

*EPA does not necessarily endorse or agree with the statements made in this forward section.*

**ATTACHMENT TO ~~FEBRUARY 19, 2008~~~~JULY 13, 2007~~ LETTER  
RESOLUTION OF 'B' LEGACY SITE SERVICES- COMMENTS ON THE DRAFT  
ARKEMA EARLY ACTION EE/CA WORK PLAN PREPARED BY  
PARAMETRIX FOR US EPA**

This document contains a complete set of Legacy Site Services (LSS) comments on the Draft Arkema Early Action EE/CA Work Plan prepared by Parametrix for US Environmental Protection Agency (EPA Work Plan). The comments contained in this document include comments that LSS is willing to accept as well as comments that will need to be addressed prior to finalization of the EPA work plan for LSS to forgo formal dispute. Also, LSS notes that a significant number of the “non-responsive” comments included in EPA’s September 21, 2006 letter disapproving the LSS Revised Work Plan are not addressed in the EPA Work Plan. Many of these comments included requirements that have not been met in the EPA Work Plan although these requirements were the basis for EPA’s decision to disapprove and reserve to itself modification of the LSS Revised Work Plan. It appears that EPA has set different standards for Parametrix and LSS, and because LSS seeks assurance that the EPA Work Plan is sufficient to meet all EPA standards and will not be modified after these current negotiations are completed, LSS requests that EPA withdraw all of the “non-responsive” comments that are not addressed in the EPA Work Plan. For a more complete explanation of the issues related to the dispute, see the text of the July 13, 2007 letter.

Explanation of table column headings:

LSS Comment Number:	A sequential number applied by LSS to identify each individual comment in the table.
Comment Priority:	A hierarchical designation provided for each comment to indicate the level of priority placed on the comment by LSS. The “A” designation is a comment that will require further technical discussion and resolution to EPA’s and LSS’ satisfaction for LSS to forgo formal dispute. LSS will not dispute the “B” designated comments if the “A” designated comments are satisfactorily resolved.
EPA Work Plan Page/Section Number	Identifies the Page and Section number of the EPA work plan to which the comment is directed.

Comment/Problem Statement

Provides LSS' comment and/or problem statement that requires resolution.

Solution

Provides LSS' proposed solution for resolution of the comment/problem.

Comment Resolution

Provides the resolution of the comment.

EPA comment number

Provides a cross-reference to the original comment number provided by EPA on the September 26, 2005 work plan, where applicable.

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LSS Comment Number	Comment Priority	EPA Work Plan Page / Section No.	Comment/Problem Statement	Solution	Comment Resolution	EPA Comment Number
1	A	All/ All	EPA's work plan was non-responsive to a total of 46 government team comments that were provided in its work plan disapproval letter to LSS dated September 21, 2006.	LSS requests that EPA retract the "non-responsiveness" determination made in EPA's September 21, 2006 letter for all of these comments.	See resolution to LSS Comment No.1 in the A comment set.	16, 26, 32, 33, 70, 86, 88, 96, 97, 121, 130, 144, 147, 199, 140, 233, 234, 237, 242, 251, 257, 271 295, 300, 304, 305, 306, 307, 311, 313, 320, 321, 322, 323, 327, 361, 376, 439, 451, 452, 435, 436, 437, 498, 499, and 500
61	B	2-1/ 2.1	Arkema/LSS does not believe there is sufficient information to determine optimal habitat characteristics for this diversity of organisms. Furthermore, the term optimal is not defined but implies "of highest quality."	LSS suggests replacing the word "optimal" with "useful."	LSS agrees to forgo this comment in order to finalize the EE/CA work plan and work plan addendum.-	
62	B	All /	New LWG data submitted to	LSS suggests that all of the	EPA believes that these data	16

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		All	EPA during the 10 months that EPA had possession of the Revised Draft EE/CA Work Plan (i.e., July 14, 2006 to May 11, 2007) was not incorporated into the data screening or figures. The upland data that EPA requested to be included in the work plan was not incorporated into EPA's work plan (with the exception of groundwater data for the riverbank monitoring wells, which was included in the revised draft EE/CA work plan [Integral 2006]).	available LWG data be included in the work plan.	can be addressed later in FSPs or other EE/CA documents as applicable, appropriate, and assuming the data are received in a timely manner.	
63	B	2-1 to 2-3 / 2.1	There is no direct reference to groundwater in Section 2.1, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this item may not be critical to the current Work Plan. To the extent needed, a concise summary can be provided in the Work Plan addendum.	234
64	B	2-2 / 2.1.2	The first sentence in Section 2.3 is incorrect. The Willamette River merges with the Columbia River at <u>Columbia</u> RM 103, not <u>Willamette</u> River RM 103.	This statement should be corrected.	This error will be corrected in the work plan addendum.	NA
65	B	Figure 2-4 / 2.2.3	Additional features described in Section 2.2.3 were not identified in Figure 2-4 as	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this item can be addressed as part of the FSP data gap analysis or addressed	237

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			requested by EPA in its work plan disapproval letter to LSS.		in other EE/CA or upland source control documentation.	
66	B	Figure 2-4 / 2.2.3	Section 2 figures in EPA's work plan do not show the location of electrolysis processing, which EPA requested in its work plan disapproval letter to LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA's assumes that if not already present in existing documents, this comment can be addressed in future source control documents.	498
67	B	2-9 / 2.2.3	Section 2.2.3 does not clarify if any site dredge projects produced any sediment chemistry data, which EPA requested in its work plan disapproval letter to LSS.	LSS requests that the the "non-responsiveness" determination be retracted.	EPA believes this comment is relevant to future work and can be addressed in FSPs as applicable. All information available to LSS was provided in previous drafts of the EE/CA work plan.	499
68	B	2-10 / 2.3	The third paragraph in Section 2.3 states that current site activities are upland IRMs to address perchlorate and hexavalent chromium in groundwater. These IRMs were discontinued because a barrier wall and groundwater extraction system was chosen as the upland site remedy due to the EE/CA schedule.	LSS requests that the work plan text be revised accordingly.	This error will be corrected in the work plan addendum	NA
69	B	2-10 / 2.3	The LWG activities summarized in Section 2.3 are not up to date. No details	LSS requests that the work plan text be revised to provide the updated information.	EPA believes this comment can be addressed by the FSP or in future EE/CA documents as	NA

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			are provided about the ongoing stormwater sampling that LSS is conducting as part of the stormwater IRM.		needed.	
70	B	3-1 to 3-13 / 3.1	A total of 13 field sampling, data, or site characterization reports were submitted to EPA by the LWG during the 10 months that EPA had possession of the Revised Draft EE/CA Work Plan (i.e., July 14, 2006 to May 11, 2007). None of these reports was incorporated into the Summary of Previous Investigations (Section 3.1) of EPA's Work Plan. It is critical that these reports be incorporated into the work plan because they fill some of the data gaps at the site. The reports are (the date submitted to EPA precedes the title of the report): <ol style="list-style-type: none"> <li>1. 2007-05-01: Round 3 Sampling for Pre-Breeding White Sturgeon (Acipenser Transmontanus) Tissue Field Sampling Report.</li> <li>2. 2007-04-30: Round</li> </ol>	LSS requests that the additional LWG report data be updated in the work plan.	EPA believes this comment can be addressed by the FSP or in future EE/CA documents as needed and to the extent the data are relevant and available in a timely manner.	NA

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			<p>3A Winter 2007 High-Flow Surface Water Event Field Sampling Report.</p> <p>3. 2007-04-16: Round 3A Sediment Trap Sampling, Quarter 1 Field Report.</p> <p>4. 2007-04-09: Round 3A Upstream &amp; Downstream Sediment Field Sampling Report.</p> <p>5. 2007-04-06: Round 3 Lamprey (Lampetra Sp.) Phase 1 Toxicity Testing Report.</p> <p>6. 2007-02-21: Comprehensive Round 2 Site Characterization Summary and Data Gaps Analysis Report.</p> <p>7. 2007-01-15: Round 3A Fall 2006 Stormwater Surface Water Event Field Sampling Report.</p> <p>8. 2006-12-15: Round 3 Sampling for Lamprey (Lampetra</p>			

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			Sp.) Tissue, Field Sampling Report. 9. 2006-12-08: Phase 2 Recalibration Results: Hydrodynamic Sedimentation Modeling for Lower Willamette River. 10. 2006-12-08: Round 3A Summer 2006 Low-Flow Surface Water Event Field Sampling Report. 11. 2006-10-20: Round 3A January 2006 High-Flow Surface Water Data Report. 12. 2006-09-01: Round 2 Benthic Tissue and Sediment Data Report. 13. 2007-08-07: Round 2 Groundwater Pathway Assessment, Transition Zone Water Site Characterization Summary Report.			
71	B	3-1 / 3.1	Section 3.1 did not include the text <i>"there is no other</i>	LSS requests that the "non-responsiveness" determination be	The comment will be addressed in the Work Plan addendum.	121

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			<i>environmental data prior to 1996</i> ", which was required by EPA in its work plan disapproval letter to LSS.	retracted.		
72	B	3-1 to 3-13 / 3.1	EPA requested in its work plan disapproval letter to LSS that "Section 3 of the revised draft work plan still does not review or discuss actual existing data as the title (Review of Existing Data) suggests-it only lists the studies that were done". EPA's work plan did not make any significant modification to this section, a discussion of existing data was not added, and the title of the section remained "Review of Existing Data". This comment also refers to the CSM in Section 4.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment can be addressed in future documents as needed to further the data gap analysis.	439, 451, and 452
73	B	3-2 / 3.1.1	Footnote 2 on page 3-2 does not specify the extent (depth) of transition-zone water (TZW) at the site, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes the FSP can address TZW samples to the extent they are needed.	242
74	B	3-2 / 3.1.1	No additional clarification was provided in footnote 2 on page 3-2 does on transition-	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes the rationale for TZW samples if needed should be discussed in the FSP.	257

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			zone water (TZW) at the site, which was required by EPA in its work plan disapproval letter to LSS.			
75	B	Figure 3-2 / (referenced in 3.1.5)	Stations RB-7 and RB-10 through RB-12 are not shown on Figure 3-2, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the “non-responsiveness” determination be retracted.	EPA believes that this can be addressed in the figures prepared for the QAPP/FSP.	70
76	B	3-3 / 3.1.5 (footnote 4)	EPA requested in its work plan disapproval letter to LSS that “Arkema define beach sediment from the ordinary high water mark or top of bank riverward”. However, riverbank soils are defined in footnote No. 4 of EPA’s work plan as the area between mean high water and ordinary high water.	LSS requests that the “non-responsiveness” determination be retracted.	This comment should be clarified in the Work Plan addendum.	361
77	B	3-3; 3-16 to 3-20 / 3.1.6	There was no clarification on the difference between sediment groundwater and any other groundwater, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the “non-responsiveness” determination be retracted.	This comment will be addressed in the addendum.	26
78	B	Figure 3-2; 3-3 to 3-4 / 3.1.7	Station 07B022 was added to the text in Section 3.1.7, but the station location is not shown on the historical	LSS suggests that the figure be revised revision to show Station 07B022.	EPA believes this comment can be addressed by the FSP or in future EE/CA documents as needed.	NA

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			sediment and riverbank station location figure (Figure 3-2). Note that Station 07B022 is shown on Figure 3-1a (all historical station locations).			
79	B	3-13 / 3.1.27	The riverbank soil sampling work was completed March 19-23, 2007 and included a total of 65 riverbank samples. The number of stations was provided in the revised SAP that was approved by DEQ and EPA in January 2007.	LSS suggests that the text be revised and updated to reflect the recent sampling effort.	EPA believes this comment can be addressed in future EE/CA documents as needed.	NA
80	B	Figures (Cross-Sections) / 3.2	No additional cross-sections were provided in EPA's work plan, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes that additional cross sections, if necessary, can be developed as part of the upland hydraulic control design process.	500
81	B	3-15 to 3-16 / 3.2.1.3	No additional cross-sections were provided, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes additional cross sections, if necessary, can be developed as part of the upland hydraulic control design process.	86
82	B	3-20 / 3.2.2.1	EPA stated in its work plan disapproval letter to LSS that "The upland groundwater chemistry results have not been referenced/presented adequately. Reviewers are not able to efficiently identify data sources or location	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes additional cross sections, if necessary, can be developed as part of the upland hydraulic control design process.	295

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			within the document". Section 3.2.2.3 of EPA's work plan was not modified to incorporate groundwater chemistry.			
83	B	3-19 / 3.2.2.1	EPA requested in its work plan disapproval letter to LSS that the last paragraph in the "Round 2 Groundwater Pathway Assessment" be revised so that the conclusions are clear. EPA did not revise this section of the work plan to clarify the conclusions.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work Plans.	300
84	B	3-17 / 3.2.2.1	The second paragraph on page 3-17 states that "Detailed cross-sections with selected COIs plotted are provided in Appendix A". The cross-sections provided in Appendix A are incomplete. They (1) do not extend from the upland source areas to the riverward extent of data; (2) do not include any LWG data; and (3) do not include a number of key site chemicals. LSS prepared detailed cross-sections that extended from the source areas to the	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes that any additional cross-sections, if necessary, can be documented as part of the upland source control effort.	86

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			riverward extend of data, included LWG data, and also were generated for more of the key site chemicals. These cross-sections were provided in the map folio in Revised Draft EE/CA work plan (Integral 2006). EPA has replaced the cross-sections provided in the Revised Draft work plan with cross-sections in EPA's version of the work plan that provide less information and are not responsive to EPA's comments. These latter cross-sections are therefore non-responsive.			
85	B	Figure 2-4 / (referenced in 3.2.1.3)	Fill history was not depicted on the figures, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes that riverbank information is still a relevant need and should be addressed in the Work Plan addendum or FSP data gap analysis. All information available to LSS was provided in previous drafts of the EE/CA work plan.	88
86	B	3-16 / 3.2.1.3	Columbia River Basalt is the name of a geologic group (consisting of a number of individual geologic formations) and should be capitalized.	This typographical error should be corrected.	EPA believes this comment can be addressed in the work plan addendum or in future EE/CA documents as needed.	NA

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87	B	3-20 / 3.2.2.3	Figures depicting a conceptual hydrostratigraph model (uplands to in-water) were not provided, which were required by EPA in its work plan disapproval letter to LSS.	LSS requests that the “non-responsiveness” determination be retracted.	EPA believes this is still a relevant comment, however, the extent to which it can be addressed is dependent on the upland hydraulic control design process.	96
88	B	3-20 / 3.2.2.3	Figures depicting potentiometric surface in map or cross-sectional view for the site (uplands to in-water) were not provided, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the “non-responsiveness” determination be retracted.	These depictions were provided as Figures 3-7, 3-8, and 3-9 in the July 14, 2006 work plan. EPA believes that any revisions to these figures, if necessary, will be generated as part of the upland hydraulic control design process.	97
89	B	3-20 / 3.2.2.3	EPA stated in its work plan disapproval letter to LSS that “The hydro-geo model as presented needs to be improved to display flow relationships in plan view and x-section view. There are significant data gaps surrounding groundwater flow”. EPA’s work plan did not include additional maps and cross-sections to address this issue.	LSS requests that the “non-responsiveness” determination be retracted.	EPA believes this data gap can be addressed as part of the upland process.	251 (originally)
90	B	3-20 / 3.2.2.3	Figures 3-11 and 3-12 are referenced in the second paragraph of Section 3.2.2.3 but are not included in the	LSS requests that these figures be provided in the work plan.	This comment will be addressed in the work plan addendum or in future EE/CA documents as needed	NA

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91	B	Fig. 4-1,-2 / 4	<p>Work Plan.</p> <p>It appears that the revised Figures 4-1 and 4-2 are simply reproductions of the Portland Harbor CSM figures. Integral's Revised Work Plan presented CSM figures that were designed with considerations to site-specific conditions. LSS does not agree that Portland Harbor-wide CSMs are as effective as customized site-specific models.</p> <p>The original comment (EPA Comment #271) stated that NAPL should be included as a secondary source so that cosolvent COI exposure is clearly presented. The only two secondary sources in the revised figures are <b>on-site surface soil</b> and <b>on-site subsurface soil</b>. In fact, the new figures don't even include "manufacturing process residue" as a primary source. This source included NAPL in the two previous work plan iterations. LSS believes that the figure</p>	<p>LSS requests that the "non-responsiveness" determination be retracted.</p>	<p>This comment has been addressed by subsequent agreements between EPA and LSS (see Category A comments).</p> <p>NAPL, to the extent it is present, is a potential secondary source and will be addressed as part of the upland hydraulic control design process.</p>	271

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			revisions are non-responsive in terms of addressing the contents of EPA's Comment 271.			
92	B	Figure 4-3 / 4	EPA required revisions to Figure 4-3 in the Revised Work Plan were not made. EPA did not add the so-called "Lot 1 DDT Trench" to the figure after stating that Arkema/LSS was non-responsive indicating that it did not exist. Clarification was not provided by EPA regarding this comment.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment is still relevant to recontamination analysis and can be addressed in a FSP document. . However, LSS has reviewed the April 2007 groundwater data for the Arkema site and the data indicate there is no DDT in shallow groundwater exceeding 0.2 ug/L on Lot 1 or in the vicinity of the former Lot 1 trench and therefore the former trench is not considered a source of DDT for recontamination purposes (ERM October 2007).  EPA needs to review the referenced ERM document before deciding whether it should be included in a FSP document.	321
93	B	Figure 4-3 / 4	EPA did not add "materials loading areas over the in-water portion of the site" to Figure 4-3. EPA stated that Arkema/LSS was "non-responsive" for not doing so	LSS requests that the the "non-responsiveness" determination be retracted.	EPA believes this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work Plans.	322

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			in the Revised Work Plan. It appears that EPA was non-responsive to its own request.			
94	B	Figure 4-3 / 4	EPA's Work Plan does not contain the "additional requested figures" for presenting the "plume locations and potential collocation with other chemicals." References are made to Figure 4-3, which was maintained from the Revised Work Plan, as well as figures contained in the Upland RI Report (e.g., those referenced in the Revised Work Plan). LSS is not clear how EPA resolved the issue in EPA Comment 305 that was declared to be "non-responsive" on the part of LSS.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work Plans. The upland hydraulic control design should capture plumes.	305
95	B	4	Same issue as LSS Comment #94 (EPA Comment #305) above. Additional requested figures were not developed or provided in EPA's Work Plan.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work Plans. The upland hydraulic control design should capture plumes.	306
96	B	4	See LSS Comment #94 above (EPA Comment #305). EPA's Work Plan does not	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work	307

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			include the identification of additional groundwater plumes.		Plans. The upland hydraulic control design should capture plumes.	
97	B	Figure 4-3 / 4	Perchlorate is still mapped out at 20 mg/l in Figure 4-3. EPA did not revise this figure to reflect the directed risk concentration of 3.6 µg/l even though the use of the 20 mg/l perchlorate level by Arkema/LSS was considered non-responsive by EPA.	LSS requests that the “non-responsiveness” determination be retracted.	EPA believes the 3.6 µg/l value should be used and can be referenced in the Work Plan addendum.	130
98	B	Figure 4-2 / 4	LSS would like clarification regarding the definition of “Beach Sediment,” which is an exposure medium in the Human Health Risk Assessment CSM. EPA stated that the Revised Work Plan Human Health CSM lacked clarity between upland source control/RI and the EE/CA for soils. The Revised Work Plan distinguished between “riparian soil” and “riverbank sediment” in the CSM. LSS understands that the EE/CA should include all soils from the top of the riverbank to the river. However, it is unclear to LSS whether “beach sediment”	The term “beach sediment” should be defined on the CSM figure in EPA’s Work Plan. Also clarification should be provided on the difference between beach sediment and “Willamette River sediment” which is defined as material below mean high water.	Clarification will be provided in the work plan addendum.	473

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			includes both "riparian soil" and "riverbank sediment." Furthermore, "Willamette River sediment" is included as an exposure medium, which is defined as material below mean high water.			
99	B	4-4 / 4.1.3	EPA indicated that LSS was non-responsive to the original comment: "MCB DNAPL contributes to the MCB groundwater plume represents an 'ongoing source' to groundwater, and to the river." The Revised Work Plan stated in the last sentence of the second paragraph in Section 4.1.2.3 (Groundwater) that "DNAPL likely contributes to the continuing presence of dissolved-phase MCB in groundwater observed in upland soils and sediments." EPA's Work Plan retained that sentence without revision. It does not appear that the comment was treated differently in EPA's Work Plan.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes the referenced sentence should be placed in the Work Plan addendum for clarification.	32
100	B	4-4 / 4.1.3	The Revised Work Plan referenced several	LSS requests that the "non-responsiveness" determination be	EPA believes the requested information (if needed) should	304

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			groundwater figures from ERM's Upland RI Report. However, EPA indicated that this was inadequate and groundwater elevations and flow directions must be presented in figures within the document. EPA included one additional figure from the Upland RI Report, which is essentially a single cross section of the site. The references of Upland RI Report figures from the Revised Work Plan were maintained in EPA's version of the Work Plan. If this type of reference was considered inadequate, why didn't EPA include the aforementioned figures depicting elevations and flows? LSS does not believe that EPA was responsive to its original comment.	retracted.	be referenced relative to ongoing upland source control efforts.	
101	B	Table 4-1 omission / 4.1.3	Table 4-1 (Detections of Selected COIs in Groundwater and Transition-Zone Water) was omitted from Section 4.1.2.3 of the Revised Work Plan. LSS believes that his was an	LSS requests that Table 4-1 be replaced in the work plan or an explanation for its deletion be provided.	A statement will be provided in the addendum that this table will be complete in the EE/CA report and will include newer data.	305

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			integral component of the conceptual site model. This presentation provided readers with an effective guide to locations of the highest and lowest detections of selected COIs at the site. Please provide an explanation as to why this table was not included in EPA's Work Plan.			
102	B	4-5 / 4.1.4	The introductory paragraph to Section 4.1.4 in EPA's Work Plan (Other COI Sources and Release Mechanisms) was abbreviated to a single sentence from the Revised Work Plan ("Other COIs known to occur in environmental media at the site are discussed below"). The fact that these additional chemicals were identified from data screening is important to this section. In addition, the original paragraph included a sentence, which reiterated the matrices evaluated as part of the EE/CA process. LSS believes that this section	LSS requests that the deleted text be replaced or an explanation for its deletion be provided.	This comment can be addressed in the work plan addendum or in future EE/CA documents as needed.	N/A

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			was unnecessarily shortened.			
103	B	Select figures / 4.1.5	EPA stated that LSS was non-responsive because the following site features were not presented in Revised Work Plan figures: <b>areas of excavation, location of the full-scale soil vapor extraction system, stormwater system improvements, locations of the polysulfide injections, and locations of the per sulfate injections.</b> However, EPA's work plan does not include revised figures with these features, and remaining consistent with the Revised Work Plan, refers to the Upland RI Report. It appears that EPA was non-responsive to the original comment.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes the requested information will be referenced relative to ongoing upland source control efforts.	311
104	B	4-8 / 4.1.5	LSS does not agree that the inclusion of "an evaluation of hydraulic controls" was non-responsive to the original comment. Since the submittal of the Revised Work Plan, the project has evolved further and a hydraulic	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes hydraulic control needs to be included in the EE/CA since upland controls will be evaluated for adequacy. EPA believes this item can be clarified in the Work Plan addendum.	33

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			control approach is in fact being developed. EPA's Work Plan simply states that the approach is being developed but does not expand upon its description or current design status. It is stated that "a draft source control IRM scoping memorandum is currently under review."			
105	B	4-9 to 4-11 / 4.2	Apart from some minor additional text and edits in this section (4.2 – Transport Pathways), the release mechanism descriptions have not been reorganized or expanded. LSS does not believe that EPA's revised section represents more "clearly presented" release mechanism descriptions.	LSS requests that the "non-responsiveness" determination be retracted.	EPA deems that this comment is no longer relevant to the May 11, 2007 and July 14, 2006 Work Plans.	323
106	B	4-9 to 4-11 / 4.2	EPA stated that it was "impractical to assume the stormwater piping system is leak free." However, EPA's Work Plan does not address the potential for stormwater piping leaks and/or failures. LSS does not believe that EPA was responsive to this comment.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes this comment will be addressed in the Work Plan addendum when discussing the recently collected storm water data.	327

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107	B	4-10 / 4.2.2	The Revised Work Plan did not define “temporary cover systems” as (e.g., asphalt pavement). LSS does not understand why EPA determined that this was non-responsive. EPA’s Work Plan is consistent with the Revised Work Plan stating the following: “temporary covers systems such as asphalt pavement...”	LSS requests that the “non-responsiveness” determination be retracted.	EPA deems that this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work Plans. EPA believes the referenced temporary cover systems are relevant to storm water/source control measures as they are made available.	313
108	B	4-10 / 4.2.3	Attachment A (Technical Memorandum – Groundwater and Stormwater Loading Estimates) is referenced in this section. The letter cites Attachment B for a presentation of the raw calculations, however, Attachment B was not provided with the work plan. Per David Livermore’s request, Attachment B was provided to Integral on June 29, 2007). Parametrix’s calculations are being evaluated.	LSS did not receive the calculations with EPA’s work plan but received the materials on June 29, 2007. LSS is currently reviewing the loading estimates and will provide additional comments when the review is complete.	The loading calculations to be presented in the Work Plan addendum will be reviewed (see LSS Comment No. 5). Hydraulic control may make this comment irrelevant.	300
109	B	4-11 / 4.2.4	EPA’s Work Plan does not provide a “clear discussion of stormwater migration to soil or groundwater via leaking	LSS requests that the “non-responsiveness” determination be retracted.	EPA deems this comment is no longer relevant provided the upland process provides this information.	320

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			from the stormwater system.” EPA determined that LSS was non-responsive for not providing this discussion.			
110	B	4-12 / 4.3	EPA defined “riverbank sediments” as soil and waste material between the ordinary high water (OHW) and the top of the bank. However, it had been previously determined that riverbank sediments were defined as materials between OHW and mean high water (MHW) and riparian soils were present between MHW and the top of bank. It is important that these definitions are used consistently during the EE/CA.	LSS requests that the text throughout the work plan be revised for consistency. It is important that these definitions are used consistently during the EE/CA.	This comment will be addressed by providing a clear definition in the work plan addendum and in future EE/CA documents as needed.	N/A
111	B	Figures (GW maps) / 3 and 4	No groundwater elevation figures were added to EPA’s work plan, which was required by EPA in its work plan disapproval letter to LSS.	LSS requests that the “non-responsiveness” determination be retracted.	EPA believes this is still a relevant comment. Updates to the requested information can be captured in a future document as they become available. The July 14, 2006 work plan provided groundwater elevation figures as requested by EPA (e.g., see Appendix E, Figures 4-6, 4-7, 4-14, 4-15, 4-17 of Integral 2006).	304

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112	B	3-1 to 5-7 / 3, 4, and 5	EPA stated in its work plan disapproval letter to LSS that "EPA directed Arkema to include upland RI data in its June 12, 2006 letter to Arkema". EPA's work plan did not include Upland RI data except for groundwater data from the riverbank monitoring wells, which was also included in the Revised Draft EE/CA work plan (Integral 2006). These comments were originally directed toward Section 2, but now include Sections 3, 4, and 5.	LSS requests that the "non-responsiveness" determination be retracted.	EPA believes these data may still need to be included in future documents (or by reference) to evaluate data gaps. The Upland RI which was included in the July 14, 2006 EE/CA Work Plan included the entire upland data set available at that time (Appendix E of Integral 2006).	435, 436, and 437
113	B	5-1 / 5	Last paragraph – The omission of toxicity testing and tissue residue data is inconsistent with the use of this information in the harbor wide RI.	LSS requests that the site-specific toxicity testing and tissue residue data be included to be consistent with the harbor wide RI.	EPA no longer feels this comment to be relevant However, LSS has committed to include relevant LWG-generated data for the EE/CA evaluation assuming it is collected and reported in a timely manner.	NA
114	B	6-2 / 6.1.1	Last paragraph –  According to EPA (1991) the phrase "...or other highly mobile materials..."	LSS requests that this be revised to state "...or other highly mobile <u>source</u> materials..."	This comment can be addressed in the work plan addendum and in future EE/CA documents as needed.	
115	B	6-3 /	Development of the Analysis	LSS requests justification in the	This comment can be	

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		6.1.3.1	Grid –Grid size.	text for the selection of a 50X50 ft grid.	addressed in the work plan addendum and in future EE/CA documents as needed-.	
116	B	6-5 / 6.1.3.1	Second Bullet –Sample results with multiple dilutions.	LSS requests clarification as to how the dilutions were handled in the screening process and confirm that only one result for each compound was reported for each sample (e.g., if a particular sample was run multiple times with different dilutions, was only one result used in the screening process?)	This comment can be addressed in the work plan addendum and in future EE/CA documents as needed-.	NA
117	B	6-7 / 6.2	Paragraph 7  “Concentrations of dioxin/furan TCDD TEQ, total TCDD TEQ, and total endrin are equally high relative to their SLVs, as are concentrations of DDX (Table 6-1).”  Relative comparisons among substances are not relevant. The scale for comparisons should focus on the benchmarks established for each chemical. The comparisons are also of limited value since Table 6-1 presents only maximum	LSS requests that this sentence be deleted and that only meaningful comparisons to chemical benchmarks, contaminant distributions, and patterns of chemical concentrations across the site and in Portland Harbor be made in the text and tables.	This comment can be addressed in the work plan addendum and in future EE/CA documents as needed-.	

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			values and does not provide any meaningful comparisons based on overall contaminant distributions and patterns of chemical concentrations across the site and in Portland Harbor.			
118	B	6-9 / 6.4	Evaluation of Recontamination Potential  General Comment - Although recontamination is an important issue, it's treatment in this section is highly redundant with material provided in previous this sections, rambles without making a significant point, and seems out of proportion to concept of PTM.	LSS requests that the redundant material in this section be removed.	This comment will be addressed in the work plan addendum.→	
119	B	6-11 / 6.4.1	Paragraph 5  This paragraph seems to contradict itself, by stating variously that recontamination potential is "unknown," "low" or "significant."	LSS requests that the paragraph be deleted or revised to make a consistent point concerning recontamination.	The referenced paragraph will remain as written.→	
120	B	7-3 / 7.1	Paragraph below bullets, last sentence.	LSS requests that "will be" be removed from end of sentence.	LSS no longer feels this comment to be relevant.→	
121	B	7-5 / 7.3	Reference to "thin-layer caps."	LSS requests that the wording be changed to thin-layer placement	This comment can be addressed in the work plan	

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				to reflect EPA Sediment Guidance.	addendum and in future EE/CA documents as needed.	
122	B	8-4 / 8.1.3	Last paragraph. Additional information on sedimentation is <u>only</u> required if piers are removed as part of remedy and <u>only</u> necessary after removal of piers concurrently with final design of removal action. This information will not be required as part of the EE/CA and not necessary for work plan. However, it may be considered in the design phase of the project.	LSS requests that the need for additional sedimentation data be determined after the remedy is selected in the EE/CA.	This comment can be addressed in the work plan addendum or in future EE/CA documents as needed.	
123	B	8-4 / 8.1.4.1	End of second paragraph.	LSS request that the words "dioxin-like" before PCBs be deleted.	. As defined in the May 11, 2007 EE/CA Work plan, analysis of chlorinated dioxins/furans will be required for a subset of samples for characterization of the RAA, Analysis of dioxin-like PCBs will not be required. However, both chlorinated dioxins/furans and dioxin-like PCBs will be analyzed in the sediments off of the Arkema facility after the removal is completed. This information will be used to assess the effectiveness of the removal action and to compare the	

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					remaining sediment concentrations to the remediation goals developed for the Portland Harbor RI/FS.	
124	B	8-5 / 8.1.4.2	EPA stated the requirement for a definition of TZW in the work plan, which was clearly presented in Section 8.1.4.2 of the Revised Work Plan. In fact, the need for additional samples to satisfy data gaps is also discussed in this section. It does not appear that EPA's Work Plan provides further detail regarding TZW sampling and analysis. LSS does not understand why this was considered "non-responsive" if EPA did not provide supplemental information.	LSS requests that the "non-responsiveness" determination be retracted.	EPA has determined that this comment will be addressed later as part of a FSP or other future document. EPA has determined that TZW sampling will be needed for post-dredging cap evaluation.	257
125	B	8-12 / 8.2.1.2	EPA has not included the tiered testing approach for surface sediment analysis which includes bioassays. There is no explanation for not including this evaluation. This contradicts early EPA comments requesting the use of bioassays to evaluate accumulative affects of contaminants on benthic	LSS requests that the "non-responsiveness" determination for these comments be retracted.	EPA believes this comment is no longer relevant to the May 11, 2007 or July 14, 2006 Work Plans. EPA believes that bioassays are no longer viewed as being necessary to evaluate practical limits of the removal action area.	435, 144, 147, 376, 199, and 140

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126	B	8-15 / 8.2.1.2	organisms. Subsurface Sediment Sampling, Analytical Strategy. Was the choice of stations and depths for the analysis of dioxins/furans selected randomly with the preliminary RAA boundary?	LSS requests that dioxin/furan analyses be deleted from the analytical strategy.	This comment can be addressed in a FSP and in future EE/CA documents as needed-.	