	6.5E-07
		Acenaphthene	---	---	1.2E-08	2.0E-09	---	6.4E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.5E-06	3.3E-07	---	1.3E-04
		Al	---	---	7.7E-03	1.0E-03	---	4.0E-01
		Anthracene	---	---	9.5E-09	1.2E-09	---	4.9E-07
		As	7.8E-07	3.2E-08	4.0E-03	5.6E-04	3.2E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.1E-09	4.1E-10	---	---	3.3E-03	---
		Benzo(a)pyrene	1.6E-07	8.1E-09	---	---	6.6E-02	---
		Benzo(b)fluoranthene	1.0E-08	5.2E-10	---	---	4.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.9E-09	5.0E-10	---	---	4.0E-03	---
		Cd	3.8E-09	1.5E-10	4.7E-05	6.1E-06	1.6E-03	2.4E-03
		Chrysene	9.9E-10	5.0E-11	---	---	4.1E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.6E-08	5.9E-03	7.6E-04	5.9E-01	3.0E-01
		Cu	---	---	1.6E-04	2.0E-05	---	8.1E-03
		Dibenz(a,h)anthracene	5.6E-09	2.8E-10	---	---	2.3E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.1E-07	1.4E-07	---	4.2E-05
		Fluorene	---	---	2.5E-08	4.1E-09	---	1.3E-06
		Hg	---	---	4.0E-04	5.2E-05	---	2.1E-02
		Indeno(1,2,3-cd)pyrene	1.4E-08	7.2E-10	---	---	5.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-07	1.8E-08	---	5.8E-06
		Ni	---	---	5.3E-04	6.9E-05	---	2.7E-02
		Pb	4.6E-09	1.8E-10	---	---	1.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.4E-06	2.3E-07	---	7.2E-05
		Sb	---	---	1.6E-04	2.0E-05	---	8.0E-03
		Se	---	---	7.4E-06	9.6E-07	---	3.8E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.4E-05	5.7E-06	---	2.3E-03
	OR-25 Total		2.5E-06	1.0E-07	1.9E-02	2.6E-03		
	OR-26	a-Chlordane	2.5E-11	1.1E-12	9.0E-08	1.3E-08	7.4E-06	3.6E-06
		g-Chlordane	2.2E-11	9.5E-13	8.0E-08	1.1E-08	6.6E-06	3.2E-06
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.4E-05	5.7E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	5.2E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	8.6E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.3E-06	5.1E-07
		Total Congeners	5.5E-08	2.8E-09	1.3E-03	2.2E-04	1.6E-02	5.1E-02
		2,4'-DDD	6.4E-13	2.7E-14	---	---	1.9E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	3.4E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.2E-07	5.9E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	3.2E-11	1.3E-12	---	---	9.4E-06	---
		4,4'-DDE	2.5E-11	1.0E-12	---	---	7.3E-06	---
		4,4'-DDT	1.1E-11	4.6E-13	1.5E-07	2.1E-08	3.3E-06	6.1E-06
		Acenaphthene	---	---	7.8E-09	1.3E-09	---	3.1E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	8.4E-06	1.1E-06	---	3.4E-04
		Al	---	---	7.2E-03	9.4E-04	---	2.9E-01
		Anthracene	---	---	9.3E-09	1.2E-09	---	3.7E-07
		As	1.0E-06	4.1E-08	5.2E-03	7.1E-04	2.9E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	6.0E-09	3.0E-10	---	---	1.8E-03	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Benzo(a)pyrene	9.2E-08	4.6E-09	---	---	2.7E-02	---
		Benzo(b)fluoranthene	6.6E-09	3.3E-10	---	---	1.9E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	7.3E-09	3.6E-10	---	---	2.1E-03	---
		Cd	6.9E-09	2.7E-10	8.4E-05	1.1E-05	2.0E-03	3.4E-03
		Chrysene	1.2E-09	6.2E-11	---	---	3.7E-04	---
		Co	---	---	---	---	---	---
		Cr	2.2E-06	8.5E-08	9.0E-03	1.2E-03	6.5E-01	3.6E-01
		Cu	---	---	2.5E-04	3.2E-05	---	9.9E-03
		Dibenz(a,h)anthracene	3.6E-09	1.8E-10	---	---	1.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.5E-07	9.3E-08	---	2.2E-05
		Fluorene	---	---	2.6E-08	4.1E-09	---	1.0E-06
		Hg	---	---	6.4E-04	8.3E-05	---	2.6E-02
		Indeno(1,2,3-cd)pyrene	7.7E-09	3.9E-10	---	---	2.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.9E-08	1.6E-08	---	4.0E-06
		Ni	---	---	6.1E-04	8.0E-05	---	2.5E-02
		Pb	1.9E-08	7.2E-10	---	---	5.5E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	8.5E-07	1.4E-07	---	3.4E-05
		Sb	---	---	6.2E-04	8.1E-05	---	2.5E-02
		Se	---	---	7.2E-06	9.4E-07	---	2.9E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.6E-05	7.3E-06	---	2.3E-03
	OR-26 Total		3.4E-06	1.4E-07	2.5E-02	3.3E-03		
	OR-27	a-Chlordane	1.9E-11	8.1E-13	6.8E-08	9.7E-09	3.7E-06	2.2E-06
		g-Chlordane	2.8E-11	1.2E-12	9.9E-08	1.4E-08	5.4E-06	3.1E-06
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	9.5E-06	4.5E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	4.1E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	6.8E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	2.2E-06	4.1E-07
		Total Congeners	4.8E-08	2.4E-09	1.1E-03	1.9E-04	9.3E-03	3.5E-02
		2,4'-DDD	7.0E-13	2.9E-14	---	---	1.4E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	2.3E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	2.3E-07	5.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.8E-11	1.1E-12	---	---	5.4E-06	---
		4,4'-DDE	1.6E-11	6.5E-13	---	---	3.0E-06	---
		4,4'-DDT	9.5E-12	3.9E-13	1.3E-07	1.8E-08	1.8E-06	4.1E-06
		Acenaphthene	---	---	5.6E-09	8.9E-10	---	1.8E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	8.8E-06	1.1E-06	---	2.8E-04
		Al	---	---	7.0E-03	9.1E-04	---	2.2E-01
		Anthracene	---	---	5.7E-09	7.2E-10	---	1.8E-07
		As	9.3E-07	3.9E-08	4.8E-03	6.7E-04	1.8E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	5.3E-09	2.6E-10	---	---	1.0E-03	---
		Benzo(a)pyrene	9.7E-08	4.9E-09	---	---	1.9E-02	---
		Benzo(b)fluoranthene	6.4E-09	3.2E-10	---	---	1.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	7.3E-09	3.6E-10	---	---	1.4E-03	---
		Cd	6.2E-09	2.4E-10	7.6E-05	9.9E-06	1.2E-03	2.4E-03
		Chrysene	7.2E-10	3.6E-11	---	---	1.4E-04	---
		Co	---	---	---	---	---	---
		Cr	4.0E-06	1.6E-07	1.6E-02	2.1E-03	7.8E-01	5.2E-01
		Cu	---	---	1.8E-04	2.4E-05	---	5.8E-03
		Dibenz(a,h)anthracene	3.2E-09	1.6E-10	---	---	6.2E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.5E-07	9.3E-08	---	1.7E-05
		Fluorene	---	---	1.6E-08	2.6E-09	---	5.2E-07
		Hg	---	---	4.8E-04	6.2E-05	---	1.5E-02

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Indeno(1,2,3-cd)pyrene	7.8E-09	3.9E-10	---	---	1.5E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	7.6E-08	1.2E-08	---	2.4E-06
		Ni	---	---	6.4E-04	8.3E-05	---	2.0E-02
		Pb	2.0E-08	7.7E-10	---	---	3.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	8.6E-07	1.4E-07	---	2.7E-05
		Sb	---	---	8.4E-04	1.1E-04	---	2.7E-02
		Se	---	---	7.6E-06	9.8E-07	---	2.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.1E-05	6.6E-06	---	1.6E-03
	OR-27 Total		5.1E-06	2.0E-07	3.2E-02	4.2E-03		
	OR-28	a-Chlordane	1.6E-11	6.7E-13	5.7E-08	8.1E-09	5.9E-06	2.8E-06
		g-Chlordane	3.0E-12	1.3E-13	1.1E-08	1.5E-09	1.1E-06	5.2E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	2.0E-05	7.7E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	6.4E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.2E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.2E-06	6.3E-07
		Total Congeners	1.5E-08	7.6E-10	3.5E-04	5.9E-05	5.6E-03	1.7E-02
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.6E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	4.7E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	4.4E-07	7.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.3E-11	5.3E-13	---	---	4.8E-06	---
		4,4'-DDE	1.9E-11	7.9E-13	---	---	7.2E-06	---
		4,4'-DDT	2.0E-12	8.3E-14	2.7E-08	3.8E-09	7.5E-07	1.3E-06
		Acenaphthene	---	---	8.9E-09	1.4E-09	---	4.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	9.2E-06	1.2E-06	---	4.5E-04
		Al	---	---	7.6E-03	9.9E-04	---	3.7E-01
		Anthracene	---	---	8.3E-09	1.0E-09	---	4.1E-07
		As	8.2E-07	3.4E-08	4.3E-03	5.9E-04	3.1E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.0E-09	4.0E-10	---	---	3.0E-03	---
		Benzo(a)pyrene	1.5E-07	7.7E-09	---	---	5.8E-02	---
		Benzo(b)fluoranthene	1.0E-08	5.1E-10	---	---	3.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.0E-08	5.0E-10	---	---	3.7E-03	---
		Cd	6.6E-09	2.6E-10	8.1E-05	1.1E-05	2.5E-03	4.0E-03
		Chrysene	1.0E-09	5.2E-11	---	---	3.9E-04	---
		Co	---	---	---	---	---	---
		Cr	1.6E-06	6.3E-08	6.6E-03	8.6E-04	6.0E-01	3.2E-01
		Cu	---	---	1.7E-04	2.1E-05	---	8.1E-03
		Dibenz(a,h)anthracene	4.7E-09	2.4E-10	---	---	1.8E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.2E-07	1.4E-07	---	4.0E-05
		Fluorene	---	---	2.3E-08	3.7E-09	---	1.1E-06
		Hg	---	---	3.9E-04	5.1E-05	---	1.9E-02
		Indeno(1,2,3-cd)pyrene	1.3E-08	6.7E-10	---	---	5.0E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.0E-07	1.6E-08	---	5.0E-06
		Ni	---	---	5.3E-04	6.9E-05	---	2.6E-02
		Pb	1.5E-08	5.8E-10	---	---	5.6E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.4E-06	2.2E-07	---	6.7E-05
		Sb	---	---	3.6E-04	4.7E-05	---	1.8E-02
		Se	---	---	8.6E-06	1.1E-06	---	4.2E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Zn	---	---	4.7E-05	6.1E-06	---	2.3E-03
	OR-28 Total		2.7E-06	1.1E-07	2.0E-02	2.7E-03		
	OR-29	a-Chlordane	1.1E-11	4.5E-13	3.8E-08	5.4E-09	2.4E-06	1.4E-06
		g-Chlordane	5.3E-12	2.2E-13	1.9E-08	2.7E-09	1.2E-06	7.2E-07
		DBT	---	---	---	---	---	---
		Dieldrin	3.9E-11	1.9E-12	1.1E-07	1.8E-08	8.9E-06	4.3E-06
		Endosulfan II	---	---	9.5E-10	1.5E-10	---	3.6E-08
		Endrin	---	---	1.7E-08	2.7E-09	---	6.3E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	2.0E-06	3.8E-07
		Total Congeners	4.6E-08	2.3E-09	1.1E-03	1.8E-04	1.0E-02	4.1E-02
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.2E-07	---
		2,4'-DDE	9.1E-13	3.8E-14	---	---	2.1E-07	---
		2,4'-DDT	8.3E-13	3.4E-14	1.1E-08	1.6E-09	1.9E-07	4.3E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.1E-11	4.4E-13	---	---	2.4E-06	---
		4,4'-DDE	1.3E-11	5.4E-13	---	---	3.0E-06	---
		4,4'-DDT	2.8E-12	1.2E-13	3.9E-08	5.4E-09	6.4E-07	1.5E-06
		Acenaphthene	---	---	5.1E-09	8.1E-10	---	1.9E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.8E-06	6.3E-07	---	1.8E-04
		Al	---	---	5.5E-03	7.1E-04	---	2.1E-01
		Anthracene	---	---	3.9E-09	4.9E-10	---	1.5E-07
		As	6.5E-07	2.7E-08	3.4E-03	4.7E-04	1.5E-01	1.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	4.1E-09	2.1E-10	---	---	9.3E-04	---
		Benzo(a)pyrene	8.7E-08	4.4E-09	---	---	2.0E-02	---
		Benzo(b)fluoranthene	5.4E-09	2.7E-10	---	---	1.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	5.8E-09	2.9E-10	---	---	1.3E-03	---
		Cd	5.1E-09	2.0E-10	6.3E-05	8.2E-06	1.2E-03	2.4E-03
		Chrysene	5.6E-10	2.8E-11	---	---	1.3E-04	---
		Co	---	---	---	---	---	---
		Cr	3.6E-06	1.4E-07	1.5E-02	1.9E-03	8.1E-01	5.6E-01
		Cu	---	---	1.6E-04	2.0E-05	---	6.0E-03
		Dibenz(a,h)anthracene	2.4E-09	1.2E-10	---	---	5.4E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.1E-07	8.6E-08	---	1.9E-05
		Fluorene	---	---	1.2E-08	1.9E-09	---	4.4E-07
		Hg	---	---	3.2E-04	4.2E-05	---	1.2E-02
		Indeno(1,2,3-cd)pyrene	7.1E-09	3.6E-10	---	---	1.6E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	7.4E-08	1.2E-08	---	2.8E-06
		Ni	---	---	5.0E-04	6.5E-05	---	1.9E-02
		Pb	1.3E-08	4.9E-10	---	---	2.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	8.1E-07	1.3E-07	---	3.1E-05
		Sb	---	---	6.0E-04	7.7E-05	---	2.3E-02
		Se	---	---	4.9E-06	6.4E-07	---	1.9E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.0E-05	5.2E-06	---	1.5E-03
	OR-29 Total		4.4E-06	1.7E-07	2.6E-02	3.5E-03		
Point Avisadero Area	PA-38	a-Chlordane	5.9E-12	2.5E-13	2.1E-08	3.0E-09	2.0E-06	9.5E-07
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	9.1E-07	4.2E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.7E-05	6.4E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	5.3E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	9.5E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.9E-06	5.7E-07
		Total Congeners	1.0E-07	5.1E-09	2.3E-03	4.0E-04	3.5E-02	1.0E-01
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.2E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	4.0E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.7E-07	6.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		4,4'-DDD	1.5E-11	6.1E-13	---	---	5.1E-06	---
		4,4'-DDE	2.5E-11	1.0E-12	---	---	8.7E-06	---
		4,4'-DDT	3.2E-12	1.3E-13	4.3E-08	6.0E-09	1.1E-06	1.9E-06
		Acenaphthene	---	---	3.5E-08	5.6E-09	---	1.6E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.1E-06	7.9E-07	---	2.7E-04
		Al	---	---	7.5E-03	9.7E-04	---	3.3E-01
		Anthracene	---	---	2.6E-08	3.2E-09	---	1.1E-06
		As	8.0E-07	3.3E-08	4.1E-03	5.7E-04	2.8E-01	1.9E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.7E-08	8.7E-10	---	---	6.0E-03	---
		Benzo(a)pyrene	2.2E-07	1.1E-08	---	---	7.7E-02	---
		Benzo(b)fluoranthene	1.7E-08	8.5E-10	---	---	5.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-08	8.7E-10	---	---	6.0E-03	---
		Cd	4.9E-09	1.9E-10	6.1E-05	7.9E-06	1.7E-03	2.7E-03
		Chrysene	2.1E-09	1.1E-10	---	---	7.3E-04	---
		Co	---	---	---	---	---	---
		Cr	1.7E-06	6.5E-08	6.8E-03	8.9E-04	5.8E-01	3.1E-01
		Cu	---	---	2.7E-04	3.5E-05	---	1.2E-02
		Dibenz(a,h)anthracene	9.4E-09	4.7E-10	---	---	3.2E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-06	3.1E-07	---	8.2E-05
		Fluorene	---	---	6.0E-08	9.7E-09	---	2.7E-06
		Hg	---	---	4.7E-04	6.1E-05	---	2.1E-02
		Indeno(1,2,3-cd)pyrene	1.7E-08	8.5E-10	---	---	5.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	9.1E-08	1.5E-08	---	4.1E-06
		Ni	---	---	4.7E-04	6.1E-05	---	2.1E-02
		Pb	1.1E-08	4.4E-10	---	---	3.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.4E-06	3.9E-07	---	1.1E-04
		Sb	---	---	2.6E-04	3.3E-05	---	1.1E-02
		Se	---	---	1.1E-05	1.4E-06	---	5.0E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.3E-05	5.6E-06	---	1.9E-03
	PA-38 Total		2.9E-06	1.2E-07	2.2E-02	3.0E-03		
	PA-39	a-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	8.9E-07	3.8E-07
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	1.0E-06	4.3E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.9E-05	6.5E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	5.5E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	9.8E-07
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	3.9E-06	5.2E-07
		Total Congeners	1.1E-07	5.5E-09	2.5E-03	4.3E-04	4.2E-02	1.2E-01
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.5E-07	---
		2,4'-DDE	1.1E-12	4.5E-14	---	---	4.2E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	4.2E-07	6.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.7E-11	6.9E-13	---	---	6.4E-06	---
		4,4'-DDE	2.0E-11	8.3E-13	---	---	7.8E-06	---
		4,4'-DDT	8.5E-12	3.5E-13	1.2E-07	1.6E-08	3.3E-06	5.3E-06
		Acenaphthene	---	---	2.5E-08	4.0E-09	---	1.1E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.7E-06	8.7E-07	---	3.1E-04
		Al	---	---	7.2E-03	9.4E-04	---	3.3E-01
		Anthracene	---	---	2.2E-08	2.7E-09	---	1.0E-06
		As	7.8E-07	3.3E-08	4.1E-03	5.6E-04	3.0E-01	1.9E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.4E-08	6.9E-10	---	---	5.3E-03	---
		Benzo(a)pyrene	1.9E-07	9.6E-09	---	---	7.4E-02	---
		Benzo(b)fluoranthene	1.4E-08	7.0E-10	---	---	5.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Benzo(k)fluoranthene	1.4E-08	6.9E-10	---	---	5.3E-03	---
		Cd	4.2E-09	1.6E-10	5.2E-05	6.7E-06	1.6E-03	2.4E-03
		Chrysene	1.7E-09	8.5E-11	---	---	6.5E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.5E-08	5.8E-03	7.6E-04	5.5E-01	2.7E-01
		Cu	---	---	1.7E-04	2.1E-05	---	7.6E-03
		Dibenz(a,h)anthracene	7.6E-09	3.8E-10	---	---	3.0E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.5E-06	2.5E-07	---	6.7E-05
		Fluorene	---	---	5.5E-08	8.8E-09	---	2.5E-06
		Hg	---	---	1.1E-03	1.4E-04	---	4.9E-02
		Indeno(1,2,3-cd)pyrene	1.5E-08	7.5E-10	---	---	5.8E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.0E-07	1.7E-08	---	4.8E-06
		Ni	---	---	5.0E-04	6.6E-05	---	2.3E-02
		Pb	1.0E-08	4.1E-10	---	---	4.0E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.1E-06	3.4E-07	---	9.7E-05
		Sb	---	---	2.9E-04	3.7E-05	---	1.3E-02
		Se	---	---	7.1E-06	9.3E-07	---	3.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.0E-05	5.1E-06	---	1.8E-03
	PA-39 Total		2.6E-06	1.1E-07	2.2E-02	3.0E-03		
	PA-40	a-Chlordane	7.9E-12	3.4E-13	2.8E-08	4.0E-09	3.2E-06	1.5E-06
		g-Chlordane	3.0E-12	1.3E-13	1.1E-08	1.5E-09	1.2E-06	5.6E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	2.2E-05	8.3E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	6.9E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.3E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.6E-06	6.8E-07
		Total Congeners	5.2E-09	2.6E-10	1.2E-04	2.1E-05	2.1E-03	6.4E-03
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.9E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	5.1E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	4.8E-07	8.4E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.4E-11	5.9E-13	---	---	5.9E-06	---
		4,4'-DDE	2.2E-11	9.1E-13	---	---	9.0E-06	---
		4,4'-DDT	5.3E-12	2.2E-13	7.3E-08	1.0E-08	2.2E-06	3.8E-06
		Acenaphthene	---	---	1.8E-08	2.8E-09	---	9.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.0E-06	7.8E-07	---	3.2E-04
		Al	---	---	7.6E-03	9.9E-04	---	4.0E-01
		Anthracene	---	---	2.0E-08	2.5E-09	---	1.0E-06
		As	8.2E-07	3.4E-08	4.3E-03	5.9E-04	3.4E-01	2.2E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.2E-09	4.6E-10	---	---	3.8E-03	---
		Benzo(a)pyrene	1.4E-07	7.2E-09	---	---	5.9E-02	---
		Benzo(b)fluoranthene	9.6E-09	4.8E-10	---	---	3.9E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.6E-09	4.8E-10	---	---	3.9E-03	---
		Cd	3.8E-09	1.5E-10	4.7E-05	6.1E-06	1.6E-03	2.5E-03
		Chrysene	1.2E-09	5.9E-11	---	---	4.8E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.5E-08	5.7E-03	7.5E-04	5.8E-01	3.0E-01
		Cu	---	---	1.7E-04	2.1E-05	---	8.7E-03
		Dibenz(a,h)anthracene	5.1E-09	2.5E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	9.8E-07	1.6E-07	---	5.2E-05
		Fluorene	---	---	4.4E-08	7.1E-09	---	2.3E-06
		Hg	---	---	2.7E-04	3.5E-05	---	1.4E-02
		Indeno(1,2,3-cd)pyrene	1.2E-08	5.9E-10	---	---	4.8E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.7E-08	1.4E-08	---	4.6E-06
		Ni	---	---	4.8E-04	6.2E-05	---	2.5E-02
		Pb	9.1E-09	3.5E-10	---	---	3.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-06	2.5E-07	---	8.1E-05
		Sb	---	---	2.1E-04	2.7E-05	---	1.1E-02
		Se	---	---	7.8E-06	1.0E-06	---	4.1E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.1E-05	5.3E-06	---	2.1E-03
	PA-40 Total		2.4E-06	9.9E-08	1.9E-02	2.5E-03		
	PA-41	a-Chlordane	1.2E-11	5.3E-13	4.5E-08	6.4E-09	2.6E-06	1.5E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	5.5E-07	3.2E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.0E-05	4.8E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	4.0E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	7.2E-07
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	2.1E-06	3.9E-07
		Total Congeners	1.2E-07	6.1E-09	2.8E-03	4.7E-04	2.5E-02	9.5E-02
		2,4'-DDD	5.9E-13	2.4E-14	---	---	1.2E-07	---
		2,4'-DDE	1.1E-12	4.5E-14	---	---	2.3E-07	---
		2,4'-DDT	1.0E-12	4.1E-14	1.4E-08	1.9E-09	2.1E-07	4.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.0E-11	8.5E-13	---	---	4.3E-06	---
		4,4'-DDE	2.5E-11	1.0E-12	---	---	5.2E-06	---
		4,4'-DDT	1.1E-11	4.4E-13	1.5E-07	2.0E-08	2.2E-06	4.9E-06
		Acenaphthene	---	---	4.3E-07	6.9E-08	---	1.5E-05
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.2E-06	8.0E-07	---	2.1E-04
		Al	---	---	7.0E-03	9.1E-04	---	2.4E-01
		Anthracene	---	---	4.9E-08	6.1E-09	---	1.6E-06
		As	8.3E-07	3.4E-08	4.3E-03	5.9E-04	1.7E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	4.8E-08	2.4E-09	---	---	1.0E-02	---
		Benzo(a)pyrene	5.6E-07	2.8E-08	---	---	1.2E-01	---
		Benzo(b)fluoranthene	4.4E-08	2.2E-09	---	---	9.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	4.3E-08	2.2E-09	---	---	9.1E-03	---
		Cd	5.7E-09	2.2E-10	7.0E-05	9.0E-06	1.2E-03	2.4E-03
		Chrysene	5.7E-09	2.9E-10	---	---	1.2E-03	---
		Co	---	---	---	---	---	---
		Cr	3.0E-06	1.2E-07	1.2E-02	1.6E-03	6.3E-01	4.2E-01
		Cu	---	---	1.5E-03	1.9E-04	---	5.1E-02
		Dibenz(a,h)anthracene	2.6E-08	1.3E-09	---	---	5.4E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	4.7E-06	7.9E-07	---	1.6E-04
		Fluorene	---	---	3.3E-07	5.3E-08	---	1.1E-05
		Hg	---	---	5.1E-04	6.6E-05	---	1.7E-02
		Indeno(1,2,3-cd)pyrene	4.0E-08	2.0E-09	---	---	8.4E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-07	2.1E-08	---	4.4E-06
		Ni	---	---	6.3E-04	8.2E-05	---	2.1E-02
		Pb	4.2E-08	1.6E-09	---	---	8.8E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.4E-06	1.0E-06	---	2.2E-04
		Sb	---	---	2.9E-04	3.7E-05	---	9.8E-03
		Se	---	---	1.1E-05	1.4E-06	---	3.7E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.3E-05	9.5E-06	---	2.5E-03
	PA-41 Total		4.8E-06	2.0E-07	3.0E-02	4.0E-03		
	PA-42	a-Chlordane	1.2E-11	5.3E-13	4.5E-08	6.4E-09	3.2E-06	1.6E-06

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	5.8E-07	3.0E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	1.1E-05	4.7E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	3.9E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	6.9E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	2.2E-06	3.6E-07
		Total Congeners	1.9E-07	9.8E-09	4.5E-03	7.6E-04	4.9E-02	1.6E-01
		2,4'-DDD	5.9E-13	2.4E-14	---	---	1.5E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	2.5E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	2.3E-07	4.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.0E-11	8.1E-13	---	---	5.0E-06	---
		4,4'-DDE	2.0E-11	8.5E-13	---	---	5.2E-06	---
		4,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	1.7E-07	3.3E-07
		Acenaphthene	---	---	5.0E-08	8.1E-09	---	1.8E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.8E-06	7.6E-07	---	2.1E-04
		Al	---	---	6.6E-03	8.6E-04	---	2.4E-01
		Anthracene	---	---	1.7E-07	2.1E-08	---	6.1E-06
		As	7.8E-07	3.3E-08	4.1E-03	5.6E-04	2.0E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	4.0E-08	2.0E-09	---	---	1.0E-02	---
		Benzo(a)pyrene	4.1E-07	2.1E-08	---	---	1.0E-01	---
		Benzo(b)fluoranthene	3.7E-08	1.9E-09	---	---	9.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.4E-08	1.7E-09	---	---	8.7E-03	---
		Cd	3.6E-09	1.4E-10	4.4E-05	5.7E-06	9.1E-04	1.6E-03
		Chrysene	5.2E-09	2.6E-10	---	---	1.3E-03	---
		Co	---	---	---	---	---	---
		Cr	2.4E-06	9.3E-08	9.8E-03	1.3E-03	6.0E-01	3.6E-01
		Cu	---	---	1.1E-03	1.5E-04	---	4.1E-02
		Dibenz(a,h)anthracene	1.8E-08	9.0E-10	---	---	4.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.6E-06	6.1E-07	---	1.3E-04
		Fluorene	---	---	2.2E-07	3.5E-08	---	8.0E-06
		Hg	---	---	4.5E-04	5.8E-05	---	1.6E-02
		Indeno(1,2,3-cd)pyrene	2.5E-08	1.3E-09	---	---	6.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.8E-07	2.8E-08	---	6.4E-06
		Ni	---	---	4.7E-04	6.1E-05	---	1.7E-02
		Pb	1.2E-08	4.6E-10	---	---	3.0E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.2E-06	5.2E-07	---	1.2E-04
		Sb	---	---	3.3E-04	4.2E-05	---	1.2E-02
		Se	---	---	7.3E-06	9.5E-07	---	2.7E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.9E-05	5.0E-06	---	1.4E-03
	PA-42 Total		3.9E-06	1.6E-07	2.7E-02	3.8E-03		
	PA-43	a-Chlordane	7.6E-12	3.2E-13	2.7E-08	3.9E-09	3.0E-06	1.5E-06
		g-Chlordane	4.9E-12	2.1E-13	1.8E-08	2.5E-09	2.0E-06	9.7E-07
		DBT	---	---	---	---	---	---
		Dieldrin	8.8E-11	4.2E-12	2.6E-07	4.1E-08	3.5E-05	1.4E-05
		Endosulfan II	---	---	2.3E-09	3.6E-10	---	1.2E-07
		Endrin	---	---	4.0E-08	6.5E-09	---	2.2E-06
		Heptachlor	2.0E-11	9.6E-13	2.3E-08	3.7E-09	8.0E-06	1.3E-06
		Total Congeners	8.1E-09	4.1E-10	1.9E-04	3.2E-05	3.3E-03	1.0E-02
		2,4'-DDD	1.2E-12	4.9E-14	---	---	4.7E-07	---
		2,4'-DDE	2.1E-12	8.6E-14	---	---	8.3E-07	---
		2,4'-DDT	2.0E-12	8.3E-14	2.7E-08	3.8E-09	8.0E-07	1.5E-06
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.5E-11	6.2E-13	---	---	6.0E-06	---
		4,4'-DDE	2.1E-11	8.9E-13	---	---	8.6E-06	---
		4,4'-DDT	5.4E-12	2.2E-13	7.4E-08	1.0E-08	2.2E-06	4.1E-06

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Acenaphthene	---	---	1.6E-08	2.6E-09	---	8.9E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.7E-06	4.9E-07	---	2.1E-04
		Al	---	---	6.9E-03	9.0E-04	---	3.8E-01
		Anthracene	---	---	1.9E-08	2.4E-09	---	1.1E-06
		As	6.4E-07	2.7E-08	3.3E-03	4.6E-04	2.6E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-08	5.4E-10	---	---	4.3E-03	---
		Benzo(a)pyrene	1.5E-07	7.6E-09	---	---	6.1E-02	---
		Benzo(b)fluoranthene	1.0E-08	5.1E-10	---	---	4.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.8E-09	4.9E-10	---	---	4.0E-03	---
		Cd	3.2E-09	1.2E-10	3.9E-05	5.1E-06	1.3E-03	2.2E-03
		Chrysene	1.2E-09	6.3E-11	---	---	5.0E-04	---
		Co	---	---	---	---	---	---
		Cr	1.6E-06	6.3E-08	6.7E-03	8.7E-04	6.5E-01	3.7E-01
		Cu	---	---	2.6E-04	3.3E-05	---	1.4E-02
		Dibenz(a,h)anthracene	5.1E-09	2.6E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-06	2.0E-07	---	6.6E-05
		Fluorene	---	---	3.7E-08	5.9E-09	---	2.0E-06
		Hg	---	---	1.5E-04	2.0E-05	---	8.4E-03
		Indeno(1,2,3-cd)pyrene	1.0E-08	5.2E-10	---	---	4.1E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	6.5E-08	1.0E-08	---	3.6E-06
		Ni	---	---	4.4E-04	5.8E-05	---	2.4E-02
		Pb	7.3E-09	2.8E-10	---	---	2.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.8E-06	2.9E-07	---	1.0E-04
		Sb	---	---	1.5E-04	1.9E-05	---	8.1E-03
		Se	---	---	6.3E-06	8.2E-07	---	3.5E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.4E-05	4.4E-06	---	1.9E-03
	PA-43 Total		2.5E-06	1.0E-07	1.8E-02	2.4E-03		
	PA-44	a-Chlordane	2.4E-11	1.0E-12	8.7E-08	1.2E-08	6.4E-06	3.0E-06
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	6.1E-07	2.8E-07
		DBT	---	---	---	---	---	---
		Dieldrin	3.9E-11	1.9E-12	1.1E-07	1.8E-08	1.0E-05	3.9E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	3.6E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	6.5E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	2.3E-06	3.4E-07
		Total Congeners	1.2E-08	5.9E-10	2.7E-04	4.6E-05	3.1E-03	9.2E-03
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.4E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	2.6E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	2.4E-07	4.3E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.3E-11	5.4E-13	---	---	3.4E-06	---
		4,4'-DDE	1.9E-11	7.9E-13	---	---	5.0E-06	---
		4,4'-DDT	1.4E-11	5.8E-13	1.9E-07	2.6E-08	3.7E-06	6.5E-06
		Acenaphthene	---	---	9.6E-08	1.5E-08	---	3.3E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.9E-06	9.0E-07	---	2.3E-04
		Al	---	---	6.9E-03	8.9E-04	---	2.3E-01
		Anthracene	---	---	3.4E-08	4.3E-09	---	1.2E-06
		As	1.0E-06	4.3E-08	5.4E-03	7.5E-04	2.8E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.5E-08	1.3E-09	---	---	6.6E-03	---
		Benzo(a)pyrene	2.6E-07	1.3E-08	---	---	6.8E-02	---
		Benzo(b)fluoranthene	2.0E-08	1.0E-09	---	---	5.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-08	1.0E-09	---	---	5.4E-03	---
		Cd	4.9E-09	1.9E-10	6.0E-05	7.7E-06	1.3E-03	2.0E-03
		Chrysene	2.6E-09	1.3E-10	---	---	6.9E-04	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Co	---	---	---	---	---	---
		Cr	2.4E-06	9.2E-08	9.7E-03	1.3E-03	6.2E-01	3.3E-01
		Cu	---	---	4.7E-04	6.1E-05	---	1.6E-02
		Dibenz(a,h)anthracene	1.1E-08	5.7E-10	---	---	3.0E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.0E-06	5.1E-07	---	1.0E-04
		Fluorene	---	---	8.0E-08	1.3E-08	---	2.7E-06
		Hg	---	---	1.6E-03	2.1E-04	---	5.4E-02
		Indeno(1,2,3-cd)pyrene	1.8E-08	9.0E-10	---	---	4.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-07	2.1E-08	---	4.5E-06
		Ni	---	---	5.0E-04	6.4E-05	---	1.7E-02
		Pb	1.0E-08	3.9E-10	---	---	2.6E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.6E-06	5.8E-07	---	1.2E-04
		Sb	---	---	4.4E-03	5.8E-04	---	1.5E-01
		Se	---	---	6.5E-06	8.4E-07	---	2.2E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.8E-05	4.9E-06	---	1.3E-03
	PA-44 Total		3.8E-06	1.5E-07	2.9E-02	3.9E-03		
	PA-45	a-Chlordane	2.0E-12	8.4E-14	7.1E-09	1.0E-09	4.2E-07	2.0E-07
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	4.9E-07	2.3E-07
		DBT	---	---	---	---	---	---
		Dieldrin	3.9E-11	1.9E-12	1.1E-07	1.8E-08	8.3E-06	3.2E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	3.0E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	5.4E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	1.9E-06	2.8E-07
		Total Congeners	4.2E-07	2.1E-08	9.8E-03	1.7E-03	8.9E-02	2.8E-01
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.1E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	2.1E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	1.9E-07	3.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.4E-11	5.8E-13	---	---	2.9E-06	---
		4,4'-DDE	1.8E-11	7.6E-13	---	---	3.9E-06	---
		4,4'-DDT	4.5E-12	1.9E-13	6.2E-08	8.5E-09	9.5E-07	1.7E-06
		Acenaphthene	---	---	6.1E-08	9.8E-09	---	1.7E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.3E-06	8.2E-07	---	1.8E-04
		Al	---	---	6.3E-03	8.1E-04	---	1.8E-01
		Anthracene	---	---	3.4E-08	4.3E-09	---	9.8E-07
		As	7.8E-07	3.3E-08	4.1E-03	5.6E-04	1.7E-01	1.2E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.5E-08	1.3E-09	---	---	5.3E-03	---
		Benzo(a)pyrene	3.6E-07	1.8E-08	---	---	7.7E-02	---
		Benzo(b)fluoranthene	2.5E-08	1.3E-09	---	---	5.3E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.5E-08	1.3E-09	---	---	5.3E-03	---
		Cd	4.4E-09	1.7E-10	5.4E-05	7.0E-06	9.3E-04	1.5E-03
		Chrysene	2.9E-09	1.5E-10	---	---	6.1E-04	---
		Co	---	---	---	---	---	---
		Cr	3.0E-06	1.2E-07	1.2E-02	1.6E-03	6.4E-01	3.5E-01
		Cu	---	---	4.5E-04	5.8E-05	---	1.3E-02
		Dibenz(a,h)anthracene	1.5E-08	7.8E-10	---	---	3.3E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.6E-06	4.3E-07	---	7.2E-05
		Fluorene	---	---	9.9E-08	1.6E-08	---	2.8E-06
		Hg	---	---	7.3E-04	9.5E-05	---	2.1E-02
		Indeno(1,2,3-cd)pyrene	2.8E-08	1.4E-09	---	---	5.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.0E-07	3.1E-08	---	5.6E-06
		Ni	---	---	1.3E-03	1.7E-04	---	3.6E-02

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Pb	1.3E-08	5.1E-10	---	---	2.8E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.7E-06	6.0E-07	---	1.1E-04
		Sb	---	---	1.9E-04	2.4E-05	---	5.3E-03
		Se	---	---	6.6E-06	8.6E-07	---	1.9E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.8E-05	5.0E-06	---	1.1E-03
	PA-45 Total		4.7E-06	2.0E-07	3.5E-02	5.0E-03		
	PA-46	a-Chlordane	2.0E-12	8.4E-14	7.1E-09	1.0E-09	4.2E-07	2.3E-07
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	4.9E-07	2.7E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	9.3E-06	4.2E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	3.5E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	6.3E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	1.9E-06	3.3E-07
		Total Congeners	6.1E-08	3.1E-09	1.4E-03	2.4E-04	1.3E-02	4.7E-02
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.1E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	2.1E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	1.9E-07	4.1E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.4E-11	5.7E-13	---	---	2.9E-06	---
		4,4'-DDE	1.2E-11	5.2E-13	---	---	2.6E-06	---
		4,4'-DDT	6.8E-12	2.8E-13	9.3E-08	1.3E-08	1.4E-06	3.1E-06
		Acenaphthene	---	---	3.9E-08	6.2E-09	---	1.3E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.8E-06	7.5E-07	---	1.9E-04
		Al	---	---	6.5E-03	8.4E-04	---	2.1E-01
		Anthracene	---	---	2.4E-08	3.1E-09	---	8.1E-07
		As	9.2E-07	3.8E-08	4.7E-03	6.6E-04	1.9E-01	1.6E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.7E-08	8.5E-10	---	---	3.6E-03	---
		Benzo(a)pyrene	2.5E-07	1.2E-08	---	---	5.2E-02	---
		Benzo(b)fluoranthene	1.8E-08	9.0E-10	---	---	3.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-08	8.9E-10	---	---	3.8E-03	---
		Cd	6.2E-09	2.4E-10	7.6E-05	9.9E-06	1.3E-03	2.5E-03
		Chrysene	2.3E-09	1.1E-10	---	---	4.8E-04	---
		Co	---	---	---	---	---	---
		Cr	3.4E-06	1.3E-07	1.4E-02	1.8E-03	7.2E-01	4.5E-01
		Cu	---	---	8.3E-04	1.1E-04	---	2.7E-02
		Dibenz(a,h)anthracene	1.2E-08	6.3E-10	---	---	2.6E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-06	2.4E-07	---	4.7E-05
		Fluorene	---	---	7.6E-08	1.2E-08	---	2.5E-06
		Hg	---	---	1.1E-03	1.5E-04	---	3.7E-02
		Indeno(1,2,3-cd)pyrene	1.9E-08	9.7E-10	---	---	4.1E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.2E-07	1.9E-08	---	3.9E-06
		Ni	---	---	1.3E-03	1.7E-04	---	4.4E-02
		Pb	2.1E-08	8.2E-10	---	---	4.5E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.2E-06	3.6E-07	---	7.4E-05
		Sb	---	---	4.9E-04	6.4E-05	---	1.6E-02
		Se	---	---	7.0E-06	9.0E-07	---	2.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.5E-05	7.1E-06	---	1.8E-03
	PA-46 Total		4.7E-06	1.9E-07	3.0E-02	4.0E-03		
	PA-47	a-Chlordane	1.4E-11	5.9E-13	5.0E-08	7.0E-09	3.0E-06	1.4E-06
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	5.0E-07	2.3E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	9.5E-06	3.5E-06

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	2.9E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	5.2E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	1.9E-06	2.7E-07
		Total Congeners	1.9E-08	9.7E-10	4.5E-04	7.6E-05	4.1E-03	1.2E-02
		2,4'-DDD	5.9E-13	2.4E-14	---	---	1.3E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	2.2E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	2.0E-07	3.4E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.0E-11	8.3E-13	---	---	4.3E-06	---
		4,4'-DDE	2.4E-11	9.9E-13	---	---	5.1E-06	---
		4,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	1.4E-07	2.5E-07
		Acenaphthene	---	---	1.1E-07	1.7E-08	---	2.9E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	9.2E-06	1.2E-06	---	2.5E-04
		Al	---	---	6.6E-03	8.6E-04	---	1.8E-01
		Anthracene	---	---	4.6E-08	5.8E-09	---	1.3E-06
		As	1.3E-06	5.5E-08	6.9E-03	9.6E-04	2.9E-01	1.9E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	3.2E-08	1.6E-09	---	---	7.0E-03	---
		Benzo(a)pyrene	4.7E-07	2.4E-08	---	---	1.0E-01	---
		Benzo(b)fluoranthene	3.6E-08	1.8E-09	---	---	7.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.5E-08	1.8E-09	---	---	7.6E-03	---
		Cd	1.3E-08	5.1E-10	1.6E-04	2.1E-05	2.8E-03	4.4E-03
		Chrysene	3.5E-09	1.8E-10	---	---	7.6E-04	---
		Co	---	---	---	---	---	---
		Cr	2.5E-06	9.8E-08	1.0E-02	1.3E-03	5.4E-01	2.8E-01
		Cu	---	---	3.0E-03	3.9E-04	---	8.2E-02
		Dibenz(a,h)anthracene	2.4E-08	1.2E-09	---	---	5.2E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.9E-06	4.9E-07	---	8.0E-05
		Fluorene	---	---	1.6E-07	2.5E-08	---	4.3E-06
		Hg	---	---	7.9E-03	1.0E-03	---	2.2E-01
		Indeno(1,2,3-cd)pyrene	3.6E-08	1.8E-09	---	---	7.8E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.2E-07	3.6E-08	---	6.1E-06
		Ni	---	---	6.2E-04	8.0E-05	---	1.7E-02
		Pb	1.1E-07	4.1E-09	---	---	2.3E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.7E-06	7.6E-07	---	1.3E-04
		Sb	---	---	5.7E-04	7.3E-05	---	1.5E-02
		Se	---	---	7.7E-06	1.0E-06	---	2.1E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	1.1E-04	1.5E-05	---	3.1E-03
	PA-47 Total		4.6E-06	1.9E-07	3.7E-02	4.8E-03		
	PA-48	a-Chlordane	2.0E-12	8.4E-14	7.1E-09	1.0E-09	5.8E-07	3.2E-07
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	6.8E-07	3.7E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	1.3E-05	5.8E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	4.8E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	8.5E-07
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	2.9E-06	5.1E-07
		Total Congeners	3.0E-09	1.5E-10	6.9E-05	1.2E-05	8.8E-04	3.1E-03
		2,4'-DDD	5.9E-13	2.4E-14	---	---	1.7E-07	---
		2,4'-DDE	1.1E-12	4.5E-14	---	---	3.2E-07	---
		2,4'-DDT	1.0E-12	4.1E-14	1.4E-08	1.9E-09	2.9E-07	6.2E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.1E-11	4.4E-13	---	---	3.1E-06	---
		4,4'-DDE	1.6E-11	6.8E-13	---	---	4.8E-06	---
		4,4'-DDT	7.5E-13	3.1E-14	1.0E-08	1.4E-09	2.2E-07	4.6E-07
		Acenaphthene	---	---	8.7E-08	1.4E-08	---	3.9E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.7E-06	6.1E-07	---	2.1E-04

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Al	---	---	7.1E-03	9.3E-04	---	3.2E-01
		Anthracene	---	---	3.8E-08	4.8E-09	---	1.7E-06
		As	8.9E-07	3.7E-08	4.6E-03	6.4E-04	2.6E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.0E-08	1.0E-09	---	---	5.9E-03	---
		Benzo(a)pyrene	2.9E-07	1.5E-08	---	---	8.7E-02	---
		Benzo(b)fluoranthene	1.7E-08	8.7E-10	---	---	5.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-08	8.9E-10	---	---	5.2E-03	---
		Cd	4.1E-09	1.6E-10	5.0E-05	6.5E-06	1.2E-03	2.3E-03
		Chrysene	2.2E-09	1.1E-10	---	---	6.6E-04	---
		Co	---	---	---	---	---	---
		Cr	2.1E-06	8.2E-08	8.6E-03	1.1E-03	6.2E-01	3.9E-01
		Cu	---	---	1.2E-04	1.5E-05	---	5.2E-03
		Dibenz(a,h)anthracene	1.0E-08	5.3E-10	---	---	3.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.2E-06	3.6E-07	---	9.8E-05
		Fluorene	---	---	1.1E-07	1.8E-08	---	5.0E-06
		Hg	---	---	8.8E-04	1.1E-04	---	3.9E-02
		Indeno(1,2,3-cd)pyrene	2.1E-08	1.1E-09	---	---	6.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.5E-07	3.9E-08	---	1.1E-05
		Ni	---	---	4.6E-04	6.0E-05	---	2.1E-02
		Pb	9.1E-09	3.5E-10	---	---	2.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.5E-06	5.6E-07	---	1.6E-04
		Sb	---	---	2.2E-04	2.8E-05	---	9.8E-03
		Se	---	---	5.7E-06	7.4E-07	---	2.6E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.6E-05	4.6E-06	---	1.6E-03
	PA-48 Total		3.4E-06	1.4E-07	2.2E-02	2.9E-03		
	PA-49	a-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	7.8E-07	4.3E-07
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	7.8E-07	4.3E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	1.5E-05	6.6E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	5.5E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	9.8E-07
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	3.4E-06	5.9E-07
		Total Congeners	2.0E-09	1.0E-10	4.7E-05	8.0E-06	6.9E-04	2.4E-03
		2,4'-DDD	9.8E-12	4.1E-13	---	---	3.4E-06	---
		2,4'-DDE	1.1E-12	4.5E-14	---	---	3.7E-07	---
		2,4'-DDT	1.0E-12	4.1E-14	1.4E-08	1.9E-09	3.4E-07	7.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	8.4E-12	3.5E-13	---	---	2.9E-06	---
		4,4'-DDE	1.1E-11	4.4E-13	---	---	3.6E-06	---
		4,4'-DDT	7.5E-13	3.1E-14	1.0E-08	1.4E-09	2.5E-07	5.3E-07
		Acenaphthene	---	---	3.6E-08	5.8E-09	---	1.9E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.3E-06	6.8E-07	---	2.7E-04
		Al	---	---	7.0E-03	9.0E-04	---	3.6E-01
		Anthracene	---	---	4.8E-08	6.0E-09	---	2.5E-06
		As	8.4E-07	3.5E-08	4.3E-03	6.0E-04	2.8E-01	2.2E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.5E-08	1.3E-09	---	---	8.6E-03	---
		Benzo(a)pyrene	3.7E-07	1.8E-08	---	---	1.2E-01	---
		Benzo(b)fluoranthene	2.1E-08	1.1E-09	---	---	7.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.1E-08	1.1E-09	---	---	7.3E-03	---
		Cd	3.7E-09	1.4E-10	4.5E-05	5.9E-06	1.3E-03	2.3E-03
		Chrysene	2.7E-09	1.4E-10	---	---	9.2E-04	---
		Co	---	---	---	---	---	---
		Cr	1.6E-06	6.3E-08	6.6E-03	8.6E-04	5.5E-01	3.4E-01
		Cu	---	---	9.4E-05	1.2E-05	---	4.8E-03

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Dibenz(a,h)anthracene	1.2E-08	6.0E-10	---	---	4.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.7E-06	4.6E-07	---	1.4E-04
		Fluorene	---	---	8.7E-08	1.4E-08	---	4.5E-06
		Hg	---	---	7.0E-04	9.1E-05	---	3.6E-02
		Indeno(1,2,3-cd)pyrene	2.7E-08	1.3E-09	---	---	9.1E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-07	2.2E-08	---	7.2E-06
		Ni	---	---	4.6E-04	5.9E-05	---	2.4E-02
		Pb	7.3E-09	2.8E-10	---	---	2.5E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	4.3E-06	6.9E-07	---	2.2E-04
		Sb	---	---	1.6E-04	2.1E-05	---	8.2E-03
		Se	---	---	6.6E-06	8.6E-07	---	3.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.3E-05	4.3E-06	---	1.7E-03
	PA-49 Total		2.9E-06	1.2E-07	1.9E-02	2.6E-03		
	PA-50	a-Chlordane	7.9E-12	3.4E-13	2.8E-08	4.0E-09	2.6E-06	1.4E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	8.7E-07	4.6E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.6E-05	6.9E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	5.8E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.0E-06
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	3.3E-06	5.5E-07
		Total Congeners	2.4E-09	1.2E-10	5.7E-05	9.6E-06	8.1E-04	2.8E-03
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.1E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	3.9E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.6E-07	7.2E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.2E-11	4.9E-13	---	---	3.9E-06	---
		4,4'-DDE	2.6E-11	1.1E-12	---	---	8.5E-06	---
		4,4'-DDT	3.0E-12	1.2E-13	4.1E-08	5.7E-09	9.9E-07	2.0E-06
		Acenaphthene	---	---	5.0E-08	8.1E-09	---	2.4E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.7E-06	7.3E-07	---	2.8E-04
		Al	---	---	7.5E-03	9.8E-04	---	3.7E-01
		Anthracene	---	---	3.1E-08	3.9E-09	---	1.5E-06
		As	8.5E-07	3.5E-08	4.4E-03	6.1E-04	2.8E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.0E-08	9.8E-10	---	---	6.5E-03	---
		Benzo(a)pyrene	3.0E-07	1.5E-08	---	---	1.0E-01	---
		Benzo(b)fluoranthene	1.7E-08	8.7E-10	---	---	5.7E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.8E-08	9.3E-10	---	---	6.1E-03	---
		Cd	4.6E-09	1.8E-10	5.6E-05	7.3E-06	1.5E-03	2.7E-03
		Chrysene	2.1E-09	1.0E-10	---	---	6.9E-04	---
		Co	---	---	---	---	---	---
		Cr	1.7E-06	6.8E-08	7.2E-03	9.3E-04	5.8E-01	3.5E-01
		Cu	---	---	1.2E-04	1.6E-05	---	5.9E-03
		Dibenz(a,h)anthracene	9.5E-09	4.8E-10	---	---	3.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.4E-06	4.0E-07	---	1.2E-04
		Fluorene	---	---	6.5E-08	1.0E-08	---	3.2E-06
		Hg	---	---	4.2E-04	5.4E-05	---	2.0E-02
		Indeno(1,2,3-cd)pyrene	2.4E-08	1.2E-09	---	---	8.0E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-07	2.2E-08	---	6.8E-06
		Ni	---	---	5.3E-04	6.9E-05	---	2.6E-02
		Pb	1.1E-08	4.3E-10	---	---	3.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.6E-06	5.8E-07	---	1.8E-04

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Sb	---	---	2.1E-04	2.7E-05	---	1.0E-02
		Se	---	---	7.7E-06	9.9E-07	---	3.7E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	4.0E-05	5.2E-06	---	1.9E-03
	PA-50 Total		3.0E-06	1.2E-07	2.1E-02	2.7E-03		
	PA-51	a-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	7.7E-07	4.5E-07
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	7.7E-07	4.5E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	1.5E-05	7.0E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	5.8E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	1.0E-06
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	3.3E-06	6.2E-07
		Total Congeners	2.5E-09	1.3E-10	5.8E-05	9.9E-06	8.3E-04	3.2E-03
		2,4'-DDD	5.9E-13	2.4E-14	---	---	2.0E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	3.3E-07	---
		2,4'-DDT	1.0E-12	4.1E-14	1.4E-08	1.9E-09	3.3E-07	7.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	6.7E-12	2.8E-13	---	---	2.2E-06	---
		4,4'-DDE	8.0E-12	3.3E-13	---	---	2.7E-06	---
		4,4'-DDT	7.5E-13	3.1E-14	1.0E-08	1.4E-09	2.5E-07	5.6E-07
		Acenaphthene	---	---	6.2E-08	1.0E-08	---	3.4E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.7E-06	6.0E-07	---	2.5E-04
		Al	---	---	6.8E-03	8.8E-04	---	3.7E-01
		Anthracene	---	---	7.0E-08	8.8E-09	---	3.8E-06
		As	8.3E-07	3.4E-08	4.3E-03	5.9E-04	2.8E-01	2.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	3.5E-08	1.8E-09	---	---	1.2E-02	---
		Benzo(a)pyrene	5.1E-07	2.6E-08	---	---	1.7E-01	---
		Benzo(b)fluoranthene	2.9E-08	1.5E-09	---	---	9.7E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.0E-08	1.5E-09	---	---	1.0E-02	---
		Cd	3.3E-09	1.3E-10	4.1E-05	5.3E-06	1.1E-03	2.2E-03
		Chrysene	4.0E-09	2.0E-10	---	---	1.3E-03	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.8E-08	6.1E-03	7.9E-04	5.0E-01	3.3E-01
		Cu	---	---	1.0E-04	1.4E-05	---	5.7E-03
		Dibenz(a,h)anthracene	1.8E-08	9.3E-10	---	---	6.2E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.4E-06	5.7E-07	---	1.9E-04
		Fluorene	---	---	1.2E-07	1.9E-08	---	6.6E-06
		Hg	---	---	2.3E-04	2.9E-05	---	1.2E-02
		Indeno(1,2,3-cd)pyrene	3.8E-08	1.9E-09	---	---	1.3E-02	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.0E-07	3.3E-08	---	1.1E-05
		Ni	---	---	4.6E-04	6.0E-05	---	2.5E-02
		Pb	7.0E-09	2.7E-10	---	---	2.3E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.3E-06	8.4E-07	---	2.9E-04
		Sb	---	---	1.6E-04	2.0E-05	---	8.5E-03
		Se	---	---	4.7E-06	6.1E-07	---	2.6E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.2E-05	4.2E-06	---	1.8E-03
	PA-51 Total		3.0E-06	1.3E-07	1.8E-02	2.4E-03		
	PA-52	a-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	7.6E-07	4.5E-07
		g-Chlordane	2.3E-12	9.8E-14	8.3E-09	1.2E-09	7.6E-07	4.5E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.4E-11	2.1E-12	1.3E-07	2.1E-08	1.5E-05	6.9E-06
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	5.8E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	1.0E-06
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	2.9E-06	5.4E-07

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Total Congeners	2.7E-09	1.4E-10	6.4E-05	1.1E-05	9.0E-04	3.4E-03
		2,4'-DDD	5.9E-13	2.4E-14	---	---	1.9E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	3.3E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	3.0E-07	6.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	9.8E-12	4.1E-13	---	---	3.3E-06	---
		4,4'-DDE	9.6E-12	4.0E-13	---	---	3.2E-06	---
		4,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	2.2E-07	4.9E-07
		Acenaphthene	---	---	6.4E-08	1.0E-08	---	3.4E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	4.5E-06	5.8E-07	---	2.4E-04
		Al	---	---	7.0E-03	9.1E-04	---	3.8E-01
		Anthracene	---	---	8.1E-08	1.0E-08	---	4.4E-06
		As	8.1E-07	3.3E-08	4.2E-03	5.8E-04	2.7E-01	2.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	4.3E-08	2.1E-09	---	---	1.4E-02	---
		Benzo(a)pyrene	5.6E-07	2.8E-08	---	---	1.8E-01	---
		Benzo(b)fluoranthene	3.2E-08	1.6E-09	---	---	1.1E-02	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.3E-08	1.7E-09	---	---	1.1E-02	---
		Cd	3.5E-09	1.4E-10	4.3E-05	5.6E-06	1.2E-03	2.3E-03
		Chrysene	4.9E-09	2.5E-10	---	---	1.6E-03	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.7E-08	6.0E-03	7.8E-04	4.9E-01	3.2E-01
		Cu	---	---	9.8E-05	1.3E-05	---	5.3E-03
		Dibenz(a,h)anthracene	2.1E-08	1.1E-09	---	---	7.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.9E-06	6.6E-07	---	2.1E-04
		Fluorene	---	---	2.1E-07	3.4E-08	---	1.1E-05
		Hg	---	---	4.3E-04	5.6E-05	---	2.3E-02
		Indeno(1,2,3-cd)pyrene	4.0E-08	2.0E-09	---	---	1.3E-02	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.3E-07	5.2E-08	---	1.8E-05
		Ni	---	---	4.5E-04	5.8E-05	---	2.4E-02
		Pb	7.0E-09	2.7E-10	---	---	2.3E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	6.6E-06	1.1E-06	---	3.6E-04
		Sb	---	---	1.9E-04	2.5E-05	---	1.0E-02
		Se	---	---	6.1E-06	7.9E-07	---	3.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.3E-05	4.3E-06	---	1.8E-03
	PA-52 Total		3.0E-06	1.3E-07	1.9E-02	2.4E-03		
	PA-53	a-Chlordane	1.4E-11	5.9E-13	5.0E-08	7.0E-09	4.3E-06	2.5E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	8.2E-07	4.8E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.5E-05	7.2E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	6.0E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.1E-06
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	3.1E-06	5.8E-07
		Total Congeners	1.6E-08	8.0E-10	3.6E-04	6.2E-05	4.9E-03	1.9E-02
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.0E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	3.6E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.4E-07	7.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.8E-11	7.3E-13	---	---	5.5E-06	---
		4,4'-DDE	2.3E-11	9.5E-13	---	---	7.1E-06	---
		4,4'-DDT	9.8E-12	4.1E-13	1.3E-07	1.9E-08	3.0E-06	6.8E-06
		Acenaphthene	---	---	1.0E-07	1.6E-08	---	5.1E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.3E-06	6.9E-07	---	2.7E-04
		Al	---	---	7.3E-03	9.5E-04	---	3.7E-01
		Anthracene	---	---	8.4E-08	1.1E-08	---	4.3E-06
		As	8.8E-07	3.6E-08	4.6E-03	6.3E-04	2.7E-01	2.3E-01

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	4.2E-08	2.1E-09	---	---	1.3E-02	---
		Benzo(a)pyrene	6.0E-07	3.0E-08	---	---	1.9E-01	---
		Benzo(b)fluoranthene	3.3E-08	1.7E-09	---	---	1.0E-02	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.6E-08	1.8E-09	---	---	1.1E-02	---
		Cd	3.9E-09	1.5E-10	4.8E-05	6.3E-06	1.2E-03	2.5E-03
		Chrysene	4.5E-09	2.3E-10	---	---	1.4E-03	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	6.0E-08	6.3E-03	8.1E-04	4.8E-01	3.2E-01
		Cu	---	---	1.5E-04	2.0E-05	---	7.8E-03
		Dibenz(a,h)anthracene	2.1E-08	1.1E-09	---	---	6.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	4.4E-06	7.4E-07	---	2.2E-04
		Fluorene	---	---	2.0E-07	3.3E-08	---	1.0E-05
		Hg	---	---	2.5E-04	3.2E-05	---	1.3E-02
		Indeno(1,2,3-cd)pyrene	4.3E-08	2.1E-09	---	---	1.3E-02	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.3E-07	3.8E-08	---	1.2E-05
		Ni	---	---	4.7E-04	6.2E-05	---	2.4E-02
		Pb	7.7E-09	3.0E-10	---	---	2.4E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	7.0E-06	1.1E-06	---	3.5E-04
		Sb	---	---	1.8E-04	2.4E-05	---	9.4E-03
		Se	---	---	5.8E-06	7.5E-07	---	2.9E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.6E-05	4.7E-06	---	1.8E-03
	PA-53 Total		3.2E-06	1.4E-07	2.0E-02	2.6E-03		
	PA-70	a-Chlordane	9.2E-12	3.9E-13	3.3E-08	4.7E-09	3.6E-06	1.7E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	1.0E-06	4.8E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.9E-05	7.3E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	6.7E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.1E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.4E-06	6.6E-07
		Total Congeners	1.3E-08	6.8E-10	3.1E-04	5.3E-05	5.1E-03	1.6E-02
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.5E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	4.5E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	4.2E-07	7.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.3E-11	5.4E-13	---	---	5.0E-06	---
		4,4'-DDE	1.7E-11	6.9E-13	---	---	6.4E-06	---
		4,4'-DDT	3.8E-12	1.6E-13	5.2E-08	7.3E-09	1.5E-06	2.7E-06
		Acenaphthene	---	---	2.2E-08	3.6E-09	---	1.1E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.5E-06	7.2E-07	---	2.8E-04
		Al	---	---	7.5E-03	9.8E-04	---	3.9E-01
		Anthracene	---	---	2.6E-08	3.3E-09	---	1.3E-06
		As	7.8E-07	3.3E-08	4.1E-03	5.6E-04	3.0E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.3E-08	6.8E-10	---	---	5.2E-03	---
		Benzo(a)pyrene	1.9E-07	9.4E-09	---	---	7.2E-02	---
		Benzo(b)fluoranthene	1.4E-08	6.9E-10	---	---	5.3E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.4E-08	6.9E-10	---	---	5.3E-03	---
		Cd	5.3E-09	2.0E-10	6.5E-05	8.4E-06	2.0E-03	3.3E-03
		Chrysene	1.8E-09	9.2E-11	---	---	7.1E-04	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.9E-08	6.2E-03	8.1E-04	5.9E-01	3.2E-01
		Cu	---	---	1.4E-04	1.9E-05	---	7.4E-03
		Dibenz(a,h)anthracene	7.2E-09	3.6E-10	---	---	2.8E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-06	2.3E-07	---	7.1E-05

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fluorene	---	---	5.6E-08	8.9E-09	---	2.9E-06
		Hg	---	---	4.3E-04	5.5E-05	---	2.2E-02
		Indeno(1,2,3-cd)pyrene	1.4E-08	7.0E-10	---	---	5.4E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.0E-07	1.6E-08	---	5.2E-06
		Ni	---	---	4.9E-04	6.4E-05	---	2.5E-02
		Pb	1.1E-08	4.4E-10	---	---	4.4E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.0E-06	3.2E-07	---	1.0E-04
		Sb	---	---	1.9E-04	2.4E-05	---	9.5E-03
		Se	---	---	1.8E-05	2.3E-06	---	9.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.8E-05	5.0E-06	---	2.0E-03
	PA-70 Total		2.6E-06	1.1E-07	1.9E-02	2.6E-03		
	PA-71	a-Chlordane	7.2E-12	3.1E-13	2.6E-08	3.7E-09	2.9E-06	1.4E-06
		g-Chlordane	2.6E-12	1.1E-13	9.4E-09	1.3E-09	1.1E-06	5.0E-07
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	2.0E-05	7.5E-06
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	6.9E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.1E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.6E-06	6.7E-07
		Total Congeners	4.2E-09	2.2E-10	9.9E-05	1.7E-05	1.7E-03	5.2E-03
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.6E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	4.7E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	4.4E-07	7.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.1E-11	4.5E-13	---	---	4.4E-06	---
		4,4'-DDE	1.6E-11	6.6E-13	---	---	6.4E-06	---
		4,4'-DDT	2.3E-12	9.6E-14	3.2E-08	4.4E-09	9.4E-07	1.7E-06
		Acenaphthene	---	---	1.8E-08	3.0E-09	---	9.7E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.1E-06	7.9E-07	---	3.2E-04
		Al	---	---	7.5E-03	9.8E-04	---	4.0E-01
		Anthracene	---	---	2.5E-08	3.1E-09	---	1.3E-06
		As	8.5E-07	3.5E-08	4.4E-03	6.1E-04	3.4E-01	2.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-08	5.5E-10	---	---	4.4E-03	---
		Benzo(a)pyrene	1.5E-07	7.6E-09	---	---	6.1E-02	---
		Benzo(b)fluoranthene	1.1E-08	5.6E-10	---	---	4.5E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.1E-08	5.5E-10	---	---	4.4E-03	---
		Cd	3.8E-09	1.5E-10	4.6E-05	6.0E-06	1.5E-03	2.4E-03
		Chrysene	1.5E-09	7.6E-11	---	---	6.1E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.5E-08	5.7E-03	7.5E-04	5.7E-01	3.0E-01
		Cu	---	---	1.3E-04	1.7E-05	---	7.0E-03
		Dibenz(a,h)anthracene	5.2E-09	2.6E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-06	2.0E-07	---	6.2E-05
		Fluorene	---	---	5.0E-08	8.0E-09	---	2.6E-06
		Hg	---	---	2.9E-04	3.8E-05	---	1.5E-02
		Indeno(1,2,3-cd)pyrene	1.2E-08	5.9E-10	---	---	4.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	8.4E-08	1.4E-08	---	4.4E-06
		Ni	---	---	4.6E-04	5.9E-05	---	2.4E-02
		Pb	9.1E-09	3.5E-10	---	---	3.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.6E-06	2.5E-07	---	8.4E-05
		Sb	---	---	2.2E-04	2.9E-05	---	1.2E-02
		Se	---	---	8.4E-06	1.1E-06	---	4.4E-04
		TBT	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.8E-05	5.0E-06	---	2.0E-03
	PA-71 Total		2.5E-06	1.0E-07	1.9E-02	2.5E-03		
	PA-72	a-Chlordane	5.3E-12	2.2E-13	1.9E-08	2.7E-09	2.2E-06	1.0E-06
		g-Chlordane	3.0E-12	1.3E-13	1.1E-08	1.5E-09	1.2E-06	5.6E-07
		DBT	---	---	---	---	---	---
		Dieldrin	5.4E-11	2.6E-12	1.6E-07	2.5E-08	2.2E-05	8.3E-06
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	7.5E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.3E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	5.2E-06	7.5E-07
		Total Congeners	2.2E-09	1.1E-10	5.2E-05	8.9E-06	9.4E-04	2.8E-03
		2,4'-DDD	7.6E-13	3.2E-14	---	---	3.2E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	5.6E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	5.2E-07	9.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	9.8E-12	4.1E-13	---	---	4.1E-06	---
		4,4'-DDE	1.3E-11	5.3E-13	---	---	5.3E-06	---
		4,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	3.8E-07	6.6E-07
		Acenaphthene	---	---	1.1E-08	1.7E-09	---	5.6E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.8E-06	7.5E-07	---	3.1E-04
		Al	---	---	7.6E-03	9.9E-04	---	4.0E-01
		Anthracene	---	---	1.2E-08	1.5E-09	---	6.5E-07
		As	8.5E-07	3.5E-08	4.4E-03	6.1E-04	3.6E-01	2.3E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	6.5E-09	3.2E-10	---	---	2.7E-03	---
		Benzo(a)pyrene	9.9E-08	5.0E-09	---	---	4.1E-02	---
		Benzo(b)fluoranthene	6.8E-09	3.4E-10	---	---	2.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	6.6E-09	3.3E-10	---	---	2.8E-03	---
		Cd	4.1E-09	1.6E-10	5.0E-05	6.5E-06	1.7E-03	2.7E-03
		Chrysene	8.2E-10	4.2E-11	---	---	3.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.4E-08	5.7E-03	7.4E-04	5.8E-01	3.0E-01
		Cu	---	---	1.2E-04	1.6E-05	---	6.4E-03
		Dibenz(a,h)anthracene	3.3E-09	1.7E-10	---	---	1.4E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	7.2E-07	1.2E-07	---	3.8E-05
		Fluorene	---	---	2.9E-08	4.7E-09	---	1.5E-06
		Hg	---	---	2.8E-04	3.7E-05	---	1.5E-02
		Indeno(1,2,3-cd)pyrene	7.9E-09	4.0E-10	---	---	3.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	5.5E-08	8.8E-09	---	2.9E-06
		Ni	---	---	4.7E-04	6.1E-05	---	2.5E-02
		Pb	9.4E-09	3.6E-10	---	---	3.9E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.1E-06	1.7E-07	---	5.6E-05
		Sb	---	---	2.0E-04	2.6E-05	---	1.1E-02
		Se	---	---	7.6E-06	9.8E-07	---	4.0E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	3.8E-05	4.9E-06	---	2.0E-03
	PA-72 Total		2.4E-06	9.7E-08	1.9E-02	2.5E-03		
South Basin Area X	SB-01	a-Chlordane	2.3E-10	1.0E-11	8.4E-07	1.2E-07	8.4E-05	4.0E-05
		g-Chlordane	4.1E-10	1.8E-11	1.5E-06	2.1E-07	1.5E-04	7.1E-05
		DBT	---	---	---	---	---	---
		Dieldrin	4.1E-09	2.0E-10	1.2E-05	1.9E-06	1.5E-03	5.7E-04
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	5.7E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	1.0E-06
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	4.1E-06	6.1E-07
		Total Congeners	9.5E-08	4.8E-09	2.2E-03	3.8E-04	3.4E-02	1.1E-01
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.3E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	4.2E-07	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.9E-07	7.1E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	8.1E-11	3.4E-12	---	---	2.9E-05	---
		4,4'-DDE	1.5E-10	6.3E-12	---	---	5.4E-05	---
		4,4'-DDT	1.9E-11	8.0E-13	2.6E-07	3.7E-08	6.9E-06	1.3E-05
		Acenaphthene	---	---	1.5E-08	2.4E-09	---	7.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.1E-05	1.4E-06	---	5.3E-04
		Al	---	---	6.6E-03	8.5E-04	---	3.1E-01
		Anthracene	---	---	1.3E-08	1.6E-09	---	6.1E-07
		As	6.0E-07	2.5E-08	3.1E-03	4.3E-04	2.1E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-08	5.4E-10	---	---	3.8E-03	---
		Benzo(a)pyrene	2.1E-07	1.1E-08	---	---	7.7E-02	---
		Benzo(b)fluoranthene	1.4E-08	7.1E-10	---	---	5.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-08	7.7E-10	---	---	5.5E-03	---
		Cd	1.5E-08	5.7E-10	1.8E-04	2.3E-05	5.2E-03	8.6E-03
		Chrysene	1.5E-09	7.6E-11	---	---	5.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.7E-06	6.8E-08	7.1E-03	9.2E-04	6.3E-01	3.4E-01
		Cu	---	---	2.0E-04	2.6E-05	---	9.6E-03
		Dibenz(a,h)anthracene	8.6E-09	4.3E-10	---	---	3.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.0E-06	1.7E-07	---	5.0E-05
		Fluorene	---	---	3.6E-08	5.8E-09	---	1.7E-06
		Hg	---	---	5.9E-04	7.6E-05	---	2.8E-02
		Indeno(1,2,3-cd)pyrene	1.8E-08	9.1E-10	---	---	6.5E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.0E-07	3.2E-08	---	9.6E-06
		Ni	---	---	4.1E-04	5.3E-05	---	1.9E-02
		Pb	4.7E-08	1.8E-09	---	---	1.7E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.7E-06	2.8E-07	---	8.3E-05
		Sb	---	---	4.3E-04	5.5E-05	---	2.0E-02
		Se	---	---	4.8E-06	6.2E-07	---	2.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.6E-05	8.6E-06	---	3.2E-03
	SB-01 Total		2.8E-06	1.1E-07	2.1E-02	2.8E-03		
	SB-02	a-Chlordane	3.5E-10	1.5E-11	1.3E-06	1.8E-07	1.2E-04	5.4E-05
		g-Chlordane	6.9E-10	3.0E-11	2.5E-06	3.5E-07	2.4E-04	1.1E-04
		DBT	---	---	---	---	---	---
		Dieldrin	1.0E-08	4.9E-10	3.0E-05	4.8E-06	3.5E-03	1.3E-03
		Endosulfan II	---	---	1.1E-09	1.7E-10	---	4.6E-08
		Endrin	---	---	1.9E-08	3.0E-09	---	8.2E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	3.0E-06	4.3E-07
		Total Congeners	1.6E-07	8.1E-09	3.7E-03	6.3E-04	5.5E-02	1.6E-01
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.8E-07	---
		2,4'-DDE	1.0E-12	4.1E-14	---	---	3.4E-07	---
		2,4'-DDT	9.1E-13	3.8E-14	1.3E-08	1.7E-09	3.2E-07	5.4E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.8E-10	7.6E-12	---	---	6.3E-05	---
		4,4'-DDE	3.1E-10	1.3E-11	---	---	1.1E-04	---
		4,4'-DDT	2.2E-11	9.2E-13	3.0E-07	4.2E-08	7.6E-06	1.3E-05
		Acenaphthene	---	---	2.8E-08	4.4E-09	---	1.2E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.0E-05	1.3E-06	---	4.5E-04
		Al	---	---	7.4E-03	9.6E-04	---	3.2E-01
		Anthracene	---	---	1.7E-08	2.2E-09	---	7.5E-07
		As	6.8E-07	2.8E-08	3.5E-03	4.9E-04	2.3E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.5E-08	7.6E-10	---	---	5.2E-03	---
		Benzo(a)pyrene	2.7E-07	1.4E-08	---	---	9.5E-02	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Benzo(b)fluoranthene	2.0E-08	9.9E-10	---	---	6.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-08	1.0E-09	---	---	7.0E-03	---
		Cd	1.1E-08	4.2E-10	1.3E-04	1.7E-05	3.8E-03	5.7E-03
		Chrysene	2.0E-09	9.9E-11	---	---	6.8E-04	---
		Co	---	---	---	---	---	---
		Cr	1.6E-06	6.3E-08	6.7E-03	8.7E-04	5.6E-01	2.9E-01
		Cu	---	---	2.4E-04	3.2E-05	---	1.0E-02
		Dibenz(a,h)anthracene	1.3E-08	6.5E-10	---	---	4.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.4E-06	2.4E-07	---	6.2E-05
		Fluorene	---	---	6.8E-08	1.1E-08	---	2.9E-06
		Hg	---	---	5.9E-04	7.7E-05	---	2.5E-02
		Indeno(1,2,3-cd)pyrene	2.3E-08	1.2E-09	---	---	7.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.3E-07	5.3E-08	---	1.4E-05
		Ni	---	---	4.9E-04	6.4E-05	---	2.1E-02
		Pb	3.6E-08	1.4E-09	---	---	1.3E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.1E-06	3.4E-07	---	9.1E-05
		Sb	---	---	4.1E-04	5.4E-05	---	1.8E-02
		Se	---	---	8.2E-06	1.1E-06	---	3.5E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.7E-05	8.7E-06	---	2.9E-03
	SB-02 Total		2.9E-06	1.2E-07	2.3E-02	3.2E-03		
	SB-03	a-Chlordane	4.4E-11	1.9E-12	1.6E-07	2.2E-08	1.8E-05	8.0E-06
		g-Chlordane	3.6E-11	1.5E-12	1.3E-07	1.8E-08	1.5E-05	6.4E-06
		DBT	---	---	---	---	---	---
		Dieldrin	5.9E-11	2.8E-12	1.7E-07	2.7E-08	2.5E-05	8.6E-06
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	7.2E-08
		Endrin	---	---	2.6E-08	4.2E-09	---	1.3E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	5.2E-06	7.2E-07
		Total Congeners	3.1E-08	1.6E-09	7.2E-04	1.2E-04	1.3E-02	3.6E-02
		2,4'-DDD	7.6E-13	3.2E-14	---	---	3.2E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	5.6E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	5.2E-07	8.6E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.2E-11	9.3E-13	---	---	9.4E-06	---
		4,4'-DDE	3.6E-11	1.5E-12	---	---	1.5E-05	---
		4,4'-DDT	6.5E-12	2.7E-13	8.9E-08	1.2E-08	2.7E-06	4.5E-06
		Acenaphthene	---	---	9.6E-09	1.5E-09	---	4.8E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	9.0E-06	1.2E-06	---	4.5E-04
		Al	---	---	7.7E-03	1.0E-03	---	3.9E-01
		Anthracene	---	---	8.1E-09	1.0E-09	---	4.1E-07
		As	6.8E-07	2.8E-08	3.5E-03	4.9E-04	2.9E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	6.5E-09	3.3E-10	---	---	2.7E-03	---
		Benzo(a)pyrene	1.3E-07	6.3E-09	---	---	5.3E-02	---
		Benzo(b)fluoranthene	7.9E-09	4.0E-10	---	---	3.3E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.0E-09	4.5E-10	---	---	3.8E-03	---
		Cd	6.4E-09	2.5E-10	7.9E-05	1.0E-05	2.7E-03	4.0E-03
		Chrysene	9.0E-10	4.5E-11	---	---	3.8E-04	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.7E-08	6.0E-03	7.8E-04	6.2E-01	3.0E-01
		Cu	---	---	2.1E-04	2.8E-05	---	1.1E-02
		Dibenz(a,h)anthracene	3.5E-09	1.8E-10	---	---	1.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	7.3E-07	1.2E-07	---	3.7E-05
		Fluorene	---	---	2.1E-08	3.3E-09	---	1.0E-06
		Hg	---	---	4.9E-04	6.4E-05	---	2.5E-02
		Indeno(1,2,3-cd)pyrene	9.5E-09	4.8E-10	---	---	4.0E-03	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.1E-07	1.7E-08	---	5.3E-06
		Ni	---	---	5.5E-04	7.1E-05	---	2.8E-02
		Pb	2.7E-08	1.0E-09	---	---	1.1E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.2E-06	1.9E-07	---	5.8E-05
		Sb	---	---	4.0E-04	5.2E-05	---	2.0E-02
		Se	---	---	8.7E-06	1.1E-06	---	4.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.8E-05	7.5E-06	---	2.9E-03
	SB-03 Total		2.4E-06	9.7E-08	2.0E-02	2.6E-03		
	SB-04	a-Chlordane	1.1E-10	4.5E-12	3.8E-07	5.4E-08	4.2E-05	1.8E-05
		g-Chlordane	1.2E-10	5.0E-12	4.2E-07	6.0E-08	4.6E-05	2.0E-05
		DBT	---	---	---	---	---	---
		Dieldrin	8.6E-10	4.2E-11	2.5E-06	4.0E-07	3.4E-04	1.2E-04
		Endosulfan II	---	---	2.7E-09	4.4E-10	---	1.3E-07
		Endrin	---	---	4.7E-08	7.6E-09	---	2.2E-06
		Heptachlor	2.4E-11	1.1E-12	2.7E-08	4.3E-09	9.3E-06	1.3E-06
		Total Congeners	9.0E-08	4.6E-09	2.1E-03	3.6E-04	3.5E-02	9.8E-02
		2,4'-DDD	1.5E-12	6.1E-14	---	---	5.7E-07	---
		2,4'-DDE	2.6E-12	1.1E-13	---	---	1.0E-06	---
		2,4'-DDT	2.4E-12	1.0E-13	3.3E-08	4.6E-09	9.4E-07	1.5E-06
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	5.5E-11	2.3E-12	---	---	2.2E-05	---
		4,4'-DDE	1.0E-10	4.2E-12	---	---	3.9E-05	---
		4,4'-DDT	1.6E-11	6.8E-13	2.2E-07	3.1E-08	6.3E-06	1.0E-05
		Acenaphthene	---	---	1.2E-08	2.0E-09	---	5.7E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	9.6E-06	1.2E-06	---	4.5E-04
		Al	---	---	7.8E-03	1.0E-03	---	3.6E-01
		Anthracene	---	---	8.7E-09	1.1E-09	---	4.1E-07
		As	6.2E-07	2.6E-08	3.2E-03	4.5E-04	2.4E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	8.0E-09	4.0E-10	---	---	3.1E-03	---
		Benzo(a)pyrene	1.7E-07	8.5E-09	---	---	6.6E-02	---
		Benzo(b)fluoranthene	1.1E-08	5.6E-10	---	---	4.3E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.2E-08	6.1E-10	---	---	4.8E-03	---
		Cd	5.6E-09	2.2E-10	6.8E-05	8.9E-06	2.2E-03	3.2E-03
		Chrysene	1.2E-09	5.9E-11	---	---	4.5E-04	---
		Co	---	---	---	---	---	---
		Cr	1.6E-06	6.2E-08	6.5E-03	8.5E-04	6.2E-01	3.0E-01
		Cu	---	---	2.1E-04	2.7E-05	---	9.8E-03
		Dibenz(a,h)anthracene	5.4E-09	2.7E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.9E-07	1.5E-07	---	4.2E-05
		Fluorene	---	---	2.7E-08	4.4E-09	---	1.3E-06
		Hg	---	---	4.7E-04	6.1E-05	---	2.2E-02
		Indeno(1,2,3-cd)pyrene	1.5E-08	7.3E-10	---	---	5.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.3E-07	2.0E-08	---	5.9E-06
		Ni	---	---	5.4E-04	7.1E-05	---	2.5E-02
		Pb	2.6E-08	1.0E-09	---	---	1.0E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-06	2.3E-07	---	6.8E-05
		Sb	---	---	4.3E-04	5.6E-05	---	2.0E-02
		Se	---	---	8.2E-06	1.1E-06	---	3.8E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	5.9E-05	7.6E-06	---	2.7E-03

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
	SB-04 Total		2.6E-06	1.1E-07	2.1E-02	2.9E-03		
	SB-05	a-Chlordane	6.2E-11	2.6E-12	2.2E-07	3.2E-08	2.3E-05	1.0E-05
		g-Chlordane	7.2E-11	3.1E-12	2.6E-07	3.7E-08	2.7E-05	1.2E-05
		DBT	---	---	---	---	---	---
		Dieldrin	5.9E-11	2.8E-12	1.7E-07	2.7E-08	2.1E-05	7.8E-06
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	6.5E-08
		Endrin	---	---	2.6E-08	4.2E-09	---	1.2E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	4.6E-06	6.5E-07
		Total Congeners	4.8E-08	2.4E-09	1.1E-03	1.9E-04	1.8E-02	5.1E-02
		2,4'-DDD	7.6E-13	3.2E-14	---	---	2.8E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	4.9E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	4.6E-07	7.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.7E-11	1.1E-12	---	---	1.0E-05	---
		4,4'-DDE	4.8E-11	2.0E-12	---	---	1.8E-05	---
		4,4'-DDT	4.3E-12	1.8E-13	5.9E-08	8.2E-09	1.6E-06	2.7E-06
		Acenaphthene	---	---	8.9E-09	1.4E-09	---	4.1E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.2E-05	1.5E-06	---	5.3E-04
		Al	---	---	7.8E-03	1.0E-03	---	3.6E-01
		Anthracene	---	---	6.1E-09	7.6E-10	---	2.8E-07
		As	8.3E-07	3.4E-08	4.3E-03	5.9E-04	3.0E-01	2.0E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	7.3E-09	3.7E-10	---	---	2.7E-03	---
		Benzo(a)pyrene	1.4E-07	7.2E-09	---	---	5.2E-02	---
		Benzo(b)fluoranthene	1.0E-08	5.2E-10	---	---	3.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.0E-08	5.1E-10	---	---	3.7E-03	---
		Cd	7.1E-09	2.8E-10	8.7E-05	1.1E-05	2.6E-03	4.0E-03
		Chrysene	9.3E-10	4.7E-11	---	---	3.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.6E-06	6.3E-08	6.7E-03	8.7E-04	6.0E-01	3.0E-01
		Cu	---	---	2.2E-04	2.9E-05	---	1.0E-02
		Dibenz(a,h)anthracene	5.1E-09	2.6E-10	---	---	1.9E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	7.4E-07	1.2E-07	---	3.4E-05
		Fluorene	---	---	2.3E-08	3.7E-09	---	1.0E-06
		Hg	---	---	6.3E-04	8.2E-05	---	2.9E-02
		Indeno(1,2,3-cd)pyrene	1.3E-08	6.7E-10	---	---	4.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.4E-07	2.3E-08	---	6.5E-06
		Ni	---	---	5.6E-04	7.2E-05	---	2.5E-02
		Pb	2.5E-08	9.8E-10	---	---	9.2E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.2E-06	2.0E-07	---	5.7E-05
		Sb	---	---	4.1E-04	5.4E-05	---	1.9E-02
		Se	---	---	9.4E-06	1.2E-06	---	4.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.2E-05	9.4E-06	---	3.3E-03
	SB-05 Total		2.7E-06	1.1E-07	2.2E-02	2.9E-03		
	SB-06	a-Chlordane	1.3E-11	5.6E-13	4.7E-08	6.7E-09	5.1E-06	2.2E-06
		g-Chlordane	1.1E-11	4.8E-13	4.0E-08	5.7E-09	4.3E-06	1.9E-06
		DBT	---	---	---	---	---	---
		Dieldrin	5.9E-11	2.8E-12	1.7E-07	2.7E-08	2.2E-05	8.1E-06
		Endosulfan II	---	---	1.5E-09	2.5E-10	---	7.3E-08
		Endrin	---	---	2.6E-08	4.2E-09	---	1.2E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	4.8E-06	6.8E-07
		Total Congeners	1.9E-08	9.8E-10	4.5E-04	7.6E-05	7.4E-03	2.1E-02
		2,4'-DDD	8.2E-13	3.4E-14	---	---	3.2E-07	---
		2,4'-DDE	1.4E-12	5.9E-14	---	---	5.4E-07	---
		2,4'-DDT	1.3E-12	5.5E-14	1.8E-08	2.5E-09	5.1E-07	8.7E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	1.1E-11	4.7E-13	---	---	4.4E-06	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		4,4'-DDE	1.8E-11	7.3E-13	---	---	6.8E-06	---
		4,4'-DDT	7.0E-12	2.9E-13	9.6E-08	1.3E-08	2.7E-06	4.6E-06
		Acenaphthene	---	---	2.6E-09	4.1E-10	---	1.2E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.2E-05	1.6E-06	---	5.7E-04
		Al	---	---	7.6E-03	9.8E-04	---	3.6E-01
		Anthracene	---	---	2.4E-09	3.0E-10	---	1.1E-07
		As	7.9E-07	3.3E-08	4.1E-03	5.7E-04	3.0E-01	2.0E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.1E-09	1.0E-10	---	---	7.9E-04	---
		Benzo(a)pyrene	4.2E-08	2.1E-09	---	---	1.6E-02	---
		Benzo(b)fluoranthene	2.8E-09	1.4E-10	---	---	1.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.2E-09	1.6E-10	---	---	1.2E-03	---
		Cd	6.2E-09	2.4E-10	7.6E-05	9.9E-06	2.4E-03	3.6E-03
		Chrysene	3.1E-10	1.6E-11	---	---	1.2E-04	---
		Co	---	---	---	---	---	---
		Cr	1.7E-06	6.6E-08	7.0E-03	9.1E-04	6.6E-01	3.3E-01
		Cu	---	---	2.2E-04	2.9E-05	---	1.0E-02
		Dibenz(a,h)anthracene	1.1E-09	5.5E-11	---	---	4.2E-04	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.3E-07	3.9E-08	---	1.1E-05
		Fluorene	---	---	7.2E-09	1.2E-09	---	3.4E-07
		Hg	---	---	5.3E-04	6.8E-05	---	2.5E-02
		Indeno(1,2,3-cd)pyrene	3.5E-09	1.8E-10	---	---	1.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	5.5E-08	8.8E-09	---	2.6E-06
		Ni	---	---	5.5E-04	7.1E-05	---	2.6E-02
		Pb	2.5E-08	9.8E-10	---	---	9.7E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.8E-07	6.1E-08	---	1.8E-05
		Sb	---	---	4.6E-04	5.9E-05	---	2.2E-02
		Se	---	---	6.8E-06	8.8E-07	---	3.2E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.5E-05	8.5E-06	---	3.1E-03
	SB-06 Total		2.6E-06	1.0E-07	2.1E-02	2.8E-03		
	SB-07	a-Chlordane	8.4E-11	3.6E-12	3.0E-07	4.3E-08	2.9E-05	1.3E-05
		g-Chlordane	1.1E-10	4.8E-12	4.0E-07	5.7E-08	3.8E-05	1.8E-05
		DBT	---	---	---	---	---	---
		Dieldrin	1.3E-09	6.3E-11	3.8E-06	6.1E-07	4.4E-04	1.7E-04
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	5.2E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	9.4E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.8E-06	5.6E-07
		Total Congeners	7.2E-08	3.7E-09	1.7E-03	2.9E-04	2.5E-02	7.4E-02
		2,4'-DDD	6.4E-13	2.7E-14	---	---	2.2E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	3.9E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.7E-07	6.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.3E-11	1.8E-12	---	---	1.5E-05	---
		4,4'-DDE	8.7E-11	3.6E-12	---	---	3.0E-05	---
		4,4'-DDT	9.0E-12	3.7E-13	1.2E-07	1.7E-08	3.0E-06	5.4E-06
		Acenaphthene	---	---	1.9E-08	3.0E-09	---	8.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.1E-05	1.4E-06	---	4.7E-04
		Al	---	---	7.5E-03	9.7E-04	---	3.3E-01
		Anthracene	---	---	1.8E-08	2.3E-09	---	8.0E-07
		As	7.8E-07	3.2E-08	4.0E-03	5.6E-04	2.6E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-08	5.0E-10	---	---	3.4E-03	---
		Benzo(a)pyrene	1.9E-07	9.8E-09	---	---	6.6E-02	---
		Benzo(b)fluoranthene	1.3E-08	6.6E-10	---	---	4.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.4E-08	7.1E-10	---	---	4.8E-03	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Cd	8.0E-09	3.1E-10	9.9E-05	1.3E-05	2.7E-03	4.3E-03
		Chrysene	1.4E-09	7.1E-11	---	---	4.8E-04	---
		Co	---	---	---	---	---	---
		Cr	1.8E-06	7.0E-08	7.4E-03	9.6E-04	6.1E-01	3.2E-01
		Cu	---	---	2.3E-04	3.0E-05	---	1.0E-02
		Dibenz(a,h)anthracene	6.6E-09	3.3E-10	---	---	2.3E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.1E-06	1.9E-07	---	5.0E-05
		Fluorene	---	---	4.4E-08	7.1E-09	---	1.9E-06
		Hg	---	---	6.8E-04	8.9E-05	---	3.0E-02
		Indeno(1,2,3-cd)pyrene	1.7E-08	8.3E-10	---	---	5.6E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-07	3.1E-08	---	8.5E-06
		Ni	---	---	5.5E-04	7.1E-05	---	2.4E-02
		Pb	3.4E-08	1.3E-09	---	---	1.2E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.8E-06	2.9E-07	---	7.9E-05
		Sb	---	---	5.5E-04	7.1E-05	---	2.4E-02
		Se	---	---	7.7E-06	1.0E-06	---	3.4E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.6E-05	8.5E-06	---	2.9E-03
	SB-07 Total		2.9E-06	1.2E-07	2.3E-02	3.1E-03		
	SB-08	a-Chlordane	6.2E-11	2.7E-12	2.2E-07	3.2E-08	2.2E-05	9.8E-06
		g-Chlordane	6.2E-11	2.7E-12	2.2E-07	3.2E-08	2.2E-05	9.8E-06
		DBT	---	---	---	---	---	---
		Dieldrin	8.3E-10	4.0E-11	2.4E-06	3.9E-07	2.9E-04	1.1E-04
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	6.2E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	1.0E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	4.3E-06	6.2E-07
		Total Congeners	6.3E-08	3.2E-09	1.5E-03	2.5E-04	2.2E-02	6.4E-02
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.4E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	4.6E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	4.3E-07	7.4E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	5.0E-11	2.1E-12	---	---	1.7E-05	---
		4,4'-DDE	4.8E-11	2.0E-12	---	---	1.7E-05	---
		4,4'-DDT	1.4E-11	5.9E-13	1.9E-07	2.7E-08	4.9E-06	8.4E-06
		Acenaphthene	---	---	2.5E-08	4.0E-09	---	1.1E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.1E-05	1.5E-06	---	5.0E-04
		Al	---	---	7.8E-03	1.0E-03	---	3.4E-01
		Anthracene	---	---	9.1E-09	1.1E-09	---	4.0E-07
		As	8.6E-07	3.6E-08	4.4E-03	6.1E-04	3.0E-01	1.9E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	7.5E-09	3.8E-10	---	---	2.6E-03	---
		Benzo(a)pyrene	1.5E-07	7.5E-09	---	---	5.2E-02	---
		Benzo(b)fluoranthene	1.0E-08	5.1E-10	---	---	3.5E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.1E-08	5.6E-10	---	---	3.8E-03	---
		Cd	6.0E-09	2.3E-10	7.4E-05	9.6E-06	2.1E-03	3.2E-03
		Chrysene	1.0E-09	5.2E-11	---	---	3.6E-04	---
		Co	---	---	---	---	---	---
		Cr	1.7E-06	6.8E-08	7.1E-03	9.2E-04	6.0E-01	3.1E-01
		Cu	---	---	2.3E-04	3.0E-05	---	1.0E-02
		Dibenz(a,h)anthracene	5.0E-09	2.5E-10	---	---	1.7E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	9.0E-07	1.5E-07	---	3.9E-05
		Fluorene	---	---	2.7E-08	4.4E-09	---	1.2E-06
		Hg	---	---	5.2E-04	6.7E-05	---	2.3E-02
		Indeno(1,2,3-cd)pyrene	1.3E-08	6.5E-10	---	---	4.4E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Naphthalene	---	---	1.4E-07	2.2E-08	---	5.9E-06
		Ni	---	---	5.7E-04	7.3E-05	---	2.5E-02
		Pb	2.9E-08	1.1E-09	---	---	1.0E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.3E-06	2.2E-07	---	5.9E-05
		Sb	---	---	5.8E-04	7.6E-05	---	2.5E-02
		Se	---	---	6.8E-06	8.8E-07	---	3.0E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.4E-05	8.3E-06	---	2.8E-03
	SB-08 Total		2.9E-06	1.2E-07	2.3E-02	3.1E-03		
	SB-09	a-Chlordane	2.7E-11	1.1E-12	9.7E-08	1.4E-08	9.1E-06	4.5E-06
		g-Chlordane	4.7E-11	2.0E-12	1.7E-07	2.4E-08	1.6E-05	7.8E-06
		DBT	---	---	---	---	---	---
		Dieldrin	3.4E-11	1.6E-12	1.0E-07	1.6E-08	1.2E-05	4.6E-06
		Endosulfan II	---	---	9.5E-10	1.5E-10	---	4.4E-08
		Endrin	---	---	1.7E-08	2.7E-09	---	7.7E-07
		Heptachlor	7.5E-12	3.6E-13	8.5E-09	1.4E-09	2.5E-06	4.0E-07
		Total Congeners	6.0E-08	3.0E-09	1.4E-03	2.4E-04	2.0E-02	6.5E-02
		2,4'-DDD	4.7E-13	1.9E-14	---	---	1.6E-07	---
		2,4'-DDE	8.3E-13	3.4E-14	---	---	2.8E-07	---
		2,4'-DDT	8.3E-13	3.4E-14	1.1E-08	1.6E-09	2.8E-07	5.3E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.1E-11	8.8E-13	---	---	7.2E-06	---
		4,4'-DDE	1.1E-10	4.6E-12	---	---	3.7E-05	---
		4,4'-DDT	5.8E-13	2.4E-14	8.0E-09	1.1E-09	2.0E-07	3.7E-07
		Acenaphthene	---	---	8.0E-09	1.3E-09	---	3.7E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	9.0E-06	1.2E-06	---	4.2E-04
		Al	---	---	6.1E-03	7.9E-04	---	2.8E-01
		Anthracene	---	---	7.3E-09	9.2E-10	---	3.4E-07
		As	7.7E-07	3.2E-08	4.0E-03	5.5E-04	2.6E-01	1.9E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	7.0E-09	3.5E-10	---	---	2.4E-03	---
		Benzo(a)pyrene	1.3E-07	6.7E-09	---	---	4.5E-02	---
		Benzo(b)fluoranthene	9.3E-09	4.7E-10	---	---	3.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	9.0E-09	4.5E-10	---	---	3.0E-03	---
		Cd	1.1E-08	4.2E-10	1.3E-04	1.7E-05	3.6E-03	6.1E-03
		Chrysene	9.7E-10	4.9E-11	---	---	3.3E-04	---
		Co	---	---	---	---	---	---
		Cr	1.9E-06	7.3E-08	7.7E-03	1.0E-03	6.4E-01	3.6E-01
		Cu	---	---	2.2E-04	2.8E-05	---	1.0E-02
		Dibenz(a,h)anthracene	6.2E-09	3.1E-10	---	---	2.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	5.0E-07	8.4E-08	---	2.3E-05
		Fluorene	---	---	2.3E-08	3.8E-09	---	1.1E-06
		Hg	---	---	2.8E-04	3.7E-05	---	1.3E-02
		Indeno(1,2,3-cd)pyrene	1.1E-08	5.6E-10	---	---	3.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-07	3.0E-08	---	8.8E-06
		Ni	---	---	4.3E-04	5.6E-05	---	2.0E-02
		Pb	4.5E-08	1.8E-09	---	---	1.5E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	9.1E-07	1.5E-07	---	4.2E-05
		Sb	---	---	1.2E-03	1.6E-04	---	5.6E-02
		Se	---	---	6.4E-06	8.4E-07	---	3.0E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.4E-05	9.6E-06	---	3.4E-03
	SB-09 Total		2.9E-06	1.2E-07	2.2E-02	2.9E-03		
	SB-10	a-Chlordane	8.7E-11	3.7E-12	3.1E-07	4.4E-08	2.4E-05	1.2E-05
		g-Chlordane	1.6E-10	7.0E-12	5.9E-07	8.4E-08	4.5E-05	2.2E-05

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		DBT	---	---	---	---	---	---
		Dieldrin	2.2E-09	1.1E-10	6.5E-06	1.0E-06	6.1E-04	2.4E-04
		Endosulfan II	---	---	9.5E-10	1.5E-10	---	3.6E-08
		Endrin	---	---	1.7E-08	2.7E-09	---	6.3E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	2.4E-06	3.8E-07
		Total Congeners	1.2E-07	6.3E-09	2.9E-03	4.9E-04	3.4E-02	1.1E-01
		2,4'-DDD	5.3E-13	2.2E-14	---	---	1.4E-07	---
		2,4'-DDE	9.1E-13	3.8E-14	---	---	2.5E-07	---
		2,4'-DDT	8.3E-13	3.4E-14	1.1E-08	1.6E-09	2.3E-07	4.3E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.5E-11	1.9E-12	---	---	1.2E-05	---
		4,4'-DDE	2.1E-10	8.5E-12	---	---	5.6E-05	---
		4,4'-DDT	2.8E-11	1.2E-12	3.8E-07	5.3E-08	7.6E-06	1.4E-05
		Acenaphthene	---	---	2.7E-08	4.3E-09	---	1.0E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	6.7E-06	8.7E-07	---	2.5E-04
		Al	---	---	6.6E-03	8.5E-04	---	2.5E-01
		Anthracene	---	---	3.5E-08	4.4E-09	---	1.3E-06
		As	1.0E-06	4.3E-08	5.4E-03	7.5E-04	2.9E-01	2.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.5E-08	7.8E-10	---	---	4.2E-03	---
		Benzo(a)pyrene	2.2E-07	1.1E-08	---	---	6.1E-02	---
		Benzo(b)fluoranthene	1.8E-08	8.9E-10	---	---	4.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.7E-08	8.4E-10	---	---	4.5E-03	---
		Cd	3.8E-09	1.5E-10	4.6E-05	6.0E-06	1.0E-03	1.7E-03
		Chrysene	2.1E-09	1.0E-10	---	---	5.7E-04	---
		Co	---	---	---	---	---	---
		Cr	2.2E-06	8.4E-08	8.9E-03	1.1E-03	5.9E-01	3.3E-01
		Cu	---	---	3.1E-04	4.1E-05	---	1.2E-02
		Dibenz(a,h)anthracene	1.1E-08	5.7E-10	---	---	3.1E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.3E-06	2.2E-07	---	4.9E-05
		Fluorene	---	---	6.2E-08	9.9E-09	---	2.3E-06
		Hg	---	---	1.4E-03	1.8E-04	---	5.3E-02
		Indeno(1,2,3-cd)pyrene	1.8E-08	9.2E-10	---	---	5.0E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	4.2E-07	6.7E-08	---	1.6E-05
		Ni	---	---	6.8E-04	8.8E-05	---	2.6E-02
		Pb	1.1E-08	4.4E-10	---	---	3.1E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.8E-06	2.9E-07	---	6.9E-05
		Sb	---	---	2.2E-04	2.8E-05	---	8.2E-03
		Se	---	---	8.0E-06	1.0E-06	---	3.0E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	8.5E-05	1.1E-05	---	3.2E-03
	SB-10 Total		3.7E-06	1.5E-07	2.6E-02	3.6E-03		
	SB-11	a-Chlordane	1.1E-10	4.7E-12	3.9E-07	5.6E-08	3.1E-05	1.4E-05
		g-Chlordane	2.0E-10	8.4E-12	7.1E-07	1.0E-07	5.6E-05	2.6E-05
		DBT	---	---	---	---	---	---
		Dieldrin	2.7E-09	1.3E-10	7.9E-06	1.3E-06	7.8E-04	2.9E-04
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	4.7E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	7.7E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.2E-06	4.6E-07
		Total Congeners	1.9E-07	9.6E-09	4.4E-03	7.5E-04	5.4E-02	1.6E-01
		2,4'-DDD	6.4E-13	2.7E-14	---	---	1.8E-07	---
		2,4'-DDE	1.2E-12	4.8E-14	---	---	3.3E-07	---
		2,4'-DDT	1.1E-12	4.5E-14	1.5E-08	2.0E-09	3.1E-07	5.3E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	6.9E-11	2.9E-12	---	---	2.0E-05	---
		4,4'-DDE	1.7E-10	6.9E-12	---	---	4.7E-05	---
		4,4'-DDT	2.2E-11	9.2E-13	3.1E-07	4.2E-08	6.3E-06	1.1E-05
		Acenaphthene	---	---	1.4E-08	2.3E-09	---	5.2E-07

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.5E-05	1.9E-06	---	5.4E-04
		Al	---	---	7.4E-03	9.6E-04	---	2.7E-01
		Anthracene	---	---	1.1E-08	1.4E-09	---	4.0E-07
		As	9.6E-07	4.0E-08	5.0E-03	6.9E-04	2.7E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.2E-08	6.2E-10	---	---	3.5E-03	---
		Benzo(a)pyrene	2.2E-07	1.1E-08	---	---	6.3E-02	---
		Benzo(b)fluoranthene	1.7E-08	8.6E-10	---	---	4.9E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.6E-08	8.1E-10	---	---	4.6E-03	---
		Cd	1.1E-08	4.3E-10	1.3E-04	1.7E-05	3.1E-03	4.8E-03
		Chrysene	1.6E-09	8.0E-11	---	---	4.5E-04	---
		Co	---	---	---	---	---	---
		Cr	2.0E-06	7.8E-08	8.2E-03	1.1E-03	5.7E-01	2.9E-01
		Cu	---	---	3.2E-04	4.1E-05	---	1.1E-02
		Dibenz(a,h)anthracene	1.0E-08	5.2E-10	---	---	3.0E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.1E-06	1.9E-07	---	4.1E-05
		Fluorene	---	---	3.5E-08	5.6E-09	---	1.3E-06
		Hg	---	---	7.6E-04	9.9E-05	---	2.7E-02
		Indeno(1,2,3-cd)pyrene	2.0E-08	1.0E-09	---	---	5.8E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.0E-07	4.8E-08	---	1.1E-05
		Ni	---	---	5.8E-04	7.5E-05	---	2.1E-02
		Pb	4.4E-08	1.7E-09	---	---	1.3E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.8E-06	2.9E-07	---	6.5E-05
		Sb	---	---	9.2E-04	1.2E-04	---	3.3E-02
		Se	---	---	8.7E-06	1.1E-06	---	3.1E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.8E-05	1.0E-05	---	2.8E-03
	SB-11 Total		3.5E-06	1.4E-07	2.8E-02	3.8E-03		
	SB-12	a-Chlordane	8.7E-11	3.7E-12	3.1E-07	4.5E-08	2.7E-05	1.1E-05
		g-Chlordane	1.2E-10	5.2E-12	4.3E-07	6.2E-08	3.7E-05	1.6E-05
		DBT	---	---	---	---	---	---
		Dieldrin	2.1E-09	9.9E-11	6.0E-06	9.7E-07	6.3E-04	2.2E-04
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	4.8E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	8.7E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.4E-06	4.7E-07
		Total Congeners	2.2E-07	1.1E-08	5.2E-03	8.9E-04	6.9E-02	1.9E-01
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.2E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	3.8E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	3.6E-07	5.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	5.1E-11	2.1E-12	---	---	1.6E-05	---
		4,4'-DDE	1.3E-10	5.3E-12	---	---	3.9E-05	---
		4,4'-DDT	1.8E-11	7.3E-13	2.4E-07	3.3E-08	5.4E-06	8.8E-06
		Acenaphthene	---	---	1.1E-08	1.8E-09	---	4.1E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.3E-05	1.7E-06	---	4.7E-04
		Al	---	---	7.5E-03	9.8E-04	---	2.7E-01
		Anthracene	---	---	9.2E-09	1.2E-09	---	3.4E-07
		As	9.2E-07	3.8E-08	4.7E-03	6.6E-04	2.8E-01	1.7E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.1E-08	5.3E-10	---	---	3.2E-03	---
		Benzo(a)pyrene	1.9E-07	9.6E-09	---	---	5.8E-02	---
		Benzo(b)fluoranthene	1.4E-08	6.9E-10	---	---	4.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.5E-08	7.3E-10	---	---	4.4E-03	---
		Cd	9.0E-09	3.5E-10	1.1E-04	1.4E-05	2.8E-03	4.0E-03
		Chrysene	1.4E-09	7.0E-11	---	---	4.2E-04	---
		Co	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Cr	1.8E-06	7.1E-08	7.5E-03	9.7E-04	5.6E-01	2.7E-01
		Cu	---	---	2.7E-04	3.5E-05	---	1.0E-02
		Dibenz(a,h)anthracene	8.1E-09	4.1E-10	---	---	2.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	9.8E-07	1.6E-07	---	3.6E-05
		Fluorene	---	---	2.9E-08	4.6E-09	---	1.0E-06
		Hg	---	---	6.6E-04	8.5E-05	---	2.4E-02
		Indeno(1,2,3-cd)pyrene	1.7E-08	8.8E-10	---	---	5.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-07	3.0E-08	---	6.8E-06
		Ni	---	---	5.7E-04	7.3E-05	---	2.1E-02
		Pb	3.5E-08	1.4E-09	---	---	1.1E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-06	2.4E-07	---	5.5E-05
		Sb	---	---	7.1E-04	9.2E-05	---	2.6E-02
		Se	---	---	8.8E-06	1.1E-06	---	3.2E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.0E-05	9.1E-06	---	2.6E-03
	SB-12 Total		3.3E-06	1.4E-07	2.7E-02	3.8E-03		
	SB-13	a-Chlordane	5.7E-11	2.4E-12	2.1E-07	2.9E-08	1.9E-05	8.3E-06
		g-Chlordane	8.2E-11	3.5E-12	3.0E-07	4.2E-08	2.7E-05	1.2E-05
		DBT	---	---	---	---	---	---
		Dieldrin	1.3E-09	6.4E-11	3.9E-06	6.2E-07	4.4E-04	1.6E-04
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	5.3E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	9.6E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.7E-06	5.2E-07
		Total Congeners	1.3E-07	6.4E-09	2.9E-03	5.0E-04	4.1E-02	1.2E-01
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.3E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	4.1E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	3.8E-07	6.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	3.8E-10	1.6E-11	---	---	1.3E-04	---
		4,4'-DDE	8.7E-11	3.6E-12	---	---	2.8E-05	---
		4,4'-DDT	8.8E-12	3.7E-13	1.2E-07	1.7E-08	2.9E-06	4.9E-06
		Acenaphthene	---	---	1.4E-08	2.3E-09	---	5.8E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.2E-05	1.6E-06	---	5.0E-04
		Al	---	---	7.6E-03	9.9E-04	---	3.1E-01
		Anthracene	---	---	1.1E-08	1.3E-09	---	4.3E-07
		As	8.5E-07	3.5E-08	4.4E-03	6.1E-04	2.8E-01	1.8E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-08	5.1E-10	---	---	3.3E-03	---
		Benzo(a)pyrene	1.8E-07	9.3E-09	---	---	6.0E-02	---
		Benzo(b)fluoranthene	1.3E-08	6.8E-10	---	---	4.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.4E-08	7.0E-10	---	---	4.6E-03	---
		Cd	7.8E-09	3.0E-10	9.6E-05	1.2E-05	2.6E-03	3.9E-03
		Chrysene	1.5E-09	7.6E-11	---	---	5.0E-04	---
		Co	---	---	---	---	---	---
		Cr	1.8E-06	6.9E-08	7.3E-03	9.5E-04	5.9E-01	3.0E-01
		Cu	---	---	2.7E-04	3.5E-05	---	1.1E-02
		Dibenz(a,h)anthracene	7.8E-09	3.9E-10	---	---	2.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-06	2.0E-07	---	4.7E-05
		Fluorene	---	---	3.4E-08	5.4E-09	---	1.4E-06
		Hg	---	---	6.5E-04	8.5E-05	---	2.7E-02
		Indeno(1,2,3-cd)pyrene	1.6E-08	8.1E-10	---	---	5.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.0E-07	3.3E-08	---	8.3E-06
		Ni	---	---	5.8E-04	7.6E-05	---	2.4E-02
		Pb	3.2E-08	1.3E-09	---	---	1.1E-02	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.7E-06	2.7E-07	---	6.9E-05
		Sb	---	---	6.7E-04	8.7E-05	---	2.7E-02
		Se	---	---	7.0E-06	9.1E-07	---	2.8E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.7E-05	8.7E-06	---	2.7E-03
	SB-13 Total		3.0E-06	1.3E-07	2.5E-02	3.4E-03		
	SB-14	a-Chlordane	3.6E-10	1.5E-11	1.3E-06	1.8E-07	1.0E+01	1.0E+01
		g-Chlordane	4.8E-10	2.0E-11	1.7E-06	2.4E-07	1.3E+01	1.3E+01
		DBT	---	---	---	---	---	---
		Dieldrin	1.7E-09	8.0E-11	4.8E-06	7.8E-07	4.7E+01	3.8E+01
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	1.1E-02
		Endrin	---	---	2.4E-08	3.8E-09	---	1.9E-01
		Heptachlor	5.3E-10	2.6E-11	6.1E-07	9.7E-08	1.5E+01	4.8E+00
		Total Congeners	9.7E-08	4.9E-09	2.3E-03	3.8E-04	2.7E+03	1.8E+04
		2,4'-DDD	7.6E-13	3.2E-14	---	---	2.1E-02	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	3.7E-02	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	3.5E-02	1.3E-01
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	6.0E-11	2.5E-12	---	---	1.7E+00	---
		4,4'-DDE	1.1E-10	4.5E-12	---	---	3.1E+00	---
		4,4'-DDT	4.4E-11	1.8E-12	6.0E-07	8.3E-08	1.2E+00	4.7E+00
		Acenaphthene	---	---	1.3E-08	2.2E-09	---	1.1E-01
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.2E-05	1.5E-06	---	9.3E+01
		Al	---	---	7.6E-03	9.8E-04	---	6.0E+04
		Anthracene	---	---	1.2E-08	1.6E-09	---	9.8E-02
		As	8.6E-07	3.6E-08	4.4E-03	6.1E-04	2.4E+04	3.5E+04
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.0E-08	5.2E-10	---	---	2.9E+02	---
		Benzo(a)pyrene	1.8E-07	8.9E-09	---	---	5.0E+03	---
		Benzo(b)fluoranthene	1.4E-08	7.0E-10	---	---	3.9E+02	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.3E-08	6.4E-10	---	---	3.6E+02	---
		Cd	6.9E-09	2.7E-10	8.5E-05	1.1E-05	2.0E+02	6.7E+02
		Chrysene	1.4E-09	7.3E-11	---	---	4.1E+01	---
		Co	---	---	---	---	---	---
		Cr	1.8E-06	6.9E-08	7.2E-03	9.4E-04	5.0E+04	5.7E+04
		Cu	---	---	2.5E-04	3.3E-05	---	2.0E+03
		Dibenz(a,h)anthracene	8.1E-09	4.1E-10	---	---	2.3E+02	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	8.9E-07	1.5E-07	---	7.0E+00
		Fluorene	---	---	3.3E-08	5.4E-09	---	2.6E-01
		Hg	---	---	6.0E-04	7.8E-05	---	4.7E+03
		Indeno(1,2,3-cd)pyrene	1.6E-08	8.0E-10	---	---	4.5E+02	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.8E-07	2.9E-08	---	1.4E+00
		Ni	---	---	5.7E-04	7.3E-05	---	4.4E+03
		Pb	3.3E-08	1.3E-09	---	---	9.4E+02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-06	2.4E-07	---	1.2E+01
		Sb	---	---	6.3E-04	8.2E-05	---	5.0E+03
		Se	---	---	8.4E-06	1.1E-06	---	6.6E+01
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.4E-05	8.3E-06	---	5.0E+02
	SB-14 Total		3.0E-06	1.2E-07	2.4E-02	3.2E-03		
	SB-15	a-Chlordane	3.6E-11	1.5E-12	1.3E-07	1.8E-08	1.2E-05	5.6E-06
		g-Chlordane	4.9E-11	2.1E-12	1.8E-07	2.5E-08	1.7E-05	7.8E-06
		DBT	---	---	---	---	---	---
		Dieldrin	7.3E-10	3.5E-11	2.1E-06	3.4E-07	2.6E-04	9.4E-05
		Endosulfan II	---	---	1.4E-09	2.3E-10	---	6.3E-08

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Endrin	---	---	2.6E-08	4.2E-09	---	1.1E-06
		Heptachlor	1.3E-11	6.0E-13	1.4E-08	2.3E-09	4.4E-06	6.3E-07
		Total Congeners	7.0E-08	3.6E-09	1.6E-03	2.8E-04	2.4E-02	7.2E-02
		2,4'-DDD	7.6E-13	3.2E-14	---	---	2.7E-07	---
		2,4'-DDE	1.3E-12	5.5E-14	---	---	4.6E-07	---
		2,4'-DDT	1.2E-12	5.2E-14	1.7E-08	2.4E-09	4.3E-07	7.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.4E-11	1.0E-12	---	---	8.4E-06	---
		4,4'-DDE	5.4E-11	2.2E-12	---	---	1.9E-05	---
		4,4'-DDT	6.5E-12	2.7E-13	8.9E-08	1.2E-08	2.3E-06	3.9E-06
		Acenaphthene	---	---	2.1E-08	3.4E-09	---	9.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.1E-05	1.4E-06	---	4.9E-04
		Al	---	---	7.8E-03	1.0E-03	---	3.4E-01
		Anthracene	---	---	1.2E-08	1.5E-09	---	5.2E-07
		As	8.4E-07	3.5E-08	4.3E-03	6.0E-04	2.9E-01	1.9E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	9.4E-09	4.7E-10	---	---	3.3E-03	---
		Benzo(a)pyrene	1.7E-07	8.7E-09	---	---	6.0E-02	---
		Benzo(b)fluoranthene	1.2E-08	5.9E-10	---	---	4.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	1.2E-08	6.2E-10	---	---	4.3E-03	---
		Cd	4.7E-09	1.8E-10	5.8E-05	7.5E-06	1.6E-03	2.5E-03
		Chrysene	1.4E-09	6.8E-11	---	---	4.7E-04	---
		Co	---	---	---	---	---	---
		Cr	1.7E-06	6.6E-08	6.9E-03	9.0E-04	5.9E-01	3.1E-01
		Cu	---	---	2.3E-04	2.9E-05	---	9.9E-03
		Dibenz(a,h)anthracene	6.7E-09	3.4E-10	---	---	2.3E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	9.4E-07	1.6E-07	---	4.1E-05
		Fluorene	---	---	3.7E-08	5.9E-09	---	1.6E-06
		Hg	---	---	5.4E-04	7.0E-05	---	2.4E-02
		Indeno(1,2,3-cd)pyrene	1.5E-08	7.7E-10	---	---	5.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.0E-07	3.2E-08	---	8.7E-06
		Ni	---	---	5.8E-04	7.5E-05	---	2.5E-02
		Pb	2.7E-08	1.1E-09	---	---	9.4E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.5E-06	2.4E-07	---	6.6E-05
		Sb	---	---	5.4E-04	7.0E-05	---	2.4E-02
		Se	---	---	7.0E-06	9.1E-07	---	3.1E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.0E-05	7.8E-06	---	2.7E-03
	SB-15 Total		2.9E-06	1.2E-07	2.3E-02	3.0E-03		
	SB-16	a-Chlordane	5.1E-11	2.2E-12	1.8E-07	2.6E-08	9.1E-06	4.7E-06
		g-Chlordane	1.0E-10	4.3E-12	3.7E-07	5.2E-08	1.8E-05	9.5E-06
		DBT	---	---	---	---	---	---
		Dieldrin	3.9E-11	1.9E-12	1.1E-07	1.8E-08	7.0E-06	3.0E-06
		Endosulfan II	---	---	9.5E-10	1.5E-10	---	2.5E-08
		Endrin	---	---	1.7E-08	2.7E-09	---	4.3E-07
		Heptachlor	8.8E-12	4.2E-13	1.0E-08	1.6E-09	1.6E-06	2.6E-07
		Total Congeners	3.0E-07	1.5E-08	7.1E-03	1.2E-03	5.4E-02	1.8E-01
		2,4'-DDD	5.3E-13	2.2E-14	---	---	9.5E-08	---
		2,4'-DDE	9.1E-13	3.8E-14	---	---	1.6E-07	---
		2,4'-DDT	8.3E-13	3.4E-14	1.1E-08	1.6E-09	1.5E-07	3.0E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.9E-11	2.0E-12	---	---	8.8E-06	---
		4,4'-DDE	5.8E-13	2.4E-14	---	---	1.0E-07	---
		4,4'-DDT	1.5E-11	6.2E-13	2.1E-07	2.8E-08	2.7E-06	5.3E-06
		Acenaphthene	---	---	1.6E-08	2.6E-09	---	4.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.4E-05	1.9E-06	---	3.8E-04
		Al	---	---	5.7E-03	7.4E-04	---	1.5E-01

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Anthracene	---	---	1.8E-08	2.3E-09	---	4.8E-07
		As	8.3E-07	3.4E-08	4.3E-03	5.9E-04	1.5E-01	1.1E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.8E-08	1.4E-09	---	---	5.1E-03	---
		Benzo(a)pyrene	3.5E-07	1.8E-08	---	---	6.4E-02	---
		Benzo(b)fluoranthene	2.9E-08	1.4E-09	---	---	5.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	3.0E-08	1.5E-09	---	---	5.4E-03	---
		Cd	1.2E-08	4.7E-10	1.5E-04	1.9E-05	2.2E-03	3.9E-03
		Chrysene	3.7E-09	1.9E-10	---	---	6.7E-04	---
		Co	---	---	---	---	---	---
		Cr	3.9E-06	1.5E-07	1.6E-02	2.1E-03	7.0E-01	4.1E-01
		Cu	---	---	4.9E-04	6.4E-05	---	1.3E-02
		Dibenz(a,h)anthracene	1.9E-08	9.3E-10	---	---	3.3E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.0E-06	3.4E-07	---	5.3E-05
		Fluorene	---	---	4.3E-08	6.9E-09	---	1.1E-06
		Hg	---	---	8.4E-04	1.1E-04	---	2.2E-02
		Indeno(1,2,3-cd)pyrene	2.8E-08	1.4E-09	---	---	5.1E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.8E-07	2.8E-08	---	4.6E-06
		Ni	---	---	1.1E-03	1.4E-04	---	2.7E-02
		Pb	5.4E-08	2.1E-09	---	---	9.6E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.6E-06	4.1E-07	---	6.7E-05
		Sb	---	---	2.8E-03	3.6E-04	---	7.3E-02
		Se	---	---	4.8E-06	6.2E-07	---	1.2E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	8.0E-05	1.0E-05	---	2.1E-03
	SB-16 Total		5.6E-06	2.3E-07	3.8E-02	5.3E-03		
	SB-17	a-Chlordane	4.5E-11	1.9E-12	1.6E-07	2.3E-08	1.2E-05	5.7E-06
		g-Chlordane	6.6E-11	2.8E-12	2.4E-07	3.4E-08	1.8E-05	8.5E-06
		DBT	---	---	---	---	---	---
		Dieldrin	4.9E-11	2.4E-12	1.4E-07	2.3E-08	1.3E-05	5.1E-06
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	4.2E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	7.6E-07
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	2.7E-06	4.1E-07
		Total Congeners	1.5E-07	7.7E-09	3.5E-03	6.0E-04	4.1E-02	1.3E-01
		2,4'-DDD	6.4E-13	2.7E-14	---	---	1.7E-07	---
		2,4'-DDE	1.1E-12	4.5E-14	---	---	2.9E-07	---
		2,4'-DDT	1.0E-12	4.1E-14	1.4E-08	1.9E-09	2.7E-07	4.9E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	3.0E-10	1.2E-11	---	---	8.0E-05	---
		4,4'-DDE	6.0E-11	2.5E-12	---	---	1.6E-05	---
		4,4'-DDT	2.1E-11	8.9E-13	2.9E-07	4.1E-08	5.7E-06	1.1E-05
		Acenaphthene	---	---	2.2E-08	3.5E-09	---	7.7E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	8.7E-06	1.1E-06	---	3.1E-04
		Al	---	---	6.9E-03	8.9E-04	---	2.5E-01
		Anthracene	---	---	1.7E-08	2.1E-09	---	5.9E-07
		As	8.2E-07	3.4E-08	4.3E-03	5.9E-04	2.2E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.0E-08	9.8E-10	---	---	5.2E-03	---
		Benzo(a)pyrene	2.8E-07	1.4E-08	---	---	7.5E-02	---
		Benzo(b)fluoranthene	2.3E-08	1.1E-09	---	---	6.0E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.1E-08	1.1E-09	---	---	5.7E-03	---
		Cd	4.8E-09	1.9E-10	5.9E-05	7.6E-06	1.3E-03	2.1E-03
		Chrysene	2.5E-09	1.3E-10	---	---	6.7E-04	---
		Co	---	---	---	---	---	---
		Cr	2.4E-06	9.2E-08	9.6E-03	1.2E-03	6.3E-01	3.4E-01
		Cu	---	---	2.9E-04	3.8E-05	---	1.0E-02
		Dibenz(a,h)anthracene	1.4E-08	7.1E-10	---	---	3.8E-03	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.6E-06	2.7E-07	---	5.7E-05
		Fluorene	---	---	4.3E-08	6.9E-09	---	1.5E-06
		Hg	---	---	8.1E-04	1.1E-04	---	2.9E-02
		Indeno(1,2,3-cd)pyrene	2.3E-08	1.2E-09	---	---	6.2E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.9E-07	3.1E-08	---	6.9E-06
		Ni	---	---	8.6E-04	1.1E-04	---	3.1E-02
		Pb	2.8E-08	1.1E-09	---	---	7.6E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.2E-06	3.6E-07	---	8.0E-05
		Sb	---	---	1.5E-03	2.0E-04	---	5.5E-02
		Se	---	---	7.2E-06	9.3E-07	---	2.6E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.9E-05	8.9E-06	---	2.5E-03
	SB-17 Total		3.7E-06	1.5E-07	2.8E-02	3.8E-03		
	SB-18	a-Chlordane	4.6E-11	2.0E-12	1.7E-07	2.3E-08	1.9E-05	8.7E-06
		g-Chlordane	1.3E-10	5.6E-12	4.7E-07	6.7E-08	5.3E-05	2.5E-05
		DBT	---	---	---	---	---	---
		Dieldrin	1.2E-09	5.9E-11	3.6E-06	5.7E-07	4.9E-04	1.9E-04
		Endosulfan II	---	---	7.1E-10	1.1E-10	---	3.7E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	7.5E-07
		Heptachlor	6.3E-12	3.0E-13	7.1E-09	1.1E-09	2.5E-06	3.7E-07
		Total Congeners	1.4E-07	7.2E-09	3.3E-03	5.6E-04	5.7E-02	1.7E-01
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.6E-07	---
		2,4'-DDE	6.6E-13	2.8E-14	---	---	2.7E-07	---
		2,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	2.7E-07	4.8E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.7E-11	2.0E-12	---	---	1.9E-05	---
		4,4'-DDE	1.1E-10	4.5E-12	---	---	4.3E-05	---
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	2.0E-07	3.6E-07
		Acenaphthene	---	---	2.7E-08	4.4E-09	---	1.4E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	5.4E-06	7.1E-07	---	2.9E-04
		Al	---	---	5.2E-03	6.8E-04	---	2.7E-01
		Anthracene	---	---	1.7E-08	2.2E-09	---	9.1E-07
		As	4.3E-07	1.8E-08	2.2E-03	3.1E-04	1.7E-01	1.2E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	2.3E-08	1.2E-09	---	---	9.4E-03	---
		Benzo(a)pyrene	2.5E-07	1.3E-08	---	---	1.0E-01	---
		Benzo(b)fluoranthene	2.2E-08	1.1E-09	---	---	8.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.3E-08	1.2E-09	---	---	9.3E-03	---
		Cd	7.4E-09	2.9E-10	9.1E-05	1.2E-05	3.0E-03	4.8E-03
		Chrysene	3.6E-09	1.8E-10	---	---	1.4E-03	---
		Co	---	---	---	---	---	---
		Cr	1.5E-06	5.9E-08	6.2E-03	8.0E-04	6.1E-01	3.2E-01
		Cu	---	---	1.9E-04	2.5E-05	---	9.9E-03
		Dibenz(a,h)anthracene	1.4E-08	7.1E-10	---	---	5.7E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.8E-06	3.0E-07	---	9.4E-05
		Fluorene	---	---	5.6E-08	9.1E-09	---	3.0E-06
		Hg	---	---	2.5E-04	3.2E-05	---	1.3E-02
		Indeno(1,2,3-cd)pyrene	1.6E-08	8.2E-10	---	---	6.6E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	4.1E-07	6.5E-08	---	2.1E-05
		Ni	---	---	4.9E-04	6.4E-05	---	2.6E-02
		Pb	4.7E-08	1.8E-09	---	---	1.9E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.5E-06	3.9E-07	---	1.3E-04
		Sb	---	---	1.0E-03	1.4E-04	---	5.5E-02

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Se	---	---	3.2E-06	4.1E-07	---	1.7E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.4E-05	9.6E-06	---	3.9E-03
	SB-18 Total		2.5E-06	1.0E-07	1.9E-02	2.6E-03		
	SB-19	a-Chlordane	3.6E-11	1.5E-12	1.3E-07	1.8E-08	1.2E-05	4.4E-06
		g-Chlordane	5.2E-11	2.2E-12	1.9E-07	2.7E-08	1.8E-05	6.4E-06
		DBT	---	---	---	---	---	---
		Dieldrin	7.5E-10	3.6E-11	2.2E-06	3.5E-07	2.6E-04	7.5E-05
		Endosulfan II	---	---	7.1E-10	1.1E-10	---	2.4E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	4.9E-07
		Heptachlor	6.3E-12	3.0E-13	7.1E-09	1.1E-09	2.2E-06	2.4E-07
		Total Congeners	5.2E-07	2.7E-08	1.2E-02	2.1E-03	1.8E-01	4.2E-01
		2,4'-DDD	4.1E-13	1.7E-14	---	---	1.4E-07	---
		2,4'-DDE	6.6E-13	2.8E-14	---	---	2.3E-07	---
		2,4'-DDT	6.6E-13	2.8E-14	9.1E-09	1.3E-09	2.3E-07	3.1E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	2.4E-11	9.8E-13	---	---	8.2E-06	---
		4,4'-DDE	2.6E-11	1.1E-12	---	---	9.0E-06	---
		4,4'-DDT	5.0E-13	2.1E-14	6.8E-09	9.5E-10	1.7E-07	2.4E-07
		Acenaphthene	---	---	7.6E-09	1.2E-09	---	2.6E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	2.9E-06	3.8E-07	---	1.0E-04
		Al	---	---	4.1E-03	5.4E-04	---	1.4E-01
		Anthracene	---	---	2.9E-09	3.6E-10	---	9.9E-08
		As	8.4E-07	3.5E-08	4.4E-03	6.0E-04	2.9E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	5.3E-09	2.7E-10	---	---	1.8E-03	---
		Benzo(a)pyrene	6.2E-08	3.1E-09	---	---	2.1E-02	---
		Benzo(b)fluoranthene	6.1E-09	3.0E-10	---	---	2.1E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	5.9E-09	2.9E-10	---	---	2.0E-03	---
		Cd	4.3E-09	1.7E-10	5.3E-05	6.9E-06	1.5E-03	1.8E-03
		Chrysene	7.6E-10	3.8E-11	---	---	2.6E-04	---
		Co	---	---	---	---	---	---
		Cr	1.4E-06	5.6E-08	5.9E-03	7.6E-04	5.0E-01	2.0E-01
		Cu	---	---	8.2E-04	1.1E-04	---	2.8E-02
		Dibenz(a,h)anthracene	4.2E-09	2.1E-10	---	---	1.5E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	4.4E-07	7.3E-08	---	1.5E-05
		Fluorene	---	---	1.3E-08	2.0E-09	---	4.4E-07
		Hg	---	---	1.0E-03	1.3E-04	---	3.5E-02
		Indeno(1,2,3-cd)pyrene	5.6E-09	2.8E-10	---	---	1.9E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	5.9E-08	9.5E-09	---	2.0E-06
		Ni	---	---	3.8E-04	5.0E-05	---	1.3E-02
		Pb	4.2E-09	1.7E-10	---	---	1.5E-03	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.4E-07	8.7E-08	---	1.9E-05
		Sb	---	---	1.3E-04	1.7E-05	---	4.4E-03
		Se	---	---	1.3E-06	1.7E-07	---	4.6E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	6.2E-05	8.0E-06	---	2.1E-03
	SB-19 Total		2.9E-06	1.2E-07	2.9E-02	4.3E-03		
	SB-20	a-Chlordane	1.6E-10	6.6E-12	5.6E-07	8.0E-08	4.6E-05	1.9E-05
		g-Chlordane	2.4E-10	1.0E-11	8.5E-07	1.2E-07	6.9E-05	2.9E-05
		DBT	---	---	---	---	---	---
		Dieldrin	3.5E-09	1.7E-10	1.0E-05	1.7E-06	1.0E-03	3.5E-04
		Endosulfan II	---	---	1.3E-09	2.1E-10	---	4.5E-08
		Endrin	---	---	2.4E-08	3.8E-09	---	8.1E-07
		Heptachlor	1.1E-11	5.4E-13	1.3E-08	2.1E-09	3.3E-06	4.4E-07
		Total Congeners	2.7E-07	1.4E-08	6.2E-03	1.1E-03	7.8E-02	2.1E-01

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		2,4'-DDD	7.0E-13	2.9E-14	---	---	2.1E-07	---
		2,4'-DDE	1.2E-12	5.2E-14	---	---	3.7E-07	---
		2,4'-DDT	1.2E-12	4.8E-14	1.6E-08	2.2E-09	3.4E-07	5.5E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	6.3E-11	2.6E-12	---	---	1.8E-05	---
		4,4'-DDE	1.6E-10	6.6E-12	---	---	4.6E-05	---
		4,4'-DDT	1.5E-11	6.4E-13	2.1E-07	2.9E-08	4.5E-06	7.3E-06
		Acenaphthene	---	---	1.8E-08	2.9E-09	---	6.3E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.3E-05	1.7E-06	---	4.6E-04
		Al	---	---	7.3E-03	9.4E-04	---	2.5E-01
		Anthracene	---	---	1.5E-08	1.8E-09	---	5.0E-07
		As	8.3E-07	3.4E-08	4.3E-03	5.9E-04	2.4E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.5E-08	7.5E-10	---	---	4.3E-03	---
		Benzo(a)pyrene	2.4E-07	1.2E-08	---	---	6.9E-02	---
		Benzo(b)fluoranthene	1.9E-08	9.5E-10	---	---	5.6E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.0E-08	9.9E-10	---	---	5.8E-03	---
		Cd	1.2E-08	4.6E-10	1.4E-04	1.9E-05	3.4E-03	4.9E-03
		Chrysene	2.2E-09	1.1E-10	---	---	6.4E-04	---
		Co	---	---	---	---	---	---
		Cr	1.9E-06	7.5E-08	7.9E-03	1.0E-03	5.7E-01	2.7E-01
		Cu	---	---	3.8E-04	4.9E-05	---	1.3E-02
		Dibenz(a,h)anthracene	9.7E-09	4.9E-10	---	---	2.8E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.6E-06	2.6E-07	---	5.4E-05
		Fluorene	---	---	4.1E-08	6.6E-09	---	1.4E-06
		Hg	---	---	1.1E-03	1.5E-04	---	3.8E-02
		Indeno(1,2,3-cd)pyrene	1.9E-08	9.7E-10	---	---	5.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.9E-07	4.6E-08	---	9.8E-06
		Ni	---	---	6.2E-04	8.1E-05	---	2.1E-02
		Pb	4.1E-08	1.6E-09	---	---	1.2E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	2.2E-06	3.5E-07	---	7.6E-05
		Sb	---	---	1.1E-03	1.5E-04	---	3.9E-02
		Se	---	---	9.7E-06	1.3E-06	---	3.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	7.6E-05	9.8E-06	---	2.6E-03
	SB-20 Total		3.4E-06	1.4E-07	2.9E-02	4.1E-03		
	SB-21	a-Chlordane	4.6E-11	2.0E-12	1.7E-07	2.3E-08	8.8E-06	3.7E-06
		g-Chlordane	5.7E-11	2.4E-12	2.0E-07	2.9E-08	1.1E-05	4.5E-06
		DBT	---	---	---	---	---	---
		Dieldrin	3.4E-11	1.6E-12	1.0E-07	1.6E-08	6.5E-06	2.2E-06
		Endosulfan II	---	---	8.3E-10	1.3E-10	---	1.9E-08
		Endrin	---	---	1.4E-08	2.3E-09	---	3.2E-07
		Heptachlor	7.5E-12	3.6E-13	8.5E-09	1.4E-09	1.4E-06	1.9E-07
		Total Congeners	8.8E-07	4.5E-08	2.1E-02	3.5E-03	1.7E-01	4.6E-01
		2,4'-DDD	4.7E-13	1.9E-14	---	---	9.0E-08	---
		2,4'-DDE	8.3E-13	3.4E-14	---	---	1.6E-07	---
		2,4'-DDT	7.5E-13	3.1E-14	1.0E-08	1.4E-09	1.4E-07	2.3E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	5.1E-10	2.1E-11	---	---	9.8E-05	---
		4,4'-DDE	9.2E-11	3.8E-12	---	---	1.8E-05	---
		4,4'-DDT	6.0E-11	2.5E-12	8.2E-07	1.1E-07	1.1E-05	1.8E-05
		Acenaphthene	---	---	5.1E-08	8.1E-09	---	1.1E-06
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	3.0E-06	4.0E-07	---	6.8E-05
		Al	---	---	4.9E-03	6.4E-04	---	1.1E-01
		Anthracene	---	---	8.0E-08	1.0E-08	---	1.8E-06
		As	7.3E-07	3.0E-08	3.8E-03	5.2E-04	1.4E-01	8.4E-02
		Ba	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Benzo(a)anthracene	5.0E-08	2.5E-09	---	---	9.6E-03	---
		Benzo(a)pyrene	5.0E-07	2.5E-08	---	---	9.6E-02	---
		Benzo(b)fluoranthene	3.9E-08	1.9E-09	---	---	7.4E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	4.0E-08	2.0E-09	---	---	7.6E-03	---
		Cd	4.5E-09	1.8E-10	5.5E-05	7.2E-06	8.6E-04	1.2E-03
		Chrysene	5.9E-09	3.0E-10	---	---	1.1E-03	---
		Co	---	---	---	---	---	---
		Cr	2.9E-06	1.1E-07	1.2E-02	1.5E-03	5.6E-01	2.7E-01
		Cu	---	---	9.1E-04	1.2E-04	---	2.0E-02
		Dibenz(a,h)anthracene	2.8E-08	1.4E-09	---	---	5.4E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	3.7E-06	6.2E-07	---	8.2E-05
		Fluorene	---	---	2.9E-07	4.7E-08	---	6.5E-06
		Hg	---	---	1.6E-03	2.0E-04	---	3.5E-02
		Indeno(1,2,3-cd)pyrene	3.3E-08	1.7E-09	---	---	6.3E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	2.9E-07	4.7E-08	---	6.5E-06
		Ni	---	---	8.5E-04	1.1E-04	---	1.9E-02
		Pb	4.5E-09	1.8E-10	---	---	8.7E-04	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	5.1E-06	8.1E-07	---	1.1E-04
		Sb	---	---	1.7E-04	2.2E-05	---	3.9E-03
		Se	---	---	3.8E-06	4.9E-07	---	8.4E-05
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	1.0E-04	1.4E-05	---	2.3E-03
	SB-21 Total		5.2E-06	2.2E-07	4.5E-02	6.7E-03		
	SB-22	a-Chlordane	9.1E-11	3.9E-12	3.3E-07	4.6E-08	2.3E-05	9.9E-06
		g-Chlordane	1.5E-10	6.6E-12	5.5E-07	7.9E-08	4.0E-05	1.7E-05
		DBT	---	---	---	---	---	---
		Dieldrin	2.7E-09	1.3E-10	7.8E-06	1.3E-06	6.9E-04	2.4E-04
		Endosulfan II	---	---	1.2E-09	1.9E-10	---	3.6E-08
		Endrin	---	---	2.1E-08	3.4E-09	---	6.5E-07
		Heptachlor	1.0E-11	4.8E-13	1.1E-08	1.8E-09	2.6E-06	3.5E-07
		Total Congeners	3.1E-07	1.6E-08	7.2E-03	1.2E-03	7.9E-02	2.2E-01
		2,4'-DDD	6.4E-13	2.7E-14	---	---	1.7E-07	---
		2,4'-DDE	1.1E-12	4.5E-14	---	---	2.8E-07	---
		2,4'-DDT	1.0E-12	4.1E-14	1.4E-08	1.9E-09	2.6E-07	4.2E-07
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	6.0E-11	2.5E-12	---	---	1.5E-05	---
		4,4'-DDE	7.1E-11	3.0E-12	---	---	1.8E-05	---
		4,4'-DDT	1.3E-11	5.4E-13	1.8E-07	2.5E-08	3.3E-06	5.4E-06
		Acenaphthene	---	---	1.7E-08	2.7E-09	---	5.1E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	1.5E-05	1.9E-06	---	4.5E-04
		Al	---	---	6.9E-03	9.0E-04	---	2.1E-01
		Anthracene	---	---	1.2E-08	1.5E-09	---	3.6E-07
		As	9.4E-07	3.9E-08	4.9E-03	6.8E-04	2.4E-01	1.5E-01
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	1.6E-08	7.9E-10	---	---	4.1E-03	---
		Benzo(a)pyrene	2.7E-07	1.4E-08	---	---	7.0E-02	---
		Benzo(b)fluoranthene	2.0E-08	1.0E-09	---	---	5.2E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.1E-08	1.0E-09	---	---	5.3E-03	---
		Cd	9.8E-09	3.8E-10	1.2E-04	1.6E-05	2.5E-03	3.7E-03
		Chrysene	2.1E-09	1.1E-10	---	---	5.5E-04	---
		Co	---	---	---	---	---	---
		Cr	2.2E-06	8.6E-08	9.0E-03	1.2E-03	5.7E-01	2.8E-01
		Cu	---	---	4.7E-04	6.1E-05	---	1.4E-02
		Dibenz(a,h)anthracene	1.2E-08	6.2E-10	---	---	3.2E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	1.2E-06	2.1E-07	---	3.8E-05
		Fluorene	---	---	3.7E-08	6.0E-09	---	1.1E-06

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		Hg	---	---	1.3E-03	1.7E-04	---	4.1E-02
		Indeno(1,2,3-cd)pyrene	2.2E-08	1.1E-09	---	---	5.7E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	3.0E-07	4.9E-08	---	9.2E-06
		Ni	---	---	6.9E-04	8.9E-05	---	2.1E-02
		Pb	5.5E-08	2.1E-09	---	---	1.4E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	1.9E-06	3.1E-07	---	5.9E-05
		Sb	---	---	2.0E-03	2.6E-04	---	6.0E-02
		Se	---	---	7.7E-06	1.0E-06	---	2.3E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---
		V	---	---	---	---	---	---
		Zn	---	---	8.6E-05	1.1E-05	---	2.6E-03
	SB-22 Total		3.9E-06	1.6E-07	3.3E-02	4.6E-03		
	SB-23	a-Chlordane	1.9E-11	8.1E-13	6.8E-08	9.7E-09	4.6E-06	1.8E-06
		g-Chlordane	2.4E-11	1.0E-12	8.7E-08	1.2E-08	5.8E-06	2.3E-06
		DBT	---	---	---	---	---	---
		Dieldrin	6.8E-10	3.3E-11	2.0E-06	3.2E-07	1.6E-04	5.4E-05
		Endosulfan II	---	---	1.7E-08	2.7E-09	---	4.5E-07
		Endrin	---	---	2.8E-07	4.6E-08	---	7.7E-06
		Heptachlor	1.5E-10	7.2E-12	1.7E-07	2.7E-08	3.6E-05	4.6E-06
		Total Congeners	6.3E-07	3.2E-08	1.5E-02	2.5E-03	1.5E-01	4.0E-01
		2,4'-DDD	8.2E-12	3.4E-13	---	---	2.0E-06	---
		2,4'-DDE	1.5E-11	6.2E-13	---	---	3.6E-06	---
		2,4'-DDT	1.5E-11	6.2E-13	2.1E-07	2.8E-08	3.6E-06	5.5E-06
		2-Methylnaphthalene	---	---	---	---	---	---
		4,4'-DDD	4.2E-11	1.7E-12	---	---	1.0E-05	---
		4,4'-DDE	1.0E-11	4.1E-13	---	---	2.4E-06	---
		4,4'-DDT	3.5E-11	1.4E-12	4.7E-07	6.6E-08	8.2E-06	1.3E-05
		Acenaphthene	---	---	2.7E-08	4.4E-09	---	7.4E-07
		Acenaphthylene	---	---	---	---	---	---
		Ag	---	---	7.8E-06	1.0E-06	---	2.1E-04
		Al	---	---	5.1E-03	6.6E-04	---	1.4E-01
		Anthracene	---	---	6.4E-08	8.0E-09	---	1.7E-06
		As	5.1E-07	2.1E-08	2.7E-03	3.7E-04	1.2E-01	7.2E-02
		Ba	---	---	---	---	---	---
		Benzo(a)anthracene	3.1E-08	1.6E-09	---	---	7.5E-03	---
		Benzo(a)pyrene	3.4E-07	1.7E-08	---	---	8.2E-02	---
		Benzo(b)fluoranthene	2.4E-08	1.2E-09	---	---	5.8E-03	---
		Benzo(g,h,i)perylene	---	---	---	---	---	---
		Benzo(k)fluoranthene	2.7E-08	1.4E-09	---	---	6.6E-03	---
		Cd	6.8E-09	2.7E-10	8.4E-05	1.1E-05	1.6E-03	2.2E-03
		Chrysene	4.4E-09	2.2E-10	---	---	1.0E-03	---
		Co	---	---	---	---	---	---
		Cr	2.5E-06	9.8E-08	1.0E-02	1.3E-03	6.0E-01	2.8E-01
		Cu	---	---	7.9E-04	1.0E-04	---	2.1E-02
		Dibenz(a,h)anthracene	1.8E-08	8.8E-10	---	---	4.2E-03	---
		Fe	---	---	---	---	---	---
		Fluoranthene	---	---	2.5E-06	4.2E-07	---	6.8E-05
		Fluorene	---	---	1.7E-07	2.8E-08	---	4.7E-06
		Hg	---	---	8.9E-04	1.2E-04	---	2.4E-02
		Indeno(1,2,3-cd)pyrene	2.3E-08	1.2E-09	---	---	5.6E-03	---
		MBT	---	---	---	---	---	---
		Mn	---	---	---	---	---	---
		Mo	---	---	---	---	---	---
		Naphthalene	---	---	1.8E-07	2.9E-08	---	4.8E-06
		Ni	---	---	6.5E-04	8.4E-05	---	1.7E-02
		Pb	4.4E-08	1.7E-09	---	---	1.0E-02	---
		Phenanthrene	---	---	---	---	---	---
		Pyrene	---	---	3.6E-06	5.7E-07	---	9.6E-05
		Sb	---	---	1.9E-03	2.5E-04	---	5.2E-02
		Se	---	---	4.2E-06	5.5E-07	---	1.1E-04
		TBT	---	---	---	---	---	---
		TTBT	---	---	---	---	---	---

Table J-3b. Calculated Risk and Hazard via Direct Contact with Sediment for HPS Stations

Area	Station Identification	Chemical	RME Risk	CTE Risk	RME Hazard	CTE Hazard	Contribution to RME Risk by Station	Contribution to RME Hazard by Station
		V	---	---	---	---	---	---
		Zn	---	---	7.5E-05	9.7E-06	---	2.0E-03
	SB-23 Total		4.2E-06	1.8E-07	3.7E-02	5.4E-03		

Table J-4a. Exposure Point Concentrations in *M. nasuta* from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
Eastern Wetland Area	2,4'-DDD	8	4.50E-05	2.75E-05	1.41E-05	3.70E-05	3.70E-05
	2,4'-DDE	8	5.50E-05	4.25E-05	8.02E-06	4.79E-05	4.79E-05
	2,4'-DDT	8	5.50E-05	3.31E-05	1.65E-05	4.42E-05	4.42E-05
	2-Methylnaphthalene	8	1.35E-04	1.10E-04	2.59E-05	1.27E-04	1.27E-04
	Acenaphthene	8	2.80E-04	1.70E-04	8.22E-05	2.25E-04	2.25E-04
	Acenaphthylene	8	4.10E-04	2.34E-04	1.15E-04	3.12E-04	3.12E-04
	a-Chlordane	8	2.20E-04	1.39E-04	5.87E-05	1.78E-04	1.78E-04
	Ag	8	6.00E-02	2.68E-02	1.57E-02	3.73E-02	3.73E-02
	Al	8	3.26E+02	2.09E+02	7.48E+01	2.59E+02	2.59E+02
	Anthracene	8	3.19E-03	1.43E-03	8.94E-04	2.03E-03	2.03E-03
	As	8	5.02E+00	3.81E+00	7.16E-01	4.29E+00	4.29E+00
	Ba	8	3.08E+00	1.99E+00	6.21E-01	2.41E+00	2.41E+00
	Benzo(a)anthracene	8	5.51E-03	3.00E-03	1.50E-03	4.00E-03	4.00E-03
	Benzo(a)pyrene	8	4.47E-03	3.25E-03	1.20E-03	4.06E-03	4.06E-03
	Benzo(b)fluoranthene	8	5.25E-03	4.00E-03	1.55E-03	5.04E-03	5.04E-03
	Benzo(g,h,i)perylene	8	4.37E-03	2.79E-03	1.32E-03	3.68E-03	3.68E-03
	Benzo(k)fluoranthene	8	5.05E-03	3.90E-03	1.40E-03	4.84E-03	4.84E-03
	Cd	8	2.32E-01	7.24E-02	6.78E-02	1.18E-01	1.18E-01
	Chrysene	8	8.44E-03	4.68E-03	2.19E-03	6.15E-03	6.15E-03
	Co	8	4.80E-01	3.54E-01	6.82E-02	4.00E-01	4.00E-01
	Cr	8	3.75E+00	2.21E+00	7.83E-01	2.74E+00	2.74E+00
	Cu	8	5.02E+00	2.83E+00	1.37E+00	3.75E+00	3.75E+00
	DBT	8	1.66E-03	1.39E-03	1.80E-04	1.51E-03	1.51E-03
	Dibenz(a,h)anthracene	8	2.40E-04	1.51E-04	9.22E-05	2.13E-04	2.13E-04
	Dieldrin	8	4.50E-04	2.30E-04	1.37E-04	3.22E-04	3.22E-04
	Endosulfan II	8	4.00E-05	3.00E-05	8.02E-06	3.54E-05	3.54E-05
	Endrin	8	3.50E-05	2.13E-05	1.27E-05	2.98E-05	2.98E-05
	Fe	8	4.15E+02	3.16E+02	7.19E+01	3.64E+02	3.64E+02
	Fluoranthene	8	2.05E-02	1.13E-02	5.40E-03	1.50E-02	1.50E-02
	Fluorene	8	4.00E-04	2.77E-04	1.34E-04	3.67E-04	3.67E-04
	g-Chlordane	8	2.20E-04	1.40E-04	5.18E-05	1.75E-04	1.75E-04
	Heptachlor	8	3.50E-05	2.25E-05	9.64E-06	2.90E-05	2.90E-05
	Hg	8	3.10E-02	1.81E-02	7.52E-03	2.31E-02	2.31E-02
	Indeno(1,2,3-cd)pyrene	8	2.30E-03	1.49E-03	6.92E-04	1.95E-03	1.95E-03
	MBT	8	6.34E-03	2.96E-03	1.53E-03	3.98E-03	3.98E-03
	Mn	8	5.71E+00	4.61E+00	9.22E-01	5.23E+00	5.23E+00
	Mo	8	7.82E-01	5.00E-01	1.44E-01	5.97E-01	5.97E-01
	Naphthalene	8	5.45E-04	3.21E-04	1.09E-04	3.94E-04	3.94E-04
	Ni	8	1.60E+00	1.17E+00	2.98E-01	1.37E+00	1.37E+00
	Pb	8	8.98E-01	5.46E-01	2.53E-01	7.15E-01	7.15E-01
	Phenanthrene	8	3.14E-03	1.90E-03	9.04E-04	2.50E-03	2.50E-03
	Pyrene	8	1.64E-02	1.16E-02	4.35E-03	1.46E-02	1.46E-02
	Sb	8	5.00E-02	2.99E-02	1.35E-02	3.89E-02	3.89E-02
	Se	8	9.44E-01	8.00E-01	1.01E-01	8.68E-01	8.68E-01
	TBT	8	4.89E-03	4.13E-03	6.77E-04	4.58E-03	4.58E-03
	Total Congeners	8	6.47E-02	3.37E-02	1.98E-02	4.70E-02	4.70E-02
	Total Dioxin	2	4.46E-04	4.39E-04	---	---	4.46E-04
	TTBT	8	1.44E-02	7.17E-03	3.00E-03	9.18E-03	9.18E-03
	V	8	1.55E+00	1.17E+00	2.23E-01	1.32E+00	1.32E+00
	Zn	8	2.63E+01	1.83E+01	4.37E+00	2.13E+01	2.13E+01

Table J-4a. Exposure Point Concentrations in *M. nasuta* from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
India Basin Area I	2,4'-DDD	6	4.00E-05	2.75E-05	1.41E-05	3.91E-05	3.91E-05
	2,4'-DDE	6	5.50E-05	4.33E-05	8.16E-06	5.01E-05	5.01E-05
	2,4'-DDT	6	5.00E-05	3.50E-05	1.58E-05	4.80E-05	4.80E-05
	2-Methylnaphthalene	6	2.30E-04	1.45E-04	5.94E-05	1.94E-04	1.94E-04
	Acenaphthene	6	4.30E-04	2.57E-04	1.45E-04	3.76E-04	3.76E-04
	Acenaphthylene	6	8.70E-04	4.63E-04	2.86E-04	6.98E-04	6.98E-04
	a-Chlordane	6	3.00E-04	1.68E-04	1.04E-04	2.54E-04	2.54E-04
	Ag	6	2.21E-01	5.45E-02	8.18E-02	1.22E-01	1.22E-01
	Al	6	3.55E+02	2.35E+02	1.06E+02	3.22E+02	3.22E+02
	Anthracene	6	1.01E-02	3.99E-03	3.18E-03	6.60E-03	6.60E-03
	As	6	3.63E+00	3.23E+00	2.91E-01	3.47E+00	3.47E+00
	Ba	6	3.72E+00	2.24E+00	9.11E-01	2.99E+00	2.99E+00
	Benzo(a)anthracene	6	1.81E-02	7.30E-03	5.51E-03	1.18E-02	1.18E-02
	Benzo(a)pyrene	6	1.02E-02	5.64E-03	2.68E-03	7.85E-03	7.85E-03
	Benzo(b)fluoranthene	6	1.40E-02	6.92E-03	3.72E-03	9.98E-03	9.98E-03
	Benzo(g,h,i)perylene	6	4.83E-03	3.21E-03	1.02E-03	4.05E-03	4.05E-03
	Benzo(k)fluoranthene	6	1.36E-02	6.77E-03	3.58E-03	9.72E-03	9.72E-03
	Cd	6	5.60E-02	3.98E-02	9.28E-03	4.75E-02	4.75E-02
	Chrysene	6	2.37E-02	9.80E-03	7.03E-03	1.56E-02	1.56E-02
	Co	6	3.86E-01	3.19E-01	6.50E-02	3.73E-01	3.73E-01
	Cr	6	1.89E+00	1.30E+00	3.78E-01	1.61E+00	1.61E+00
	Cu	6	2.50E+00	2.09E+00	3.93E-01	2.42E+00	2.42E+00
	DBT	6	2.04E-03	1.44E-03	4.24E-04	1.79E-03	1.79E-03
	Dibenz(a,h)anthracene	6	4.20E-04	1.82E-04	1.98E-04	3.45E-04	3.45E-04
	Dieldrin	6	5.10E-04	2.30E-04	1.44E-04	3.48E-04	3.48E-04
	Endosulfan II	6	4.00E-05	3.00E-05	8.37E-06	3.69E-05	3.69E-05
	Endrin	6	3.50E-05	2.17E-05	1.33E-05	3.26E-05	3.26E-05
	Fe	6	4.09E+02	2.92E+02	7.93E+01	3.57E+02	3.57E+02
	Fluoranthene	6	6.10E-02	2.43E-02	1.85E-02	3.96E-02	3.96E-02
	Fluorene	6	6.20E-04	3.38E-04	1.96E-04	5.00E-04	5.00E-04
	g-Chlordane	6	2.90E-04	1.45E-04	7.92E-05	2.10E-04	2.10E-04
	Heptachlor	6	3.50E-05	2.33E-05	1.08E-05	3.22E-05	3.22E-05
	Hg	6	2.10E-02	1.55E-02	5.04E-03	1.96E-02	1.96E-02
	Indeno(1,2,3-cd)pyrene	6	3.20E-03	1.99E-03	8.04E-04	2.65E-03	2.65E-03
	MBT	6	2.94E-03	2.64E-03	2.15E-04	2.82E-03	2.82E-03
	Mn	6	5.37E+00	3.53E+00	1.13E+00	4.46E+00	4.46E+00
	Mo	6	4.69E-01	4.20E-01	4.25E-02	4.55E-01	4.55E-01
	Naphthalene	6	9.15E-04	4.48E-04	2.46E-04	6.50E-04	6.50E-04
	Ni	6	2.86E+00	1.33E+00	7.55E-01	1.96E+00	1.96E+00
	Pb	6	4.46E-01	3.74E-01	5.37E-02	4.18E-01	4.18E-01
	Phenanthrene	6	4.45E-03	2.43E-03	1.16E-03	3.39E-03	3.39E-03
	Pyrene	6	6.71E-02	2.77E-02	1.99E-02	4.41E-02	4.41E-02
	Sb	6	2.80E-02	2.02E-02	4.07E-03	2.35E-02	2.35E-02
	Se	6	8.24E-01	6.72E-01	1.46E-01	7.91E-01	7.91E-01
	TBT	6	9.97E-03	5.18E-03	2.50E-03	7.23E-03	7.23E-03
	Total Congeners	6	2.00E-02	1.28E-02	5.30E-03	1.71E-02	1.71E-02
	TTBT	6	6.70E-03	6.01E-03	4.93E-04	6.42E-03	6.42E-03
	V	6	1.43E+00	1.03E+00	2.70E-01	1.25E+00	1.25E+00
	Zn	6	2.00E+01	1.49E+01	3.33E+00	1.76E+01	1.76E+01

Table J-4a. Exposure Point Concentrations in *M. nasuta* from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
Oil Reclamation Area	2,4'-DDD	6	6.00E-05	3.43E-05	1.16E-05	4.39E-05	4.39E-05
	2,4'-DDE	6	7.00E-05	4.59E-05	1.02E-05	5.42E-05	5.42E-05
	2,4'-DDT	6	7.00E-05	4.11E-05	1.32E-05	5.20E-05	5.20E-05
	2-Methylnaphthalene	6	6.50E-04	2.09E-04	1.12E-04	3.01E-04	3.01E-04
	Acenaphthene	6	1.01E-03	2.37E-04	1.91E-04	3.94E-04	3.94E-04
	Acenaphthylene	6	9.00E-04	4.03E-04	2.15E-04	5.80E-04	5.80E-04
	a-Chlordane	6	2.69E-03	6.12E-04	5.16E-04	1.04E-03	1.04E-03
	Ag	6	4.10E-02	2.25E-02	1.01E-02	3.08E-02	3.08E-02
	Al	6	4.59E+02	2.54E+02	9.51E+01	3.32E+02	3.32E+02
	Anthracene	6	3.40E-03	1.60E-03	8.48E-04	2.30E-03	2.30E-03
	As	6	3.97E+00	3.24E+00	4.84E-01	3.64E+00	3.64E+00
	Ba	6	6.04E+00	2.62E+00	1.14E+00	3.56E+00	3.56E+00
	Benzo(a)anthracene	6	8.13E-03	4.55E-03	1.96E-03	6.16E-03	6.16E-03
	Benzo(a)pyrene	6	1.65E-02	6.75E-03	3.01E-03	9.23E-03	9.23E-03
	Benzo(b)fluoranthene	6	1.55E-02	7.81E-03	3.04E-03	1.03E-02	1.03E-02
	Benzo(g,h,i)perylene	6	9.65E-03	4.75E-03	1.86E-03	6.28E-03	6.28E-03
	Benzo(k)fluoranthene	6	1.65E-02	8.66E-03	3.28E-03	1.14E-02	1.14E-02
	Cd	6	8.40E-02	4.45E-02	1.50E-02	5.69E-02	5.69E-02
	Chrysene	6	1.66E-02	7.48E-03	3.74E-03	1.06E-02	1.06E-02
	Co	6	4.80E-01	3.25E-01	8.08E-02	3.91E-01	3.91E-01
	Cr	6	3.52E+00	1.74E+00	7.32E-01	2.34E+00	2.34E+00
	Cu	6	4.43E+00	3.20E+00	6.91E-01	3.76E+00	3.76E+00
	DBT	6	9.61E-03	2.68E-03	2.06E-03	4.37E-03	4.37E-03
	Dibenz(a,h)anthracene	6	9.40E-04	3.37E-04	2.19E-04	5.17E-04	5.17E-04
	Dieldrin	6	4.69E-03	9.40E-04	9.66E-04	1.73E-03	1.73E-03
	Endosulfan II	6	5.50E-05	3.35E-05	8.85E-06	4.08E-05	4.08E-05
	Endrin	6	4.50E-05	2.78E-05	9.98E-06	3.60E-05	3.60E-05
	Fe	6	6.28E+02	3.43E+02	1.08E+02	4.32E+02	4.32E+02
	Fluoranthene	6	5.39E-02	1.79E-02	1.30E-02	2.86E-02	2.86E-02
	Fluorene	6	6.50E-04	3.01E-04	1.67E-04	4.38E-04	4.38E-04
	g-Chlordane	6	3.74E-03	8.50E-04	7.35E-04	1.45E-03	1.45E-03
	Heptachlor	6	4.50E-05	2.72E-05	8.37E-06	3.41E-05	3.41E-05
	Hg	6	3.10E-02	2.15E-02	5.35E-03	2.59E-02	2.59E-02
	Indeno(1,2,3-cd)pyrene	6	7.30E-03	3.10E-03	1.56E-03	4.39E-03	4.39E-03
	MBT	6	3.94E-03	2.74E-03	4.46E-04	3.11E-03	3.11E-03
	Mn	6	6.72E+00	3.92E+00	1.25E+00	4.95E+00	4.95E+00
	Mo	6	5.63E-01	4.35E-01	6.64E-02	4.90E-01	4.90E-01
	Naphthalene	6	1.98E-03	5.44E-04	3.47E-04	8.30E-04	8.30E-04
	Ni	6	1.84E+00	1.21E+00	3.60E-01	1.51E+00	1.51E+00
	Pb	6	2.35E+00	1.15E+00	4.45E-01	1.52E+00	1.52E+00
	Phenanthrene	6	6.50E-03	2.55E-03	1.47E-03	3.76E-03	3.76E-03
	Pyrene	6	8.08E-02	2.27E-02	1.64E-02	3.62E-02	3.62E-02
	Sb	6	2.31E-01	4.41E-02	4.33E-02	7.98E-02	7.98E-02
	Se	6	9.33E-01	6.88E-01	1.60E-01	8.19E-01	8.19E-01
	TBT	6	3.41E-02	9.00E-03	8.07E-03	1.56E-02	1.56E-02
	Total Congeners	6	6.61E-01	2.67E-01	1.52E-01	3.93E-01	3.93E-01
	Total Dioxin	2	8.97E-04	6.56E-04	---	---	8.97E-04
	TTBT	6	8.97E-03	6.25E-03	1.02E-03	7.08E-03	7.08E-03
	V	6	1.84E+00	1.08E+00	3.47E-01	1.36E+00	1.36E+00
	Zn	6	2.40E+01	1.69E+01	4.03E+00	2.02E+01	2.02E+01

Table J-4a. Exposure Point Concentrations in *M. nasuta* from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
Point Avisadero Area	2,4'-DDD	16	5.50E-05	3.25E-05	1.25E-05	3.80E-05	3.80E-05
	2,4'-DDE	16	7.00E-05	4.41E-05	1.07E-05	4.87E-05	4.87E-05
	2,4'-DDT	16	6.50E-05	3.88E-05	1.40E-05	4.49E-05	4.49E-05
	2-Methylnaphthalene	16	2.35E-04	1.47E-04	4.04E-05	1.65E-04	1.65E-04
	Acenaphthene	16	4.90E-04	2.63E-04	8.36E-05	2.99E-04	2.99E-04
	Acenaphthylene	16	6.90E-04	4.57E-04	1.44E-04	5.20E-04	5.20E-04
	a-Chlordane	16	1.60E-04	1.07E-04	3.74E-05	1.23E-04	1.23E-04
	Ag	16	4.50E-02	1.75E-02	8.38E-03	2.12E-02	2.12E-02
	Al	16	4.48E+02	2.83E+02	7.45E+01	3.15E+02	3.15E+02
	Anthracene	16	5.02E-03	2.65E-03	1.22E-03	3.18E-03	3.18E-03
	As	16	3.89E+00	3.38E+00	3.44E-01	3.53E+00	3.53E+00
	Ba	16	4.87E+00	2.91E+00	9.37E-01	3.32E+00	3.32E+00
	Benzo(a)anthracene	16	9.81E-03	4.86E-03	2.20E-03	5.83E-03	5.83E-03
	Benzo(a)pyrene	16	7.10E-03	4.84E-03	1.34E-03	5.43E-03	5.43E-03
	Benzo(b)fluoranthene	16	7.07E-03	4.72E-03	1.31E-03	5.29E-03	5.29E-03
	Benzo(g,h,i)perylene	16	4.63E-03	2.73E-03	9.40E-04	3.14E-03	3.14E-03
	Benzo(k)fluoranthene	16	8.25E-03	5.57E-03	1.55E-03	6.25E-03	6.25E-03
	Cd	16	6.30E-02	4.58E-02	8.87E-03	4.96E-02	4.96E-02
	Chrysene	16	1.25E-02	6.67E-03	2.66E-03	7.84E-03	7.84E-03
	Co	16	4.87E-01	4.01E-01	5.39E-02	4.24E-01	4.24E-01
	Cr	16	5.28E+00	2.67E+00	1.43E+00	3.29E+00	3.29E+00
	Cu	16	3.21E+01	6.58E+00	7.78E+00	9.99E+00	9.99E+00
	DBT	16	2.00E-02	5.83E-03	5.36E-03	8.17E-03	8.17E-03
	Dibenz(a,h)anthracene	16	3.10E-04	1.78E-04	8.25E-05	2.14E-04	2.14E-04
	Dieldrin	16	3.00E-04	1.26E-04	7.21E-05	1.58E-04	1.58E-04
	Endosulfan II	16	5.00E-05	3.22E-05	8.56E-06	3.59E-05	3.59E-05
	Endrin	16	4.50E-05	2.59E-05	1.08E-05	3.07E-05	3.07E-05
	Fe	16	6.33E+02	4.35E+02	1.14E+02	4.85E+02	4.85E+02
	Fluoranthene	16	3.08E-02	1.74E-02	6.48E-03	2.02E-02	2.02E-02
	Fluorene	16	7.00E-04	3.89E-04	1.41E-04	4.50E-04	4.50E-04
	g-Chlordane	16	1.90E-04	1.08E-04	5.25E-05	1.30E-04	1.30E-04
	Heptachlor	16	4.50E-05	2.63E-05	9.40E-06	3.04E-05	3.04E-05
	Hg	16	6.63E-01	8.71E-02	1.66E-01	1.60E-01	1.60E-01
	Indeno(1,2,3-cd)pyrene	16	3.66E-03	1.71E-03	8.34E-04	2.07E-03	2.07E-03
	MBT	16	5.49E-03	2.61E-03	8.72E-04	2.99E-03	2.99E-03
	Mn	16	1.00E+01	6.52E+00	2.24E+00	7.50E+00	7.50E+00
	Mo	16	5.48E-01	4.29E-01	5.91E-02	4.55E-01	4.55E-01
	Naphthalene	16	6.25E-04	4.03E-04	1.18E-04	4.54E-04	4.54E-04
	Ni	16	2.25E+00	1.38E+00	3.26E-01	1.53E+00	1.53E+00
	Pb	16	9.26E-01	4.74E-01	1.65E-01	5.46E-01	5.46E-01
	Phenanthrene	16	5.87E-03	2.74E-03	1.22E-03	3.28E-03	3.28E-03
	Pyrene	16	3.81E-02	2.09E-02	8.37E-03	2.45E-02	2.45E-02
	Sb	16	3.80E-02	2.35E-02	5.70E-03	2.60E-02	2.60E-02
	Se	16	9.22E-01	6.48E-01	1.46E-01	7.12E-01	7.12E-01
	TBT	16	2.09E-01	5.59E-02	5.64E-02	8.07E-02	8.07E-02
	Total Congeners	16	6.59E-02	1.92E-02	1.57E-02	2.60E-02	2.60E-02
	TTBT	16	1.25E-02	6.22E-03	1.73E-03	6.98E-03	6.98E-03
	V	16	1.95E+00	1.39E+00	3.46E-01	1.54E+00	1.54E+00
	Zn	16	2.12E+01	1.69E+01	2.50E+00	1.80E+01	1.80E+01

Table J-4a. Exposure Point Concentrations in *M. nasuta* from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
South Basin Area X	2,4'-DDD	23	6.00E-05	3.43E-05	1.16E-05	3.85E-05	3.85E-05
	2,4'-DDE	23	7.00E-05	4.59E-05	1.02E-05	4.95E-05	4.95E-05
	2,4'-DDT	23	7.00E-05	4.11E-05	1.32E-05	4.58E-05	4.58E-05
	2-Methylnaphthalene	23	6.50E-04	2.09E-04	1.12E-04	2.49E-04	2.49E-04
	Acenaphthene	23	1.01E-03	2.37E-04	1.91E-04	3.06E-04	3.06E-04
	Acenaphthylene	23	9.00E-04	4.03E-04	2.15E-04	4.80E-04	4.80E-04
	a-Chlordane	23	2.69E-03	6.12E-04	5.16E-04	7.96E-04	7.96E-04
	Ag	23	4.10E-02	2.25E-02	1.01E-02	2.61E-02	2.61E-02
	Al	23	4.59E+02	2.54E+02	9.51E+01	2.88E+02	2.88E+02
	Anthracene	23	3.40E-03	1.60E-03	8.48E-04	1.91E-03	1.91E-03
	As	23	3.97E+00	3.24E+00	4.84E-01	3.42E+00	3.42E+00
	Ba	23	6.04E+00	2.62E+00	1.14E+00	3.03E+00	3.03E+00
	Benzo(a)anthracene	23	8.13E-03	4.55E-03	1.96E-03	5.25E-03	5.25E-03
	Benzo(a)pyrene	23	1.65E-02	6.75E-03	3.01E-03	7.83E-03	7.83E-03
	Benzo(b)fluoranthene	23	1.55E-02	7.81E-03	3.04E-03	8.90E-03	8.90E-03
	Benzo(g,h,i)perylene	23	9.65E-03	4.75E-03	1.86E-03	5.42E-03	5.42E-03
	Benzo(k)fluoranthene	23	1.65E-02	8.66E-03	3.28E-03	9.83E-03	9.83E-03
	Cd	23	8.40E-02	4.45E-02	1.50E-02	4.99E-02	4.99E-02
	Chrysene	23	1.66E-02	7.48E-03	3.74E-03	8.82E-03	8.82E-03
	Co	23	4.80E-01	3.25E-01	8.08E-02	3.54E-01	3.54E-01
	Cr	23	3.52E+00	1.74E+00	7.32E-01	2.00E+00	2.00E+00
	Cu	23	4.43E+00	3.20E+00	6.91E-01	3.44E+00	3.44E+00
	DBT	23	9.61E-03	2.68E-03	2.06E-03	3.42E-03	3.42E-03
	Dibenz(a,h)anthracene	23	9.40E-04	3.37E-04	2.19E-04	4.15E-04	4.15E-04
	Dieldrin	23	4.69E-03	9.40E-04	9.66E-04	1.29E-03	1.29E-03
	Endosulfan II	23	5.50E-05	3.35E-05	8.85E-06	3.66E-05	3.66E-05
	Endrin	23	4.50E-05	2.78E-05	9.98E-06	3.14E-05	3.14E-05
	Fe	23	6.28E+02	3.43E+02	1.08E+02	3.82E+02	3.82E+02
	Fluoranthene	23	5.39E-02	1.79E-02	1.30E-02	2.26E-02	2.26E-02
	Fluorene	23	6.50E-04	3.01E-04	1.67E-04	3.61E-04	3.61E-04
	g-Chlordane	23	3.74E-03	8.50E-04	7.35E-04	1.11E-03	1.11E-03
	Heptachlor	23	4.50E-05	2.72E-05	8.37E-06	3.02E-05	3.02E-05
	Hg	23	3.10E-02	2.15E-02	5.35E-03	2.34E-02	2.34E-02
	Indeno(1,2,3-cd)pyrene	23	7.30E-03	3.10E-03	1.56E-03	3.66E-03	3.66E-03
	MBT	23	3.94E-03	2.74E-03	4.46E-04	2.90E-03	2.90E-03
	Mn	23	6.72E+00	3.92E+00	1.25E+00	4.37E+00	4.37E+00
	Mo	23	5.63E-01	4.35E-01	6.64E-02	4.59E-01	4.59E-01
	Naphthalene	23	1.98E-03	5.44E-04	3.47E-04	6.69E-04	6.69E-04
	Ni	23	1.84E+00	1.21E+00	3.60E-01	1.34E+00	1.34E+00
	Pb	23	2.35E+00	1.15E+00	4.45E-01	1.31E+00	1.31E+00
	Phenanthrene	23	6.50E-03	2.55E-03	1.47E-03	3.08E-03	3.08E-03
	Pyrene	23	8.08E-02	2.27E-02	1.64E-02	2.86E-02	2.86E-02
	Sb	23	2.31E-01	4.41E-02	4.33E-02	5.96E-02	5.96E-02
	Se	23	9.33E-01	6.88E-01	1.60E-01	7.45E-01	7.45E-01
	TBT	23	3.41E-02	9.00E-03	8.07E-03	1.19E-02	1.19E-02
	Total Congeners	23	6.61E-01	2.67E-01	1.52E-01	3.22E-01	3.22E-01
	Total Dioxin	2	1.04E-03	7.72E-04	---	---	1.04E-03
	TTBT	23	8.97E-03	6.25E-03	1.02E-03	6.61E-03	6.61E-03
	V	23	1.84E+00	1.08E+00	3.47E-01	1.20E+00	1.20E+00
	Zn	23	2.40E+01	1.69E+01	4.03E+00	1.84E+01	1.84E+01

Note: all concentrations are presented on wet weight basis

*: Expsoure Point Concentration is the lower value between the maximum concentration and 95% UCL of the mean.

Table J-4b. Exposure Point Concentrations in Surface Sediment from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
Eastern Wetland Area	a-Chlordane	8	1.50E-04	6.69E-05	5.91E-05	1.06E-04	1.06E-04
	g-Chlordane	8	5.00E-05	3.19E-05	1.13E-05	3.95E-05	3.95E-05
	DBT	8	5.36E-03	2.14E-03	2.13E-03	3.56E-03	3.56E-03
	Dieldrin	8	6.00E-05	4.06E-05	1.37E-05	4.98E-05	4.98E-05
	Endosulfan II	8	6.00E-05	4.06E-05	1.37E-05	4.98E-05	4.98E-05
	Endrin	8	5.50E-05	3.81E-05	1.16E-05	4.59E-05	4.59E-05
	Heptachlor	8	5.00E-05	3.38E-05	1.13E-05	4.13E-05	4.13E-05
	Total Congeners	8	2.70E-02	1.36E-02	6.53E-03	1.80E-02	1.80E-02
	2,4'-DDD	8	6.50E-05	4.50E-05	1.41E-05	5.45E-05	5.45E-05
	2,4'-DDE	8	8.00E-05	5.44E-05	1.88E-05	6.70E-05	6.70E-05
	2,4'-DDT	8	7.50E-05	5.25E-05	1.63E-05	6.34E-05	6.34E-05
	2-Methylnaphthalene	8	6.39E-03	3.59E-03	1.94E-03	4.89E-03	4.89E-03
	4,4'-DDD	8	1.03E-03	4.61E-04	4.09E-04	7.35E-04	7.35E-04
	4,4'-DDE	8	1.19E-03	5.89E-04	4.24E-04	8.73E-04	8.73E-04
	4,4'-DDT	8	5.30E-04	1.40E-04	1.87E-04	2.65E-04	2.65E-04
	Acenaphthene	8	6.24E-03	2.77E-03	2.41E-03	4.38E-03	4.38E-03
	Acenaphthylene	8	8.54E-03	4.57E-03	3.00E-03	6.57E-03	6.57E-03
	Ag	8	3.97E-01	1.87E-01	1.39E-01	2.80E-01	2.80E-01
	Al	8	7.49E+04	5.51E+04	1.34E+04	6.40E+04	6.40E+04
	Anthracene	8	4.32E-02	2.05E-02	1.70E-02	3.19E-02	3.19E-02
	As	8	1.11E+01	8.12E+00	2.34E+00	9.69E+00	9.69E+00
	Ba	8	4.58E+02	3.92E+02	4.91E+01	4.24E+02	4.24E+02
	Benzo(a)anthracene	8	1.28E-01	6.12E-02	4.79E-02	9.33E-02	9.33E-02
	Benzo(a)pyrene	8	1.97E-01	9.64E-02	6.99E-02	1.43E-01	1.43E-01
	Benzo(b)fluoranthene	8	1.18E-01	5.90E-02	4.38E-02	8.84E-02	8.84E-02
	Benzo(g,h,i)perylene	8	1.66E-01	8.35E-02	6.09E-02	1.24E-01	1.24E-01
	Benzo(k)fluoranthene	8	1.29E-01	6.30E-02	4.49E-02	9.31E-02	9.31E-02
	Cd	8	2.71E-01	2.34E-01	3.75E-02	2.59E-01	2.59E-01
	Chrysene	8	1.56E-01	7.47E-02	5.69E-02	1.13E-01	1.13E-01
	Co	8	1.88E+01	1.55E+01	2.81E+00	1.74E+01	1.74E+01
	Cr	8	4.00E+02	2.36E+02	8.15E+01	2.90E+02	2.90E+02
	Cu	8	5.28E+01	3.11E+01	1.50E+01	4.11E+01	4.11E+01
	Dibenz(a,h)anthracene	8	1.56E-02	8.09E-03	6.08E-03	1.22E-02	1.22E-02
	Fe	8	4.65E+04	3.34E+04	8.96E+03	3.94E+04	3.94E+04
	Fluoranthene	8	2.76E-01	1.35E-01	9.44E-02	1.99E-01	1.99E-01
	Fluorene	8	8.61E-03	4.32E-03	3.03E-03	6.36E-03	6.36E-03
	Hg	8	2.86E-01	1.61E-01	8.62E-02	2.18E-01	2.18E-01
	Indeno(1,2,3-cd)pyrene	8	1.50E-01	7.45E-02	5.59E-02	1.12E-01	1.12E-01
	MBT	8	6.47E-04	4.33E-04	1.45E-04	5.30E-04	5.30E-04
	Mn	8	5.79E+02	4.95E+02	5.95E+01	5.34E+02	5.34E+02
	Mo	8	1.17E+00	7.38E-01	3.12E-01	9.47E-01	9.47E-01
	Naphthalene	8	1.60E-02	8.53E-03	4.84E-03	1.18E-02	1.18E-02
	Ni	8	9.75E+01	7.41E+01	1.63E+01	8.50E+01	8.50E+01
	Pb	8	2.98E+01	2.14E+01	4.96E+00	2.47E+01	2.47E+01
	Phenanthrene	8	1.33E-01	5.77E-02	4.61E-02	8.86E-02	8.86E-02
	Pyrene	8	3.59E-01	1.79E-01	1.25E-01	2.62E-01	2.62E-01
	Sb	8	3.64E+00	1.21E+00	1.01E+00	1.89E+00	1.89E+00
	Se	8	4.71E-01	1.87E-01	1.77E-01	3.06E-01	3.06E-01
	TBT	8	6.82E-03	2.48E-03	2.88E-03	4.41E-03	4.41E-03
	TTBT	8	1.53E-03	1.03E-03	3.44E-04	1.26E-03	1.26E-03
	V	8	1.62E+02	1.15E+02	3.53E+01	1.38E+02	1.38E+02
	Zn	8	1.27E+02	9.05E+01	2.69E+01	1.09E+02	1.09E+02

Table J-4b. Exposure Point Concentrations in Surface Sediment from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
India Basin Area I	a-Chlordane	6	5.00E-04	1.82E-04	1.72E-04	3.23E-04	3.23E-04
	g-Chlordane	6	1.40E-04	5.83E-05	4.01E-05	9.13E-05	9.13E-05
	DBT	6	1.09E-02	2.69E-03	4.00E-03	5.98E-03	5.98E-03
	Dieldrin	6	5.50E-05	5.33E-05	2.58E-06	5.55E-05	5.50E-05
	Endosulfan II	6	5.50E-05	5.33E-05	2.58E-06	5.55E-05	5.50E-05
	Endrin	6	5.00E-05	4.83E-05	2.58E-06	5.05E-05	5.00E-05
	Heptachlor	6	4.50E-05	4.50E-05	0.00E+00	4.50E-05	4.50E-05
	Total Congeners	6	7.11E-02	2.48E-02	2.71E-02	4.70E-02	4.70E-02
	2,4'-DDD	6	6.00E-05	5.83E-05	2.58E-06	6.05E-05	6.00E-05
	2,4'-DDE	6	7.50E-05	7.33E-05	2.58E-06	7.55E-05	7.50E-05
	2,4'-DDT	6	7.00E-05	6.83E-05	2.58E-06	7.05E-05	7.00E-05
	2-Methylnaphthalene	6	1.30E-02	8.00E-03	2.67E-03	1.02E-02	1.02E-02
	4,4'-DDD	6	1.92E-03	1.19E-03	4.44E-04	1.55E-03	1.55E-03
	4,4'-DDE	6	1.84E-03	1.27E-03	3.29E-04	1.54E-03	1.54E-03
	4,4'-DDT	6	8.30E-04	4.72E-04	2.91E-04	7.11E-04	7.11E-04
	Acenaphthene	6	1.18E-02	7.68E-03	2.47E-03	9.72E-03	9.72E-03
	Acenaphthylene	6	1.32E-02	1.03E-02	2.29E-03	1.22E-02	1.22E-02
	Ag	6	3.21E-01	2.79E-01	2.54E-02	3.00E-01	3.00E-01
	Al	6	7.25E+04	6.92E+04	3.51E+03	7.21E+04	7.21E+04
	Anthracene	6	2.28E-01	7.79E-02	7.41E-02	1.39E-01	1.39E-01
	As	6	1.14E+01	1.05E+01	5.82E-01	1.10E+01	1.10E+01
	Ba	6	5.33E+02	4.69E+02	3.28E+01	4.96E+02	4.96E+02
	Benzo(a)anthracene	6	2.36E-01	1.34E-01	5.34E-02	1.78E-01	1.78E-01
	Benzo(a)pyrene	6	2.99E-01	2.04E-01	4.99E-02	2.45E-01	2.45E-01
	Benzo(b)fluoranthene	6	2.65E-01	1.52E-01	5.77E-02	1.99E-01	1.99E-01
	Benzo(g,h,i)perylene	6	2.21E-01	1.70E-01	2.79E-02	1.93E-01	1.93E-01
	Benzo(k)fluoranthene	6	2.55E-01	1.44E-01	5.68E-02	1.91E-01	1.91E-01
	Cd	6	2.64E-01	2.25E-01	2.45E-02	2.45E-01	2.45E-01
	Chrysene	6	3.75E-01	1.87E-01	9.62E-02	2.66E-01	2.66E-01
	Co	6	2.14E+01	1.68E+01	2.32E+00	1.87E+01	1.87E+01
	Cr	6	3.19E+02	2.06E+02	7.08E+01	2.64E+02	2.64E+02
	Cu	6	1.17E+02	5.89E+01	3.00E+01	8.35E+01	8.35E+01
	Dibenz(a,h)anthracene	6	4.28E-02	2.41E-02	1.04E-02	3.27E-02	3.27E-02
	Fe	6	4.37E+04	4.18E+04	1.36E+03	4.29E+04	4.29E+04
	Fluoranthene	6	4.19E-01	2.72E-01	7.57E-02	3.34E-01	3.34E-01
	Fluorene	6	3.27E-02	1.46E-02	9.12E-03	2.20E-02	2.20E-02
	Hg	6	4.07E-01	3.12E-01	6.10E-02	3.62E-01	3.62E-01
	Indeno(1,2,3-cd)pyrene	6	2.24E-01	1.60E-01	3.34E-02	1.88E-01	1.88E-01
	MBT	6	5.89E-04	5.63E-04	2.31E-05	5.82E-04	5.82E-04
	Mn	6	4.50E+02	4.28E+02	1.45E+01	4.40E+02	4.40E+02
	Mo	6	1.63E+00	1.03E+00	3.23E-01	1.29E+00	1.29E+00
	Naphthalene	6	1.93E-02	1.42E-02	2.75E-03	1.65E-02	1.65E-02
	Ni	6	2.32E+02	1.26E+02	6.17E+01	1.77E+02	1.77E+02
	Pb	6	1.26E+02	4.11E+01	4.17E+01	7.54E+01	7.54E+01
	Phenanthrene	6	1.67E-01	1.11E-01	3.18E-02	1.37E-01	1.37E-01
	Pyrene	6	4.37E-01	3.32E-01	5.57E-02	3.78E-01	3.78E-01
	Sb	6	1.24E+00	9.09E-01	2.11E-01	1.08E+00	1.08E+00
	Se	6	4.30E-01	3.37E-01	6.10E-02	3.87E-01	3.87E-01
	TBT	6	1.77E-02	3.58E-03	6.93E-03	9.28E-03	9.28E-03
	TTBT	6	1.40E-03	1.33E-03	5.46E-05	1.38E-03	1.38E-03
	V	6	1.41E+02	1.36E+02	7.68E+00	1.42E+02	1.41E+02
	Zn	6	1.36E+02	1.22E+02	9.31E+00	1.30E+02	1.30E+02

Table J-4b. Exposure Point Concentrations in Surface Sediment from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
Oil Reclamation Area	a-Chlordane	6	4.10E-04	2.70E-04	1.11E-04	3.62E-04	3.62E-04
	g-Chlordane	6	4.20E-04	2.33E-04	1.76E-04	3.77E-04	3.77E-04
	DBT	6	2.08E-02	1.03E-02	6.99E-03	1.61E-02	1.61E-02
	Dieldrin	6	4.40E-04	1.15E-04	1.59E-04	2.46E-04	2.46E-04
	Endosulfan II	6	6.00E-05	5.17E-05	7.53E-06	5.79E-05	5.79E-05
	Endrin	6	5.00E-05	4.42E-05	5.85E-06	4.90E-05	4.90E-05
	Heptachlor	6	5.00E-05	4.25E-05	6.12E-06	4.75E-05	4.75E-05
	Total Congeners	6	2.13E-01	1.24E-01	6.53E-02	1.78E-01	1.78E-01
	2,4'-DDD	6	6.00E-05	5.42E-05	7.36E-06	6.02E-05	6.00E-05
	2,4'-DDE	6	8.00E-05	6.83E-05	9.31E-06	7.60E-05	7.60E-05
	2,4'-DDT	6	7.50E-05	6.42E-05	9.70E-06	7.21E-05	7.21E-05
	2-Methylnaphthalene	6	9.85E-03	7.32E-03	1.62E-03	8.65E-03	8.65E-03
	4,4'-DDD	6	3.08E-03	1.89E-03	9.43E-04	2.66E-03	2.66E-03
	4,4'-DDE	6	1.50E-03	9.82E-04	4.00E-04	1.31E-03	1.31E-03
	4,4'-DDT	6	7.80E-04	3.94E-04	3.15E-04	6.53E-04	6.53E-04
	Acenaphthene	6	7.62E-03	4.06E-03	2.07E-03	5.76E-03	5.76E-03
	Acenaphthylene	6	1.02E-02	7.28E-03	2.18E-03	9.07E-03	9.07E-03
	Ag	6	4.35E-01	3.25E-01	1.25E-01	4.28E-01	4.28E-01
	Al	6	7.30E+04	6.48E+04	8.40E+03	7.17E+04	7.17E+04
	Anthracene	6	6.09E-02	2.81E-02	1.73E-02	4.24E-02	4.24E-02
	As	6	1.36E+01	1.13E+01	1.65E+00	1.27E+01	1.27E+01
	Ba	6	4.58E+02	3.92E+02	5.99E+01	4.42E+02	4.42E+02
	Benzo(a)anthracene	6	1.51E-01	9.10E-02	3.55E-02	1.20E-01	1.20E-01
	Benzo(a)pyrene	6	2.04E-01	1.58E-01	4.63E-02	1.96E-01	1.96E-01
	Benzo(b)fluoranthene	6	1.49E-01	1.07E-01	3.33E-02	1.34E-01	1.34E-01
	Benzo(g,h,i)perylene	6	1.93E-01	1.50E-01	3.73E-02	1.80E-01	1.80E-01
	Benzo(k)fluoranthene	6	1.69E-01	1.12E-01	3.45E-02	1.41E-01	1.41E-01
	Cd	6	3.99E-01	3.34E-01	6.49E-02	3.87E-01	3.87E-01
	Chrysene	6	2.62E-01	1.39E-01	6.74E-02	1.95E-01	1.95E-01
	Co	6	2.26E+01	1.93E+01	1.80E+00	2.08E+01	2.08E+01
	Cr	6	4.64E+02	3.20E+02	1.33E+02	4.29E+02	4.29E+02
	Cu	6	9.75E+01	6.94E+01	1.81E+01	8.43E+01	8.43E+01
	Dibenz(a,h)anthracene	6	2.48E-02	1.61E-02	5.95E-03	2.10E-02	2.10E-02
	Fe	6	4.87E+04	4.49E+04	2.88E+03	4.73E+04	4.73E+04
	Fluoranthene	6	2.91E-01	1.89E-01	6.14E-02	2.39E-01	2.39E-01
	Fluorene	6	1.13E-02	6.65E-03	2.77E-03	8.93E-03	8.93E-03
	Hg	6	6.02E-01	4.32E-01	1.05E-01	5.18E-01	5.18E-01
	Indeno(1,2,3-cd)pyrene	6	1.81E-01	1.30E-01	4.04E-02	1.63E-01	1.63E-01
	MBT	6	2.69E-03	9.03E-04	8.78E-04	1.63E-03	1.63E-03
	Mn	6	6.24E+02	4.95E+02	9.27E+01	5.71E+02	5.71E+02
	Mo	6	1.71E+00	1.35E+00	3.43E-01	1.63E+00	1.63E+00
	Naphthalene	6	1.59E-02	1.34E-02	2.28E-03	1.52E-02	1.52E-02
	Ni	6	1.60E+02	1.15E+02	2.41E+01	1.35E+02	1.35E+02
	Pb	6	6.01E+01	4.05E+01	1.70E+01	5.45E+01	5.45E+01
	Phenanthrene	6	1.35E-01	7.54E-02	3.30E-02	1.03E-01	1.03E-01
	Pyrene	6	3.28E-01	2.41E-01	7.11E-02	2.99E-01	2.99E-01
	Sb	6	3.17E+00	2.02E+00	9.06E-01	2.76E+00	2.76E+00
	Se	6	4.06E-01	3.21E-01	6.95E-02	3.78E-01	3.78E-01
	TBT	6	6.59E-02	2.16E-02	2.33E-02	4.07E-02	4.07E-02
	TTBT	6	1.50E-03	1.26E-03	2.12E-04	1.44E-03	1.44E-03
	V	6	1.71E+02	1.52E+02	1.41E+01	1.63E+02	1.63E+02
	Zn	6	1.79E+02	1.43E+02	2.37E+01	1.62E+02	1.62E+02

Table J-4b. Exposure Point Concentrations in Surface Sediment from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
Point Avisadero Area	a-Chlordane	20	3.70E-04	1.09E-04	8.91E-05	1.43E-04	1.43E-04
	g-Chlordane	20	4.50E-05	3.80E-05	3.40E-06	3.93E-05	3.93E-05
	DBT	19	5.74E-02	1.70E-02	1.67E-02	2.36E-02	2.36E-02
	Dieldrin	20	5.50E-05	4.73E-05	4.13E-06	4.88E-05	4.88E-05
	Endosulfan II	20	6.00E-05	4.88E-05	4.55E-06	5.05E-05	5.05E-05
	Endrin	20	5.00E-05	4.30E-05	3.40E-06	4.43E-05	4.43E-05
	Heptachlor	20	5.00E-05	4.00E-05	4.29E-06	4.17E-05	4.17E-05
	Total Congeners	19	1.23E+00	1.69E-01	3.02E-01	2.89E-01	2.89E-01
	2,4'-DDD	20	8.40E-04	9.15E-05	1.76E-04	1.60E-04	1.60E-04
	2,4'-DDE	20	8.00E-05	6.55E-05	5.83E-06	6.78E-05	6.78E-05
	2,4'-DDT	20	7.50E-05	6.13E-05	5.59E-06	6.34E-05	6.34E-05
	2-Methylnaphthalene	19	2.04E-02	1.02E-02	4.83E-03	1.21E-02	1.21E-02
	4,4'-DDD	20	1.74E-03	1.11E-03	3.61E-04	1.25E-03	1.25E-03
	4,4'-DDE	20	1.54E-03	1.04E-03	3.46E-04	1.17E-03	1.17E-03
	4,4'-DDT	20	8.40E-04	2.48E-04	2.38E-04	3.40E-04	3.40E-04
	Acenaphthene	19	1.82E-01	2.95E-02	3.90E-02	4.50E-02	4.50E-02
	Acenaphthylene	19	5.81E-02	2.23E-02	1.53E-02	2.84E-02	2.84E-02
	Ag	19	4.34E-01	2.74E-01	5.36E-02	2.95E-01	2.95E-01
	Al	19	7.20E+04	6.69E+04	3.89E+03	6.84E+04	6.84E+04
	Anthracene	19	4.89E-01	1.32E-01	1.05E-01	1.74E-01	1.74E-01
	As	19	1.82E+01	1.17E+01	1.89E+00	1.25E+01	1.25E+01
	Ba	19	5.68E+02	4.63E+02	3.69E+01	4.78E+02	4.78E+02
	Benzo(a)anthracene	19	6.01E-01	3.00E-01	1.60E-01	3.63E-01	3.63E-01
	Benzo(a)pyrene	19	7.54E-01	4.03E-01	2.00E-01	4.82E-01	4.82E-01
	Benzo(b)fluoranthene	19	5.50E-01	2.73E-01	1.34E-01	3.26E-01	3.26E-01
	Benzo(g,h,i)perylene	19	5.52E-01	3.01E-01	1.42E-01	3.57E-01	3.57E-01
	Benzo(k)fluoranthene	19	5.46E-01	2.75E-01	1.35E-01	3.28E-01	3.28E-01
	Cd	19	7.60E-01	2.76E-01	1.26E-01	3.26E-01	3.26E-01
	Chrysene	19	7.15E-01	3.51E-01	1.83E-01	4.23E-01	4.23E-01
	Co	19	2.16E+01	1.74E+01	1.65E+00	1.81E+01	1.81E+01
	Cr	19	3.91E+02	2.26E+02	7.40E+01	2.56E+02	2.56E+02
	Cu	19	1.05E+03	1.72E+02	2.53E+02	2.72E+02	2.72E+02
	Dibenz(a,h)anthracene	19	9.48E-02	4.71E-02	2.54E-02	5.71E-02	5.71E-02
	Fe	19	4.65E+04	4.12E+04	1.86E+03	4.19E+04	4.19E+04
	Fluoranthene	19	1.21E+00	6.27E-01	3.10E-01	7.50E-01	7.50E-01
	Fluorene	19	9.24E-02	3.09E-02	2.24E-02	3.98E-02	3.98E-02
	Hg	19	7.47E+00	9.04E-01	1.63E+00	1.55E+00	1.55E+00
	Indeno(1,2,3-cd)pyrene	19	5.36E-01	2.96E-01	1.42E-01	3.52E-01	3.52E-01
	MBT	19	5.87E-04	4.97E-04	4.06E-05	5.14E-04	5.14E-04
	Mn	19	6.15E+02	4.99E+02	4.61E+01	5.17E+02	5.17E+02
	Mo	19	1.47E+00	9.50E-01	1.99E-01	1.03E+00	1.03E+00
	Naphthalene	19	4.57E-02	2.11E-02	1.01E-02	2.51E-02	2.51E-02
	Ni	19	2.50E+02	1.09E+02	4.92E+01	1.29E+02	1.29E+02
	Pb	19	2.75E+02	4.38E+01	5.97E+01	6.75E+01	6.75E+01
	Phenanthrene	19	7.63E-01	3.25E-01	2.15E-01	4.11E-01	4.11E-01
	Pyrene	19	1.47E+00	7.39E-01	3.79E-01	8.90E-01	8.90E-01
	Sb	19	1.68E+01	1.77E+00	3.66E+00	3.23E+00	3.23E+00
	Se	19	8.55E-01	3.70E-01	1.39E-01	4.25E-01	4.25E-01
	TBT	19	2.08E-01	5.78E-02	6.06E-02	8.18E-02	8.18E-02
	TTBT	19	1.39E-03	1.18E-03	9.63E-05	1.22E-03	1.22E-03
	V	19	1.57E+02	1.33E+02	1.15E+01	1.38E+02	1.38E+02
	Zn	19	3.22E+02	1.25E+02	5.45E+01	1.47E+02	1.47E+02

Table J-4b. Exposure Point Concentrations in Surface Sediment from HPS Stations

Area	Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC* (mg/kg)
South Basin Area X	a-Chlordane	24	5.47E-03	1.40E-03	1.43E-03	1.90E-03	1.90E-03
	g-Chlordane	24	1.05E-02	2.21E-03	2.49E-03	3.08E-03	3.08E-03
	DBT	23	5.12E-02	1.63E-02	1.14E-02	2.04E-02	2.04E-02
	Dieldrin	24	1.04E-02	1.59E-03	2.23E-03	2.37E-03	2.37E-03
	Endosulfan II	24	7.00E-04	7.75E-05	1.33E-04	1.24E-04	1.24E-04
	Endrin	24	6.00E-04	6.79E-05	1.14E-04	1.08E-04	1.08E-04
	Heptachlor	24	2.13E-03	1.52E-04	4.37E-04	3.04E-04	3.04E-04
	Total Congeners	23	2.59E+00	5.98E-01	6.24E-01	8.21E-01	8.21E-01
	2,4'-DDD	24	7.00E-04	8.15E-05	1.32E-04	1.28E-04	1.28E-04
	2,4'-DDE	24	9.00E-04	1.02E-04	1.70E-04	1.62E-04	1.62E-04
	2,4'-DDT	24	9.00E-04	9.81E-05	1.71E-04	1.58E-04	1.58E-04
	2-Methylnaphthalene	23	4.90E-02	1.82E-02	9.28E-03	2.15E-02	2.15E-02
	4,4'-DDD	24	4.36E-02	7.90E-03	1.08E-02	1.17E-02	1.17E-02
	4,4'-DDE	24	1.84E-02	5.47E-03	4.21E-03	6.94E-03	6.94E-03
	4,4'-DDT	24	3.60E-03	9.68E-04	8.56E-04	1.27E-03	1.27E-03
	Acenaphthene	23	2.13E-02	7.59E-03	4.22E-03	9.10E-03	9.10E-03
	Acenaphthylene	23	4.37E-02	1.19E-02	8.80E-03	1.51E-02	1.51E-02
	Ag	23	7.09E-01	4.83E-01	1.58E-01	5.39E-01	5.39E-01
	Al	23	7.41E+04	6.44E+04	1.04E+04	6.82E+04	6.82E+04
	Anthracene	23	2.34E-01	5.18E-02	5.43E-02	7.12E-02	7.12E-02
	As	23	1.43E+01	1.07E+01	1.96E+00	1.14E+01	1.14E+01
	Ba	23	8.93E+02	5.12E+02	1.20E+02	5.55E+02	5.55E+02
	Benzo(a)anthracene	23	6.29E-01	1.81E-01	1.33E-01	2.28E-01	2.28E-01
	Benzo(a)pyrene	23	6.32E-01	2.69E-01	1.25E-01	3.14E-01	3.14E-01
	Benzo(b)fluoranthene	23	4.84E-01	2.01E-01	9.95E-02	2.36E-01	2.36E-01
	Benzo(g,h,i)perylene	23	3.84E-01	2.39E-01	8.26E-02	2.69E-01	2.69E-01
	Benzo(k)fluoranthene	23	5.00E-01	2.07E-01	1.04E-01	2.44E-01	2.44E-01
	Cd	23	8.45E-01	4.55E-01	1.69E-01	5.15E-01	5.15E-01
	Chrysene	23	7.44E-01	2.45E-01	1.66E-01	3.04E-01	3.04E-01
	Co	23	2.19E+01	1.69E+01	2.97E+00	1.80E+01	1.80E+01
	Cr	23	4.51E+02	2.28E+02	6.35E+01	2.51E+02	2.51E+02
	Cu	23	3.19E+02	1.21E+02	7.39E+01	1.48E+02	1.48E+02
	Dibenz(a,h)anthracene	23	1.04E-01	3.62E-02	2.21E-02	4.41E-02	4.41E-02
	Fe	23	4.78E+04	4.02E+04	8.96E+03	4.34E+04	4.34E+04
	Fluoranthene	23	9.53E-01	3.25E-01	1.92E-01	3.94E-01	3.94E-01
	Fluorene	23	8.15E-02	1.47E-02	1.71E-02	2.08E-02	2.08E-02
	Hg	23	1.47E+00	7.07E-01	3.20E-01	8.21E-01	8.21E-01
	Indeno(1,2,3-cd)pyrene	23	4.13E-01	2.17E-01	8.43E-02	2.47E-01	2.47E-01
	MBT	23	3.30E-03	7.46E-04	6.61E-04	9.83E-04	9.83E-04
	Mn	23	5.80E+02	4.32E+02	6.08E+01	4.53E+02	4.53E+02
	Mo	23	1.83E+00	1.14E+00	2.56E-01	1.23E+00	1.23E+00
	Naphthalene	23	5.87E-02	2.97E-02	1.35E-02	3.45E-02	3.45E-02
	Ni	23	1.99E+02	1.13E+02	2.86E+01	1.24E+02	1.24E+02
	Pb	23	1.42E+02	8.52E+01	3.56E+01	9.80E+01	9.80E+01
	Phenanthrene	23	6.68E-01	1.49E-01	1.42E-01	2.00E-01	2.00E-01
	Pyrene	23	1.06E+00	3.90E-01	2.05E-01	4.63E-01	4.63E-01
	Sb	23	1.06E+01	3.16E+00	2.52E+00	4.06E+00	4.06E+00
	Se	23	4.57E-01	3.22E-01	1.02E-01	3.59E-01	3.59E-01
	TBT	23	1.29E-01	2.38E-02	2.71E-02	3.36E-02	3.36E-02
	TTBT	23	1.55E-03	1.23E-03	2.58E-04	1.32E-03	1.32E-03
	V	23	1.72E+02	1.32E+02	2.81E+01	1.42E+02	1.42E+02
	Zn	23	2.97E+02	2.02E+02	3.03E+01	2.13E+02	2.13E+02

Table J-5a. Summary of *M. nasuta* Tissue Concentrations from Reference Stations

Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC (mg/kg)
2,4'-DDD	25	6.50E-05	3.48E-05	1.25E-05	3.91E-05	3.91E-05
2,4'-DDE	25	8.00E-05	4.58E-05	1.12E-05	4.96E-05	4.96E-05
2,4'-DDT	25	7.50E-05	4.10E-05	1.39E-05	4.58E-05	4.58E-05
2-Methylnaphthalene	25	2.00E-04	1.36E-04	3.13E-05	1.47E-04	1.47E-04
4,4'-DDD	25	7.50E-04	4.60E-04	1.35E-04	5.06E-04	5.06E-04
4,4'-DDE	25	1.29E-03	7.93E-04	2.33E-04	8.73E-04	8.73E-04
4,4'-DDT	25	3.70E-04	4.44E-05	6.85E-05	6.78E-05	6.78E-05
Acenaphthene	25	2.70E-04	1.59E-04	5.06E-05	1.77E-04	1.77E-04
Acenaphthylene	25	5.40E-04	2.63E-04	1.13E-04	3.01E-04	3.01E-04
a-Chlordane	25	2.00E-04	9.98E-05	4.79E-05	1.16E-04	1.16E-04
Ag	25	4.20E-02	2.13E-02	7.69E-03	2.39E-02	2.39E-02
Al	25	4.56E+02	2.46E+02	9.57E+01	2.79E+02	2.79E+02
Anthracene	25	2.21E-03	1.01E-03	5.25E-04	1.19E-03	1.19E-03
As	25	6.47E+00	3.50E+00	7.76E-01	3.77E+00	3.77E+00
Ba	25	5.36E+00	2.60E+00	9.80E-01	2.94E+00	2.94E+00
Benzo(a)anthracene	25	4.19E-03	2.20E-03	8.48E-04	2.49E-03	2.49E-03
Benzo(a)pyrene	25	5.68E-03	3.37E-03	1.18E-03	3.78E-03	3.78E-03
Benzo(b)fluoranthene	25	5.09E-03	3.09E-03	1.18E-03	3.49E-03	3.49E-03
Benzo(g,h,i)perylene	25	4.78E-03	2.61E-03	1.25E-03	3.03E-03	3.03E-03
Benzo(k)fluoranthene	25	6.33E-03	3.58E-03	1.21E-03	3.99E-03	3.99E-03
Cd	20	3.53E-01	6.24E-02	6.92E-02	8.91E-02	8.91E-02
Chrysene	25	7.95E-03	3.77E-03	1.70E-03	4.35E-03	4.35E-03
Co	25	7.56E-01	4.70E-01	1.13E-01	5.09E-01	5.09E-01
Cr	25	8.31E+00	2.21E+00	1.78E+00	2.82E+00	2.82E+00
Cu	25	4.93E+00	2.26E+00	6.33E-01	2.48E+00	2.48E+00
DBT	24	9.35E-03	1.78E-03	1.65E-03	2.36E-03	2.36E-03
Dibenz(a,h)anthracene	25	3.20E-04	1.06E-04	9.83E-05	1.40E-04	1.40E-04
Dieldrin	25	3.60E-04	1.30E-04	8.47E-05	1.59E-04	1.59E-04
Endosulfan II	25	6.00E-05	3.28E-05	9.36E-06	3.60E-05	3.60E-05
Endrin	25	5.00E-05	2.76E-05	1.05E-05	3.12E-05	3.12E-05
Fe	25	6.92E+02	3.45E+02	1.38E+02	3.92E+02	3.92E+02
Fluoranthene	25	1.72E-02	8.52E-03	3.89E-03	9.85E-03	9.85E-03
Fluorene	25	4.40E-04	2.26E-04	8.74E-05	2.56E-04	2.56E-04
g-Chlordane	25	1.60E-04	7.90E-05	4.15E-05	9.32E-05	9.32E-05
Heptachlor	25	5.00E-05	2.70E-05	8.90E-06	3.00E-05	3.00E-05
Hg	25	5.40E-02	1.97E-02	1.01E-02	2.32E-02	2.32E-02
Indeno(1,2,3-cd)pyrene	25	2.87E-03	1.56E-03	7.86E-04	1.83E-03	1.83E-03
MBT	24	5.54E-03	3.04E-03	8.99E-04	3.35E-03	3.35E-03
Mn	25	1.25E+01	7.17E+00	2.23E+00	7.93E+00	7.93E+00
Mo	25	8.95E-01	4.55E-01	1.02E-01	4.90E-01	4.90E-01
Naphthalene	25	9.95E-04	4.63E-04	1.68E-04	5.20E-04	5.20E-04
Ni	25	2.13E+00	1.24E+00	3.67E-01	1.36E+00	1.36E+00
Pb	25	8.80E-01	4.33E-01	1.67E-01	4.90E-01	4.90E-01
Phenanthrene	25	4.62E-03	2.05E-03	1.20E-03	2.47E-03	2.47E-03
Pyrene	25	2.25E-02	9.66E-03	6.15E-03	1.18E-02	1.18E-02
Sb	25	4.20E-02	2.41E-02	7.44E-03	2.66E-02	2.66E-02
Se	25	1.15E+00	7.31E-01	1.64E-01	7.87E-01	7.87E-01
TBT	24	1.24E-02	3.88E-03	2.48E-03	4.75E-03	4.75E-03
Total Congeners	20	1.16E-02	6.95E-03	2.28E-03	7.84E-03	7.84E-03
Total Dioxin	4	6.62E-04	6.44E-04	1.30E-05	---	6.62E-04
TTBT	24	1.26E-02	6.92E-03	2.05E-03	7.63E-03	7.63E-03
V	25	2.50E+00	1.32E+00	5.12E-01	1.49E+00	1.49E+00
Zn	25	3.17E+01	1.68E+01	4.21E+00	1.83E+01	1.83E+01

Note: Reference levels were estimated for total congeners (PCBs) excluding the data collected from Alameda Buoy while data collected from Alcatraz Environs were excluded for cadmium.

Table J-5b. Summary of Surface Sediment Concentrations from Reference Stations

Chemical	Number of Samples	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)	95% UCL of Arithmetic Mean (mg/kg)	EPC (mg/kg)
a-Chlordane	6	1.20E-04	4.42E-05	3.79E-05	7.53E-05	7.53E-05
g-Chlordane	6	5.00E-05	3.67E-05	9.83E-06	4.48E-05	4.48E-05
DBT	5	1.32E-03	1.05E-03	2.69E-04	1.30E-03	1.30E-03
Dieldrin	6	6.00E-05	4.58E-05	1.11E-05	5.50E-05	5.50E-05
Endosulfan II	6	6.50E-05	4.75E-05	1.29E-05	5.81E-05	5.81E-05
Endrin	6	5.50E-05	4.08E-05	1.11E-05	5.00E-05	5.00E-05
Heptachlor	6	5.50E-05	4.00E-05	1.10E-05	4.90E-05	4.90E-05
24''-DDD	6	7.00E-05	5.08E-05	1.36E-05	6.20E-05	6.20E-05
24''-DDE	6	8.50E-05	6.25E-05	1.70E-05	7.64E-05	7.64E-05
24''-DDT	6	8.00E-05	5.92E-05	1.46E-05	7.12E-05	7.12E-05
2-Methyl naphthalene	5	7.15E-03	3.85E-03	2.70E-03	6.43E-03	6.43E-03
44''-DDD	6	3.11E-03	1.08E-03	1.14E-03	2.01E-03	2.01E-03
44''-DDE	6	9.30E-04	5.15E-04	3.44E-04	7.98E-04	7.98E-04
44''-DDT	6	1.65E-03	3.11E-04	6.56E-04	8.51E-04	8.51E-04
Acenaphthene	5	1.24E-02	4.04E-03	4.72E-03	8.54E-03	8.54E-03
Acenaphthylene	5	1.20E-02	5.49E-03	4.01E-03	9.31E-03	9.31E-03
Ag	5	5.38E-01	2.56E-01	1.97E-01	4.43E-01	4.43E-01
Al	5	7.59E+04	6.43E+04	1.27E+04	7.65E+04	7.59E+04
Anthracene	5	4.25E-02	1.70E-02	1.51E-02	3.13E-02	3.13E-02
As	5	1.21E+01	1.01E+01	2.14E+00	1.22E+01	1.21E+01
Ba	5	5.01E+02	4.45E+02	4.04E+01	4.83E+02	4.83E+02
Benzo(a)anthracene	5	1.25E-01	5.48E-02	4.20E-02	9.49E-02	9.49E-02
Benzo(a)pyrene	5	2.40E-01	1.07E-01	8.31E-02	1.86E-01	1.86E-01
Benzo(b)fluoranthene	5	1.47E-01	6.78E-02	5.12E-02	1.17E-01	1.17E-01
Benzo(ghi)perylene	5	2.21E-01	1.01E-01	8.11E-02	1.78E-01	1.78E-01
Benzo(k)fluoranthene	5	1.45E-01	6.60E-02	4.94E-02	1.13E-01	1.13E-01
Cd	5	8.41E-01	3.63E-01	2.92E-01	6.42E-01	6.42E-01
Chrysene	5	1.40E-01	6.93E-02	4.46E-02	1.12E-01	1.12E-01
Co	5	2.26E+01	1.73E+01	4.43E+00	2.15E+01	2.15E+01
Cr	5	1.76E+02	1.54E+02	2.92E+01	1.82E+02	1.76E+02
Cu	5	4.79E+01	3.33E+01	1.44E+01	4.70E+01	4.70E+01
Dibenz(ah)anthracene	5	2.45E-02	1.03E-02	8.89E-03	1.87E-02	1.87E-02
Diesel Range Organics	5	4.60E+01	1.80E+01	1.88E+01	3.59E+01	3.59E+01
Fe	5	4.95E+04	3.89E+04	1.08E+04	4.92E+04	4.92E+04
Fluoranthene	5	3.06E-01	1.35E-01	1.02E-01	2.33E-01	2.33E-01
Fluorene	5	1.09E-02	4.76E-03	3.77E-03	8.36E-03	8.36E-03
Hg	5	3.84E-01	2.15E-01	1.57E-01	3.64E-01	3.64E-01
Indeno(123-cd)pyrene	5	2.00E-01	9.05E-02	7.21E-02	1.59E-01	1.59E-01
MBT	5	6.87E-04	4.77E-04	1.50E-04	6.20E-04	6.20E-04
Mn	5	6.34E+02	5.21E+02	9.94E+01	6.15E+02	6.15E+02
Mo	5	8.51E-01	6.42E-01	2.50E-01	8.80E-01	8.51E-01
Naphthalene	5	1.65E-02	8.75E-03	5.65E-03	1.41E-02	1.41E-02
Ni	5	1.01E+02	7.84E+01	2.31E+01	1.00E+02	1.00E+02
Pb	5	2.97E+01	2.15E+01	7.47E+00	2.86E+01	2.86E+01
Phenanthrene	5	1.42E-01	5.74E-02	4.97E-02	1.05E-01	1.05E-01
Pyrene	5	3.83E-01	1.75E-01	1.26E-01	2.94E-01	2.94E-01
Sb	5	9.29E-01	6.63E-01	2.65E-01	9.16E-01	9.16E-01
Se	5	4.98E-01	2.78E-01	1.85E-01	4.54E-01	4.54E-01
TBT	5	4.04E-03	1.37E-03	1.50E-03	2.80E-03	2.80E-03
Total Congeners	5	2.16E-02	7.54E-03	8.37E-03	1.44E-02	1.44E-02
TTBT	5	1.63E-03	1.13E-03	3.55E-04	1.47E-03	1.47E-03
V	5	1.59E+02	1.30E+02	3.85E+01	1.67E+02	1.59E+02
Zn	5	1.30E+02	9.48E+01	3.42E+01	1.27E+02	1.27E+02

Table J-6a. RME Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Eastern Wetland Area	2,4'-DDD	3.70E-05	1.09E-08	2.54E-08	2.40E-01	NA	2.6E-09	---
	2,4'-DDE	4.79E-05	1.41E-08	3.28E-08	0.34	NA	4.8E-09	---
	2,4'-DDT	4.42E-05	1.30E-08	3.03E-08	0.34	0.0005	4.4E-09	6.1E-05
	2-Methylnaphthalene	1.27E-04	3.74E-08	8.73E-08	NA	NA	---	---
	Acenaphthene	2.25E-04	6.61E-08	1.54E-07	NA	0.06	---	2.6E-06
	Acenaphthylene	3.12E-04	9.16E-08	2.14E-07	NA	NA	---	---
	a-Chlordane	1.78E-04	5.23E-08	1.22E-07	1.3	0.0005	6.8E-08	2.4E-04
	Ag	3.73E-02	1.10E-05	2.56E-05	NA	0.005	---	5.1E-03
	Al	2.59E+02	7.62E-02	1.78E-01	NA	NA	---	---
	Anthracene	2.03E-03	5.97E-07	1.39E-06	NA	0.3	---	4.6E-06
	As	4.29E+00	1.26E-03	2.94E-03	1.5	0.0003	1.9E-03	9.8E+00
	Ba	2.41E+00	7.08E-04	1.65E-03	NA	NA	---	---
	Benzo(a)anthracene	4.00E-03	1.18E-06	2.74E-06	1.2	NA	1.4E-06	---
	Benzo(a)pyrene	4.06E-03	1.19E-06	2.78E-06	12	NA	1.4E-05	---
	Benzo(b)fluoranthene	5.04E-03	1.48E-06	3.46E-06	1.2	NA	1.8E-06	---
	Benzo(g,h,i)perylene	3.68E-03	1.08E-06	2.52E-06	NA	NA	---	---
	Benzo(k)fluoranthene	4.84E-03	1.42E-06	3.32E-06	1.2	NA	1.7E-06	---
	Cd	1.18E-01	3.46E-05	8.08E-05	0.38	0.0005	1.3E-05	1.6E-01
	Chrysene	6.15E-03	1.81E-06	4.22E-06	0.12	NA	2.2E-07	---
	Co	4.00E-01	1.18E-04	2.74E-04	NA	NA	---	---
	Cr	2.74E+00	8.04E-04	1.88E-03	0.19	0.003	1.5E-04	6.3E-01
	Cu	3.75E+00	1.10E-03	2.57E-03	NA	0.037	---	6.9E-02
	DBT	1.51E-03	4.44E-07	1.04E-06	NA	NA	---	---
	Dibenz(a,h)anthracene	2.13E-04	6.26E-08	1.46E-07	4.1	NA	2.6E-07	---
	Dieldrin	3.22E-04	9.45E-08	2.21E-07	16	0.00005	1.5E-06	4.4E-03
	Endosulfan II	3.54E-05	1.04E-08	2.43E-08	NA	0.006	---	4.0E-06
	Endrin	2.98E-05	8.75E-09	2.04E-08	NA	0.0003	---	6.8E-05
	Fe	3.64E+02	1.07E-01	2.50E-01	NA	NA	---	---
	Fluoranthene	1.50E-02	4.40E-06	1.03E-05	NA	0.04	---	2.6E-04
	Fluorene	3.67E-04	1.08E-07	2.52E-07	NA	0.04	---	6.3E-06
	g-Chlordane	1.75E-04	5.13E-08	1.20E-07	1.3	0.0005	6.7E-08	2.4E-04
	Heptachlor	2.90E-05	8.51E-09	1.99E-08	4.1	0.0005	3.5E-08	4.0E-05
	Hg	2.31E-02	6.79E-06	1.58E-05	NA	0.0001	---	1.6E-01
	Indeno(1,2,3-cd)pyrene	1.95E-03	5.74E-07	1.34E-06	1.2	NA	6.9E-07	---
	MBT	3.98E-03	1.17E-06	2.73E-06	NA	NA	---	---
	Mn	5.23E+00	1.54E-03	3.59E-03	NA	NA	---	---
	Mo	5.97E-01	1.75E-04	4.09E-04	NA	NA	---	---
	Naphthalene	3.94E-04	1.16E-07	2.70E-07	NA	0.02	---	1.4E-05
	Ni	1.37E+00	4.04E-04	9.43E-04	NA	0.02	---	4.7E-02
	Pb	7.15E-01	2.10E-04	4.91E-04	0.0085	NA	1.8E-06	---
	Phenanthrene	2.50E-03	7.36E-07	1.72E-06	NA	NA	---	---
	Pyrene	1.46E-02	4.28E-06	9.99E-06	NA	0.03	---	3.3E-04
	Sb	3.89E-02	1.14E-05	2.67E-05	NA	0.0004	---	6.7E-02
	Se	8.68E-01	2.55E-04	5.95E-04	NA	0.005	---	1.2E-01
	TBT	4.58E-03	1.35E-06	3.14E-06	NA	NA	---	---
	Total Congeners	4.70E-02	1.38E-05	3.22E-05	5	NA	6.9E-05	---
	Total Dioxin	4.46E-04	1.31E-07	3.06E-07	130000	NA	1.7E-02	---
	TTBT	9.18E-03	2.70E-06	6.30E-06	NA	NA	---	---
	V	1.32E+00	3.88E-04	9.06E-04	NA	NA	---	---
	Zn	2.13E+01	6.25E-03	1.46E-02	NA	0.3	---	4.9E-02

Table J-6a. RME Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
India Basin Area I	2,4'-DDD	3.91E-05	1.15E-08	2.68E-08	0.24	NA	2.8E-09	---
	2,4'-DDE	5.01E-05	1.47E-08	3.43E-08	0.34	NA	5.0E-09	---
	2,4'-DDT	4.80E-05	1.41E-08	3.29E-08	0.34	0.0005	4.8E-09	6.6E-05
	2-Methylnaphthalene	1.94E-04	5.70E-08	1.33E-07	NA	NA	---	---
	Acenaphthene	3.76E-04	1.10E-07	2.58E-07	NA	0.06	---	4.3E-06
	Acenaphthylene	6.98E-04	2.05E-07	4.79E-07	NA	NA	---	---
	a-Chlordane	2.54E-04	7.47E-08	1.74E-07	1.3	0.0005	9.7E-08	3.5E-04
	Ag	1.22E-01	3.58E-05	8.35E-05	NA	0.005	---	1.7E-02
	Al	3.22E+02	9.47E-02	2.21E-01	NA	NA	---	---
	Anthracene	6.60E-03	1.94E-06	4.53E-06	NA	0.3	---	1.5E-05
	As	3.47E+00	1.02E-03	2.38E-03	1.5	0.0003	1.5E-03	7.9E+00
	Ba	2.99E+00	8.79E-04	2.05E-03	NA	NA	---	---
	Benzo(a)anthracene	1.18E-02	3.48E-06	8.11E-06	1.2	NA	4.2E-06	---
	Benzo(a)pyrene	7.85E-03	2.31E-06	5.38E-06	12	NA	2.8E-05	---
	Benzo(b)fluoranthene	9.98E-03	2.93E-06	6.84E-06	1.2	NA	3.5E-06	---
	Benzo(g,h,i)perylene	4.05E-03	1.19E-06	2.78E-06	NA	NA	---	---
	Benzo(k)fluoranthene	9.72E-03	2.86E-06	6.66E-06	1.2	NA	3.4E-06	---
	Cd	4.75E-02	1.40E-05	3.26E-05	0.38	0.0005	5.3E-06	6.5E-02
	Chrysene	1.56E-02	4.58E-06	1.07E-05	0.12	NA	5.5E-07	---
	Co	3.73E-01	1.10E-04	2.56E-04	NA	NA	---	---
	Cr	1.61E+00	4.73E-04	1.10E-03	0.19	0.003	9.0E-05	3.7E-01
	Cu	2.42E+00	7.10E-04	1.66E-03	NA	0.037	---	4.5E-02
	DBT	1.79E-03	5.25E-07	1.22E-06	NA	NA	---	---
	Dibenz(a,h)anthracene	3.45E-04	1.01E-07	2.36E-07	4.1	NA	4.2E-07	---
	Dieldrin	3.48E-04	1.02E-07	2.39E-07	16	0.00005	1.6E-06	4.8E-03
	Endosulfan II	3.69E-05	1.08E-08	2.53E-08	NA	0.006	---	4.2E-06
	Endrin	3.26E-05	9.58E-09	2.24E-08	NA	0.0003	---	7.5E-05
	Fe	3.57E+02	1.05E-01	2.45E-01	NA	NA	---	---
	Fluoranthene	3.96E-02	1.16E-05	2.71E-05	NA	0.04	---	6.8E-04
	Fluorene	5.00E-04	1.47E-07	3.43E-07	NA	0.04	---	8.6E-06
	g-Chlordane	2.10E-04	6.18E-08	1.44E-07	1.3	0.0005	8.0E-08	2.9E-04
	Heptachlor	3.22E-05	9.47E-09	2.21E-08	4.1	0.0005	3.9E-08	4.4E-05
	Hg	1.96E-02	5.77E-06	1.35E-05	NA	0.0001	---	1.3E-01
	Indeno(1,2,3-cd)pyrene	2.65E-03	7.79E-07	1.82E-06	1.2	NA	9.3E-07	---
	MBT	2.82E-03	8.28E-07	1.93E-06	NA	NA	---	---
	Mn	4.46E+00	1.31E-03	3.06E-03	NA	NA	---	---
	Mo	4.55E-01	1.34E-04	3.12E-04	NA	NA	---	---
	Naphthalene	6.50E-04	1.91E-07	4.46E-07	NA	0.02	---	2.2E-05
	Ni	1.96E+00	5.75E-04	1.34E-03	NA	0.02	---	6.7E-02
	Pb	4.18E-01	1.23E-04	2.86E-04	0.0085	NA	1.0E-06	---
	Phenanthrene	3.39E-03	9.96E-07	2.32E-06	NA	NA	---	---
	Pyrene	4.41E-02	1.30E-05	3.02E-05	NA	0.03	---	1.0E-03
	Sb	2.35E-02	6.91E-06	1.61E-05	NA	0.0004	---	4.0E-02
	Se	7.91E-01	2.33E-04	5.43E-04	NA	0.005	---	1.1E-01
	TBT	7.23E-03	2.13E-06	4.96E-06	NA	NA	---	---
	Total Congeners	1.71E-02	5.03E-06	1.17E-05	5	NA	2.5E-05	---
	TTBT	6.42E-03	1.89E-06	4.40E-06	NA	NA	---	---
	V	1.25E+00	3.67E-04	8.56E-04	NA	NA	---	---
	Zn	1.76E+01	5.18E-03	1.21E-02	NA	0.3	---	4.0E-02

Table J-6a. RME Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Oil Reclamation Area	2,4'-DDD	4.39E-05	1.29E-08	3.01E-08	0.24	NA	3.1E-09	---
	2,4'-DDE	5.42E-05	1.59E-08	3.72E-08	0.34	NA	5.4E-09	---
	2,4'-DDT	5.20E-05	1.53E-08	3.56E-08	0.34	0.0005	5.2E-09	7.1E-05
	2-Methylnaphthalene	3.01E-04	8.86E-08	2.07E-07	NA	NA	---	---
	Acenaphthene	3.94E-04	1.16E-07	2.70E-07	NA	0.06	---	4.5E-06
	Acenaphthylene	5.80E-04	1.70E-07	3.97E-07	NA	NA	---	---
	a-Chlordane	1.04E-03	3.04E-07	7.10E-07	1.3	0.0005	4.0E-07	1.4E-03
	Ag	3.08E-02	9.04E-06	2.11E-05	NA	0.005	---	4.2E-03
	Al	3.32E+02	9.77E-02	2.28E-01	NA	NA	---	---
	Anthracene	2.30E-03	6.77E-07	1.58E-06	NA	0.3	---	5.3E-06
	As	3.64E+00	1.07E-03	2.50E-03	1.5	0.0003	1.6E-03	8.3E+00
	Ba	3.56E+00	1.05E-03	2.44E-03	NA	NA	---	---
	Benzo(a)anthracene	6.16E-03	1.81E-06	4.23E-06	1.2	NA	2.2E-06	---
	Benzo(a)pyrene	9.23E-03	2.71E-06	6.33E-06	12	NA	3.3E-05	---
	Benzo(b)fluoranthene	1.03E-02	3.03E-06	7.07E-06	1.2	NA	3.6E-06	---
	Benzo(g,h,i)perylene	6.28E-03	1.85E-06	4.31E-06	NA	NA	---	---
	Benzo(k)fluoranthene	1.14E-02	3.34E-06	7.79E-06	1.2	NA	4.0E-06	---
	Cd	5.69E-02	1.67E-05	3.90E-05	0.38	0.0005	6.3E-06	7.8E-02
	Chrysene	1.06E-02	3.10E-06	7.24E-06	0.12	NA	3.7E-07	---
	Co	3.91E-01	1.15E-04	2.68E-04	NA	NA	---	---
	Cr	2.34E+00	6.87E-04	1.60E-03	0.19	0.003	1.3E-04	5.3E-01
	Cu	3.76E+00	1.11E-03	2.58E-03	NA	0.037	---	7.0E-02
	DBT	4.37E-03	1.29E-06	3.00E-06	NA	NA	---	---
	Dibenz(a,h)anthracene	5.17E-04	1.52E-07	3.54E-07	4.1	NA	6.2E-07	---
	Dieldrin	1.73E-03	5.10E-07	1.19E-06	16	0.00005	8.2E-06	2.4E-02
	Endosulfan II	4.08E-05	1.20E-08	2.79E-08	NA	0.006	---	4.7E-06
	Endrin	3.60E-05	1.06E-08	2.47E-08	NA	0.0003	---	8.2E-05
	Fe	4.32E+02	1.27E-01	2.96E-01	NA	NA	---	---
	Fluoranthene	2.86E-02	8.41E-06	1.96E-05	NA	0.04	---	4.9E-04
	Fluorene	4.38E-04	1.29E-07	3.01E-07	NA	0.04	---	7.5E-06
	g-Chlordane	1.45E-03	4.28E-07	9.98E-07	1.3	0.0005	5.6E-07	2.0E-03
	Heptachlor	3.41E-05	1.00E-08	2.34E-08	4.1	0.0005	4.1E-08	4.7E-05
	Hg	2.59E-02	7.62E-06	1.78E-05	NA	0.0001	---	1.8E-01
	Indeno(1,2,3-cd)pyrene	4.39E-03	1.29E-06	3.01E-06	1.2	NA	1.5E-06	---
	MBT	3.11E-03	9.13E-07	2.13E-06	NA	NA	---	---
	Mn	4.95E+00	1.45E-03	3.39E-03	NA	NA	---	---
	Mo	4.90E-01	1.44E-04	3.36E-04	NA	NA	---	---
	Naphthalene	8.30E-04	2.44E-07	5.69E-07	NA	0.02	---	2.8E-05
	Ni	1.51E+00	4.42E-04	1.03E-03	NA	0.02	---	5.2E-02
	Pb	1.52E+00	4.45E-04	1.04E-03	0.0085	NA	3.8E-06	---
	Phenanthrene	3.76E-03	1.10E-06	2.58E-06	NA	NA	---	---
	Pyrene	3.62E-02	1.06E-05	2.48E-05	NA	0.03	---	8.3E-04
	Sb	7.98E-02	2.34E-05	5.47E-05	NA	0.0004	---	1.4E-01
	Se	8.19E-01	2.41E-04	5.62E-04	NA	0.005	---	1.1E-01
	TBT	1.56E-02	4.60E-06	1.07E-05	NA	NA	---	---
	Total Congeners	3.93E-01	1.15E-04	2.69E-04	5	NA	5.8E-04	---
	Total Dioxin	8.97E-04	2.63E-07	6.15E-07	130000	NA	3.4E-02	---
	TTBT	7.08E-03	2.08E-06	4.86E-06	NA	NA	---	---
	V	1.36E+00	4.01E-04	9.36E-04	NA	NA	---	---
	Zn	2.02E+01	5.94E-03	1.39E-02	NA	0.3	---	4.6E-02

Table J-6a. RME Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Point Avisadero Area	2,4'-DDD	3.80E-05	1.12E-08	2.60E-08	0.24	NA	2.7E-09	---
	2,4'-DDE	4.87E-05	1.43E-08	3.34E-08	0.34	NA	4.9E-09	---
	2,4'-DDT	4.49E-05	1.32E-08	3.08E-08	0.34	0.0005	4.5E-09	6.2E-05
	2-Methylnaphthalene	1.65E-04	4.84E-08	1.13E-07	NA	NA	---	---
	Acenaphthene	2.99E-04	8.79E-08	2.05E-07	NA	0.06	---	3.4E-06
	Acenaphthylene	5.20E-04	1.53E-07	3.57E-07	NA	NA	---	---
	a-Chlordane	1.23E-04	3.62E-08	8.45E-08	1.3	0.0005	4.7E-08	1.7E-04
	Ag	2.12E-02	6.23E-06	1.45E-05	NA	0.005	---	2.9E-03
	Al	3.15E+02	9.27E-02	2.16E-01	NA	NA	---	---
	Anthracene	3.18E-03	9.34E-07	2.18E-06	NA	0.3	---	7.3E-06
	As	3.53E+00	1.04E-03	2.42E-03	1.5	0.0003	1.6E-03	8.1E+00
	Ba	3.32E+00	9.75E-04	2.27E-03	NA	NA	---	---
	Benzo(a)anthracene	5.83E-03	1.71E-06	4.00E-06	1.2	NA	2.1E-06	---
	Benzo(a)pyrene	5.43E-03	1.60E-06	3.72E-06	12	NA	1.9E-05	---
	Benzo(b)fluoranthene	5.29E-03	1.56E-06	3.63E-06	1.2	NA	1.9E-06	---
	Benzo(g,h,i)perylene	3.14E-03	9.23E-07	2.15E-06	NA	NA	---	---
	Benzo(k)fluoranthene	6.25E-03	1.84E-06	4.29E-06	1.2	NA	2.2E-06	---
	Cd	4.96E-02	1.46E-05	3.40E-05	0.38	0.0005	5.5E-06	6.8E-02
	Chrysene	7.84E-03	2.30E-06	5.38E-06	0.12	NA	2.8E-07	---
	Co	4.24E-01	1.25E-04	2.91E-04	NA	NA	---	---
	Cr	3.29E+00	9.68E-04	2.26E-03	0.19	0.003	1.8E-04	7.5E-01
	Cu	9.99E+00	2.94E-03	6.85E-03	NA	0.037	---	1.9E-01
	DBT	8.17E-03	2.40E-06	5.61E-06	NA	NA	---	---
	Dibenz(a,h)anthracene	2.14E-04	6.30E-08	1.47E-07	4.1	NA	2.6E-07	---
	Dieldrin	1.58E-04	4.64E-08	1.08E-07	16	0.00005	7.4E-07	2.2E-03
	Endosulfan II	3.59E-05	1.06E-08	2.46E-08	NA	0.006	---	4.1E-06
	Endrin	3.07E-05	9.02E-09	2.10E-08	NA	0.0003	---	7.0E-05
	Fe	4.85E+02	1.42E-01	3.32E-01	NA	NA	---	---
	Fluoranthene	2.02E-02	5.94E-06	1.38E-05	NA	0.04	---	3.5E-04
	Fluorene	4.50E-04	1.32E-07	3.09E-07	NA	0.04	---	7.7E-06
	g-Chlordane	1.30E-04	3.83E-08	8.95E-08	1.3	0.0005	5.0E-08	1.8E-04
	Heptachlor	3.04E-05	8.92E-09	2.08E-08	4.1	0.0005	3.7E-08	4.2E-05
	Hg	1.60E-01	4.69E-05	1.10E-04	NA	0.0001	---	1.1E+00
	Indeno(1,2,3-cd)pyrene	2.07E-03	6.08E-07	1.42E-06	1.2	NA	7.3E-07	---
	MBT	2.99E-03	8.79E-07	2.05E-06	NA	NA	---	---
	Mn	7.50E+00	2.20E-03	5.14E-03	NA	NA	---	---
	Mo	4.55E-01	1.34E-04	3.12E-04	NA	NA	---	---
	Naphthalene	4.54E-04	1.33E-07	3.11E-07	NA	0.02	---	1.6E-05
	Ni	1.53E+00	4.49E-04	1.05E-03	NA	0.02	---	5.2E-02
	Pb	5.46E-01	1.61E-04	3.75E-04	0.0085	NA	1.4E-06	---
	Phenanthrene	3.28E-03	9.63E-07	2.25E-06	NA	NA	---	---
	Pyrene	2.45E-02	7.21E-06	1.68E-05	NA	0.03	---	5.6E-04
	Sb	2.60E-02	7.64E-06	1.78E-05	NA	0.0004	---	4.5E-02
	Se	7.12E-01	2.09E-04	4.89E-04	NA	0.005	---	9.8E-02
	TBT	8.07E-02	2.37E-05	5.53E-05	NA	NA	---	---
	Total Congeners	2.60E-02	7.65E-06	1.79E-05	5	NA	3.8E-05	---
	TTBT	6.98E-03	2.05E-06	4.78E-06	NA	NA	---	---
	V	1.54E+00	4.53E-04	1.06E-03	NA	NA	---	---
	Zn	1.80E+01	5.28E-03	1.23E-02	NA	0.3	---	4.1E-02

Table J-6a. RME Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
South Basin Area X	2,4'-DDD	3.85E-05	1.13E-08	2.64E-08	0.24	NA	2.7E-09	---
	2,4'-DDE	4.95E-05	1.46E-08	3.40E-08	0.34	NA	4.9E-09	---
	2,4'-DDT	4.58E-05	1.35E-08	3.14E-08	0.34	0.0005	4.6E-09	6.3E-05
	2-Methylnaphthalene	2.49E-04	7.33E-08	1.71E-07	NA	NA	---	---
	Acenaphthene	3.06E-04	8.98E-08	2.10E-07	NA	0.06	---	3.5E-06
	Acenaphthylene	4.80E-04	1.41E-07	3.29E-07	NA	NA	---	---
	a-Chlordane	7.96E-04	2.34E-07	5.46E-07	1.3	0.0005	3.0E-07	1.1E-03
	Ag	2.61E-02	7.67E-06	1.79E-05	NA	0.005	---	3.6E-03
	Al	2.88E+02	8.47E-02	1.98E-01	NA	NA	---	---
	Anthracene	1.91E-03	5.61E-07	1.31E-06	NA	0.3	---	4.4E-06
	As	3.42E+00	1.00E-03	2.34E-03	1.5	0.0003	1.5E-03	7.8E+00
	Ba	3.03E+00	8.91E-04	2.08E-03	NA	NA	---	---
	Benzo(a)anthracene	5.25E-03	1.54E-06	3.60E-06	1.2	NA	1.9E-06	---
	Benzo(a)pyrene	7.83E-03	2.30E-06	5.37E-06	12	NA	2.8E-05	---
	Benzo(b)fluoranthene	8.90E-03	2.62E-06	6.10E-06	1.2	NA	3.1E-06	---
	Benzo(g,h,i)perylene	5.42E-03	1.59E-06	3.72E-06	NA	NA	---	---
	Benzo(k)fluoranthene	9.83E-03	2.89E-06	6.74E-06	1.2	NA	3.5E-06	---
	Cd	4.99E-02	1.47E-05	3.42E-05	0.38	0.0005	5.6E-06	6.8E-02
	Chrysene	8.82E-03	2.59E-06	6.04E-06	0.12	NA	3.1E-07	---
	Co	3.54E-01	1.04E-04	2.43E-04	NA	NA	---	---
	Cr	2.00E+00	5.87E-04	1.37E-03	0.19	0.003	1.1E-04	4.6E-01
	Cu	3.44E+00	1.01E-03	2.36E-03	NA	0.037	---	6.4E-02
	DBT	3.42E-03	1.00E-06	2.34E-06	NA	NA	---	---
	Dibenz(a,h)anthracene	4.15E-04	1.22E-07	2.85E-07	4.1	NA	5.0E-07	---
	Dieldrin	1.29E-03	3.78E-07	8.82E-07	16	0.00005	6.0E-06	1.8E-02
	Endosulfan II	3.66E-05	1.08E-08	2.51E-08	NA	0.006	---	4.2E-06
	Endrin	3.14E-05	9.23E-09	2.15E-08	NA	0.0003	---	7.2E-05
	Fe	3.82E+02	1.12E-01	2.62E-01	NA	NA	---	---
	Fluoranthene	2.26E-02	6.63E-06	1.55E-05	NA	0.04	---	3.9E-04
	Fluorene	3.61E-04	1.06E-07	2.47E-07	NA	0.04	---	6.2E-06
	g-Chlordane	1.11E-03	3.27E-07	7.63E-07	1.3	0.0005	4.3E-07	1.5E-03
	Heptachlor	3.02E-05	8.87E-09	2.07E-08	4.1	0.0005	3.6E-08	4.1E-05
	Hg	2.34E-02	6.89E-06	1.61E-05	NA	0.0001	---	1.6E-01
	Indeno(1,2,3-cd)pyrene	3.66E-03	1.08E-06	2.51E-06	1.2	NA	1.3E-06	---
	MBT	2.90E-03	8.52E-07	1.99E-06	NA	NA	---	---
	Mn	4.37E+00	1.28E-03	3.00E-03	NA	NA	---	---
	Mo	4.59E-01	1.35E-04	3.15E-04	NA	NA	---	---
	Naphthalene	6.69E-04	1.96E-07	4.58E-07	NA	0.02	---	2.3E-05
	Ni	1.34E+00	3.93E-04	9.18E-04	NA	0.02	---	4.6E-02
	Pb	1.31E+00	3.85E-04	8.98E-04	0.0085	NA	3.3E-06	---
	Phenanthrene	3.08E-03	9.04E-07	2.11E-06	NA	NA	---	---
	Pyrene	2.86E-02	8.40E-06	1.96E-05	NA	0.03	---	6.5E-04
	Sb	5.96E-02	1.75E-05	4.09E-05	NA	0.0004	---	1.0E-01
	Se	7.45E-01	2.19E-04	5.11E-04	NA	0.005	---	1.0E-01
	TBT	1.19E-02	3.50E-06	8.16E-06	NA	NA	---	---
	Total Congeners	3.22E-01	9.46E-05	2.21E-04	5	NA	4.7E-04	---
	Total Dioxin	1.04E-03	3.04E-07	7.10E-07	130000	NA	4.0E-02	---
	TTBT	6.61E-03	1.94E-06	4.53E-06	NA	NA	---	---
	V	1.20E+00	3.54E-04	8.25E-04	NA	NA	---	---
	Zn	1.84E+01	5.39E-03	1.26E-02	NA	0.3	---	4.2E-02

Note: all concentrations are presented on wet weight basis

Table J-6b. RME Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Eastern Wetland Area	a-Chlordane	1.06E-04	5.38E-12	1.26E-11	1.30E+00	5.00E-04	7.0E-12	2.5E-08
	g-Chlordane	3.95E-05	2.00E-12	4.66E-12	1.3	0.0005	2.6E-12	9.3E-09
	DBT	3.56E-03	2.18E-10	5.08E-10	NA	NA	---	---
	Dieldrin	4.98E-05	3.04E-12	7.09E-12	16	0.00005	4.9E-11	1.4E-07
	Endosulfan II	4.98E-05	3.04E-12	7.09E-12	NA	0.006	---	1.2E-09
	Endrin	4.59E-05	2.80E-12	6.54E-12	NA	0.0003	---	2.2E-08
	Heptachlor	4.13E-05	2.52E-12	5.88E-12	4.1	0.0005	1.0E-11	1.2E-08
	Total Congeners	1.80E-02	1.23E-09	2.86E-09	5	NA	6.1E-09	---
	2,4'-DDD	5.45E-05	2.66E-12	6.21E-12	0.24	NA	6.4E-13	---
	2,4'-DDE	6.70E-05	3.27E-12	7.63E-12	0.34	NA	1.1E-12	---
	2,4'-DDT	6.34E-05	3.10E-12	7.22E-12	0.34	0.0005	1.1E-12	1.4E-08
	2-Methylnaphthalene	4.89E-03	2.13E-10	4.98E-10	NA	NA	---	---
	4,4'-DDD	7.35E-04	3.59E-11	8.37E-11	0.24	NA	8.6E-12	---
	4,4'-DDE	8.73E-04	4.26E-11	9.94E-11	0.34	NA	1.4E-11	---
	4,4'-DDT	2.65E-04	1.30E-11	3.02E-11	0.34	0.0005	4.4E-12	6.0E-08
	Acenaphthene	4.38E-03	2.68E-10	6.24E-10	NA	0.06	---	1.0E-08
	Acenaphthylene	6.57E-03	4.01E-10	9.36E-10	NA	NA	---	---
	Ag	2.80E-01	1.22E-08	2.86E-08	NA	0.005	---	5.7E-06
	Al	6.40E+04	2.80E-03	6.54E-03	NA	NA	---	---
	Anthracene	3.19E-02	1.40E-09	3.26E-09	NA	0.3	---	1.1E-08
	As	9.69E+00	4.73E-07	1.10E-06	1.5	0.0003	7.1E-07	3.7E-03
	Ba	4.24E+02	1.86E-05	4.34E-05	NA	NA	---	---
	Benzo(a)anthracene	9.33E-02	6.18E-09	1.44E-08	1.2	NA	7.4E-09	---
	Benzo(a)pyrene	1.43E-01	9.49E-09	2.21E-08	12	NA	1.1E-07	---
	Benzo(b)fluoranthene	8.84E-02	5.85E-09	1.37E-08	1.2	NA	7.0E-09	---
	Benzo(g,h,i)perylene	1.24E-01	7.59E-09	1.77E-08	NA	NA	---	---
	Benzo(k)fluoranthene	9.31E-02	6.17E-09	1.44E-08	1.2	NA	7.4E-09	---
	Cd	2.59E-01	1.13E-08	2.64E-08	0.38	0.0005	4.3E-09	5.3E-05
	Chrysene	1.13E-01	7.47E-09	1.74E-08	0.12	NA	9.0E-10	---
	Co	1.74E+01	7.62E-07	1.78E-06	NA	NA	---	---
	Cr	2.90E+02	1.27E-05	2.97E-05	0.19	0.003	2.4E-06	9.9E-03
	Cu	4.11E+01	1.80E-06	4.20E-06	NA	0.037	---	1.1E-04
	Dibenz(a,h)anthracene	1.22E-02	8.06E-10	1.88E-09	4.1	NA	3.3E-09	---
	Fe	3.94E+04	NA	NA	NA	NA	---	---
	Fluoranthene	1.99E-01	1.32E-08	3.07E-08	NA	0.04	---	7.7E-07
	Fluorene	6.36E-03	3.88E-10	9.05E-10	NA	0.04	---	2.3E-08
	Hg	2.18E-01	9.56E-09	2.23E-08	NA	0.0001	---	2.2E-04
	Indeno(1,2,3-cd)pyrene	1.12E-01	7.41E-09	1.73E-08	1.2	NA	8.9E-09	---
	MBT	5.30E-04	3.24E-11	7.55E-11	NA	NA	---	---
	Mn	5.34E+02	2.34E-05	5.46E-05	NA	NA	---	---
	Mo	9.47E-01	5.78E-08	1.35E-07	NA	NA	---	---
	Naphthalene	1.18E-02	7.18E-10	1.68E-09	NA	0.02	---	8.4E-08
	Ni	8.50E+01	3.72E-06	8.68E-06	NA	0.02	---	4.3E-04
	Pb	2.47E+01	1.08E-06	2.52E-06	0.0085	NA	9.2E-09	---
	Phenanthrene	8.86E-02	5.40E-09	1.26E-08	NA	NA	---	---
	Pyrene	2.62E-01	1.60E-08	3.73E-08	NA	0.03	---	1.2E-06
	Sb	1.89E+00	8.28E-08	1.93E-07	NA	0.0004	---	4.8E-04
	Se	3.06E-01	1.34E-08	3.13E-08	NA	0.005	---	6.3E-06
	TBT	4.41E-03	2.69E-10	6.28E-10	NA	NA	---	---
	TTBT	1.26E-03	7.66E-11	1.79E-10	NA	NA	---	---
	V	1.38E+02	6.06E-06	1.41E-05	NA	NA	---	---
	Zn	1.09E+02	4.75E-06	1.11E-05	NA	0.3	---	3.7E-05

Table J-6b. RME Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
India Basin Area I	a-Chlordane	3.23E-04	1.63E-11	3.81E-11	1.3	0.0005	2.1E-11	7.6E-08
	g-Chlordane	9.13E-05	4.62E-12	1.08E-11	1.3	0.0005	6.0E-12	2.2E-08
	DBT	5.98E-03	3.65E-10	8.52E-10	NA	NA	---	---
	Dieldrin	5.50E-05	3.36E-12	7.83E-12	16	0.00005	5.4E-11	1.6E-07
	Endosulfan II	5.50E-05	3.36E-12	7.83E-12	NA	0.006	---	1.3E-09
	Endrin	5.00E-05	3.05E-12	7.12E-12	NA	0.0003	---	2.4E-08
	Heptachlor	4.50E-05	2.75E-12	6.41E-12	4.1	0.0005	1.1E-11	1.3E-08
	Total Congeners	4.70E-02	3.20E-09	7.46E-09	5	NA	1.6E-08	---
	2,4'-DDD	6.00E-05	2.93E-12	6.84E-12	0.24	NA	7.0E-13	---
	2,4'-DDE	7.50E-05	3.66E-12	8.55E-12	0.34	NA	1.2E-12	---
	2,4'-DDT	7.00E-05	3.42E-12	7.98E-12	0.34	0.0005	1.2E-12	1.6E-08
	2-Methylnaphthalene	1.02E-02	4.45E-10	1.04E-09	NA	NA	---	---
	4,4'-DDD	1.55E-03	7.58E-11	1.77E-10	0.24	NA	1.8E-11	---
	4,4'-DDE	1.54E-03	7.54E-11	1.76E-10	0.34	NA	2.6E-11	---
	4,4'-DDT	7.11E-04	3.47E-11	8.10E-11	0.34	0.0005	1.2E-11	1.6E-07
	Acenaphthene	9.72E-03	5.93E-10	1.38E-09	NA	0.06	---	2.3E-08
	Acenaphthylene	1.22E-02	7.45E-10	1.74E-09	NA	NA	---	---
	Ag	3.00E-01	1.31E-08	3.07E-08	NA	0.005	---	6.1E-06
	Al	7.21E+04	3.16E-03	7.37E-03	NA	NA	---	---
	Anthracene	1.39E-01	6.08E-09	1.42E-08	NA	0.3	---	4.7E-08
	As	1.10E+01	5.36E-07	1.25E-06	1.5	0.0003	8.0E-07	4.2E-03
	Ba	4.96E+02	2.17E-05	5.07E-05	NA	NA	---	---
	Benzo(a)anthracene	1.78E-01	1.18E-08	2.75E-08	1.2	NA	1.4E-08	---
	Benzo(a)pyrene	2.45E-01	1.62E-08	3.79E-08	12	NA	1.9E-07	---
	Benzo(b)fluoranthene	1.99E-01	1.32E-08	3.08E-08	1.2	NA	1.6E-08	---
	Benzo(g,h,i)perylene	1.93E-01	1.18E-08	2.75E-08	NA	NA	---	---
	Benzo(k)fluoranthene	1.91E-01	1.26E-08	2.95E-08	1.2	NA	1.5E-08	---
	Cd	2.45E-01	1.07E-08	2.51E-08	0.38	0.0005	4.1E-09	5.0E-05
	Chrysene	2.66E-01	1.76E-08	4.11E-08	0.12	NA	2.1E-09	---
	Co	1.87E+01	8.19E-07	1.91E-06	NA	NA	---	---
	Cr	2.64E+02	1.16E-05	2.70E-05	0.19	0.003	2.2E-06	9.0E-03
	Cu	8.35E+01	3.66E-06	8.53E-06	NA	0.037	---	2.3E-04
	Dibenz(a,h)anthracene	3.27E-02	2.17E-09	5.06E-09	4.1	NA	8.9E-09	---
	Fe	4.29E+04	NA	NA	NA	NA	---	---
	Fluoranthene	3.34E-01	2.21E-08	5.17E-08	NA	0.04	---	1.3E-06
	Fluorene	2.20E-02	1.35E-09	3.14E-09	NA	0.04	---	7.8E-08
	Hg	3.62E-01	1.58E-08	3.70E-08	NA	0.0001	---	3.7E-04
	Indeno(1,2,3-cd)pyrene	1.88E-01	1.24E-08	2.90E-08	1.2	NA	1.5E-08	---
	MBT	5.82E-04	3.55E-11	8.28E-11	NA	NA	---	---
	Mn	4.40E+02	1.93E-05	4.49E-05	NA	NA	---	---
	Mo	1.29E+00	7.89E-08	1.84E-07	NA	NA	---	---
	Naphthalene	1.65E-02	1.01E-09	2.35E-09	NA	0.02	---	1.2E-07
	Ni	1.77E+02	7.75E-06	1.81E-05	NA	0.02	---	9.0E-04
	Pb	7.54E+01	3.30E-06	7.70E-06	0.0085	NA	2.8E-08	---
	Phenanthrene	1.37E-01	8.38E-09	1.96E-08	NA	NA	---	---
	Pyrene	3.78E-01	2.30E-08	5.38E-08	NA	0.03	---	1.8E-06
	Sb	1.08E+00	4.74E-08	1.11E-07	NA	0.0004	---	2.8E-04
	Se	3.87E-01	1.69E-08	3.95E-08	NA	0.005	---	7.9E-06
	TBT	9.28E-03	5.66E-10	1.32E-09	NA	NA	---	---
	TTBT	1.38E-03	8.41E-11	1.96E-10	NA	NA	---	---
	V	1.41E+02	6.17E-06	1.44E-05	NA	NA	---	---
	Zn	1.30E+02	5.69E-06	1.33E-05	NA	0.3	---	4.4E-05

Table J-6b. RME Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Oil Reclamation Area	a-Chlordane	3.62E-04	1.83E-11	4.27E-11	1.3	0.0005	2.4E-11	8.5E-08
	g-Chlordane	3.77E-04	1.91E-11	4.45E-11	1.3	0.0005	2.5E-11	8.9E-08
	DBT	1.61E-02	9.80E-10	2.29E-09	NA	NA	---	---
	Dieldrin	2.46E-04	1.50E-11	3.50E-11	16	0.00005	2.4E-10	7.0E-07
	Endosulfan II	5.79E-05	3.53E-12	8.24E-12	NA	0.006	---	1.4E-09
	Endrin	4.90E-05	2.99E-12	6.97E-12	NA	0.0003	---	2.3E-08
	Heptachlor	4.75E-05	2.90E-12	6.77E-12	4.1	0.0005	1.2E-11	1.4E-08
	Total Congeners	1.78E-01	1.21E-08	2.82E-08	5	NA	6.0E-08	---
	2,4'-DDD	6.00E-05	2.93E-12	6.84E-12	0.24	NA	7.0E-13	---
	2,4'-DDE	7.60E-05	3.71E-12	8.66E-12	0.34	NA	1.3E-12	---
	2,4'-DDT	7.21E-05	3.52E-12	8.22E-12	0.34	0.0005	1.2E-12	1.6E-08
	2-Methylnaphthalene	8.65E-03	3.77E-10	8.80E-10	NA	NA	---	---
	4,4'-DDD	2.66E-03	1.30E-10	3.03E-10	0.24	NA	3.1E-11	---
	4,4'-DDE	1.31E-03	6.40E-11	1.49E-10	0.34	NA	2.2E-11	---
	4,4'-DDT	6.53E-04	3.19E-11	7.44E-11	0.34	0.0005	1.1E-11	1.5E-07
	Acenaphthene	5.76E-03	3.51E-10	8.20E-10	NA	0.06	---	1.4E-08
	Acenaphthylene	9.07E-03	5.53E-10	1.29E-09	NA	NA	---	---
	Ag	4.28E-01	1.87E-08	4.37E-08	NA	0.005	---	8.7E-06
	Al	7.17E+04	3.14E-03	7.33E-03	NA	NA	---	---
	Anthracene	4.24E-02	1.85E-09	4.33E-09	NA	0.3	---	1.4E-08
	As	1.27E+01	6.19E-07	1.44E-06	1.5	0.0003	9.3E-07	4.8E-03
	Ba	4.42E+02	1.93E-05	4.51E-05	NA	NA	---	---
	Benzo(a)anthracene	1.20E-01	7.96E-09	1.86E-08	1.2	NA	9.6E-09	---
	Benzo(a)pyrene	1.96E-01	1.30E-08	3.02E-08	12	NA	1.6E-07	---
	Benzo(b)fluoranthene	1.34E-01	8.87E-09	2.07E-08	1.2	NA	1.1E-08	---
	Benzo(g,h,i)perylene	1.80E-01	1.10E-08	2.57E-08	NA	NA	---	---
	Benzo(k)fluoranthene	1.41E-01	9.32E-09	2.18E-08	1.2	NA	1.1E-08	---
	Cd	3.87E-01	1.70E-08	3.96E-08	0.38	0.0005	6.4E-09	7.9E-05
	Chrysene	1.95E-01	1.29E-08	3.01E-08	0.12	NA	1.5E-09	---
	Co	2.08E+01	9.11E-07	2.13E-06	NA	NA	---	---
	Cr	4.29E+02	1.88E-05	4.38E-05	0.19	0.003	3.6E-06	1.5E-02
	Cu	8.43E+01	3.69E-06	8.62E-06	NA	0.037	---	2.3E-04
	Dibenz(a,h)anthracene	2.10E-02	1.39E-09	3.25E-09	4.1	NA	5.7E-09	---
	Fe	4.73E+04	NA	NA	NA	NA	---	---
	Fluoranthene	2.39E-01	1.58E-08	3.70E-08	NA	0.04	---	9.2E-07
	Fluorene	8.93E-03	5.45E-10	1.27E-09	NA	0.04	---	3.2E-08
	Hg	5.18E-01	2.27E-08	5.29E-08	NA	0.0001	---	5.3E-04
	Indeno(1,2,3-cd)pyrene	1.63E-01	1.08E-08	2.53E-08	1.2	NA	1.3E-08	---
	MBT	1.63E-03	9.92E-11	2.31E-10	NA	NA	---	---
	Mn	5.71E+02	2.50E-05	5.83E-05	NA	NA	---	---
	Mo	1.63E+00	9.96E-08	2.32E-07	NA	NA	---	---
	Naphthalene	1.52E-02	9.29E-10	2.17E-09	NA	0.02	---	1.1E-07
	Ni	1.35E+02	5.92E-06	1.38E-05	NA	0.02	---	6.9E-04
	Pb	5.45E+01	2.39E-06	5.57E-06	0.0085	NA	2.0E-08	---
	Phenanthrene	1.03E-01	6.26E-09	1.46E-08	NA	NA	---	---
	Pyrene	2.99E-01	1.82E-08	4.26E-08	NA	0.03	---	1.4E-06
	Sb	2.76E+00	1.21E-07	2.82E-07	NA	0.0004	---	7.1E-04
	Se	3.78E-01	1.65E-08	3.86E-08	NA	0.005	---	7.7E-06
	TBT	4.07E-02	2.48E-09	5.80E-09	NA	NA	---	---
	TTBT	1.44E-03	8.76E-11	2.04E-10	NA	NA	---	---
	V	1.63E+02	7.15E-06	1.67E-05	NA	NA	---	---
	Zn	1.62E+02	7.09E-06	1.66E-05	NA	0.3	---	5.5E-05

Table J-6b. RME Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Point Avisadero Area	a-Chlordane	1.43E-04	7.24E-12	1.69E-11	1.3	0.0005	9.4E-12	3.4E-08
	g-Chlordane	3.93E-05	1.99E-12	4.64E-12	1.3	0.0005	2.6E-12	9.3E-09
	DBT	2.36E-02	1.44E-09	3.36E-09	NA	NA	---	---
	Dieldrin	4.88E-05	2.98E-12	6.95E-12	16	0.00005	4.8E-11	1.4E-07
	Endosulfan II	5.05E-05	3.08E-12	7.19E-12	NA	0.006	---	1.2E-09
	Endrin	4.43E-05	2.70E-12	6.31E-12	NA	0.0003	---	2.1E-08
	Heptachlor	4.17E-05	2.54E-12	5.93E-12	4.1	0.0005	1.0E-11	1.2E-08
	Total Congeners	2.89E-01	1.97E-08	4.59E-08	5	NA	9.8E-08	---
	2,4'-DDD	1.60E-04	7.80E-12	1.82E-11	0.24	NA	1.9E-12	---
	2,4'-DDE	6.78E-05	3.31E-12	7.72E-12	0.34	NA	1.1E-12	---
	2,4'-DDT	6.34E-05	3.10E-12	7.23E-12	0.34	0.0005	1.1E-12	1.4E-08
	2-Methylnaphthalene	1.21E-02	5.27E-10	1.23E-09	NA	NA	---	---
	4,4'-DDD	1.25E-03	6.09E-11	1.42E-10	0.24	NA	1.5E-11	---
	4,4'-DDE	1.17E-03	5.74E-11	1.34E-10	0.34	NA	2.0E-11	---
	4,4'-DDT	3.40E-04	1.66E-11	3.87E-11	0.34	0.0005	5.6E-12	7.7E-08
	Acenaphthene	4.50E-02	2.74E-09	6.40E-09	NA	0.06	---	1.1E-07
	Acenaphthylene	2.84E-02	1.73E-09	4.04E-09	NA	NA	---	---
	Ag	2.95E-01	1.29E-08	3.02E-08	NA	0.005	---	6.0E-06
	Al	6.84E+04	3.00E-03	6.99E-03	NA	NA	---	---
	Anthracene	1.74E-01	7.63E-09	1.78E-08	NA	0.3	---	5.9E-08
	As	1.25E+01	6.09E-07	1.42E-06	1.5	0.0003	9.1E-07	4.7E-03
	Ba	4.78E+02	2.09E-05	4.88E-05	NA	NA	---	---
	Benzo(a)anthracene	3.63E-01	2.41E-08	5.62E-08	1.2	NA	2.9E-08	---
	Benzo(a)pyrene	4.82E-01	3.19E-08	7.45E-08	12	NA	3.8E-07	---
	Benzo(b)fluoranthene	3.26E-01	2.16E-08	5.04E-08	1.2	NA	2.6E-08	---
	Benzo(g,h,i)perylene	3.57E-01	2.18E-08	5.09E-08	NA	NA	---	---
	Benzo(k)fluoranthene	3.28E-01	2.17E-08	5.07E-08	1.2	NA	2.6E-08	---
	Cd	3.26E-01	1.43E-08	3.33E-08	0.38	0.0005	5.4E-09	6.7E-05
	Chrysene	4.23E-01	2.80E-08	6.54E-08	0.12	NA	3.4E-09	---
	Co	1.81E+01	7.90E-07	1.84E-06	NA	NA	---	---
	Cr	2.56E+02	1.12E-05	2.61E-05	0.19	0.003	2.1E-06	8.7E-03
	Cu	2.72E+02	1.19E-05	2.78E-05	NA	0.037	---	7.5E-04
	Dibenz(a,h)anthracene	5.71E-02	3.78E-09	8.83E-09	4.1	NA	1.6E-08	---
	Fe	4.19E+04	NA	NA	NA	NA	---	---
	Fluoranthene	7.50E-01	4.97E-08	1.16E-07	NA	0.04	---	2.9E-06
	Fluorene	3.98E-02	2.43E-09	5.66E-09	NA	0.04	---	1.4E-07
	Hg	1.55E+00	6.79E-08	1.58E-07	NA	0.0001	---	1.6E-03
	Indeno(1,2,3-cd)pyrene	3.52E-01	2.33E-08	5.44E-08	1.2	NA	2.8E-08	---
	MBT	5.14E-04	3.13E-11	7.31E-11	NA	NA	---	---
	Mn	5.17E+02	2.26E-05	5.28E-05	NA	NA	---	---
	Mo	1.03E+00	6.28E-08	1.46E-07	NA	NA	---	---
	Naphthalene	2.51E-02	1.53E-09	3.57E-09	NA	0.02	---	1.8E-07
	Ni	1.29E+02	5.63E-06	1.31E-05	NA	0.02	---	6.6E-04
	Pb	6.75E+01	2.96E-06	6.90E-06	0.0085	NA	2.5E-08	---
	Phenanthrene	4.11E-01	2.50E-08	5.84E-08	NA	NA	---	---
	Pyrene	8.90E-01	5.43E-08	1.27E-07	NA	0.03	---	4.2E-06
	Sb	3.23E+00	1.41E-07	3.30E-07	NA	0.0004	---	8.2E-04
	Se	4.25E-01	1.86E-08	4.35E-08	NA	0.005	---	8.7E-06
	TBT	8.18E-02	4.99E-09	1.16E-08	NA	NA	---	---
	TTBT	1.22E-03	7.42E-11	1.73E-10	NA	NA	---	---
	V	1.38E+02	6.03E-06	1.41E-05	NA	NA	---	---
	Zn	1.47E+02	6.43E-06	1.50E-05	NA	0.3	---	5.0E-05

Table J-6b. RME Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
South Basin Area X	a-Chlordane	1.90E-03	9.61E-11	2.24E-10	1.3	0.0005	1.2E-10	4.5E-07
	g-Chlordane	3.08E-03	1.56E-10	3.63E-10	1.3	0.0005	2.0E-10	7.3E-07
	DBT	2.04E-02	1.24E-09	2.90E-09	NA	NA	---	---
	Dieldrin	2.37E-03	1.45E-10	3.37E-10	16	0.00005	2.3E-09	6.7E-06
	Endosulfan II	1.24E-04	7.57E-12	1.77E-11	NA	0.006	---	2.9E-09
	Endrin	1.08E-04	6.57E-12	1.53E-11	NA	0.0003	---	5.1E-08
	Heptachlor	3.04E-04	1.86E-11	4.33E-11	4.1	0.0005	7.6E-11	8.7E-08
	Total Congeners	8.21E-01	5.58E-08	1.30E-07	5	NA	2.8E-07	---
	2,4'-DDD	1.28E-04	6.24E-12	1.45E-11	0.24	NA	1.5E-12	---
	2,4'-DDE	1.62E-04	7.91E-12	1.84E-11	0.34	NA	2.7E-12	---
	2,4'-DDT	1.58E-04	7.72E-12	1.80E-11	0.34	0.0005	2.6E-12	3.6E-08
	2-Methylnaphthalene	2.15E-02	9.37E-10	2.19E-09	NA	NA	---	---
	4,4'-DDD	1.17E-02	5.70E-10	1.33E-09	0.24	NA	1.4E-10	---
	4,4'-DDE	6.94E-03	3.39E-10	7.91E-10	0.34	NA	1.2E-10	---
	4,4'-DDT	1.27E-03	6.19E-11	1.44E-10	0.34	0.0005	2.1E-11	2.9E-07
	Acenaphthene	9.10E-03	5.55E-10	1.29E-09	NA	0.06	---	2.2E-08
	Acenaphthylene	1.51E-02	9.19E-10	2.14E-09	NA	NA	---	---
	Ag	5.39E-01	2.36E-08	5.51E-08	NA	0.005	---	1.1E-05
	Al	6.82E+04	2.98E-03	6.96E-03	NA	NA	---	---
	Anthracene	7.12E-02	3.12E-09	7.27E-09	NA	0.3	---	2.4E-08
	As	1.14E+01	5.56E-07	1.30E-06	1.5	0.0003	8.3E-07	4.3E-03
	Ba	5.55E+02	2.43E-05	5.67E-05	NA	NA	---	---
	Benzo(a)anthracene	2.28E-01	1.51E-08	3.53E-08	1.2	NA	1.8E-08	---
	Benzo(a)pyrene	3.14E-01	2.08E-08	4.85E-08	12	NA	2.5E-07	---
	Benzo(b)fluoranthene	2.36E-01	1.57E-08	3.65E-08	1.2	NA	1.9E-08	---
	Benzo(g,h,i)perylene	2.69E-01	1.64E-08	3.83E-08	NA	NA	---	---
	Benzo(k)fluoranthene	2.44E-01	1.62E-08	3.77E-08	1.2	NA	1.9E-08	---
	Cd	5.15E-01	2.26E-08	5.26E-08	0.38	0.0005	8.6E-09	1.1E-04
	Chrysene	3.04E-01	2.02E-08	4.70E-08	0.12	NA	2.4E-09	---
	Co	1.80E+01	7.88E-07	1.84E-06	NA	NA	---	---
	Cr	2.51E+02	1.10E-05	2.56E-05	0.19	0.003	2.1E-06	8.5E-03
	Cu	1.48E+02	6.47E-06	1.51E-05	NA	0.037	---	4.1E-04
	Dibenz(a,h)anthracene	4.41E-02	2.92E-09	6.81E-09	4.1	NA	1.2E-08	---
	Fe	4.34E+04	NA	NA	NA	NA	---	---
	Fluoranthene	3.94E-01	2.61E-08	6.08E-08	NA	0.04	---	1.5E-06
	Fluorene	2.08E-02	1.27E-09	2.96E-09	NA	0.04	---	7.4E-08
	Hg	8.21E-01	3.60E-08	8.39E-08	NA	0.0001	---	8.4E-04
	Indeno(1,2,3-cd)pyrene	2.47E-01	1.64E-08	3.82E-08	1.2	NA	2.0E-08	---
	MBT	9.83E-04	6.00E-11	1.40E-10	NA	NA	---	---
	Mn	4.53E+02	1.98E-05	4.63E-05	NA	NA	---	---
	Mo	1.23E+00	7.49E-08	1.75E-07	NA	NA	---	---
	Naphthalene	3.45E-02	2.11E-09	4.91E-09	NA	2.00E-02	---	2.46E-07
	Ni	1.24E+02	5.41E-06	1.26E-05	NA	2.00E-02	---	6.31E-04
	Pb	9.80E+01	4.29E-06	1.00E-05	8.50E-03	NA	3.65E-08	---
	Phenanthrene	2.00E-01	1.22E-08	2.85E-08	NA	NA	---	---
	Pyrene	4.63E-01	2.83E-08	6.59E-08	NA	3.00E-02	---	2.20E-06
	Sb	4.06E+00	1.78E-07	4.15E-07	NA	4.00E-04	---	1.04E-03
	Se	3.59E-01	1.57E-08	3.67E-08	NA	5.00E-03	---	7.33E-06
	TBT	3.36E-02	2.05E-09	4.78E-09	NA	NA	---	---
	TTBT	1.32E-03	8.05E-11	1.88E-10	NA	NA	---	---
	V	1.42E+02	6.23E-06	1.45E-05	NA	NA	---	---
	Zn	2.13E+02	9.33E-06	2.18E-05	NA	3.00E-01	---	7.26E-05

Table J-7a. CTE Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
Eastern Wetland Area	2,4'-DDD	3.70E-05	5.43E-10	4.23E-09	2.40E-01	NA	1.3E-10	---
	2,4'-DDE	4.79E-05	7.03E-10	5.47E-09	0.34	NA	2.4E-10	---
	2,4'-DDT	4.42E-05	6.49E-10	5.05E-09	0.34	0.0005	2.2E-10	1.0E-05
	2-Methylnaphthalene	1.27E-04	1.87E-09	1.46E-08	NA	NA	---	---
	Acenaphthene	2.25E-04	3.31E-09	2.57E-08	NA	0.06	---	4.3E-07
	Acenaphthylene	3.12E-04	4.58E-09	3.56E-08	NA	NA	---	---
	a-Chlordane	1.78E-04	2.62E-09	2.03E-08	1.3	0.0005	3.4E-09	4.1E-05
	Ag	3.73E-02	5.48E-07	4.26E-06	NA	0.005	---	8.5E-04
	Al	2.59E+02	3.81E-03	2.96E-02	NA	NA	---	---
	Anthracene	2.03E-03	2.99E-08	2.32E-07	NA	0.3	---	7.7E-07
	As	4.29E+00	6.30E-05	4.90E-04	1.5	0.0003	9.4E-05	1.6E+00
	Ba	2.41E+00	3.54E-05	2.75E-04	NA	NA	---	---
	Benzo(a)anthracene	4.00E-03	5.88E-08	4.57E-07	1.2	NA	7.1E-08	---
	Benzo(a)pyrene	4.06E-03	5.96E-08	4.64E-07	12	NA	7.2E-07	---
	Benzo(b)fluoranthene	5.04E-03	7.41E-08	5.76E-07	1.2	NA	8.9E-08	---
	Benzo(g,h,i)perylene	3.68E-03	5.40E-08	4.20E-07	NA	NA	---	---
	Benzo(k)fluoranthene	4.84E-03	7.11E-08	5.53E-07	1.2	NA	8.5E-08	---
	Cd	1.18E-01	1.73E-06	1.35E-05	0.38	0.0005	6.6E-07	2.7E-02
	Chrysene	6.15E-03	9.04E-08	7.03E-07	0.12	NA	1.1E-08	---
	Co	4.00E-01	5.88E-06	4.57E-05	NA	NA	---	---
	Cr	2.74E+00	4.02E-05	3.13E-04	0.19	0.003	7.6E-06	1.0E-01
	Cu	3.75E+00	5.50E-05	4.28E-04	NA	0.037	---	1.2E-02
	DBT	1.51E-03	2.22E-08	1.73E-07	NA	NA	---	---
	Dibenz(a,h)anthracene	2.13E-04	3.13E-09	2.43E-08	4.1	NA	1.3E-08	---
	Dieldrin	3.22E-04	4.73E-09	3.68E-08	16	0.00005	7.6E-08	7.4E-04
	Endosulfan II	3.54E-05	5.20E-10	4.04E-09	NA	0.006	---	6.7E-07
	Endrin	2.98E-05	4.38E-10	3.40E-09	NA	0.0003	---	1.1E-05
	Fe	3.64E+02	5.35E-03	4.16E-02	NA	NA	---	---
	Fluoranthene	1.50E-02	2.20E-07	1.71E-06	NA	0.04	---	4.3E-05
	Fluorene	3.67E-04	5.39E-09	4.19E-08	NA	0.04	---	1.0E-06
	g-Chlordane	1.75E-04	2.57E-09	2.00E-08	1.3	0.0005	3.3E-09	4.0E-05
	Heptachlor	2.90E-05	4.25E-10	3.31E-09	4.1	0.0005	1.7E-09	6.6E-06
	Hg	2.31E-02	3.39E-07	2.64E-06	NA	0.0001	---	2.6E-02
	Indeno(1,2,3-cd)pyrene	1.95E-03	2.87E-08	2.23E-07	1.2	NA	3.4E-08	---
	MBT	3.98E-03	5.86E-08	4.55E-07	NA	NA	---	---
	Mn	5.23E+00	7.69E-05	5.98E-04	NA	NA	---	---
	Mo	5.97E-01	8.77E-06	6.82E-05	NA	NA	---	---
	Naphthalene	3.94E-04	5.79E-09	4.50E-08	NA	0.02	---	2.3E-06
	Ni	1.37E+00	2.02E-05	1.57E-04	NA	0.02	---	7.9E-03
	Pb	7.15E-01	1.05E-05	8.18E-05	0.0085	NA	8.9E-08	---
	Phenanthrene	2.50E-03	3.68E-08	2.86E-07	NA	NA	---	---
	Pyrene	1.46E-02	2.14E-07	1.66E-06	NA	0.03	---	5.5E-05
	Sb	3.89E-02	5.72E-07	4.45E-06	NA	0.0004	---	1.1E-02
	Se	8.68E-01	1.27E-05	9.92E-05	NA	0.005	---	2.0E-02
	TBT	4.58E-03	6.73E-08	5.23E-07	NA	NA	---	---
	Total Congeners	4.70E-02	6.90E-07	5.37E-06	5	NA	3.5E-06	---
	Total Dioxin	4.46E-04	6.56E-09	5.10E-08	130000	NA	8.5E-04	---
	TTBT	9.18E-03	1.35E-07	1.05E-06	NA	NA	---	---
	V	1.32E+00	1.94E-05	1.51E-04	NA	NA	---	---
	Zn	2.13E+01	3.13E-04	2.43E-03	NA	0.3	---	8.1E-03

Table J-7a. CTE Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
India Basin Area I	2,4'-DDD	3.91E-05	5.74E-10	4.46E-09	0.24	NA	1.4E-10	---
	2,4'-DDE	5.01E-05	7.35E-10	5.72E-09	0.34	NA	2.5E-10	---
	2,4'-DDT	4.80E-05	7.05E-10	5.49E-09	0.34	0.0005	2.4E-10	1.1E-05
	2-Methylnaphthalene	1.94E-04	2.85E-09	2.22E-08	NA	NA	---	---
	Acenaphthene	3.76E-04	5.52E-09	4.30E-08	NA	0.06	---	7.2E-07
	Acenaphthylene	6.98E-04	1.03E-08	7.98E-08	NA	NA	---	---
	a-Chlordane	2.54E-04	3.73E-09	2.90E-08	1.3	0.0005	4.9E-09	5.8E-05
	Ag	1.22E-01	1.79E-06	1.39E-05	NA	0.005	---	2.8E-03
	Al	3.22E+02	4.74E-03	3.68E-02	NA	NA	---	---
	Anthracene	6.60E-03	9.70E-08	7.55E-07	NA	0.3	---	2.5E-06
	As	3.47E+00	5.09E-05	3.96E-04	1.5	0.0003	7.6E-05	1.3E+00
	Ba	2.99E+00	4.40E-05	3.42E-04	NA	NA	---	---
	Benzo(a)anthracene	1.18E-02	1.74E-07	1.35E-06	1.2	NA	2.1E-07	---
	Benzo(a)pyrene	7.85E-03	1.15E-07	8.97E-07	12	NA	1.4E-06	---
	Benzo(b)fluoranthene	9.98E-03	1.47E-07	1.14E-06	1.2	NA	1.8E-07	---
	Benzo(g,h,i)perylene	4.05E-03	5.95E-08	4.63E-07	NA	NA	---	---
	Benzo(k)fluoranthene	9.72E-03	1.43E-07	1.11E-06	1.2	NA	1.7E-07	---
	Cd	4.75E-02	6.98E-07	5.43E-06	0.38	0.0005	2.7E-07	1.1E-02
	Chrysene	1.56E-02	2.29E-07	1.78E-06	0.12	NA	2.7E-08	---
	Co	3.73E-01	5.48E-06	4.26E-05	NA	NA	---	---
	Cr	1.61E+00	2.36E-05	1.84E-04	0.19	0.003	4.5E-06	6.1E-02
	Cu	2.42E+00	3.55E-05	2.76E-04	NA	0.037	---	7.5E-03
	DBT	1.79E-03	2.62E-08	2.04E-07	NA	NA	---	---
	Dibenz(a,h)anthracene	3.45E-04	5.06E-09	3.94E-08	4.1	NA	2.1E-08	---
	Dieldrin	3.48E-04	5.12E-09	3.98E-08	16	0.00005	8.2E-08	8.0E-04
	Endosulfan II	3.69E-05	5.42E-10	4.22E-09	NA	0.006	---	7.0E-07
	Endrin	3.26E-05	4.79E-10	3.73E-09	NA	0.0003	---	1.2E-05
	Fe	3.57E+02	5.24E-03	4.08E-02	NA	NA	---	---
	Fluoranthene	3.96E-02	5.81E-07	4.52E-06	NA	0.04	---	1.1E-04
	Fluorene	5.00E-04	7.34E-09	5.71E-08	NA	0.04	---	1.4E-06
	g-Chlordane	2.10E-04	3.09E-09	2.40E-08	1.3	0.0005	4.0E-09	4.8E-05
	Heptachlor	3.22E-05	4.73E-10	3.68E-09	4.1	0.0005	1.9E-09	7.4E-06
	Hg	1.96E-02	2.89E-07	2.25E-06	NA	0.0001	---	2.2E-02
	Indeno(1,2,3-cd)pyrene	2.65E-03	3.90E-08	3.03E-07	1.2	NA	4.7E-08	---
	MBT	2.82E-03	4.14E-08	3.22E-07	NA	NA	---	---
	Mn	4.46E+00	6.56E-05	5.10E-04	NA	NA	---	---
	Mo	4.55E-01	6.69E-06	5.20E-05	NA	NA	---	---
	Naphthalene	6.50E-04	9.55E-09	7.43E-08	NA	0.02	---	3.7E-06
	Ni	1.96E+00	2.87E-05	2.23E-04	NA	0.02	---	1.1E-02
	Pb	4.18E-01	6.14E-06	4.77E-05	0.0085	NA	5.2E-08	---
	Phenanthrene	3.39E-03	4.98E-08	3.87E-07	NA	NA	---	---
	Pyrene	4.41E-02	6.48E-07	5.04E-06	NA	0.03	---	1.7E-04
	Sb	2.35E-02	3.46E-07	2.69E-06	NA	0.0004	---	6.7E-03
	Se	7.91E-01	1.16E-05	9.04E-05	NA	0.005	---	1.8E-02
	TBT	7.23E-03	1.06E-07	8.27E-07	NA	NA	---	---
	Total Congeners	1.71E-02	2.52E-07	1.96E-06	5	NA	1.3E-06	---
	TTBT	6.42E-03	9.43E-08	7.33E-07	NA	NA	---	---
	V	1.25E+00	1.83E-05	1.43E-04	NA	NA	---	---
	Zn	1.76E+01	2.59E-04	2.01E-03	NA	0.3	---	6.7E-03

Table J-7a. CTE Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
Oil Reclamation Area	2,4'-DDD	4.39E-05	6.45E-10	5.02E-09	0.24	NA	1.5E-10	---
	2,4'-DDE	5.42E-05	7.97E-10	6.20E-09	0.34	NA	2.7E-10	---
	2,4'-DDT	5.20E-05	7.64E-10	5.94E-09	0.34	0.0005	2.6E-10	1.2E-05
	2-Methylnaphthalene	3.01E-04	4.43E-09	3.45E-08	NA	NA	---	---
	Acenaphthene	3.94E-04	5.79E-09	4.51E-08	NA	0.06	---	7.5E-07
	Acenaphthylene	5.80E-04	8.52E-09	6.62E-08	NA	NA	---	---
	a-Chlordane	1.04E-03	1.52E-08	1.18E-07	1.3	0.0005	2.0E-08	2.4E-04
	Ag	3.08E-02	4.52E-07	3.52E-06	NA	0.005	---	7.0E-04
	Al	3.32E+02	4.89E-03	3.80E-02	NA	NA	---	---
	Anthracene	2.30E-03	3.38E-08	2.63E-07	NA	0.3	---	8.8E-07
	As	3.64E+00	5.35E-05	4.16E-04	1.5	0.0003	8.0E-05	1.4E+00
	Ba	3.56E+00	5.23E-05	4.07E-04	NA	NA	---	---
	Benzo(a)anthracene	6.16E-03	9.06E-08	7.04E-07	1.2	NA	1.1E-07	---
	Benzo(a)pyrene	9.23E-03	1.36E-07	1.05E-06	12	NA	1.6E-06	---
	Benzo(b)fluoranthene	1.03E-02	1.52E-07	1.18E-06	1.2	NA	1.8E-07	---
	Benzo(g,h,i)perylene	6.28E-03	9.23E-08	7.18E-07	NA	NA	---	---
	Benzo(k)fluoranthene	1.14E-02	1.67E-07	1.30E-06	1.2	NA	2.0E-07	---
	Cd	5.69E-02	8.35E-07	6.50E-06	0.38	0.0005	3.2E-07	1.3E-02
	Chrysene	1.06E-02	1.55E-07	1.21E-06	0.12	NA	1.9E-08	---
	Co	3.91E-01	5.75E-06	4.47E-05	NA	NA	---	---
	Cr	2.34E+00	3.44E-05	2.67E-04	0.19	0.003	6.5E-06	8.9E-02
	Cu	3.76E+00	5.53E-05	4.30E-04	NA	0.037	---	1.2E-02
	DBT	4.37E-03	6.43E-08	5.00E-07	NA	NA	---	---
	Dibenz(a,h)anthracene	5.17E-04	7.60E-09	5.91E-08	4.1	NA	3.1E-08	---
	Dieldrin	1.73E-03	2.55E-08	1.98E-07	16	0.00005	4.1E-07	4.0E-03
	Endosulfan II	4.08E-05	5.99E-10	4.66E-09	NA	0.006	---	7.8E-07
	Endrin	3.60E-05	5.30E-10	4.12E-09	NA	0.0003	---	1.4E-05
	Fe	4.32E+02	6.35E-03	4.94E-02	NA	NA	---	---
	Fluoranthene	2.86E-02	4.21E-07	3.27E-06	NA	0.04	---	8.2E-05
	Fluorene	4.38E-04	6.44E-09	5.01E-08	NA	0.04	---	1.3E-06
	g-Chlordane	1.45E-03	2.14E-08	1.66E-07	1.3	0.0005	2.8E-08	3.3E-04
	Heptachlor	3.41E-05	5.00E-10	3.89E-09	4.1	0.0005	2.1E-09	7.8E-06
	Hg	2.59E-02	3.81E-07	2.96E-06	NA	0.0001	---	3.0E-02
	Indeno(1,2,3-cd)pyrene	4.39E-03	6.45E-08	5.02E-07	1.2	NA	7.7E-08	---
	MBT	3.11E-03	4.57E-08	3.55E-07	NA	NA	---	---
	Mn	4.95E+00	7.27E-05	5.66E-04	NA	NA	---	---
	Mo	4.90E-01	7.19E-06	5.59E-05	NA	NA	---	---
	Naphthalene	8.30E-04	1.22E-08	9.49E-08	NA	0.02	---	4.7E-06
	Ni	1.51E+00	2.21E-05	1.72E-04	NA	0.02	---	8.6E-03
	Pb	1.52E+00	2.23E-05	1.73E-04	0.0085	NA	1.9E-07	---
	Phenanthrene	3.76E-03	5.52E-08	4.30E-07	NA	NA	---	---
	Pyrene	3.62E-02	5.32E-07	4.14E-06	NA	0.03	---	1.4E-04
	Sb	7.98E-02	1.17E-06	9.12E-06	NA	0.0004	---	2.3E-02
	Se	8.19E-01	1.20E-05	9.36E-05	NA	0.005	---	1.9E-02
	TBT	1.56E-02	2.30E-07	1.79E-06	NA	NA	---	---
	Total Congeners	3.93E-01	5.77E-06	4.49E-05	5	NA	2.9E-05	---
	Total Dioxin	8.97E-04	1.32E-08	1.02E-07	130000	NA	1.7E-03	---
	TTBT	7.08E-03	1.04E-07	8.09E-07	NA	NA	---	---
	V	1.36E+00	2.00E-05	1.56E-04	NA	NA	---	---
	Zn	2.02E+01	2.97E-04	2.31E-03	NA	0.3	---	7.7E-03

Table J-7a. CTE Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
Point Avisadero Area	2,4'-DDD	3.80E-05	5.58E-10	4.34E-09	0.24	NA	1.3E-10	---
	2,4'-DDE	4.87E-05	7.16E-10	5.57E-09	0.34	NA	2.4E-10	---
	2,4'-DDT	4.49E-05	6.59E-10	5.13E-09	0.34	0.0005	2.2E-10	1.0E-05
	2-Methylnaphthalene	1.65E-04	2.42E-09	1.88E-08	NA	NA	---	---
	Acenaphthene	2.99E-04	4.40E-09	3.42E-08	NA	0.06	---	5.7E-07
	Acenaphthylene	5.20E-04	7.64E-09	5.95E-08	NA	NA	---	---
	a-Chlordane	1.23E-04	1.81E-09	1.41E-08	1.3	0.0005	2.4E-09	2.8E-05
	Ag	2.12E-02	3.12E-07	2.42E-06	NA	0.005	---	4.8E-04
	Al	3.15E+02	4.64E-03	3.61E-02	NA	NA	---	---
	Anthracene	3.18E-03	4.67E-08	3.63E-07	NA	0.3	---	1.2E-06
	As	3.53E+00	5.19E-05	4.03E-04	1.5	0.0003	7.8E-05	1.3E+00
	Ba	3.32E+00	4.87E-05	3.79E-04	NA	NA	---	---
	Benzo(a)anthracene	5.83E-03	8.56E-08	6.66E-07	1.2	NA	1.0E-07	---
	Benzo(a)pyrene	5.43E-03	7.98E-08	6.21E-07	12	NA	9.6E-07	---
	Benzo(b)fluoranthene	5.29E-03	7.78E-08	6.05E-07	1.2	NA	9.3E-08	---
	Benzo(g,h,i)perylene	3.14E-03	4.62E-08	3.59E-07	NA	NA	---	---
	Benzo(k)fluoranthene	6.25E-03	9.19E-08	7.15E-07	1.2	NA	1.1E-07	---
	Cd	4.96E-02	7.29E-07	5.67E-06	0.38	0.0005	2.8E-07	1.1E-02
	Chrysene	7.84E-03	1.15E-07	8.96E-07	0.12	NA	1.4E-08	---
	Co	4.24E-01	6.24E-06	4.85E-05	NA	NA	---	---
	Cr	3.29E+00	4.84E-05	3.77E-04	0.19	0.003	9.2E-06	1.3E-01
	Cu	9.99E+00	1.47E-04	1.14E-03	NA	0.037	---	3.1E-02
	DBT	8.17E-03	1.20E-07	9.34E-07	NA	NA	---	---
	Dibenz(a,h)anthracene	2.14E-04	3.15E-09	2.45E-08	4.1	NA	1.3E-08	---
	Dieldrin	1.58E-04	2.32E-09	1.80E-08	16	0.00005	3.7E-08	3.6E-04
	Endosulfan II	3.59E-05	5.28E-10	4.11E-09	NA	0.006	---	6.8E-07
	Endrin	3.07E-05	4.51E-10	3.51E-09	NA	0.0003	---	1.2E-05
	Fe	4.85E+02	7.12E-03	5.54E-02	NA	NA	---	---
	Fluoranthene	2.02E-02	2.97E-07	2.31E-06	NA	0.04	---	5.8E-05
	Fluorene	4.50E-04	6.62E-09	5.15E-08	NA	0.04	---	1.3E-06
	g-Chlordane	1.30E-04	1.92E-09	1.49E-08	1.3	0.0005	2.5E-09	3.0E-05
	Heptachlor	3.04E-05	4.46E-10	3.47E-09	4.1	0.0005	1.8E-09	6.9E-06
	Hg	1.60E-01	2.35E-06	1.83E-05	NA	0.0001	---	1.8E-01
	Indeno(1,2,3-cd)pyrene	2.07E-03	3.04E-08	2.37E-07	1.2	NA	3.7E-08	---
	MBT	2.99E-03	4.40E-08	3.42E-07	NA	NA	---	---
	Mn	7.50E+00	1.10E-04	8.57E-04	NA	NA	---	---
	Mo	4.55E-01	6.68E-06	5.20E-05	NA	NA	---	---
	Naphthalene	4.54E-04	6.67E-09	5.19E-08	NA	0.02	---	2.6E-06
	Ni	1.53E+00	2.24E-05	1.75E-04	NA	0.02	---	8.7E-03
	Pb	5.46E-01	8.03E-06	6.24E-05	0.0085	NA	6.8E-08	---
	Phenanthrene	3.28E-03	4.82E-08	3.75E-07	NA	NA	---	---
	Pyrene	2.45E-02	3.60E-07	2.80E-06	NA	0.03	---	9.3E-05
	Sb	2.60E-02	3.82E-07	2.97E-06	NA	0.0004	---	7.4E-03
	Se	7.12E-01	1.05E-05	8.14E-05	NA	0.005	---	1.6E-02
	TBT	8.07E-02	1.19E-06	9.22E-06	NA	NA	---	---
	Total Congeners	2.60E-02	3.83E-07	2.98E-06	5	NA	1.9E-06	---
	TTBT	6.98E-03	1.02E-07	7.97E-07	NA	NA	---	---
	V	1.54E+00	2.26E-05	1.76E-04	NA	NA	---	---
	Zn	1.80E+01	2.64E-04	2.05E-03	NA	0.3	---	6.8E-03

Table J-7a. CTE Dose and Risk Calculation for Exposure to *M. nasuta* at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
South Basin Area X	2,4'-DDD	3.85E-05	5.66E-10	4.40E-09	0.24	NA	1.4E-10	---
	2,4'-DDE	4.95E-05	7.28E-10	5.66E-09	0.34	NA	2.5E-10	---
	2,4'-DDT	4.58E-05	6.73E-10	5.24E-09	0.34	0.0005	2.3E-10	1.0E-05
	2-Methylnaphthalene	2.49E-04	3.67E-09	2.85E-08	NA	NA	---	---
	Acenaphthene	3.06E-04	4.49E-09	3.49E-08	NA	0.06	---	5.8E-07
	Acenaphthylene	4.80E-04	7.05E-09	5.48E-08	NA	NA	---	---
	a-Chlordane	7.96E-04	1.17E-08	9.10E-08	1.3	0.0005	1.5E-08	1.8E-04
	Ag	2.61E-02	3.83E-07	2.98E-06	NA	0.005	---	6.0E-04
	Al	2.88E+02	4.24E-03	3.30E-02	NA	NA	---	---
	Anthracene	1.91E-03	2.80E-08	2.18E-07	NA	0.3	---	7.3E-07
	As	3.42E+00	5.02E-05	3.91E-04	1.5	0.0003	7.5E-05	1.3E+00
	Ba	3.03E+00	4.45E-05	3.46E-04	NA	NA	---	---
	Benzo(a)anthracene	5.25E-03	7.72E-08	6.01E-07	1.2	NA	9.3E-08	---
	Benzo(a)pyrene	7.83E-03	1.15E-07	8.95E-07	12	NA	1.4E-06	---
	Benzo(b)fluoranthene	8.90E-03	1.31E-07	1.02E-06	1.2	NA	1.6E-07	---
	Benzo(g,h,i)perylene	5.42E-03	7.96E-08	6.19E-07	NA	NA	---	---
	Benzo(k)fluoranthene	9.83E-03	1.44E-07	1.12E-06	1.2	NA	1.7E-07	---
	Cd	4.99E-02	7.33E-07	5.70E-06	0.38	0.0005	2.8E-07	1.1E-02
	Chrysene	8.82E-03	1.30E-07	1.01E-06	0.12	NA	1.6E-08	---
	Co	3.54E-01	5.20E-06	4.04E-05	NA	NA	---	---
	Cr	2.00E+00	2.94E-05	2.28E-04	0.19	0.003	5.6E-06	7.6E-02
	Cu	3.44E+00	5.06E-05	3.93E-04	NA	0.037	---	1.1E-02
	DBT	3.42E-03	5.02E-08	3.90E-07	NA	NA	---	---
	Dibenz(a,h)anthracene	4.15E-04	6.10E-09	4.74E-08	4.1	NA	2.5E-08	---
	Dieldrin	1.29E-03	1.89E-08	1.47E-07	16	0.00005	3.0E-07	2.9E-03
	Endosulfan II	3.66E-05	5.38E-10	4.19E-09	NA	0.006	---	7.0E-07
	Endrin	3.14E-05	4.61E-10	3.59E-09	NA	0.0003	---	1.2E-05
	Fe	3.82E+02	5.61E-03	4.36E-02	NA	NA	---	---
	Fluoranthene	2.26E-02	3.32E-07	2.58E-06	NA	0.04	---	6.4E-05
	Fluorene	3.61E-04	5.30E-09	4.12E-08	NA	0.04	---	1.0E-06
	g-Chlordane	1.11E-03	1.64E-08	1.27E-07	1.3	0.0005	2.1E-08	2.5E-04
	Heptachlor	3.02E-05	4.43E-10	3.45E-09	4.1	0.0005	1.8E-09	6.9E-06
	Hg	2.34E-02	3.44E-07	2.68E-06	NA	0.0001	---	2.7E-02
	Indeno(1,2,3-cd)pyrene	3.66E-03	5.38E-08	4.19E-07	1.2	NA	6.5E-08	---
	MBT	2.90E-03	4.26E-08	3.31E-07	NA	NA	---	---
	Mn	4.37E+00	6.42E-05	4.99E-04	NA	NA	---	---
	Mo	4.59E-01	6.74E-06	5.24E-05	NA	NA	---	---
	Naphthalene	6.69E-04	9.82E-09	7.64E-08	NA	0.02	---	3.8E-06
	Ni	1.34E+00	1.97E-05	1.53E-04	NA	0.02	---	7.6E-03
	Pb	1.31E+00	1.92E-05	1.50E-04	0.0085	NA	1.6E-07	---
	Phenanthrene	3.08E-03	4.52E-08	3.52E-07	NA	NA	---	---
	Pyrene	2.86E-02	4.20E-07	3.27E-06	NA	0.03	---	1.1E-04
	Sb	5.96E-02	8.76E-07	6.82E-06	NA	0.0004	---	1.7E-02
	Se	7.45E-01	1.09E-05	8.51E-05	NA	0.005	---	1.7E-02
	TBT	1.19E-02	1.75E-07	1.36E-06	NA	NA	---	---
	Total Congeners	3.22E-01	4.73E-06	3.68E-05	5	NA	2.4E-05	---
	Total Dioxin	1.04E-03	1.52E-08	1.18E-07	130000	NA	2.0E-03	---
	TTBT	6.61E-03	9.71E-08	7.55E-07	NA	NA	---	---
	V	1.20E+00	1.77E-05	1.37E-04	NA	NA	---	---
	Zn	1.84E+01	2.70E-04	2.10E-03	NA	0.3	---	7.0E-03

Note: all concentrations are presented on wet weight basis

Table J-7b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
Eastern Wetland Area	a-Chlordane	1.06E-04	2.30E-13	1.79E-12	1.30E+00	5.00E-04	3.0E-13	3.6E-09
	g-Chlordane	3.95E-05	8.51E-14	6.62E-13	1.3	0.0005	1.1E-13	1.3E-09
	DBT	3.56E-03	1.05E-11	8.15E-11	NA	NA	---	---
	Dieldrin	4.98E-05	1.47E-13	1.14E-12	16	0.00005	2.3E-12	2.3E-08
	Endosulfan II	4.98E-05	1.47E-13	1.14E-12	NA	0.006	---	1.9E-10
	Endrin	4.59E-05	1.35E-13	1.05E-12	NA	0.0003	---	3.5E-09
	Heptachlor	4.13E-05	1.21E-13	9.44E-13	4.1	0.0005	5.0E-13	1.9E-09
	Total Congeners	1.80E-02	6.24E-11	4.85E-10	5	NA	3.1E-10	---
	2,4'-DDD	5.45E-05	1.10E-13	8.59E-13	0.24	NA	2.7E-14	---
	2,4'-DDE	6.70E-05	1.36E-13	1.06E-12	0.34	NA	4.6E-14	---
	2,4'-DDT	6.34E-05	1.28E-13	9.99E-13	0.34	0.0005	4.4E-14	2.0E-09
	2-Methylnaphthalene	4.89E-03	8.00E-12	6.22E-11	NA	NA	---	---
	4,4'-DDD	7.35E-04	1.49E-12	1.16E-11	0.24	NA	3.6E-13	---
	4,4'-DDE	8.73E-04	1.77E-12	1.38E-11	0.34	NA	6.0E-13	---
	4,4'-DDT	2.65E-04	5.38E-13	4.18E-12	0.34	0.0005	1.8E-13	8.4E-09
	Acenaphthene	4.38E-03	1.29E-11	1.00E-10	NA	0.06	---	1.7E-09
	Acenaphthylene	6.57E-03	1.93E-11	1.50E-10	NA	NA	---	---
	Ag	2.80E-01	4.61E-10	3.59E-09	NA	0.005	---	7.2E-07
	Al	6.40E+04	1.06E-04	8.21E-04	NA	NA	---	---
	Anthracene	3.19E-02	5.25E-11	4.09E-10	NA	0.3	---	1.4E-09
	As	9.69E+00	1.96E-08	1.53E-07	1.5	0.0003	2.9E-08	5.1E-04
	Ba	4.24E+02	7.00E-07	5.44E-06	NA	NA	---	---
	Benzo(a)anthracene	9.33E-02	3.11E-10	2.42E-09	1.2	NA	3.7E-10	---
	Benzo(a)pyrene	1.43E-01	4.77E-10	3.71E-09	12	NA	5.7E-09	---
	Benzo(b)fluoranthene	8.84E-02	2.94E-10	2.29E-09	1.2	NA	3.5E-10	---
	Benzo(g,h,i)perylene	1.24E-01	3.66E-10	2.84E-09	NA	NA	---	---
	Benzo(k)fluoranthene	9.31E-02	3.10E-10	2.41E-09	1.2	NA	3.7E-10	---
	Cd	2.59E-01	4.27E-10	3.32E-09	0.38	0.0005	1.6E-10	6.6E-06
	Chrysene	1.13E-01	3.76E-10	2.92E-09	0.12	NA	4.5E-11	---
	Co	1.74E+01	2.87E-08	2.23E-07	NA	NA	---	---
	Cr	2.90E+02	4.78E-07	3.72E-06	0.19	0.003	9.1E-08	1.2E-03
	Cu	4.11E+01	6.77E-08	5.27E-07	NA	0.037	---	1.4E-05
	Dibenz(a,h)anthracene	1.22E-02	4.05E-11	3.15E-10	4.1	NA	1.7E-10	---
	Fe	3.94E+04	NA	NA	NA	NA	---	---
	Fluoranthene	1.99E-01	6.62E-10	5.15E-09	NA	0.04	---	1.3E-07
	Fluorene	6.36E-03	1.87E-11	1.45E-10	NA	0.04	---	3.6E-09
	Hg	2.18E-01	3.60E-10	2.80E-09	NA	0.0001	---	2.8E-05
	Indeno(1,2,3-cd)pyrene	1.12E-01	3.73E-10	2.90E-09	1.2	NA	4.5E-10	---
	MBT	5.30E-04	1.56E-12	1.21E-11	NA	NA	---	---
	Mn	5.34E+02	8.81E-07	6.85E-06	NA	NA	---	---
	Mo	9.47E-01	2.78E-09	2.17E-08	NA	NA	---	---
	Naphthalene	1.18E-02	3.46E-11	2.69E-10	NA	0.02	---	1.3E-08
	Ni	8.50E+01	1.40E-07	1.09E-06	NA	0.02	---	5.4E-05
	Pb	2.47E+01	4.07E-08	3.17E-07	0.0085	NA	3.5E-10	---
	Phenanthrene	8.86E-02	2.60E-10	2.03E-09	NA	NA	---	---
	Pyrene	2.62E-01	7.71E-10	5.99E-09	NA	0.03	---	2.0E-07
	Sb	1.89E+00	3.12E-09	2.42E-08	NA	0.0004	---	6.1E-05
	Se	3.06E-01	5.04E-10	3.92E-09	NA	0.005	---	7.8E-07
	TBT	4.41E-03	1.30E-11	1.01E-10	NA	NA	---	---
	TTBT	1.26E-03	3.69E-12	2.87E-11	NA	NA	---	---

Table J-7b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
	V	1.38E+02	2.28E-07	1.77E-06	NA	NA	---	---
	Zn	1.09E+02	1.79E-07	1.39E-06	NA	0.3	---	4.6E-06
India Basin Area I	a-Chlordane	3.23E-04	6.97E-13	5.42E-12	1.3	0.0005	9.1E-13	1.1E-08
	g-Chlordane	9.13E-05	1.97E-13	1.53E-12	1.3	0.0005	2.6E-13	3.1E-09
	DBT	5.98E-03	1.76E-11	1.37E-10	NA	NA	---	---
	Dieldrin	5.50E-05	1.62E-13	1.26E-12	16	0.00005	2.6E-12	2.5E-08
	Endosulfan II	5.50E-05	1.62E-13	1.26E-12	NA	0.006	---	2.1E-10
	Endrin	5.00E-05	1.47E-13	1.14E-12	NA	0.0003	---	3.8E-09
	Heptachlor	4.50E-05	1.32E-13	1.03E-12	4.1	0.0005	5.4E-13	2.1E-09
	Total Congeners	4.70E-02	1.63E-10	1.27E-09	5	NA	8.1E-10	---
	2,4'-DDD	6.00E-05	1.22E-13	9.46E-13	0.24	NA	2.9E-14	---
	2,4'-DDE	7.50E-05	1.52E-13	1.18E-12	0.34	NA	5.2E-14	---
	2,4'-DDT	7.00E-05	1.42E-13	1.10E-12	0.34	0.0005	4.8E-14	2.2E-09
	2-Methylnaphthalene	1.02E-02	1.67E-11	1.30E-10	NA	NA	---	---
	4,4'-DDD	1.55E-03	3.15E-12	2.45E-11	0.24	NA	7.6E-13	---
	4,4'-DDE	1.54E-03	3.13E-12	2.43E-11	0.34	NA	1.1E-12	---
	4,4'-DDT	7.11E-04	1.44E-12	1.12E-11	0.34	0.0005	4.9E-13	2.2E-08
	Acenaphthene	9.72E-03	2.86E-11	2.22E-10	NA	0.06	---	3.7E-09
	Acenaphthylene	1.22E-02	3.59E-11	2.79E-10	NA	NA	---	---
	Ag	3.00E-01	4.95E-10	3.85E-09	NA	0.005	---	7.7E-07
	Al	7.21E+04	1.19E-04	9.24E-04	NA	NA	---	---
	Anthracene	1.39E-01	2.29E-10	1.78E-09	NA	0.3	---	5.9E-09
	As	1.10E+01	2.23E-08	1.73E-07	1.5	0.0003	3.3E-08	5.8E-04
	Ba	4.96E+02	8.18E-07	6.36E-06	NA	NA	---	---
	Benzo(a)anthracene	1.78E-01	5.94E-10	4.62E-09	1.2	NA	7.1E-10	---
	Benzo(a)pyrene	2.45E-01	8.16E-10	6.35E-09	12	NA	9.8E-09	---
	Benzo(b)fluoranthene	1.99E-01	6.63E-10	5.16E-09	1.2	NA	8.0E-10	---
	Benzo(g,h,i)perylene	1.93E-01	5.67E-10	4.41E-09	NA	NA	---	---
	Benzo(k)fluoranthene	1.91E-01	6.35E-10	4.94E-09	1.2	NA	7.6E-10	---
	Cd	2.45E-01	4.04E-10	3.15E-09	0.38	0.0005	1.5E-10	6.3E-06
	Chrysene	2.66E-01	8.87E-10	6.90E-09	0.12	NA	1.1E-10	---
	Co	1.87E+01	3.08E-08	2.40E-07	NA	NA	---	---
	Cr	2.64E+02	4.35E-07	3.39E-06	0.19	0.003	8.3E-08	1.1E-03
	Cu	8.35E+01	1.38E-07	1.07E-06	NA	0.037	---	2.9E-05
	Dibenz(a,h)anthracene	3.27E-02	1.09E-10	8.48E-10	4.1	NA	4.5E-10	---
	Fe	4.29E+04	NA	NA	NA	NA	---	---
	Fluoranthene	3.34E-01	1.11E-09	8.67E-09	NA	0.04	---	2.2E-07
	Fluorene	2.20E-02	6.48E-11	5.04E-10	NA	0.04	---	1.3E-08
	Hg	3.62E-01	5.96E-10	4.64E-09	NA	0.0001	---	4.6E-05
	Indeno(1,2,3-cd)pyrene	1.88E-01	6.26E-10	4.87E-09	1.2	NA	7.5E-10	---
	MBT	5.82E-04	1.71E-12	1.33E-11	NA	NA	---	---
	Mn	4.40E+02	7.25E-07	5.64E-06	NA	NA	---	---
	Mo	1.29E+00	3.80E-09	2.96E-08	NA	NA	---	---
	Naphthalene	1.65E-02	4.85E-11	3.77E-10	NA	0.02	---	1.9E-08
	Ni	1.77E+02	2.92E-07	2.27E-06	NA	0.02	---	1.1E-04
	Pb	7.54E+01	1.24E-07	9.67E-07	0.0085	NA	1.1E-09	---
	Phenanthrene	1.37E-01	4.04E-10	3.14E-09	NA	NA	---	---
	Pyrene	3.78E-01	1.11E-09	8.64E-09	NA	0.03	---	2.9E-07
	Sb	1.08E+00	1.78E-09	1.39E-08	NA	0.0004	---	3.5E-05

Table J-7b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
	Se	3.87E-01	6.38E-10	4.96E-09	NA	0.005	---	9.9E-07
	TBT	9.28E-03	2.73E-11	2.12E-10	NA	NA	---	---
	TTBT	1.38E-03	4.05E-12	3.15E-11	NA	NA	---	---
	V	1.41E+02	2.32E-07	1.81E-06	NA	NA	---	---
	Zn	1.30E+02	2.14E-07	1.67E-06	NA	0.3	---	5.6E-06
Oil Reclamation Area	a-Chlordane	3.62E-04	7.80E-13	6.07E-12	1.3	0.0005	1.0E-12	1.2E-08
	g-Chlordane	3.77E-04	8.13E-13	6.33E-12	1.3	0.0005	1.1E-12	1.3E-08
	DBT	1.61E-02	4.72E-11	3.67E-10	NA	NA	---	---
	Dieldrin	2.46E-04	7.24E-13	5.63E-12	16	0.00005	1.2E-11	1.1E-07
	Endosulfan II	5.79E-05	1.70E-13	1.32E-12	NA	0.006	---	2.2E-10
	Endrin	4.90E-05	1.44E-13	1.12E-12	NA	0.0003	---	3.7E-09
	Heptachlor	4.75E-05	1.40E-13	1.09E-12	4.1	0.0005	5.7E-13	2.2E-09
	Total Congeners	1.78E-01	6.15E-10	4.78E-09	5	NA	3.1E-09	---
	2,4'-DDD	6.00E-05	1.22E-13	9.46E-13	0.24	NA	2.9E-14	---
	2,4'-DDE	7.60E-05	1.54E-13	1.20E-12	0.34	NA	5.2E-14	---
	2,4'-DDT	7.21E-05	1.46E-13	1.14E-12	0.34	0.0005	5.0E-14	2.3E-09
	2-Methylnaphthalene	8.65E-03	1.42E-11	1.10E-10	NA	NA	---	---
	4,4'-DDD	2.66E-03	5.39E-12	4.19E-11	0.24	NA	1.3E-12	---
	4,4'-DDE	1.31E-03	2.66E-12	2.07E-11	0.34	NA	9.0E-13	---
	4,4'-DDT	6.53E-04	1.32E-12	1.03E-11	0.34	0.0005	4.5E-13	2.1E-08
	Acenaphthene	5.76E-03	1.69E-11	1.32E-10	NA	0.06	---	2.2E-09
	Acenaphthylene	9.07E-03	2.67E-11	2.07E-10	NA	NA	---	---
	Ag	4.28E-01	7.05E-10	5.49E-09	NA	0.005	---	1.1E-06
	Al	7.17E+04	1.18E-04	9.20E-04	NA	NA	---	---
	Anthracene	4.24E-02	6.98E-11	5.43E-10	NA	0.3	---	1.8E-09
	As	1.27E+01	2.57E-08	2.00E-07	1.5	0.0003	3.9E-08	6.7E-04
	Ba	4.42E+02	7.28E-07	5.66E-06	NA	NA	---	---
	Benzo(a)anthracene	1.20E-01	4.01E-10	3.12E-09	1.2	NA	4.8E-10	---
	Benzo(a)pyrene	1.96E-01	6.52E-10	5.07E-09	12	NA	7.8E-09	---
	Benzo(b)fluoranthene	1.34E-01	4.46E-10	3.47E-09	1.2	NA	5.4E-10	---
	Benzo(g,h,i)perylene	1.80E-01	5.31E-10	4.13E-09	NA	NA	---	---
	Benzo(k)fluoranthene	1.41E-01	4.69E-10	3.65E-09	1.2	NA	5.6E-10	---
	Cd	3.87E-01	6.38E-10	4.97E-09	0.38	0.0005	2.4E-10	9.9E-06
	Chrysene	1.95E-01	6.48E-10	5.04E-09	0.12	NA	7.8E-11	---
	Co	2.08E+01	3.43E-08	2.67E-07	NA	NA	---	---
	Cr	4.29E+02	7.07E-07	5.50E-06	0.19	0.003	1.3E-07	1.8E-03
	Cu	8.43E+01	1.39E-07	1.08E-06	NA	0.037	---	2.9E-05
	Dibenz(a,h)anthracene	2.10E-02	7.00E-11	5.45E-10	4.1	NA	2.9E-10	---
	Fe	4.73E+04	NA	NA	NA	NA	---	---
	Fluoranthene	2.39E-01	7.97E-10	6.20E-09	NA	0.04	---	1.5E-07
	Fluorene	8.93E-03	2.63E-11	2.04E-10	NA	0.04	---	5.1E-09
	Hg	5.18E-01	8.54E-10	6.64E-09	NA	0.0001	---	6.6E-05
	Indeno(1,2,3-cd)pyrene	1.63E-01	5.45E-10	4.24E-09	1.2	NA	6.5E-10	---
	MBT	1.63E-03	4.78E-12	3.72E-11	NA	NA	---	---
	Mn	5.71E+02	9.41E-07	7.32E-06	NA	NA	---	---
	Mo	1.63E+00	4.80E-09	3.73E-08	NA	NA	---	---
	Naphthalene	1.52E-02	4.48E-11	3.48E-10	NA	0.02	---	1.7E-08
	Ni	1.35E+02	2.23E-07	1.73E-06	NA	0.02	---	8.7E-05
	Pb	5.45E+01	8.98E-08	6.99E-07	0.0085	NA	7.6E-10	---
	Phenanthrene	1.03E-01	3.02E-10	2.35E-09	NA	NA	---	---

Table J-7b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
	Pyrene	2.99E-01	8.79E-10	6.84E-09	NA	0.03	---	2.3E-07
	Sb	2.76E+00	4.55E-09	3.54E-08	NA	0.0004	---	8.9E-05
	Se	3.78E-01	6.23E-10	4.84E-09	NA	0.005	---	9.7E-07
	TBT	4.07E-02	1.20E-10	9.31E-10	NA	NA	---	---
	TTBT	1.44E-03	4.22E-12	3.28E-11	NA	NA	---	---
	V	1.63E+02	2.69E-07	2.09E-06	NA	NA	---	---
	Zn	1.62E+02	2.67E-07	2.08E-06	NA	0.3	---	6.9E-06
Point Avisadero Area	a-Chlordane	1.43E-04	3.09E-13	2.40E-12	1.3	0.0005	4.0E-13	4.8E-09
	g-Chlordane	3.93E-05	8.48E-14	6.60E-13	1.3	0.0005	1.1E-13	1.3E-09
	DBT	2.36E-02	6.95E-11	5.40E-10	NA	NA	---	---
	Dieldrin	4.88E-05	1.44E-13	1.12E-12	16	0.00005	2.3E-12	2.2E-08
	Endosulfan II	5.05E-05	1.49E-13	1.16E-12	NA	0.006	---	1.9E-10
	Endrin	4.43E-05	1.30E-13	1.01E-12	NA	0.0003	---	3.4E-09
	Heptachlor	4.17E-05	1.23E-13	9.53E-13	4.1	0.0005	5.0E-13	1.9E-09
	Total Congeners	2.89E-01	1.00E-09	7.79E-09	5	NA	5.0E-09	---
	2,4'-DDD	1.60E-04	3.24E-13	2.52E-12	0.24	NA	7.8E-14	---
	2,4'-DDE	6.78E-05	1.37E-13	1.07E-12	0.34	NA	4.7E-14	---
	2,4'-DDT	6.34E-05	1.29E-13	1.00E-12	0.34	0.0005	4.4E-14	2.0E-09
	2-Methylnaphthalene	1.21E-02	1.98E-11	1.54E-10	NA	NA	---	---
	4,4'-DDD	1.25E-03	2.53E-12	1.97E-11	0.24	NA	6.1E-13	---
	4,4'-DDE	1.17E-03	2.38E-12	1.85E-11	0.34	NA	8.1E-13	---
	4,4'-DDT	3.40E-04	6.89E-13	5.36E-12	0.34	0.0005	2.3E-13	1.1E-08
	Acenaphthene	4.50E-02	1.32E-10	1.03E-09	NA	0.06	---	1.7E-08
	Acenaphthylene	2.84E-02	8.34E-11	6.49E-10	NA	NA	---	---
	Ag	2.95E-01	4.87E-10	3.79E-09	NA	0.005	---	7.6E-07
	Al	6.84E+04	1.13E-04	8.78E-04	NA	NA	---	---
	Anthracene	1.74E-01	2.87E-10	2.23E-09	NA	0.3	---	7.4E-09
	As	1.25E+01	2.53E-08	1.96E-07	1.5	0.0003	3.8E-08	6.5E-04
	Ba	4.78E+02	7.87E-07	6.12E-06	NA	NA	---	---
	Benzo(a)anthracene	3.63E-01	1.21E-09	9.42E-09	1.2	NA	1.5E-09	---
	Benzo(a)pyrene	4.82E-01	1.61E-09	1.25E-08	12	NA	1.9E-08	---
	Benzo(b)fluoranthene	3.26E-01	1.09E-09	8.46E-09	1.2	NA	1.3E-09	---
	Benzo(g,h,i)perylene	3.57E-01	1.05E-09	8.18E-09	NA	NA	---	---
	Benzo(k)fluoranthene	3.28E-01	1.09E-09	8.50E-09	1.2	NA	1.3E-09	---
	Cd	3.26E-01	5.37E-10	4.18E-09	0.38	0.0005	2.0E-10	8.4E-06
	Chrysene	4.23E-01	1.41E-09	1.10E-08	0.12	NA	1.7E-10	---
	Co	1.81E+01	2.98E-08	2.31E-07	NA	NA	---	---
	Cr	2.56E+02	4.22E-07	3.28E-06	0.19	0.003	8.0E-08	1.1E-03
	Cu	2.72E+02	4.48E-07	3.49E-06	NA	0.037	---	9.4E-05
	Dibenz(a,h)anthracene	5.71E-02	1.90E-10	1.48E-09	4.1	NA	7.8E-10	---
	Fe	4.19E+04	NA	NA	NA	NA	---	---
	Fluoranthene	7.50E-01	2.50E-09	1.94E-08	NA	0.04	---	4.9E-07
	Fluorene	3.98E-02	1.17E-10	9.09E-10	NA	0.04	---	2.3E-08
	Hg	1.55E+00	2.55E-09	1.99E-08	NA	0.0001	---	2.0E-04
	Indeno(1,2,3-cd)pyrene	3.52E-01	1.17E-09	9.12E-09	1.2	NA	1.4E-09	---
	MBT	5.14E-04	1.51E-12	1.17E-11	NA	NA	---	---
	Mn	5.17E+02	8.52E-07	6.63E-06	NA	NA	---	---
	Mo	1.03E+00	3.03E-09	2.35E-08	NA	NA	---	---
	Naphthalene	2.51E-02	7.37E-11	5.73E-10	NA	0.02	---	2.9E-08

Table J-7b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
	Ni	1.29E+02	2.12E-07	1.65E-06	NA	0.02	---	8.2E-05
	Pb	6.75E+01	1.11E-07	8.65E-07	0.0085	NA	9.5E-10	---
	Phenanthrene	4.11E-01	1.21E-09	9.39E-09	NA	NA	---	---
	Pyrene	8.90E-01	2.62E-09	2.04E-08	NA	0.03	---	6.8E-07
	Sb	3.23E+00	5.32E-09	4.14E-08	NA	0.0004	---	1.0E-04
	Se	4.25E-01	7.01E-10	5.45E-09	NA	0.005	---	1.1E-06
	TBT	8.18E-02	2.41E-10	1.87E-09	NA	NA	---	---
	TTBT	1.22E-03	3.58E-12	2.78E-11	NA	NA	---	---
	V	1.38E+02	2.27E-07	1.77E-06	NA	NA	---	---
	Zn	1.47E+02	2.42E-07	1.88E-06	NA	0.3	---	6.3E-06
South Basin Area X	a-Chlordane	1.90E-03	4.10E-12	3.19E-11	1.3	0.0005	5.3E-12	6.4E-08
	g-Chlordane	3.08E-03	6.64E-12	5.16E-11	1.3	0.0005	8.6E-12	1.0E-07
	DBT	2.04E-02	6.00E-11	4.67E-10	NA	NA	---	---
	Dieldrin	2.37E-03	6.97E-12	5.42E-11	16	0.00005	1.1E-10	1.1E-06
	Endosulfan II	1.24E-04	3.65E-13	2.84E-12	NA	0.006	---	4.7E-10
	Endrin	1.08E-04	3.17E-13	2.46E-12	NA	0.0003	---	8.2E-09
	Heptachlor	3.04E-04	8.95E-13	6.96E-12	4.1	0.0005	3.7E-12	1.4E-08
	Total Congeners	8.21E-01	2.84E-09	2.21E-08	5	NA	1.4E-08	---
	2,4'-DDD	1.28E-04	2.59E-13	2.01E-12	0.24	NA	6.2E-14	---
	2,4'-DDE	1.62E-04	3.28E-13	2.55E-12	0.34	NA	1.1E-13	---
	2,4'-DDT	1.58E-04	3.20E-13	2.49E-12	0.34	0.0005	1.1E-13	5.0E-09
	2-Methylnaphthalene	2.15E-02	3.51E-11	2.73E-10	NA	NA	---	---
	4,4'-DDD	1.17E-02	2.37E-11	1.84E-10	0.24	NA	5.7E-12	---
	4,4'-DDE	6.94E-03	1.41E-11	1.09E-10	0.34	NA	4.8E-12	---
	4,4'-DDT	1.27E-03	2.57E-12	2.00E-11	0.34	0.0005	8.7E-13	4.0E-08
	Acenaphthene	9.10E-03	2.67E-11	2.08E-10	NA	0.06	---	3.5E-09
	Acenaphthylene	1.51E-02	4.43E-11	3.44E-10	NA	NA	---	---
	Ag	5.39E-01	8.89E-10	6.92E-09	NA	0.005	---	1.4E-06
	Al	6.82E+04	1.12E-04	8.74E-04	NA	NA	---	---
	Anthracene	7.12E-02	1.17E-10	9.13E-10	NA	0.3	---	3.0E-09
	As	1.14E+01	2.31E-08	1.80E-07	1.5	0.0003	3.5E-08	6.0E-04
	Ba	5.55E+02	9.15E-07	7.12E-06	NA	NA	---	---
	Benzo(a)anthracene	2.28E-01	7.61E-10	5.92E-09	1.2	NA	9.1E-10	---
	Benzo(a)pyrene	3.14E-01	1.05E-09	8.13E-09	12	NA	1.3E-08	---
	Benzo(b)fluoranthene	2.36E-01	7.87E-10	6.12E-09	1.2	NA	9.4E-10	---
	Benzo(g,h,i)perylene	2.69E-01	7.90E-10	6.15E-09	NA	NA	---	---
	Benzo(k)fluoranthene	2.44E-01	8.13E-10	6.33E-09	1.2	NA	9.8E-10	---
	Cd	5.15E-01	8.49E-10	6.60E-09	0.38	0.0005	3.2E-10	1.3E-05
	Chrysene	3.04E-01	1.01E-09	7.89E-09	0.12	NA	1.2E-10	---
	Co	1.80E+01	2.97E-08	2.31E-07	NA	NA	---	---
	Cr	2.51E+02	4.13E-07	3.22E-06	0.19	0.003	7.9E-08	1.1E-03
	Cu	1.48E+02	2.44E-07	1.90E-06	NA	0.037	---	5.1E-05
	Dibenz(a,h)anthracene	4.41E-02	1.47E-10	1.14E-09	4.1	NA	6.0E-10	---
	Fe	4.34E+04	NA	NA	NA	NA	---	---
	Fluoranthene	3.94E-01	1.31E-09	1.02E-08	NA	0.04	---	2.6E-07
	Fluorene	2.08E-02	6.12E-11	4.76E-10	NA	0.04	---	1.2E-08
	Hg	8.21E-01	1.35E-09	1.05E-08	NA	0.0001	---	1.1E-04
	Indeno(1,2,3-cd)pyrene	2.47E-01	8.24E-10	6.41E-09	1.2	NA	9.9E-10	---
	MBT	9.83E-04	2.89E-12	2.25E-11	NA	NA	---	---
	Mn	4.53E+02	7.47E-07	5.81E-06	NA	NA	---	---
	Mo	1.23E+00	3.61E-09	2.81E-08	NA	NA	---	---
	Naphthalene	3.45E-02	1.01E-10	7.89E-10	NA	0.02	---	3.9E-08
	Ni	1.24E+02	2.04E-07	1.58E-06	NA	0.02	---	7.9E-05
	Pb	9.80E+01	1.61E-07	1.26E-06	0.0085	NA	1.4E-09	---
	Phenanthrene	2.00E-01	5.89E-10	4.58E-09	NA	NA	---	---
	Pyrene	4.63E-01	1.36E-09	1.06E-08	NA	0.03	---	3.5E-07

Table J-7b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at HPS Stations

Area	Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
	Sb	4.06E+00	6.70E-09	5.21E-08	NA	0.0004	---	1.3E-04
	Se	3.59E-01	5.92E-10	4.60E-09	NA	0.005	---	9.2E-07
	TBT	3.36E-02	9.87E-11	7.67E-10	NA	NA	---	---
	TTBT	1.32E-03	3.88E-12	3.02E-11	NA	NA	---	---
	V	1.42E+02	2.34E-07	1.82E-06	NA	NA	---	---
	Zn	2.13E+02	3.51E-07	2.73E-06	NA	0.3	---	9.1E-06

Table J-8a. RME Dose and Risk Calculation for Exposure to *M. nasuta* at Reference Locations

Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
2,4'-DDD	3.91E-05	1.15E-08	2.68E-08	0.24	NA	2.8E-09	---
2,4'-DDE	4.96E-05	1.46E-08	3.40E-08	0.34	NA	5.0E-09	---
2,4'-DDT	4.58E-05	1.34E-08	3.14E-08	0.34	0.0005	4.6E-09	6.3E-05
2-Methylnaphthalene	1.47E-04	4.31E-08	1.01E-07	NA	NA	---	---
4,4'-DDD	5.06E-04	1.49E-07	3.47E-07	0.24	NA	3.6E-08	---
4,4'-DDE	8.73E-04	2.56E-07	5.98E-07	0.34	NA	8.7E-08	---
4,4'-DDT	6.78E-05	1.99E-08	4.65E-08	0.34	0.0005	6.8E-09	9.3E-05
Acenaphthene	1.77E-04	5.19E-08	1.21E-07	NA	0.06	---	2.0E-06
Acenaphthylene	3.01E-04	8.85E-08	2.06E-07	NA	NA	---	---
a-Chlordane	1.16E-04	3.41E-08	7.97E-08	1.30E+00	5.00E-04	4.4E-08	1.6E-04
Ag	2.39E-02	7.03E-06	1.64E-05	NA	0.005	---	3.3E-03
Al	2.79E+02	8.20E-02	1.91E-01	NA	NA	---	---
Anthracene	1.19E-03	3.51E-07	8.19E-07	NA	0.3	---	2.7E-06
As	3.77E+00	1.11E-03	2.58E-03	1.5	0.0003	1.7E-03	8.6E+00
Ba	2.94E+00	8.63E-04	2.01E-03	NA	NA	---	---
Benzo(a)anthracene	2.49E-03	7.31E-07	1.71E-06	1.2	NA	8.8E-07	---
Benzo(a)pyrene	3.78E-03	1.11E-06	2.59E-06	12	NA	1.3E-05	---
Benzo(b)fluoranthene	3.49E-03	1.03E-06	2.39E-06	1.2	NA	1.2E-06	---
Benzo(g,h,i)perylene	3.03E-03	8.91E-07	2.08E-06	NA	NA	---	---
Benzo(k)fluoranthene	3.99E-03	1.17E-06	2.74E-06	1.2	NA	1.4E-06	---
Cd	8.91E-02	2.62E-05	6.11E-05	0.38	0.0005	1.0E-05	1.2E-01
Chrysene	4.35E-03	1.28E-06	2.98E-06	0.12	NA	1.5E-07	---
Co	5.09E-01	1.50E-04	3.49E-04	NA	NA	---	---
Cr	2.82E+00	8.28E-04	1.93E-03	0.19	0.003	1.6E-04	6.4E-01
Cu	2.48E+00	7.28E-04	1.70E-03	NA	0.037	---	4.6E-02
DBT	2.36E-03	6.94E-07	1.62E-06	NA	NA	---	---
Dibenz(a,h)anthracene	1.40E-04	4.12E-08	9.60E-08	4.1	NA	1.7E-07	---
Dieldrin	1.59E-04	4.67E-08	1.09E-07	16	0.00005	7.5E-07	2.2E-03
Endosulfan II	3.60E-05	1.06E-08	2.47E-08	NA	0.006	---	4.1E-06
Endrin	3.12E-05	9.17E-09	2.14E-08	NA	0.0003	---	7.1E-05
Fe	3.92E+02	1.15E-01	2.69E-01	NA	NA	---	---
Fluoranthene	9.85E-03	2.89E-06	6.75E-06	NA	0.04	---	1.7E-04
Fluorene	2.56E-04	7.53E-08	1.76E-07	NA	0.04	---	4.4E-06
g-Chlordane	9.32E-05	2.74E-08	6.39E-08	1.3	0.0005	3.6E-08	1.3E-04
Heptachlor	3.00E-05	8.83E-09	2.06E-08	4.1	0.0005	3.6E-08	4.1E-05
Hg	2.32E-02	6.82E-06	1.59E-05	NA	0.0001	---	1.6E-01
Indeno(1,2,3-cd)pyrene	1.83E-03	5.37E-07	1.25E-06	1.2	NA	6.4E-07	---
MBT	3.35E-03	9.85E-07	2.30E-06	NA	NA	---	---
Mn	7.93E+00	2.33E-03	5.44E-03	NA	NA	---	---
Mo	4.90E-01	1.44E-04	3.36E-04	NA	NA	---	---
Naphthalene	5.20E-04	1.53E-07	3.57E-07	NA	0.02	---	1.8E-05
Ni	1.36E+00	4.00E-04	9.34E-04	NA	0.02	---	4.7E-02
Pb	4.90E-01	1.44E-04	3.36E-04	0.0085	NA	1.2E-06	---
Phenanthrene	2.47E-03	7.24E-07	1.69E-06	NA	NA	---	---
Pyrene	1.18E-02	3.46E-06	8.06E-06	NA	0.03	---	2.7E-04
Sb	2.66E-02	7.83E-06	1.83E-05	NA	0.0004	---	4.6E-02
Se	7.87E-01	2.31E-04	5.40E-04	NA	0.005	---	1.1E-01
TBT	4.75E-03	1.39E-06	3.25E-06	NA	NA	---	---
Total Congeners	7.84E-03	2.30E-06	5.37E-06	5	NA	1.2E-05	---
Total Dioxin	6.62E-04	1.94E-07	4.54E-07	130000	NA	2.5E-02	---
TTBT	7.63E-03	2.24E-06	5.23E-06	NA	NA	---	---
V	1.49E+00	4.38E-04	1.02E-03	NA	NA	---	---
Zn	1.83E+01	5.37E-03	1.25E-02	NA	0.3	---	4.2E-02

Table J-8b. RME Dose and Risk Calculation for Exposure to Surface Sediment at Reference Locations

Chemical	EPC for RME (mg/kg)	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
a-Chlordane	7.53E-05	3.81E-12	8.89E-12	1.3	0.0005	5.0E-12	1.8E-08
g-Chlordane	4.48E-05	2.26E-12	5.28E-12	1.3	0.0005	2.9E-12	1.1E-08
DBT	1.30E-03	7.95E-11	1.86E-10	NA	NA	---	---
Dieldrin	5.50E-05	3.36E-12	7.83E-12	16	0.00005	5.4E-11	1.6E-07
Endosulfan II	5.81E-05	3.55E-12	8.28E-12	NA	0.006	---	1.4E-09
Endrin	5.00E-05	3.05E-12	7.12E-12	NA	0.0003	---	2.4E-08
Heptachlor	4.90E-05	2.99E-12	6.98E-12	4.1	0.0005	1.2E-11	1.4E-08
2,4'-DDD	6.20E-05	3.03E-12	7.06E-12	0.24	NA	7.3E-13	---
2,4'-DDE	7.64E-05	3.73E-12	8.71E-12	0.34	NA	1.3E-12	---
2,4'-DDT	7.12E-05	3.48E-12	8.11E-12	3.40E-01	5.00E-04	1.2E-12	1.6E-08
4,4'-DDD	2.01E-03	9.83E-11	2.29E-10	0.24	NA	2.4E-11	---
4,4'-DDE	7.98E-04	3.90E-11	9.09E-11	0.34	NA	1.3E-11	---
4,4'-DDT	8.51E-04	4.15E-11	9.69E-11	0.34	0.0005	1.4E-11	1.9E-07
Acenaphthene	8.54E-03	5.21E-10	1.22E-09	NA	0.06	---	2.0E-08
Acenaphthylene	9.31E-03	5.68E-10	1.33E-09	NA	NA	---	---
Ag	4.43E-01	1.94E-08	4.53E-08	NA	0.005	---	9.1E-06
Al	7.59E+04	3.32E-03	7.75E-03	NA	NA	---	---
Anthracene	3.13E-02	1.37E-09	3.20E-09	NA	0.3	---	1.1E-08
As	1.21E+01	5.91E-07	1.38E-06	1.5	0.0003	8.9E-07	4.6E-03
Ba	4.83E+02	2.12E-05	4.94E-05	NA	NA	---	---
Benzo(a)anthracene	9.49E-02	6.28E-09	1.47E-08	1.2	NA	7.5E-09	---
Benzo(a)pyrene	1.86E-01	1.23E-08	2.87E-08	12	NA	1.5E-07	---
Benzo(b)fluoranthene	1.17E-01	7.73E-09	1.80E-08	1.2	NA	9.3E-09	---
Benzo(g,h,i)perylene	1.78E-01	1.09E-08	2.53E-08	NA	NA	---	---
Benzo(k)fluoranthene	1.13E-01	7.49E-09	1.75E-08	1.2	NA	9.0E-09	---
Cd	6.42E-01	2.81E-08	6.56E-08	0.38	0.0005	1.1E-08	1.3E-04
Chrysene	1.12E-01	7.41E-09	1.73E-08	0.12	NA	8.9E-10	---
Co	2.15E+01	9.41E-07	2.20E-06	NA	NA	---	---
Cr	1.76E+02	7.71E-06	1.80E-05	0.19	0.003	1.5E-06	6.0E-03
Cu	4.70E+01	2.06E-06	4.80E-06	NA	0.037	---	1.3E-04
Dibenz(a,h)anthracene	1.87E-02	1.24E-09	2.90E-09	4.1	NA	5.1E-09	---
Fe	4.92E+04	NA	NA	NA	NA	---	---
Fluoranthene	2.33E-01	1.54E-08	3.59E-08	NA	0.04	---	9.0E-07
Fluorene	8.36E-03	5.10E-10	1.19E-09	NA	0.04	---	3.0E-08
Hg	3.64E-01	1.59E-08	3.72E-08	NA	0.0001	---	3.7E-04
Indeno(1,2,3-cd)pyrene	1.59E-01	1.05E-08	2.46E-08	1.2	NA	1.3E-08	---
MBT	6.20E-04	3.78E-11	8.83E-11	NA	NA	---	---
Mn	6.15E+02	2.69E-05	6.29E-05	NA	NA	---	---
Mo	8.51E-01	5.19E-08	1.21E-07	NA	NA	---	---
Naphthalene	1.41E-02	8.63E-10	2.01E-09	NA	0.02	---	1.0E-07
Ni	1.00E+02	4.39E-06	1.03E-05	NA	0.02	---	5.1E-04
Pb	2.86E+01	1.25E-06	2.92E-06	0.0085	NA	1.1E-08	---
Phenanthrene	1.05E-01	6.39E-09	1.49E-08	NA	NA	---	---
Pyrene	2.94E-01	1.80E-08	4.19E-08	NA	0.03	---	1.4E-06
Sb	9.16E-01	4.01E-08	9.35E-08	NA	0.0004	---	2.3E-04
Se	4.54E-01	1.99E-08	4.64E-08	NA	0.005	---	9.3E-06
TBT	2.80E-03	1.71E-10	3.98E-10	NA	NA	---	---
Total Congeners	1.44E-02	9.81E-10	2.29E-09	5	NA	4.9E-09	---
TTBT	1.47E-03	8.96E-11	2.09E-10	NA	NA	---	---
V	1.59E+02	6.96E-06	1.62E-05	NA	NA	---	---
Zn	1.27E+02	5.58E-06	1.30E-05	NA	0.3	---	4.3E-05

Table J-9a. CTE Dose and Risk Calculation for Exposure to *M. nasuta* at Reference Locations

Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
2,4'-DDD	3.91E-05	5.74E-10	4.47E-09	0.24	NA	1.4E-10	---
2,4'-DDE	4.96E-05	7.29E-10	5.67E-09	0.34	NA	2.5E-10	---
2,4'-DDT	4.58E-05	6.72E-10	5.23E-09	0.34	0.0005	2.3E-10	1.0E-05
2-Methylnaphthalene	1.47E-04	2.16E-09	1.68E-08	NA	NA	---	---
4,4'-DDD	5.06E-04	7.43E-09	5.78E-08	0.24	NA	1.8E-09	---
4,4'-DDE	8.73E-04	1.28E-08	9.97E-08	0.34	NA	4.4E-09	---
4,4'-DDT	6.78E-05	9.97E-10	7.75E-09	0.34	0.0005	3.4E-10	1.6E-05
Acenaphthene	1.77E-04	2.59E-09	2.02E-08	NA	0.06	---	3.4E-07
Acenaphthylene	3.01E-04	4.42E-09	3.44E-08	NA	NA	---	---
a-Chlordane	1.16E-04	1.71E-09	1.33E-08	1.30E+00	5.00E-04	2.2E-09	2.7E-05
Ag	2.39E-02	3.51E-07	2.73E-06	NA	0.005	---	5.5E-04
Al	2.79E+02	4.10E-03	3.19E-02	NA	NA	---	---
Anthracene	1.19E-03	1.75E-08	1.36E-07	NA	0.3	---	4.5E-07
As	3.77E+00	5.53E-05	4.30E-04	1.5	0.0003	8.3E-05	1.4E+00
Ba	2.94E+00	4.31E-05	3.36E-04	NA	NA	---	---
Benzo(a)anthracene	2.49E-03	3.66E-08	2.84E-07	1.2	NA	4.4E-08	---
Benzo(a)pyrene	3.78E-03	5.55E-08	4.32E-07	12	NA	6.7E-07	---
Benzo(b)fluoranthene	3.49E-03	5.13E-08	3.99E-07	1.2	NA	6.2E-08	---
Benzo(g,h,i)perylene	3.03E-03	4.46E-08	3.47E-07	NA	NA	---	---
Benzo(k)fluoranthene	3.99E-03	5.87E-08	4.56E-07	1.2	NA	7.0E-08	---
Cd	8.91E-02	1.31E-06	1.02E-05	0.38	0.0005	5.0E-07	2.0E-02
Chrysene	4.35E-03	6.40E-08	4.97E-07	0.12	NA	7.7E-09	---
Co	5.09E-01	7.48E-06	5.82E-05	NA	NA	---	---
Cr	2.82E+00	4.14E-05	3.22E-04	0.19	0.003	7.9E-06	1.1E-01
Cu	2.48E+00	3.64E-05	2.83E-04	NA	0.037	---	7.7E-03
DBT	2.36E-03	3.47E-08	2.70E-07	NA	NA	---	---
Dibenz(a,h)anthracene	1.40E-04	2.06E-09	1.60E-08	4.1	NA	8.4E-09	---
Dieldrin	1.59E-04	2.33E-09	1.81E-08	16	0.00005	3.7E-08	3.6E-04
Endosulfan II	3.60E-05	5.29E-10	4.11E-09	NA	0.006	---	6.9E-07
Endrin	3.12E-05	4.58E-10	3.57E-09	NA	0.0003	---	1.2E-05
Fe	3.92E+02	5.76E-03	4.48E-02	NA	NA	---	---
Fluoranthene	9.85E-03	1.45E-07	1.13E-06	NA	0.04	---	2.8E-05
Fluorene	2.56E-04	3.77E-09	2.93E-08	NA	0.04	---	7.3E-07
g-Chlordane	9.32E-05	1.37E-09	1.07E-08	1.3	0.0005	1.8E-09	2.1E-05
Heptachlor	3.00E-05	4.41E-10	3.43E-09	4.1	0.0005	1.8E-09	6.9E-06
Hg	2.32E-02	3.41E-07	2.65E-06	NA	0.0001	---	2.7E-02
Indeno(1,2,3-cd)pyrene	1.83E-03	2.69E-08	2.09E-07	1.2	NA	3.2E-08	---
MBT	3.35E-03	4.92E-08	3.83E-07	NA	NA	---	---
Mn	7.93E+00	1.16E-04	9.06E-04	NA	NA	---	---
Mo	4.90E-01	7.20E-06	5.60E-05	NA	NA	---	---
Naphthalene	5.20E-04	7.64E-09	5.95E-08	NA	0.02	---	3.0E-06
Ni	1.36E+00	2.00E-05	1.56E-04	NA	0.02	---	7.8E-03
Pb	4.90E-01	7.20E-06	5.60E-05	0.0085	NA	6.1E-08	---
Phenanthrene	2.47E-03	3.62E-08	2.82E-07	NA	NA	---	---
Pyrene	1.18E-02	1.73E-07	1.34E-06	NA	0.03	---	4.5E-05
Sb	2.66E-02	3.91E-07	3.04E-06	NA	0.0004	---	7.6E-03
Se	7.87E-01	1.16E-05	9.00E-05	NA	0.005	---	1.8E-02
TBT	4.75E-03	6.97E-08	5.42E-07	NA	NA	---	---
Total Congeners	7.84E-03	1.15E-07	8.95E-07	5	NA	5.8E-07	---
Total Dioxin	6.62E-04	9.72E-09	7.56E-08	130000	NA	1.3E-03	---
TTBT	7.63E-03	1.12E-07	8.72E-07	NA	NA	---	---
V	1.49E+00	2.19E-05	1.70E-04	NA	NA	---	---
Zn	1.83E+01	2.69E-04	2.09E-03	NA	0.3	---	7.0E-03

Table J-9b. CTE Dose and Risk Calculation for Exposure to Surface Sediment at Reference Locations

Chemical	EPC (mg/kg)	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
a-Chlordane	7.53E-05	1.63E-13	1.26E-12	1.3	0.0005	2.1E-13	2.5E-09
g-Chlordane	4.48E-05	9.66E-14	7.51E-13	1.3	0.0005	1.3E-13	1.5E-09
DBT	1.30E-03	3.83E-12	2.98E-11	NA	NA	---	---
Dieldrin	5.50E-05	1.62E-13	1.26E-12	16	0.00005	2.6E-12	2.5E-08
Endosulfan II	5.81E-05	1.71E-13	1.33E-12	NA	0.006	---	2.2E-10
Endrin	5.00E-05	1.47E-13	1.14E-12	NA	0.0003	---	3.8E-09
Heptachlor	4.90E-05	1.44E-13	1.12E-12	4.1	0.0005	5.9E-13	2.2E-09
2,4'-DDD	6.20E-05	1.26E-13	9.77E-13	0.24	NA	3.0E-14	---
2,4'-DDE	7.64E-05	1.55E-13	1.21E-12	0.34	NA	5.3E-14	---
2,4'-DDT	7.12E-05	1.44E-13	1.12E-12	3.40E-01	5.00E-04	4.9E-14	2.2E-09
4,4'-DDD	2.01E-03	4.08E-12	3.17E-11	0.24	NA	9.8E-13	---
4,4'-DDE	7.98E-04	1.62E-12	1.26E-11	0.34	NA	5.5E-13	---
4,4'-DDT	8.51E-04	1.72E-12	1.34E-11	0.34	0.0005	5.9E-13	2.7E-08
Acenaphthene	8.54E-03	2.51E-11	1.95E-10	NA	0.06	---	3.3E-09
Acenaphthylene	9.31E-03	2.74E-11	2.13E-10	NA	NA	---	---
Ag	4.43E-01	7.30E-10	5.68E-09	NA	0.005	---	1.1E-06
Al	7.59E+04	1.25E-04	9.73E-04	NA	NA	---	---
Anthracene	3.13E-02	5.16E-11	4.02E-10	NA	0.3	---	1.3E-09
As	1.21E+01	2.45E-08	1.91E-07	1.5	0.0003	3.7E-08	6.4E-04
Ba	4.83E+02	7.96E-07	6.19E-06	NA	NA	---	---
Benzo(a)anthracene	9.49E-02	3.16E-10	2.46E-09	1.2	NA	3.8E-10	---
Benzo(a)pyrene	1.86E-01	6.20E-10	4.82E-09	12	NA	7.4E-09	---
Benzo(b)fluoranthene	1.17E-01	3.89E-10	3.02E-09	1.2	NA	4.7E-10	---
Benzo(g,h,i)perylene	1.78E-01	5.24E-10	4.07E-09	NA	NA	---	---
Benzo(k)fluoranthene	1.13E-01	3.77E-10	2.93E-09	1.2	NA	4.5E-10	---
Cd	6.42E-01	1.06E-09	8.23E-09	0.38	0.0005	4.0E-10	1.6E-05
Chrysene	1.12E-01	3.73E-10	2.90E-09	0.12	NA	4.5E-11	---
Co	2.15E+01	3.54E-08	2.75E-07	NA	NA	---	---
Cr	1.76E+02	2.90E-07	2.26E-06	0.19	0.003	5.5E-08	7.5E-04
Cu	4.70E+01	7.75E-08	6.03E-07	NA	0.037	---	1.6E-05
Dibenz(a,h)anthracene	1.87E-02	6.25E-11	4.86E-10	4.1	NA	2.6E-10	---
Fe	4.92E+04	NA	NA	NA	NA	---	---
Fluoranthene	2.33E-01	7.75E-10	6.03E-09	NA	0.04	---	1.5E-07
Fluorene	8.36E-03	2.46E-11	1.91E-10	NA	0.04	---	4.8E-09
Hg	3.64E-01	6.00E-10	4.67E-09	NA	0.0001	---	4.7E-05
Indeno(1,2,3-cd)pyrene	1.59E-01	5.31E-10	4.13E-09	1.2	NA	6.4E-10	---
MBT	6.20E-04	1.82E-12	1.42E-11	NA	NA	---	---
Mn	6.15E+02	1.01E-06	7.89E-06	NA	NA	---	---
Mo	8.51E-01	2.50E-09	1.95E-08	NA	NA	---	---
Naphthalene	1.41E-02	4.16E-11	3.23E-10	NA	0.02	---	1.6E-08
Ni	1.00E+02	1.65E-07	1.29E-06	NA	0.02	---	6.4E-05
Pb	2.86E+01	4.71E-08	3.66E-07	0.0085	NA	4.0E-10	---
Phenanthrene	1.05E-01	3.08E-10	2.40E-09	NA	NA	---	---
Pyrene	2.94E-01	8.66E-10	6.73E-09	NA	0.03	---	2.2E-07
Sb	9.16E-01	1.51E-09	1.17E-08	NA	0.0004	---	2.9E-05
Se	4.54E-01	7.48E-10	5.82E-09	NA	0.005	---	1.2E-06
TBT	2.80E-03	8.23E-12	6.40E-11	NA	NA	---	---
Total Congeners	1.44E-02	5.00E-11	3.89E-10	5	NA	2.5E-10	---
TTBT	1.47E-03	4.32E-12	3.36E-11	NA	NA	---	---
V	1.59E+02	2.62E-07	2.04E-06	NA	NA	---	---
Zn	1.27E+02	2.10E-07	1.63E-06	NA	0.3	---	5.4E-06

APPENDIX K

Human Health Risk Communication

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Appendix K. Human Health Risk Communication

Numerous studies have been conducted on San Francisco Bay to determine the health impact of contaminant sources on body burdens in sport fish. In 1993, a health advisory was issued in the San Francisco Bay and Delta for striped bass due to elevated methylmercury (i.e., organic mercury) concentrations resulting from surface water runoff from historical mining operations. In 1994, the San Francisco Bay Regional Water Quality Control Board (RWQCS) in cooperation with the Bay Protection and Toxic Cleanup Program (BPTCP) conducted a pilot study to determine the chemical levels present in sports fish throughout San Francisco Bay. The purpose of the study was to evaluate types of chemicals present in the bay and determine where elevated concentrations may be occurring. The pilot study was further expanded to include a preliminary health assessment on consuming certain types of fish species caught in the bay. The results of the assessment then were used to determine if additional health advisories were warranted for other fish species that likewise may have elevated chemical contaminants similar to the striped bass.

More than 100 chemicals were analyzed in the pilot study and only the following six compounds were found to be levels high enough to warrant further investigation, methylmercury, polychlorinated biphenyls (PCBs), dioxins, chlordane, DDT group, and dieldrin. The majority of these compounds are associated with industrial activities or agriculture. Using screening values recommended by United States Environmental Protection Agency (U.S. EPA) guidance, the study found that these chemicals were potential human health concern for people consuming bay-caught fish. The Office of Environmental Health Hazard Assessment (OEHHA) then issued an interim health advisory for people consuming from San Francisco Bay (OEHHA, 1994), which states that:

- Adults should limit consumption of Bay sport fish to, at most, two meals per month;
- Adults should not eat any striped bass more than 35 inches;
- Pregnant women or women that may become pregnant or are breast-feeding, and children under 6 should not eat more than one meal per month and should not eat any meals of shark more than 24 inches or striped bass more than 27 inches.

It should be noted that the advisory does not apply to salmon, anchovies, herring, and smelt caught in the bay, other ocean-caught sport fish, or commercial fish.

Following the 1994 study, the Regional Monitoring Program (RMP) Fish Contamination Committee, including representatives from local agencies, dischargers, and environmental groups, designed a program to monitor contaminant levels in fish over five years starting in 1997. The program included core monitoring of fish tissue levels, special studies to improve future monitoring, and study design to measure rates at which people consume fish caught in San Francisco Bay. The fish tissue monitoring and special studies were performed in 1997. The fish consumption was reported in 2001. The following sections describe the results from San Francisco Estuary Institute (SFEI) studies conducted in 1997 and 2001

K.1 1997 CONTAMINANT CONCENTRATIONS IN FISH

The SFEI core monitoring program targeted seven fish species frequently captured and consumed by local fisherman. The species sampled included jacksmelt (*Atherinopsis californiensis*), shiner surfperch (*Cymatogaster aggregata*), white croaker (*Genyonemus lineatus*), striped bass (*Morone saxatilis*), California halibut (*Paralichthys californicus*), leopard shark (*Triakis semifasciata*), and white sturgeon (*Acipenser transmontanus*). The objectives of the study were to determine the variance of chemical contaminants among individual fish, and to identify the factors, which influence bioaccumulation in fish. The special study was designed to evaluate if different cooking techniques reduces human exposure to contaminant in fish. Fish were collected in May 1997 using gill nets, otter trawls, and hook and line from

seven sampling locations (i.e., South Bay Bridges, Oakland Harbor, San Francisco Waterfront, Berkeley, San Pablo Bay, Davis Point, and Suisun Bay) frequented by anglers. Captured fish ranged in size from 10 cm to greater than 183 cm depending on the species. Head and tails from the striped bass, leopard shark, and sturgeon were removed in the field, leaving the body cavity intact, and skin was removed prior to compositing. White croaker were composited using muscle and skin. Shiner surfperch and jacksmelt were composited by removing the heads, tails, and guts, and leaving muscle with skin and skeleton. All the samples were analyzed for mercury, selenium, PCBs, organochlorine pesticides, dibenzodioxins, and dibenzofurans.

Results from the fish tissue analysis were compared against screening values established for protection of a human receptor consuming 30 g of locally-captured fish per day. In addition, statistical comparisons were made using the 1994 pilot study and 1997 data for each species using the nonparametric Wilcoxon test (SFEI, 1999). Parametric analysis of covariance (ANOVA) also was performed to determine the relationship between chemical concentrations and fish lengths. Spatial and temporal differences were evaluated using both the wet weight data and data adjusted for length and lipid content. Actual differences in fish concentrations from various locations could not be related directly to potential intake by local anglers.

The study found that persistent toxic chemicals in San Francisco Bay fish were at levels of potential concern to human health and confirmed the initial findings of the 1994 pilot study. Mercury exceeded the screening value of 0.23 mg/kg wet weight at 44 of the 84 samples. The larger species of fish, including leopard shark and striped bass, accumulated higher mercury. A high positive correlation was determined for mercury based on fish length. Concentrations of trace organics were highest in white croaker and shiner surfperch. PCBs were elevated above the screening value of 0.023 mg/kg in 51 of the 72 samples with all of the white croaker and surfperch concentrations above the screening value. The remaining chemicals had lower number of exceedances above the screening value including 27 of 72 samples for dieldrin, 16 of 72 samples for DDTs, and 11 of 72 for chlordanes. Species with low lipid content in their muscle tissue, such as halibut and leopard shark, had the lowest concentrations of trace organics (SFEI, 1999). Dibenzodioxins and dibenzofurans were measured in six samples of white croaker and one sample of striped bass above the screening value of 0.0015 mg/kg wet weight.

Spatial variations were found to be evident in three fish species including white croaker, surfperch, and jacksmelt. Oakland Harbor had higher concentrations of mercury, PCBs, DDTs, and chlordanes in white croaker, surfperch, and jacksmelt as compared to the screening values. To determine if the spatial variations were dependent on lipid content and fish length, the data were normalized or standardized based on percent lipid content and length. It was determined that fish size and lipid content were important factors influencing accumulation of persistent compounds including PCBs, chlordanes, DDTs, and dieldrin. The results of the sampling for spatial patterns suggest that surfperch and jacksmelt are good indicator species to determine the spatial variation in contamination across San Francisco Bay.

Reviewing the data for temporal trends indicated that mercury concentrations have not significantly declined since 1994. In 1997, lipid normalized concentrations of PCBs were lower than levels found in white croaker, surfperch, and jacksmelt in 1994. A similar pattern of decreasing concentrations was observed for lipid normalized DDTs, chlordances, dieldrin, and dioxins. The reasons for the difference in the lipid normalized concentrations shown in 1994 and 1997 is not understood, and further studies are required to see whether the declining concentrations are due to variations in the physiology or behavior of fish, the food web of San Francisco Bay, analytical methods, or contaminant loads.

K.2 2001 SEAFOOD CONSUMPTION STUDY

As a follow-up to RMP's 1997 study, a seafood consumption study was performed in 2000 (SFEI, 2001) to survey San Francisco Bay anglers and evaluate their fish consumption practices. The study was designed to gather information from local anglers and identify those anglers that may be at risk due to their fish consumption practices and methods for promoting an effective educational program to inform these anglers regarding health advisories. In addition to the fish consumption study, SFEI continued its core monitoring program and collected fish tissue following the same protocol conducted in the 1997 study. The interpretation of the fish tissue results is not yet available from SFEI; however, preliminary data from this study were released for inclusion in this report, and the findings are discussed in Section 10.2.2.

The survey was performed in 1998 and 1999 and targeted 14 public piers and adjacent beaches or banks, five public boat launches, and party boats from three marinas. Participants in the study included 1,300 San Francisco Bay anglers who spoke five different languages (i.e., English, Spanish, Vietnamese, Cantonese, and Mandarin). The survey included questions on ethnicity, income, education, age, amount of fish eaten, species of fish eaten, parts of fish eaten, preparation and cooking methods, others in the household who eat local catch, and awareness of the health advisories (SFEI, 2001). Angler fish-consumption rates were determined using the responses from the survey regarding how often a meal of fish was eaten and the proportions.

About 15% of the anglers reported not eating fish in the last four weeks. Of those that eat their catch, 9% (one in ten fish-consuming bay anglers) consume fish above the health advisory, and the remaining 91% eat below the advisory amount. Asians and African-Americans were more likely than other ethnic groups to eat above the limit. Eating above the limit was not found to be based on differences in income, education, or fishing mode. African Americans and Filipinos reported higher overall consumption than Caucasians. The average consumption rate among all ethnic groups was 14 g of fish per day for individuals who consume their catch. Highest average consumption rate of 27.5 g/day was determined for a group specified as "others", which includes individuals of Russian, Middle Eastern, and mixed descents. The lowest consumption rate was estimated for Caucasians at 12.1 g/day. All other groups ranged from 12.6 g/day (Vietnamese, Koreans, Japanese, and Southeast Asians) to 22.4 g/day for Pacific Islanders. It should be noted that these consumption rates are significantly lower than those found in the Asian Pacific Environmental Network's Laotian study (APEN, 1998) were the 90th percentile consumption rate was estimated at 42.5 g/day.

The five most popular fish consume by local anglers were striped bass, halibut, jacksmelt, sturgeon, and white croaker. The popularity of the fish depends on the mode of capture, ethnicity, income, and education. White croaker, which has the elevated contamination levels is more likely to be eaten by Asians or individuals with lower income and education. Asians also have preparation and cooking practices which tend to increase their exposure to the contaminants including consuming the skin of the fish, or eating it raw. About one fifth of all anglers reported eating fish they caught from places other than San Francisco Bay including the ocean (SFEI, 2001). Anglers who consume their catch also were likely to order fish in restaurants or stores. About 40% of anglers stated that woman of child bearing age eat some of the catch, and 13% reported that children under the age of six eat the fish they catch (SFEI, 2001). About 2% of the participants stated that pregnant or breast-feeding women eat the catch.

Overall, the vast majority of San Francisco Bay anglers are eating within the health advisory limit recommended by OEHHA. Approximately one in ten fisherman are eating above the limit, and Asian and African-Americans are the highest at risk due to their cooking practices and higher consumption rates. Study recommended further outreach programs targeted exposed populations and other approaches for effectively promoting educational message regarding the health advisory.

Table K-1. Summary of Sports Fish Tissue Concentrations from HPS and Reference Locations

Area	Species	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
HPS	Jacksmelt	a-Chlordane	6	6	100%	3.10E-04	7.40E-04	4.43E-04	1.68E-04
		g-Chlordane	6	6	100%	1.10E-04	2.70E-04	1.63E-04	6.92E-05
		DBT	2	6	33%	4.70E-04	4.69E-03	3.31E-03	2.10E-03
		Dieldrin	6	6	100%	1.80E-04	5.10E-04	3.30E-04	1.18E-04
		Endosulfan II	0	6	0%	2.00E-05	2.00E-05	2.00E-05	4.07E-13
		Endrin	0	6	0%	5.00E-06	5.00E-06	5.00E-06	1.02E-13
		Heptachlor	0	6	0%	1.00E-05	1.00E-05	1.00E-05	2.03E-13
		24-DDD	0	6	0%	1.00E-05	1.00E-05	1.00E-05	2.03E-13
		24-DDE	0	6	0%	4.00E-05	4.00E-05	4.00E-05	8.13E-13
		24-DDT	0	6	0%	1.50E-05	1.50E-05	1.50E-05	2.03E-13
		2-Methyl naphthalene	0	6	0%	6.43E-05	1.09E-04	8.08E-05	1.67E-05
		44-DDD	6	6	100%	9.80E-04	2.32E-03	1.48E-03	5.70E-04
		44-DDE	6	6	100%	5.91E-03	1.29E-02	8.83E-03	2.49E-03
		44-DDT	6	6	100%	1.50E-04	4.90E-04	3.10E-04	1.31E-04
		Acenaphthene	6	6	100%	1.38E-04	3.84E-04	2.60E-04	1.08E-04
		Acenaphthylene	1	6	17%	8.31E-06	3.84E-05	1.34E-05	1.22E-05
		Ag	6	6	100%	4.61E-03	1.27E-02	9.74E-03	3.33E-03
		Anthracene	5	6	83%	6.80E-06	5.03E-05	3.71E-05	1.61E-05
		As	6	6	100%	3.14E-01	4.41E-01	3.75E-01	5.63E-02
		Benzo(a)anthracene	5	6	83%	7.19E-06	9.81E-05	5.86E-05	3.79E-05
		Benzo(a)pyrene	1	6	17%	9.93E-06	8.15E-05	2.20E-05	2.92E-05
		Benzo(b)fluoranthene	3	6	50%	7.18E-06	1.99E-04	9.54E-05	9.69E-05
		Benzo(ghi)perylene	0	6	0%	4.88E-05	1.16E-04	8.36E-05	2.75E-05
		Benzo(k)fluoranthene	3	6	50%	8.37E-06	1.47E-04	7.59E-05	7.40E-05
		Cd	6	6	100%	1.48E-02	4.46E-02	2.91E-02	1.01E-02
		Chrysene	6	6	100%	5.32E-05	2.24E-04	1.12E-04	6.86E-05
		Cr	2	6	33%	7.99E-02	4.18E-01	1.71E-01	1.32E-01
		Cu	6	6	100%	4.95E-01	1.32E+00	8.74E-01	3.01E-01
		Dibenz(ah)anthracene	0	6	0%	6.75E-06	7.04E-06	6.84E-06	1.07E-07
		Fluoranthene	1	6	17%	4.22E-05	7.65E-04	1.95E-04	2.83E-04
		Fluorene	6	6	100%	8.29E-05	2.01E-04	1.30E-04	5.05E-05
		Hg	6	6	100%	1.36E-01	2.59E-01	1.80E-01	4.23E-02
		Indeno(123-cd)pyrene	3	6	50%	3.79E-06	1.44E-04	6.77E-05	7.03E-05
		MBT	0	6	0%	1.46E-03	1.48E-03	1.47E-03	1.00E-05
		Naphthalene	0	6	0%	1.53E-04	1.91E-04	1.68E-04	1.32E-05
		Ni	6	6	100%	3.76E-02	1.69E-01	6.83E-02	4.99E-02
		Pb	6	6	100%	9.63E-03	3.14E+01	5.24E+00	1.28E+01
		Phenanthrene	1	6	17%	7.61E-05	7.90E-04	2.24E-04	2.79E-04
		Pyrene	0	6	0%	6.05E-05	3.02E-04	1.21E-04	9.42E-05
		Sb	5	6	83%	8.18E-04	2.43E-03	1.84E-03	5.69E-04
		Se	6	6	100%	1.21E-01	3.09E-01	2.40E-01	7.12E-02
		TBT	6	6	100%	3.61E-03	8.96E-03	6.32E-03	2.15E-03
		Total_PCB	6	6	100%	5.73E-02	2.24E-01	1.20E-01	6.43E-02
		Zn	6	6	100%	1.59E+01	2.92E+01	2.00E+01	5.32E+00
Reference	Jacksmelt	a-Chlordane	6	6	100%	1.20E-04	5.60E-04	2.87E-04	1.65E-04
		g-Chlordane	6	6	100%	4.00E-05	1.90E-04	9.33E-05	6.77E-05
		DBT	0	6	0%	4.62E-03	4.67E-03	4.64E-03	1.60E-05
		Dieldrin	6	6	100%	1.50E-04	6.50E-04	4.17E-04	1.68E-04
		Endosulfan II	0	6	0%	2.00E-05	2.00E-05	2.00E-05	4.07E-13
		Endrin	0	6	0%	5.00E-06	5.00E-06	5.00E-06	1.02E-13
		Heptachlor	0	6	0%	1.00E-05	1.00E-05	1.00E-05	2.03E-13
		24-DDD	0	6	0%	1.00E-05	1.00E-05	1.00E-05	2.03E-13
		24-DDE	0	6	0%	4.00E-05	4.00E-05	4.00E-05	8.13E-13
		24-DDT	0	6	0%	1.50E-05	1.50E-05	1.50E-05	2.03E-13
		2-Methyl naphthalene	0	6	0%	6.83E-05	1.12E-04	8.67E-05	1.92E-05
		44-DDD	6	6	100%	5.70E-04	1.70E-03	1.01E-03	3.90E-04
		44-DDE	6	6	100%	4.38E-03	2.23E-02	1.17E-02	6.54E-03
		44-DDT	6	6	100%	1.20E-04	7.90E-04	3.68E-04	2.61E-04
		Acenaphthene	6	6	100%	9.61E-05	2.97E-04	1.66E-04	7.13E-05
		Acenaphthylene	1	6	17%	8.45E-06	3.29E-05	1.26E-05	9.94E-06
		Ag	5	6	83%	1.33E-03	1.57E-01	3.00E-02	6.21E-02

Table K-1. Summary of Sports Fish Tissue Concentrations from HPS and Reference Locations

Area	Species	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
		Anthracene	6	6	100%	2.65E-05	4.06E-05	3.31E-05	4.53E-06
		As	6	6	100%	2.93E-01	4.85E-01	3.72E-01	7.65E-02
		Benzo(a)anthracene	5	6	83%	7.47E-06	9.33E-05	4.44E-05	2.90E-05
		Benzo(a)pyrene	1	6	17%	1.01E-05	8.50E-05	2.27E-05	3.05E-05
		Benzo(b)fluoranthene	3	6	50%	7.29E-06	1.88E-04	6.47E-05	7.25E-05
		Benzo(ghi)perylene	0	6	0%	6.16E-05	1.44E-04	8.43E-05	3.01E-05
		Benzo(k)fluoranthene	3	6	50%	8.49E-06	1.34E-04	5.27E-05	5.25E-05
		Cd	6	6	100%	1.02E-02	2.61E-02	1.84E-02	6.45E-03
		Chrysene	2	6	33%	1.08E-05	1.06E-04	5.61E-05	3.45E-05
		Cr	3	6	50%	7.26E-02	5.13E-01	2.01E-01	1.67E-01
		Cu	6	6	100%	3.20E-01	5.27E-01	4.72E-01	7.62E-02
		Dibenz(ah)anthracene	0	6	0%	6.86E-06	7.06E-06	6.97E-06	7.54E-08
		Fluoranthene	0	6	0%	4.47E-06	1.15E-04	6.59E-05	3.57E-05
		Fluorene	2	6	33%	4.59E-05	2.21E-04	9.32E-05	6.98E-05
		Hg	6	6	100%	6.64E-02	1.85E-01	1.23E-01	4.74E-02
		Indeno(123-cd)pyrene	3	6	50%	3.85E-06	2.10E-04	6.60E-05	8.18E-05
		MBT	0	6	0%	1.46E-03	1.48E-03	1.47E-03	5.24E-06
		Naphthalene	0	6	0%	1.52E-04	2.69E-04	2.00E-04	3.82E-05
		Ni	6	6	100%	4.71E-02	2.60E-01	1.00E-01	8.23E-02
		Pb	6	6	100%	8.51E-03	2.68E-02	1.46E-02	7.29E-03
		Phenanthrene	1	6	17%	6.54E-05	4.57E-04	1.64E-04	1.48E-04
		Pyrene	0	6	0%	6.37E-05	1.04E-04	8.64E-05	1.80E-05
		Sb	3	6	50%	8.36E-04	9.00E-03	2.69E-03	3.17E-03
		Se	6	6	100%	2.19E-01	3.89E-01	3.02E-01	6.64E-02
		TBT	6	6	100%	2.64E-03	3.89E-03	3.27E-03	4.84E-04
		Total_PCB	6	6	100%	3.58E-02	8.30E-02	4.98E-02	1.78E-02
		Zn	6	6	100%	1.67E+01	2.44E+01	2.08E+01	3.87E+00
HPS	Perch	a-Chlordane	6	6	100%	3.20E-04	5.20E-04	4.03E-04	8.89E-05
		g-Chlordane	6	6	100%	1.10E-04	2.60E-04	1.97E-04	6.56E-05
		DBT	4	6	67%	5.00E-04	4.64E-03	2.18E-03	1.92E-03
		Dieldrin	6	6	100%	4.30E-04	2.03E-03	1.21E-03	6.59E-04
		Endosulfan II	0	4	0%	2.00E-05	3.00E-05	2.38E-05	4.79E-06
		Endrin	0	4	0%	5.00E-06	1.00E-05	7.50E-06	2.89E-06
		Heptachlor	0	4	0%	1.00E-05	2.00E-05	1.38E-05	4.79E-06
		24-DDD	0	4	0%	1.00E-05	2.00E-05	1.25E-05	5.00E-06
		24-DDE	0	4	0%	4.00E-05	6.00E-05	4.50E-05	1.00E-05
		24-DDT	0	4	0%	1.50E-05	2.00E-05	1.63E-05	2.50E-06
		2-Methyl naphthalene	4	6	67%	1.23E-04	8.35E-04	4.13E-04	2.92E-04
		44-DDD	6	6	100%	1.09E-03	3.25E-03	2.15E-03	7.85E-04
		44-DDE	6	6	100%	6.60E-03	1.83E-02	1.13E-02	4.23E-03
		44-DDT	6	6	100%	2.30E-04	1.03E-03	5.22E-04	2.85E-04
		Acenaphthene	6	6	100%	4.52E-04	3.84E-03	1.91E-03	1.32E-03
		Acenaphthylene	3	6	50%	8.45E-06	1.32E-04	5.44E-05	5.18E-05
		Ag	5	6	83%	1.37E-03	7.97E-02	2.05E-02	3.11E-02
		Anthracene	6	6	100%	6.64E-05	5.01E-04	2.71E-04	1.75E-04
		As	6	6	100%	6.18E-01	9.16E-01	7.44E-01	1.12E-01
		Benzo(a)anthracene	6	6	100%	6.42E-05	1.96E-04	1.22E-04	4.89E-05
		Benzo(a)pyrene	2	6	33%	1.01E-05	2.01E-04	6.02E-05	8.00E-05
		Benzo(b)fluoranthene	5	6	83%	7.29E-06	2.98E-04	1.79E-04	9.87E-05
		Benzo(ghi)perylene	0	6	0%	8.63E-05	1.52E-04	1.25E-04	2.70E-05
		Benzo(k)fluoranthene	5	6	83%	8.49E-06	3.35E-04	1.68E-04	1.12E-04
		Cd	6	6	100%	4.76E-03	9.10E-03	6.22E-03	1.73E-03
		Chrysene	6	6	100%	2.04E-04	4.33E-04	3.36E-04	8.64E-05
		Cr	1	6	17%	8.86E-02	2.30E-01	1.21E-01	5.41E-02
		Cu	6	6	100%	3.65E-01	4.35E-01	3.95E-01	2.82E-02
		Dibenz(ah)anthracene	0	6	0%	6.79E-06	1.05E-05	7.61E-06	1.45E-06
		Fluoranthene	5	6	83%	2.20E-04	2.82E-03	1.76E-03	9.71E-04
		Fluorene	6	6	100%	3.51E-04	2.35E-03	1.27E-03	8.02E-04
		Hg	6	6	100%	1.06E-01	1.61E-01	1.36E-01	1.89E-02
		Indeno(123-cd)pyrene	4	6	67%	4.21E-06	2.12E-04	1.10E-04	8.81E-05
		MBT	0	6	0%	1.46E-03	1.48E-03	1.47E-03	7.36E-06
		Naphthalene	0	6	0%	2.12E-04	4.48E-04	2.95E-04	9.68E-05

Table K-1. Summary of Sports Fish Tissue Concentrations from HPS and Reference Locations

Area	Species	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	Standard Deviation (mg/kg)
		Ni	6	6	100%	4.02E-02	1.14E-01	6.11E-02	2.72E-02
		Pb	6	6	100%	8.29E-03	2.49E-02	1.51E-02	6.92E-03
		Phenanthrene	6	6	100%	6.81E-04	4.92E-03	2.98E-03	1.60E-03
		Pyrene	2	6	33%	1.48E-04	1.34E-03	6.30E-04	4.96E-04
		Sb	2	6	33%	8.72E-04	4.33E-03	1.79E-03	1.44E-03
		Se	6	6	100%	2.44E-01	4.67E-01	3.56E-01	9.52E-02
		TBT	6	6	100%	2.01E-03	7.85E-03	4.25E-03	2.48E-03
		Total_PCB	6	6	100%	6.06E-02	1.96E-01	1.10E-01	5.00E-02
		Zn	6	6	100%	8.49E+00	1.01E+01	9.68E+00	5.93E-01
Reference	Perch	a-Chlordane	6	6	100%	1.60E-04	3.50E-04	2.90E-04	6.66E-05
		g-Chlordane	6	6	100%	4.00E-05	1.60E-04	9.33E-05	4.97E-05
		DBT	1	6	17%	7.40E-04	9.28E-03	5.31E-03	3.00E-03
		Dieldrin	6	6	100%	2.30E-04	1.77E-03	7.98E-04	5.96E-04
		Endosulfan II	0	4	0%	2.50E-05	4.00E-05	3.38E-05	6.29E-06
		Endrin	0	4	0%	1.00E-05	1.50E-05	1.13E-05	2.50E-06
		Heptachlor	0	4	0%	1.50E-05	2.50E-05	2.00E-05	4.08E-06
		24-DDD	0	4	0%	1.50E-05	2.50E-05	2.00E-05	4.08E-06
		24-DDE	0	4	0%	5.00E-05	8.00E-05	6.25E-05	1.26E-05
		24-DDT	0	4	0%	2.00E-05	3.00E-05	2.25E-05	5.00E-06
		2-Methyl naphthalene	2	6	33%	8.52E-05	2.11E-03	5.86E-04	8.21E-04
		44-DDD	6	6	100%	7.50E-04	2.38E-03	1.52E-03	6.67E-04
		44-DDE	6	6	100%	3.65E-03	1.87E-02	9.57E-03	5.19E-03
		44-DDT	6	6	100%	1.60E-04	4.80E-04	3.25E-04	1.13E-04
		Acenaphthene	5	6	83%	1.08E-05	4.09E-03	1.28E-03	1.74E-03
		Acenaphthylene	2	6	33%	9.83E-06	1.29E-04	5.00E-05	5.77E-05
		Ag	3	6	50%	1.25E-03	2.83E-02	6.74E-03	1.07E-02
		Anthracene	6	6	100%	4.48E-05	1.61E-04	8.93E-05	4.81E-05
		As	6	6	100%	4.59E-01	6.71E-01	5.60E-01	9.41E-02
		Benzo(a)anthracene	5	6	83%	1.15E-05	9.80E-05	4.78E-05	2.86E-05
		Benzo(a)pyrene	0	6	0%	1.17E-05	2.04E-05	1.51E-05	3.09E-06
		Benzo(b)fluoranthene	4	6	67%	9.48E-06	1.57E-04	9.48E-05	6.74E-05
		Benzo(ghi)perylene	0	6	0%	8.27E-05	1.75E-04	1.19E-04	3.21E-05
		Benzo(k)fluoranthene	1	6	17%	9.88E-06	1.28E-04	3.22E-05	4.72E-05
		Cd	6	6	100%	2.57E-03	1.22E-02	5.29E-03	3.61E-03
		Chrysene	4	6	67%	5.64E-05	2.70E-04	1.76E-04	9.09E-05
		Cr	3	6	50%	6.90E-02	4.33E-01	1.84E-01	1.43E-01
		Cu	6	6	100%	2.83E-01	6.81E-01	4.42E-01	1.74E-01
		Dibenz(ah)anthracene	0	6	0%	7.98E-06	1.39E-05	1.03E-05	2.10E-06
		Fluoranthene	6	6	100%	4.26E-04	3.73E-03	1.46E-03	1.45E-03
		Fluorene	6	6	100%	2.19E-04	2.93E-03	1.00E-03	1.16E-03
		Hg	6	6	100%	1.23E-01	1.95E-01	1.52E-01	3.27E-02
		Indeno(123-cd)pyrene	4	6	67%	5.00E-06	1.83E-04	1.00E-04	7.64E-05
		MBT	0	6	0%	1.43E-03	2.93E-03	2.02E-03	6.49E-04
		Naphthalene	1	6	17%	2.09E-04	2.24E-03	6.39E-04	7.93E-04
		Ni	6	6	100%	3.23E-02	2.65E-01	9.19E-02	8.84E-02
		Pb	5	6	83%	3.18E-03	2.30E-02	9.26E-03	6.94E-03
		Phenanthrene	5	6	83%	2.47E-04	7.64E-03	2.62E-03	3.03E-03
		Pyrene	1	6	17%	1.16E-04	1.09E-03	3.78E-04	3.75E-04
		Sb	6	6	100%	2.15E-03	3.68E-03	2.95E-03	6.72E-04
		Se	6	6	100%	1.82E-01	4.10E-01	3.29E-01	8.47E-02
		TBT	6	6	100%	1.02E-03	3.06E-03	2.09E-03	7.03E-04
		Total_PCB	6	6	100%	2.17E-02	9.00E-02	5.81E-02	2.50E-02
		Zn	6	6	100%	6.29E+00	1.16E+01	8.12E+00	1.99E+00

Note: all concentrations are presented on wet weight basis

Table K-2. Statistical Comparisons of HPS Sports Fish Data to Reference Data

Fish Species	Chemical	Distribution Fitting of Actual Data	Comparison Results of Site Data to Reference	Nondetects/ Samples (Site vs Reference)	Actual Maximum Measured Concentration (mg/kg wet weight)*	Location of Maximum
Jacksmelt	Ag	None	Statistically Similar	0/6-1/6	1.27E-02	Hunters Point South
	As	Normal	Statistically Similar	0/6-0/6	4.41E-01	Hunters Point North
	Cd	Normal	Statistically Similar	0/6-0/6	4.46E-02	Hunters Point North
	Cr	Lognormal	Statistically Similar	4/6-3/6	4.18E-01	Hunters Point East
	Cu	Lognormal	**Above Reference**	0/6-0/6	1.32E+00	Hunters Point North
	Hg	Normal	Statistically Similar	0/6-0/6	2.59E-01	Hunters Point East
	Ni	None	Statistically Similar	0/6-0/6	1.69E-01	Hunters Point East
	Pb	None	Statistically Similar	0/6-0/6	3.14E+01	Hunters Point North
	Sb	Lognormal	Statistically Similar	1/6-3/6	2.43E-03	Hunters Point East
	Se	Normal	Statistically Similar	0/6-0/6	3.09E-01	Hunters Point North
	Zn	Lognormal	Statistically Similar	0/6-0/6	2.92E+01	Hunters Point North
	2-Methyl naphthalene	Lognormal	Not Detected	6/6-6/6	1.09E-04	None Detected
	Acenaphthene	Normal	Statistically Similar	0/6-0/6	3.84E-04	Hunters Point North
	Acenaphthylene	None	Statistically Similar	5/6-5/6	3.84E-05	Hunters Point North
	Anthracene	Normal	Statistically Similar	1/6-0/6	5.03E-05	Hunters Point East
	Benzo(a)anthracene	Normal	Statistically Similar	1/6-1/6	9.81E-05	Hunters Point South
	Benzo(a)pyrene	None	Statistically Similar	5/6-5/6	8.15E-05	Hunters Point South
	Benzo(b)fluoranthene	None	Statistically Similar	3/6-3/6	1.99E-04	Hunters Point East
	Benzo(ghi)perylene	Normal	Not Detected	6/6-6/6	1.16E-04	None Detected
	Benzo(k)fluoranthene	None	Statistically Similar	3/6-3/6	1.47E-04	Hunters Point East
	Chrysene	Normal	Statistically Similar	0/6-4/6	2.24E-04	Hunters Point East
	Dibenz(ah)anthracene	Normal	Not Detected	6/6-6/6	7.04E-06	None Detected
	Fluoranthene	None	Statistically Similar (Not Detected in Reference)	5/6-6/6	7.65E-04	Hunters Point East
	Fluorene	Normal	Statistically Similar	0/6-4/6	2.01E-04	Hunters Point North
	Indeno(123-cd)pyrene	None	Statistically Similar	3/6-3/6	1.44E-04	Hunters Point East
	Naphthalene	Lognormal	Not Detected	6/6-6/6	1.91E-04	None Detected
	Phenanthrene	None	Statistically Similar	5/6-5/6	7.90E-04	Hunters Point East
	Pyrene	None	Not Detected	6/6-6/6	3.02E-04	None Detected
	Total_PCB	Lognormal	**Above Reference***	0/6-0/6	2.24E-01	Hunters Point South
	24-DDD	None	Not Detected	6/6-6/6	1.00E-05	None Detected
	24-DDE	None	Not Detected	6/6-6/6	4.00E-05	None Detected
	24-DDT	None	Not Detected	6/6-6/6	1.50E-05	None Detected
	44-DDD	Normal	**Above Reference***	0/6-0/6	2.32E-03	Hunters Point South
	44-DDE	Normal	Statistically Similar*	0/6-0/6	1.29E-02	Hunters Point South
	44-DDT	Normal	Statistically Similar*	0/6-0/6	4.90E-04	Hunters Point South
	Dieldrin	Normal	Statistically Similar*	0/6-0/6	5.10E-04	Hunters Point South
	Endosulfan II	None	Not Detected	6/6-6/6	2.00E-05	None Detected
	Endrin	None	Not Detected	6/6-6/6	5.00E-06	None Detected
	Heptachlor	None	Not Detected	6/6-6/6	1.00E-05	None Detected
	a-Chlordane	Normal	**Above Reference***	0/6-0/6	7.40E-04	Hunters Point South
	g-Chlordane	Normal	**Above Reference***	0/6-0/6	2.70E-04	Hunters Point South
	DBT	None	Statistically Similar (Not Detected in Reference)	4/6-6/6	4.69E-03	Hunters Point North
	MBT	Normal	Not Detected	6/6-6/6	1.48E-03	None Detected
	TBT	Lognormal	**Above Reference**	0/6-0/6	8.96E-03	Hunters Point East
Perch	Ag	None	Statistically Similar	1/6-3/6	7.97E-02	Hunters Point North
	As	Normal	**Above Reference**	0/6-0/6	9.16E-01	Hunters Point North
	Cd	Normal	Statistically Similar	0/6-0/6	9.10E-03	Hunters Point East
	Cr	Lognormal	Statistically Similar	5/6-3/6	2.30E-01	Hunters Point East
	Cu	None	Statistically Similar	0/6-0/6	4.35E-01	Hunters Point North
	Hg	Normal	Statistically Similar	0/6-0/6	1.61E-01	Hunters Point South
	Ni	Lognormal	Statistically Similar	0/6-0/6	1.14E-01	Hunters Point North
	Pb	Lognormal	Statistically Similar	0/6-1/6	2.49E-02	Hunters Point North
	Sb	Normal	Statistically Similar	4/6-0/6	4.33E-03	Hunters Point East
	Se	Normal	Statistically Similar	0/6-0/6	4.67E-01	Hunters Point North
	Zn	Normal	Statistically Similar	0/6-0/6	1.01E+01	Hunters Point North
	2-Methyl naphthalene	Lognormal	Statistically Similar	2/6-4/6	8.35E-04	Hunters Point North
	Acenaphthene	Normal	Statistically Similar	0/6-1/6	3.84E-03	Hunters Point North
	Acenaphthylene	None	Statistically Similar	3/6-4/6	1.32E-04	Hunters Point North
	Anthracene	Lognormal	**Above Reference**	0/6-0/6	5.01E-04	Hunters Point North
	Benzo(a)anthracene	Normal	**Above Reference**	0/6-1/6	1.96E-04	Hunters Point East
	Benzo(a)pyrene	None	Statistically Similar (Not Detected in Reference)	4/6-6/6	2.01E-04	Hunters Point East
	Benzo(b)fluoranthene	Normal	Statistically Similar	1/6-2/6	2.98E-04	Hunters Point East
	Benzo(ghi)perylene	Normal	Not Detected	6/6-6/6	1.52E-04	None Detected
	Benzo(k)fluoranthene	None	**Above Reference**	1/6-5/6	3.35E-04	Hunters Point East

Table K-2. Statistical Comparisons of HPS Sports Fish Data to Reference Data

Fish Species	Chemical	Distribution Fitting of Actual Data	Comparison Results of Site Data to Reference	Nondetects/ Samples (Site vs Reference)	Actual Maximum Measured Concentration (mg/kg wet weight)*	Location of Maximum
	Chrysene	Normal	**Above Reference**	0/6-2/6	4.33E-04	Hunters Point East
	Dibenz(ah)anthracene	Normal	Not Detected	6/6-6/6	1.05E-05	None Detected
	Fluoranthene	Normal	Statistically Similar	1/6-0/6	2.82E-03	Hunters Point North
	Fluorene	Lognormal	Statistically Similar	0/6-0/6	2.35E-03	Hunters Point North
	Indeno(123-cd)pyrene	None	Statistically Similar	2/6-2/6	2.12E-04	Hunters Point East
	Naphthalene	None	Statistically Similar (Not Detected at Site)	6/6-5/6	4.48E-04	None Detected
	Phenanthrene	Normal	Statistically Similar	0/6-1/6	4.92E-03	Hunters Point North
	Pyrene	Lognormal	Statistically Similar	4/6-5/6	1.34E-03	Hunters Point East
	Total_PCB	Normal	Statistically Similar*	0/6-0/6	1.96E-01	Hunters Point North
	24-DDD	Normal	Not Detected	4/4-4/4	2.00E-05	None Detected
	24-DDE	Normal	Not Detected	4/4-4/4	6.00E-05	None Detected
	24-DDT	None	Not Detected	4/4-4/4	2.00E-05	None Detected
	44-DDD	Normal	Statistically Similar*	0/6-0/6	3.25E-03	Hunters Point North
	44-DDE	Normal	Statistically Similar*	0/6-0/6	1.83E-02	Hunters Point North
	44-DDT	Lognormal	Statistically Similar*	0/6-0/6	1.03E-03	Hunters Point North
	Dieldrin	Normal	Statistically Similar	0/6-0/6	2.03E-03	Hunters Point North
	Endosulfan II	Normal	Not Detected	4/4-4/4	3.00E-05	None Detected
	Endrin	None	Not Detected	4/4-4/4	1.00E-05	None Detected
	Heptachlor	Normal	Not Detected	4/4-4/4	2.00E-05	None Detected
	a-Chlordane	Normal	Statistically Similar*	0/6-0/6	5.20E-04	Hunters Point South
	g-Chlordane	Normal	**Above Reference***	0/6-0/6	2.60E-04	Hunters Point North
	DBT	Normal	Statistically Similar	2/6-5/6	4.64E-03	Hunters Point East
	MBT	None	Not Detected	6/6-6/6	1.48E-03	None Detected
	TBT	Lognormal	Statistically Similar	0/6-0/6	7.85E-03	Hunters Point North

* results based on statistical comparison of lipid normalized data

Table K-3. Summary of RMP Fish Tissue Concentrations

Summary Statistics for 1997

Species	Chemical	Number of Samples	Number of Detects	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average (mg/kg)	Standard Deviation (mg/kg)	95% UCL(mg/kg)	EPC (mg/kg)
Jacksmelt	Hg	12	12	100%	6.20E-02	2.55E-01	1.06E-01	5.23E-02	1.33E-01	1.33E-01
	Total_PCB	12	12	100%	2.48E-02	3.32E-01	9.32E-02	9.59E-02	1.43E-01	1.43E-01
	DDT	12	12	100%	1.17E-02	4.83E-02	3.33E-02	9.03E-03	3.80E-02	3.80E-02
	Dieldrin	12	12	100%	2.50E-04	2.50E-03	8.71E-04	6.00E-04	1.18E-03	1.18E-03
Perch	Hg	15	15	100%	7.20E-02	1.92E-01	1.16E-01	3.22E-02	1.31E-01	1.31E-01
	Total_PCB	15	15	100%	7.78E-02	8.41E-01	3.04E-01	2.61E-01	4.22E-01	4.22E-01
	DDT	15	15	100%	2.73E-02	9.55E-02	5.81E-02	2.23E-02	6.83E-02	6.83E-02
	Dieldrin	15	15	100%	3.00E-04	4.70E-03	1.98E-03	1.13E-03	2.49E-03	2.49E-03

Summary Statistics for 2000

Species	Chemical	Number of Samples	Number of Detects	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Average (mg/kg)	Standard Deviation (mg/kg)	95% UCL(mg/kg)	EPC (mg/kg)
Jacksmelt	Hg	15	12	80%	4.73E-02	1.16E-01	6.65E-02	1.86E-02	7.50E-02	7.50E-02
	Total_PCB	15	15	100%	1.42E-02	1.44E-01	5.38E-02	3.57E-02	7.00E-02	7.00E-02
	DDT	15	15	100%	1.37E-02	3.21E-02	2.26E-02	5.49E-03	2.51E-02	2.51E-02
Perch	Hg	18	18	100%	4.73E-02	1.74E-01	9.54E-02	4.02E-02	1.12E-01	1.12E-01
	Total_PCB	18	18	100%	7.41E-02	4.34E-01	2.29E-01	1.19E-01	2.78E-01	2.78E-01
	DDT	18	18	100%	2.11E-02	4.96E-02	3.68E-02	8.80E-03	4.04E-02	4.04E-02
	Dieldrin	18	3	17%	2.31E-03	2.73E-03	2.49E-03	2.16E-04	2.58E-03	2.58E-03

RME Risk Calculation for 1997

Species	Chemical	EPC (mg/kg) from 1997	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Jacksmelt	Hg	1.33E-01	3.49E-05	8.15E-05	NA	3.00E-04	---	2.7E-01
	Total_PCB	1.43E-01	3.76E-05	8.78E-05	5.00E+00	NA	1.9E-04	---
	DDT	3.80E-02	1.00E-05	2.33E-05	3.40E-01	5.00E-04	3.4E-06	4.7E-02
	Dieldrin	1.18E-03	3.11E-07	7.26E-07	1.60E+01	5.00E-05	5.0E-06	1.5E-02
Perch	Hg	1.31E-01	3.44E-05	8.03E-05	NA	3.00E-04	---	2.7E-01
	Total_PCB	4.22E-01	1.11E-04	2.59E-04	5.00E+00	NA	5.6E-04	---
	DDT	6.83E-02	1.80E-05	4.20E-05	3.40E-01	5.00E-04	6.1E-06	8.4E-02
	Dieldrin	2.49E-03	6.56E-07	1.53E-06	1.60E+01	5.00E-05	1.1E-05	3.1E-02

RME Risk Calculation for 2000

Species	Chemical	EPC (mg/kg) from 2000	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	RME Risk	RME Hazard
Jacksmelt	Hg	7.50E-02	1.97E-05	4.61E-05	NA	3.00E-04	---	1.5E-01
	Total_PCB	7.00E-02	1.84E-05	4.30E-05	5.00E+00	NA	9.2E-05	---
	DDT	2.51E-02	6.60E-06	1.54E-05	3.40E-01	5.00E-04	2.2E-06	3.1E-02
Perch	Hg	1.12E-01	2.94E-05	6.87E-05	NA	3.00E-04	---	2.3E-01
	Total_PCB	2.78E-01	7.31E-05	1.71E-04	5.00E+00	NA	3.7E-04	---
	DDT	4.04E-02	1.06E-05	2.48E-05	3.40E-01	5.00E-04	3.6E-06	5.0E-02
	Dieldrin	2.58E-03	6.79E-07	1.58E-06	1.60E+01	5.00E-05	1.1E-05	3.2E-02

CTE Risk Calculation for 1997

Species	Chemical	Average (mg/kg) from 1997	LADD for CTE (mg/kg-day)	ADD for CTE (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
Jacksmelt	Hg	1.06E-01	2.78E-05	6.49E-05	NA	3.00E-04	---	2.2E-01
	Total_PCB	9.32E-02	2.45E-05	5.72E-05	5.00E+00	NA	1.2E-04	---
	DDT	3.33E-02	8.77E-06	2.05E-05	3.40E-01	5.00E-04	3.0E-06	4.1E-02
	Dieldrin	8.71E-04	2.29E-07	5.35E-07	1.60E+01	5.00E-05	3.7E-06	1.1E-02
Perch	Hg	1.16E-01	3.06E-05	7.13E-05	NA	3.00E-04	---	2.4E-01
	Total_PCB	3.04E-01	7.99E-05	1.86E-04	5.00E+00	NA	4.0E-04	---
	DDT	5.81E-02	1.53E-05	3.57E-05	3.40E-01	5.00E-04	5.2E-06	7.1E-02
	Dieldrin	1.98E-03	5.21E-07	1.22E-06	1.60E+01	5.00E-05	8.3E-06	2.4E-02

CTE Risk Calculation for 2000

Species	Chemical	Average (mg/kg) from 2000	LADD for RME (mg/kg-day)	ADD for RME (mg/kg-day)	Oral CSF (mg/kg-day)-1	Oral RfD (mg/kg-day)	CTE Risk	CTE Hazard
Jacksmelt	Hg	6.65E-02	1.75E-05	4.09E-05	NA	3.00E-04	---	1.4E-01
	Total_PCB	5.38E-02	1.42E-05	3.30E-05	5.00E+00	NA	7.1E-05	---
	DDT	2.26E-02	5.94E-06	1.39E-05	3.40E-01	5.00E-04	2.0E-06	2.8E-02
Perch	Hg	9.54E-02	2.51E-05	5.86E-05	NA	3.00E-04	---	2.0E-01
	Total_PCB	2.29E-01	6.02E-05	1.41E-04	5.00E+00	NA	3.0E-04	---
	DDT	3.68E-02	9.68E-06	2.26E-05	3.40E-01	5.00E-04	3.3E-06	4.5E-02
	Dieldrin	2.49E-03	6.56E-07	1.53E-06	1.60E+01	5.00E-05	1.0E-05	3.1E-02

* Chlordane was eliminated from the calculation since a majority of the samples were nondetect. Dieldrin was not detected in any of the jacksmelts captured in 2000 sampling event.

K-4. Exposure Point Concentration for Sports Fish at HPS and Reference Stations

Area	Species	Chemical	Number of Hits	Number of Samples	Frequency of Detection	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Geometric Mean (mg/kg)	Average Concentration (mg/kg)**	Standard Deviation (mg/kg)**	95% UCL of Arithmetic Mean (mg/kg)	EPC for RME* (mg/kg)
HPS	Jacksmelt	Cu	6	6	100%	4.95E-01	1.32E+00	8.29E-01	-1.87E-01	3.62E-01	1.33E+00	1.32E+00
		44-DDD	6	6	100%	9.80E-04	2.32E-03	---	1.48E-03	5.70E-04	1.95E-03	1.95E-03
		a-Chlordane	6	6	100%	3.10E-04	7.40E-04	---	4.43E-04	1.68E-04	5.81E-04	5.81E-04
		g-Chlordane	6	6	100%	1.10E-04	2.70E-04	---	1.63E-04	6.92E-05	2.20E-04	2.20E-04
		TBT	6	6	100%	3.61E-03	8.96E-03	6.02E-03	-5.11E+00	3.47E-01	9.47E-03	8.96E-03
		Total_PCB	6	6	100%	5.73E-02	2.24E-01	1.07E-01	-2.23E+00	5.16E-01	2.42E-01	2.24E-01
Reference	Jacksmelt	Cu	6	6	100%	3.20E-01	5.27E-01	4.66E-01	-7.64E-01	1.87E-01	5.69E-01	5.27E-01
		44-DDD	6	6	100%	5.70E-04	1.70E-03	---	1.01E-03	3.90E-04	1.00E+00	1.70E-03
		a-Chlordane	6	6	100%	1.20E-04	5.60E-04	---	2.87E-04	1.65E-04	1.00E+00	5.60E-04
		g-Chlordane	6	6	100%	4.00E-05	1.90E-04	---	9.33E-05	6.77E-05	1.00E+00	1.90E-04
		TBT	6	6	100%	2.64E-03	3.89E-03	3.24E-03	-5.73E+00	1.49E-01	3.77E-03	3.77E-03
		Total_PCB	6	6	100%	3.58E-02	8.30E-02	4.76E-02	-3.05E+00	3.19E-01	7.05E-02	7.05E-02
HPS	Perch	g-Chlordane	6	6	100%	1.10E-04	2.60E-04	NA	1.97E-04	6.56E-05	2.51E-04	2.51E-04
		Anthracene	6	6	100%	6.64E-05	5.01E-04	2.18E-04	-8.43E+00	7.77E-01	1.21E-03	5.01E-04
		As	6	6	100%	6.18E-01	9.16E-01	NA	7.44E-01	1.12E-01	8.36E-01	8.36E-01
		Benzo(a)anthracene	6	6	100%	6.42E-05	1.96E-04	NA	1.22E-04	4.89E-05	1.62E-04	1.62E-04
		Benzo(k)fluoranthene	5	6	83%	8.49E-06	3.35E-04	NA	1.68E-04	1.12E-04	2.60E-04	2.60E-04
		Chrysene	6	6	100%	2.04E-04	4.33E-04	NA	3.36E-04	8.64E-05	4.07E-04	4.07E-04
Reference	Perch	g-Chlordane	6	6	100%	4.00E-05	1.60E-04	NA	9.33E-05	4.97E-05	1.34E-04	1.34E-04
		Anthracene	6	6	100%	4.48E-05	1.61E-04	7.97E-05	-9.44E+00	5.15E-01	1.79E-04	1.61E-04
		As	6	6	100%	4.59E-01	6.71E-01	NA	5.60E-01	9.41E-02	6.38E-01	6.38E-01
		Benzo(a)anthracene	5	6	83%	1.15E-05	9.80E-05	NA	4.78E-05	2.86E-05	7.13E-05	7.13E-05
		Benzo(k)fluoranthene	1	6	17%	9.88E-06	1.28E-04	NA	3.22E-05	4.72E-05	7.11E-05	7.11E-05
		Chrysene	4	6	67%	5.64E-05	2.70E-04	NA	1.76E-04	9.09E-05	2.51E-04	2.51E-04

Note: all concentrations are presented on wet weight basis

*: Exposure Point Concentration is the lower value between the maximum concentration and 95% UCL of the mean.

**: log transformed mean and standard deviation are shown for compounds that were found to be lognormal

OBS®-3

Sediment Instruments for all Environments

Field-proven monitor of suspended solids and turbidity.

FEATURES

- Measures turbidity and suspended solids
- Compact probe
- Low-power consumption
- Voltage clamp and 4-20 mA current loop options

APPLICATIONS

- River and stream gaging
- Add-on sensor for CTDs, data loggers, and current meters
- Wastewater and effluent measurements
- Monitor dredging and mining operations
- Permit compliance
- Control instrumentation for settling ponds
- Sediment transport research
- Laboratory measurements

DESCRIPTION

The OBS-3 sensor measures suspended solids and turbidity with a patented (U.S. Patent No. 4,841,157) backscatter method. It features: nearly linear response to particle concentrations spanning more than three orders of magnitude; an infrared measurement system; and an optical filter with synchronous detection to reject ambient light.

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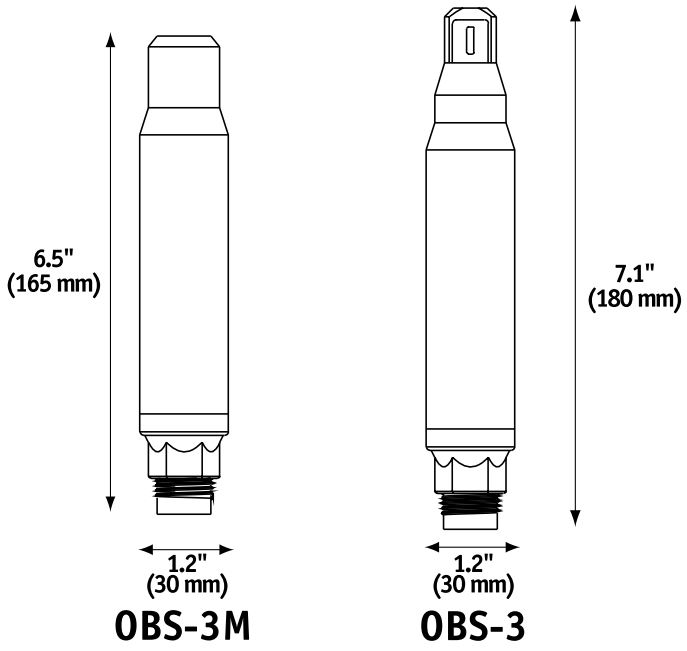
OBS®-3



RANGES

Turbidity		0 to 4000 NTU
Concentration[1]	Mud	0 to 5000 mg/l
	Sand	0 to 50 g/l

[1] Ranges depend on sediment type.

ACCURACY

Turbidity	0-100	+/- 0.1 NTU
	100 - 500	+/- 1 NTU
	500 - 4000[2]	+/- 5 NTU
Concentration[2]	Mud	+/- 0.1 mg/l
	Sand	+/- 0.1 g/l

[2] With 2nd-order polynomial equation.

OTHER DATA

Maximum data rate	10 Hz
Infrared wavelength	875 nm
Maximum depth	500 m
Drift	< 5% / year
Power	9 - 16Vd.c. / 14 mA
Housing Material	Delrin®

ORDERING INFORMATION

- Consult the manufacturer about your application.
- Specify cable length.
- Choose voltage-clamp or current-loop options.

PAYMENT AND SHIPPING TERMS

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