Appendix E-3

Ecological Risk Assessment Criteria

(Compact Disk)

Appendix E-3: Ecological Risk Assessment Criteria

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a]								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[d]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
Benzene	8260B	0.50 µg/L	0.28 µg/L	70-130	20	70-130	370 µg/L	e
Bromobenzene	8260B	1.0 µg/L	0.27 µg/L	70-130	20	70-130		
Bromochloromethane	8260B	1.0 µg/L	0.40 µg/L	70-130	20	70-130		
Bromodichloromethane	8260B	0.50 µg/L	0.30 µg/L	70-130	20	70-130	1.1 µg/L	c
Bromoform	8260B	0.50 µg/L	0.40 µg/L	70-130	20	70-130	8.5 µg/L	c
Bromomethane	8260B	1.0 µg/L	0.42 µg/L	70-130	20	70-130	8.7 µg/L	c
n-Butylbenzene	8260B	1.0 µg/L	0.37 µg/L	70-130	20	70-130		
sec-Butylbenzene	8260B	1.0 µg/L	0.25 µg/L	70-130	20	70-130		
tert-Butylbenzene	8260B	1.0 µg/L	0.22 µg/L	70-130	20	70-130		
Carbon tetrachloride	8260B	0.50 µg/L	0.28 µg/L	70-130	20	70-130	13.3 µg/L	e
Chlorobenzene	8260B	0.50 µg/L	0.36 µg/L	70-130	20	70-130	64 µg/L	f
Chloroethane	8260B	0.50 µg/L	0.40 µg/L	70-130	20	70-130	21,000 µg/L	c
2-Chlorotoluene	8260B	1.0 µg/L	0.28 µg/L	70-130	20	70-130	730 µg/L	c
4-Chlorotoluene	8260B	1.0 µg/L	0.29 µg/L	70-130	20	70-130	2600 µg/L	c
Chloroform	8260B	0.50 µg/L	0.33 µg/L	70-130	20	70-130	1.8 µg/L	e
Chloromethane	8260B	0.50 µg/L	0.40 µg/L	70-130	20	70-130	1.8 µg/L	c
1,2-Dibromo-3-chloropropane	8260B	1.0 µg/L	0.97 µg/L*	70-130	20	70-130	0.00032 µg/L	c
Dibromochloromethane	8260B	0.50 µg/L	0.40 µg/L	70-130	20	70-130	0.80 µg/L	c
1,2-Dibromoethane	8260B	1.0 µg/L	0.40 µg/L*	70-130	20	70-130	0.0065 µg/L	c
Dibromomethane	8260B	1.0 µg/L	0.36 µg/L	70-130	20	70-130	370 µg/L	c
1,3-Dichlorobenzene	8260B	1.0 µg/L	0.35 µg/L	70-130	20	70-130	150 µg/L	e
1,4-Dichlorobenzene	8260B	0.50 µg/L	0.37 µg/L	70-130	20	70-130	26 µg/L	e
Dichlorodifluoromethane	8260B	2.0 µg/L	0.26 µg/L	70-130	20	70-130	390 µg/L	c
1,1-Dichloroethane	8260B	0.50 µg/L	0.40 µg/L	70-130	20	70-130	47 µg/L	f
1,2-Dichloroethane	8260B	0.50 µg/L	0.28 µg/L	70-130	20	70-130	100 µg/L	e
1,1-Dichloroethene	8260B	0.50 µg/L	0.42 µg/L	70-130	20	70-130	25 µg/L	f
cis-1,2-Dichloroethene	8260B	0.50 µg/L	0.32 µg/L	70-130	20	70-130	370 µg/L	c
trans-1,2-Dichloroethene	8260B	0.50 µg/L	0.30 µg/L	70-130	20	70-130	110 µg/L	c
Dichlorofluoromethane	8260B	2.5 µg/L	0.90 µg/L	70-130	20	70-130		

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[d]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
1,2-Dichloropropane	8260B	0.50 µg/L	0.35 µg/L*	70-130	20	70-130	0.39 µg/L	c
1,3-Dichloropropane	8260B	0.50 µg/L	0.32 µg/L	70-130	20	70-130	730 µg/L	c
2,2-Dichloropropane	8260B	1.0 µg/L	0.34 µg/L	70-130	20	70-130		
1,1-Dichloropropene	8260B	1.0 µg/L	0.28 µg/L	70-130	20	70-130		
Ethylbenzene	8260B	0.50 µg/L	0.25 µg/L	70-130	20	70-130	90 µg/L	e
Hexachlorobutadiene	8260B	1.0 µg/L	0.38 µg/L	70-130	20	70-130	1.3 µg/L	e
Isopropylbenzene	8260B	1.0 µg/L	0.25 µg/L	70-130	20	70-130	680 µg/L	c
p-Isopropyltoluene	8260B	1.0 µg/L	0.28 µg/L	70-130	20	70-130		
Methylene chloride	8260B	1.0 µg/L	0.95 µg/L	70-130	20	70-130	98.1 µg/L	e
Naphthalene	8260B	1.0 µg/L	.041 µg/L	70-130	20	70-130	1.1 µg/L	e
n-Propylbenzene	8260B	1.0 µg/L	0.27 µg/L	70-130	20	70-130		
Styrene	8260B	0.50 µg/L	0.20 µg/L	70-130	20	70-130	72 µg/L	e
tert-butyl methyl ether	8260B	1.0 µg/L	0.32 µg/L	70-130	20	70-130	12 µg/L	c
1,1,2,2-Tetrachloroethane	8260B	0.50 µg/L	0.30 µg/L	70-130	20	70-130	610 µg/L	f
Tetrachloroethene	8260B	0.50 µg/L	0.32 µg/L	70-130	20	70-130	111 µg/L	e
1,1,1,2-Tetrachloroethane	8260B	1.0 µg/L	0.27 µg/L*	70-130	20	70-130	0.52 µg/L	c
Toluene	8260B	0.50 µg/L	0.36 µg/L	70-130	20	70-130	2.0 µg/L	e
1,2,3-Trichlorobenzene	8260B	1.0 µg/L	0.30 µg/L	70-130	20	70-130	8.0 µg/L	e
1,2,4-Trichlorobenzene	8260B	0.50 µg/L	0.48 µg/L	70-130	20	70-130	24 µg/L	e
1,1,1-Trichloroethane	8260B	0.50 µg/L	0.30 µg/L	70-130	20	70-130	11 µg/L	f
1,1,2-Trichloroethane	8260B	0.50 µg/L	0.30 µg/L	70-130	20	70-130	1200 µg/L	f
Trichloroethene	8260B	0.50 µg/L	0.26 µg/L	70-130	20	70-130	21 µg/L	e
Trichlorofluoromethane	8260B	1.0 µg/L	0.34 µg/L	70-130	20	70-130	1,300 µg/L	c
1,2,3-Trichloropropane	8260B	1.0 µg/L	0.40 µg/L*	70-130	20	70-130	0.0096 µg/L	c
1,2,4-Trimethylbenzene	8260B	1.0 µg/L	0.23 µg/L	70-130	20	70-130	15 µg/L	c
1,3,5-Trimethylbenzene	8260B	1.0 µg/L	0.26 µg/L	70-130	20	70-130		
Vinyl chloride	8260B	0.50 µg/L	0.40 µg/L*	70-130	20	70-130	0.016 µg/L	c
Xylene (total)	8260B	1.0 µg/L	0.60 µg/L	70-130	20	70-130	13 µg/L	f
o-Xylene	8260B	1.0 µg/L	0.30 µg/L	70-130	20	70-130	13 µg/L	f

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[d]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
m-Xylene	8260B	1.0 µg/L	0.60 µg/L	70-130	20	70-130	13 µg/L	f
p-Xylene	8260B	1.0 µg/L	0.60 µg/L	70-130	20	70-130	13 µg/L	f
Diesel (C12-C23)-TPH	8015B	500 µg/L	100 µg/L	50-130	20	50-130		
Motor Oil (C23-C40)-TPH	8015B	500 µg/L	100 µg/L	50-130	20	50-130		
Gasoline (C4-C12)-TPH	8015B	50 µg/L	25 µg/L	70-130	20	70-130		
2-Chlorophenol	625 LL	1.0 µg/L	0.20 µg/L	50-130	20	50-130	7.0 µg/L	e
4-Chloro-3-methylphenol	625 LL	1.0 µg/L	0.20 µg/L	50-130	20	50-130		
2,4-Dichlorophenol	625 LL	2.0 µg/L	0.20 µg/L*	50-130	20	50-130	0.20 µg/L	e
2,4-Dimethylphenol	625 LL	2.0 µg/L	0.30 µg/L	50-130	20	50-130	730 µg/L	c
2,4-Dintrophenol	625 LL	5.0 µg/L	0.90 µg/L	50-130	20	50-130	73 µg/L	c
4,6-Dintiro-o-cresol	625 LL	5.0 µg/L	0.20 µg/L	50-130	20	50-130		
2-Methylphenol	625 LL	2.0 µg/L	0.10 µg/L	50-130	20	50-130	13 µg/L	f
3&4-Methylphenol	625 LL	5.0 µg/L	0.20 µg/L	50-130	20	50-130	1800 µg/L	c
2-Nitrophenol	625 LL	2.0 µg/L	0.10 µg/L	50-130	20	50-130		
4-Nitrophenol	625 LL	5.0 µg/L	2.5 µg/L	50-130	20	50-130	300 µg/L	f
Pentachlorophenol	625 LL	2.0 µg/L	0.10 µg/L	50-130	20	50-130	15 µg/L	g
Phenol	625 LL	1.0 µg/L	0.30 µg/L	50-130	20	50-130	4.0 µg/L	e
2,4,5-Trichlorophenol	625 LL	2.0 µg/L	0.20 µg/L	50-130	20	50-130	18 µg/L	e
2,4,6-Trichlorophenol	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	18 µg/L	e
Benzoic acid	625 LL	20 µg/L	3.0 µg/L	50-130	20	50-130	42 µg/L	f
4-Bromophenyl phenyl ether	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	1.5 µg/L	f
Butyl benzyl phthalate	625 LL	5.0 µg/L	0.70 µg/L	50-130	20	50-130	19 µg/L	f
2-Chloronaphthalene	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130	2900 µg/L	c
4-Chloroaniline	625 LL	2.0 µg/L	0.10 µg/L	50-130	20	50-130	150 µg/L	c
Carbazole	625 LL	1.0 µg/L	0.25 µg/L	50-130	20	50-130	3.4 µg/L	c
bis(2-Chloroethoxy)methane	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130	110 µg/L	c
bis(2-Chloroethyl)ether	625 LL	0.50 µg/L	0.10 µg/L*	50-130	20	50-130	0.012 µg/L	c
bis(2-Chloroisopropyl)ether	625 LL	0.50 µg/L	0.10 µg/L*	50-130	20	50-130	0.32 µg/L	c
4-Chlorophenyl phenyl ether	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130		
2,4-Dintitrotoluene	625 LL	5.0 µg/L	0.20 µg/L	50-130	20	50-130	73 µg/L	c

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[d]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
2,6-Dinitrotoluene	625 LL	5.0 µg/L	0.10 µg/L	50-130	20	50-130	37 µg/L	c
3,3′-Dichlorobenzidine	625 LL	5.0 µg/L	0.40 µg/L*	50-130	20	50-130	0.15 µg/L	c
Dibenzofuran	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130	3.7 µg/L	f
1,2-Dichlorobenzene	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130	370 µg/L	c
1,3-Dichlorobenzene	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130		
1,4-Dichlorobenzene	625 LL	0.50 µg/L	0.20 µg/L*	50-130	20	50-130	0.43 µg/L	c
di-*n*-Butyl phthalate	625 LL	2.0 µg/L	0.20 µg/L	50-130	20	50-130	19 µg/L	e
di-*n*-Octyl phthalate	625 LL	5.0 µg/L	0.10 µg/L	50-130	20	50-130	1,500 µg/L	c
Diethyl phthalate	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	210 µg/L	f
Dimethyl phthalate	625 LL	0.50 µg/L	0.10 µg/L	50-130	20	50-130		
bis(2-Ethylhexyl)phthalate	625 LL	5.0 µg/L	1.7 µg/L	50-130	20	50-130	16 µg/L	e
Hexachlorobenzene	625 LL	1.0 µg/L	0.10 µg/L*	50-130	20	50-130	0.042 µg/L	c
Hexachlorobutadiene	625 LL	1.0 µg/L	0.20 µg/L*	50-130	20	50-130	0.86 µg/L	c
Hexachlorocyclopentadiene	625 LL	5.0 µg/L	0.10 µg/L	50-130	20	50-130	220 µg/L	c
Hexachloroethane	625 LL	1.0 µg/L	0.20 µg/L	50-130	20	50-130	12 µg/L	f
Isophorone	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	71 µg/L	c
2-Methylnaphthalene	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	150 µg/L	c
2-Nitroaniline	625 LL	5.0 µg/L	0.10 µg/L	50-130	20	50-130		
3-Nitroaniline	625 LL	5.0 µg/L	0.20 µg/L	50-130	20	50-130		
4-Nitroaniline	625 LL	5.0 µg/L	0.50 µg/L	50-130	20	50-130		
Nitrobenzene	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	3.4 µg/L	c
N-Nitroso-di-*n*-propylamine	625 LL	2.0 µg/L	0.10 µg/L*	50-130	20	50-130	0.0096 µg/L	c
N-Nitrosodiphenylamine	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	210 µg/L	f
1,2,4-Trichlorobenzene	625 LL	1.0 µg/L	0.10 µg/L	50-130	20	50-130	19 µg/L	c
Acenaphthene	8270C SIM	0.50 µg/L	0.05 µg/L	50-130	20	50-130	5.8 µg/L	e
Acenaphthylene	8270C SIM	0.50 µg/L	0.05 µg/L	50-130	20	50-130		
Anthracene	8270C SIM	0.50 µg/L	0.011 µg/L*	50-130	20	50-130	0.012 µg/L	e
Benzo(a)anthracene	8270C SIM	0.50 µg/L	0.007 µg/L	50-130	20	50-130	10 µg/L	e
Benzo(a)pyrene	8270C SIM	0.50 µg/L	0.009 µg/L*	50-130	20	50-130	0.015 µg/L	e
Benzo(b)fluoranthene	8270C SIM	0.50 µg/L	0.05 µg/L*	50-130	20	50-130	0.029 µg/L	c

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[d]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
Benzo(g,h,i)perylene	8270C SIM	0.50 µg/L	0.05 µg/L	50-130	20	50-130		
Benzo(k)fluoranthene	8270C SIM	0.50 µg/L	0.05 µg/L*	50-130	20	50-130	0.29 µg/L	c
Chrysene	8270C SIM	0.50 µg/L	0.05 µg/L	50-130	20	50-130	2.9 µg/L	c
Dibenzo(a,h)anthracene	8270C SIM	0.50 µg/L	0.05 µg/L*	50-130	20	50-130	0.0029 µg/L	c
Fluoranthene	8270C SIM	0.50 µg/L	0.012 µg/L*	50-130	20	50-130	0.04 µg/L	e
Fluorene	8270C SIM	0.50 µg/L	0.05 µg/L	50-130	20	50-130	3.0 µg/L	e
Indeno(1,2,3-cd)pyrene	8270C SIM	0.50 µg/L	0.05 µg/L*	50-130	20	50-130	0.029 µg/L	c
Naphthalene	8270C SIM	0.50 µg/L	0.05 µg/L*	50-130	20	50-130	0.14 µg/L	c
Phenanthrene	8270C SIM	0.50 µg/L	0.05 µg/L*	50-130	20	50-130	0.40 µg/L	e
Pyrene	8270C SIM	0.50 µg/L	0.006 µg/L*	50-130	20	50-130	0.025 µg/L	e
alpha-BHC	8081A LL	0.0013 µg/L	0.000379 µg/L	50-130	20	50-130	2.2 µg/L	f
beta-BHC	8081A LL	0.0013 µg/L	0.000362 µg/L	50-130	20	50-130	2.2 µg/L	f
gamma-BHC (Lindane)	8081A LL	0.0013 µg/L	0.000379 µg/L	50-130	20	50-130		
delta-BHC	8081A LL	0.0013 µg/L	0.000237 µg/L	50-130	20	50-130	2.2 µg/L	f
Heptachlor	8081A LL	0.0013 µg/L	0.000347 µg/L	50-130	20	50-130	0.0038 µg/L	g
Aldrin	8081A LL	0.0013 µg/L	0.000278 µg/L	50-130	20	50-130	0.0040 µg/L	c
Heptachlor epoxide	8081A LL	0.0013 µg/L	0.000247 µg/L	50-130	20	50-130	0.0038 µg/L	g
Endosulfan I	8081A LL	0.0013 µg/L	0.000185 µg/L	50-130	20	50-130	0.056 µg/L	g
Dieldrin	8081A LL	0.0013 µg/L	0.0002 µg/L	50-130	20	50-130	0.056 µg/L	g
Endrin aldehyde	8081A LL	0.0013 µg/L	0.000301 µg/L	50-130	20	50-130		
Endrin	8081A LL	0.0013 µg/L	0.000191 µg/L	50-130	20	50-130	0.036 µg/L	g
Endosulfan II	8081A LL	0.0013 µg/L	0.000377 µg/L	50-130	20	50-130	0.056 µg/L	g
4,4′- DDD	8081A LL	0.0013 µg/L	0.000193 µg/L	50-130	20	50-130	0.011 µg/L	f
Endosulfan sulfate	8081A LL	0.0013 µg/L	0.000398 µg/L	50-130	20	50-130	0.051 µg/L	f
4,4′-DDT	8081A LL	0.0013 µg/L	0.000344 µg/L*	50-130	20	50-130	0.001 µg/L	g
4,4′-DDE	8081A LL	0.0013 µg/L	0.000169 µg/L	50-130	20	50-130	0.20 µg/L	c
Methoxychlor	8081A LL	0.0013 µg/L	0.000458 µg/L	50-130	20	50-130	0.03 µg/L	g
Endrin ketone	8081A LL	0.0013 µg/L	0.000249 µg/L	50-130	20	50-130		
alpha-Chlordane	8081A LL	0.0013 µg/L	0.000281 µg/L	50-130	20	50-130		
gamma-Chlordane	8081A LL	0.0013 µg/L	0.000189 µg/L	50-130	20	50-130		

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued

Parameter	Analytical Method	Reporting Limit	Method Detection Limit[d]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Toxaphene	8081A LL	0.05 µg/L	0.000378 µg/L*	NA	NA	NA	0.002 µg/L	g
Aroclor-1016	8082 LL	0.01 µg/L	0.002515 µg/L	50-130	20	50-130	0.014 µg/L	g
Aroclor-1221	8082 LL	0.01 µg/L	0.00249 µg/L	NA	NA	NA	0.014 µg/L	g
Aroclor-1232	8082 LL	0.01 µg/L	0.002931 µg/L	NA	NA	NA	0.014 µg/L	g
Aroclor-1242	8082 LL	0.01 µg/L	0.001857 µg/L	NA	NA	NA	0.014 µg/L	g
Aroclor-1248	8082 LL	0.01 µg/L	0.002273 µg/L	NA	NA	NA	0.014 µg/L	g
Aroclor-1254	8082 LL	0.01 µg/L	0.002289 µg/L	NA	NA	NA	0.014 µg/L	g
Aroclor-1260	8082 LL	0.01 µg/L	0.001355 µg/L	50-130	20	50-130	0.014 µg/L	g
2,4,5-T	8151A	1.0 µg/L	0.20 µg/L	50-130	20	50-130	370 µg/L	c
2,4-D	8151A	4.0 µg/L	0.69 µg/L	50-130	20	50-130	4.0 µg/L	e
2,4-DB	8151A	4.0 µg/L	0.27 µg/L	50-130	20	50-130		
Dalapon	8151A	2.0 µg/L	0.43 µg/L	50-130	20	50-130	1,100 µg/L	c
Dichloroprop	8151A	4.0 µg/L	0.40 µg/L	50-130	20	50-130		
Dicamba	8151A	2.0 µg/L	0.11 µg/L	50-130	20	50-130	1,100 µg/L	c
Dinoseb	8151A	0.60 µg/L	0.24 µg/L	50-130	20	50-130	37 µg/L	c
MCPA	8151A	400 µg/L	64 µg/L*	50-130	20	50-130	18 µg/L	c
MCPP	8151A	400 µg/L	46 µg/L*	50-130	20	50-130	37 µg/L	c
Silvex	8151A	1.0 µg/L	0.25 µg/L	50-130	20	50-130	290 µg/L	c
Aluminum	6010B	0.05 mg/L	0.04 mg/L	75-125	20	80-120	0.087 mg/L	g
Aluminum	200.7	0.05 mg/L	0.04 mg/L	70-130	20	80-120	0.087 mg/L	g
Antimony	6020	2.0 µg/L	0.20 µg/L	75-125	20	80-120	30 µg/L	f
Antimony	200.8	2.0 µg/L	0.20 µg/L	70-130	20	80-120	30 µg/L	f
Arsenic	6020	1.0 µg/L	0.70 µg/L	75-125	20	80-120	150 µg/L	g
Arsenic	200.8	1.0 µg/L	0.70 µg/L	70-130	20	80-120	150 µg/L	g
Barium	6020	1.0 µg/L	0.40 µg/L	75-125	20	80-120	4.0 µg/L	f
Barium	200.8	1.0 µg/L	0.40 µg/L	70-130	20	80-120	4.0 µg/L	f
Beryllium	6020	0.50 µg/L	0.20 µg/L	75-125	20	80-120	0.66 µg/L	f
Beryllium	200.8	0.50 µg/L	0.20 µg/L	70-130	20	80-120	0.66 µg/L	f
Boron	6020	20 µg/L	10 µg/L*	75-125	20	80-120	1.6 µg/L	f
Boron	200.7	50 µg/L	20 µg/L*	70-130	20	80-120	1.6 µg/L	f

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued

Parameter	Analytical Method	Reporting Limit	Method Detection Limit[d]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Cadmium	6020	1.0 µg/L	0.11 µg/L	75-125	20	80-120	0.25 µg/L	g
Cadmium	200.8	1.0 µg/L	0.11 µg/L	70-130	20	80-120	0.25 µg/L	g
Calcium	6010B	0.1 mg/L	0.050 mg/L	75-125	20	80-120		
Calcium	200.7	0.1 mg/L	0.05 mg/L	70-130	20	80-120		
Chromium	6020	2.0 µg/L	0.70 µg/L	75-125	20	80-120	74 µg/L	g
Chromium	200.8	2.0 µg/L	0.70 µg/L	70-130	20	80-120	74 µg/L	g
Cobalt	6020	1.0 µg/L	0.15 µg/L	75-125	20	80-120	23 µg/L	f
Cobalt	200.8	1.0 µg/L	0.15 µg/L	70-130	20	80-120	23 µg/L	f
Copper	6020	2.0 µg/L	0.75 µg/L	75-125	20	80-120	9.0 µg/L	g
Copper	200.8	1.0 µg/L	0.75 µg/L	70-130	20	80-120	9.0 µg/L	g
Iron	6010B	0.04 mg/L	0.015 mg/L	75-125	20	80-120	1.0 mg/L	g
Iron	200.7	0.04 mg/L	0.015 mg/L	70-130	20	80-120	1.0 mg/L	g
Lead	6020	1.0 µg/L	0.30 µg/L	75-125	20	80-120	2.5 µg/L	g
Lead	200.8	1.0 µg/L	0.30 µg/L	70-130	20	80-120	2.5 µg/L	g
Lithium	200.8	2.0 µg/L	0.5 µg/L	70-130	20	80-120	14 µg/L	f
Magnesium	6010B	0.02 mg/L	0.012 mg/L	75-125	20	80-120		
Magnesium	200.7	0.02 mg/L	0.012 mg/L	70-130	20	80-120		
Manganese	6020	1.0 µg/L	0.75 µg/L	75-125	20	80-120	14 µg/L	f
Manganese	200.8	1.0 µg/L	0.75 µg/L	70-130	20	80-120	14 µg/L	f
Mercury	7470A	0.20 µg/L	0.10 µg/L	75-125	20	80-120	0.77 µg/L	g
Mercury	245.1	0.20 µg/L	0.10 µg/L	75-125	20	80-120	0.77 µg/L	g
Molybdenum	6020	2.0 µg/L	0.20 µg/L	75-125	20	80-120	73 µg/L	e
Molybdenum	200.8	2.0 µg/L	0.20 µg/L	70-130	20	80-120	73 µg/L	e
Nickel	6020	2.0 µg/L	0.90 µg/L	75-125	20	80-120	52 µg/L	g
Nickel	200.8	2.0 µg/L	0.90 µg/L	70-130	20	80-120	52 µg/L	g
Phosphorus	200.7	0.04 mg/L	0.020 mg/L	70-130	20	80-120		
Potassium	6010B	0.5 mg/L	0.37 mg/L	75-125	20	80-120		
Potassium	200.7	0.5 mg/L	0.37 mg/L	70-130	20	80-120		
Selenium	6020	2.0 µg/L	0.30 µg/L	75-125	20	80-120	5.0 µg/L	g
Selenium	200.8	2.0 µg/L	0.30 µg/L	70-130	20	80-120	5.0 µg/L	g

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued

Parameter	Analytical Method	Reporting Limit	Method Detection Limit[d]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Silicon	200.7	0.05 mg/L	0.013 mg/L	70-130	20	80-120		
Silver	6020	1.0 µg/L	0.30 µg/L*	75-125	20	80-120	0.1 µg/L	e
Silver	200.8	1.0 µg/L	0.30 µg/L	70-130	20	80-120	0.1 µg/L	e
Sodium	6010B	0.5 mg/L	0.19 mg/L	75-125	20	80-120		
Sodium	200.7	0.5 mg/L	0.19 mg/L	70-130	20	80-120		
Strontium	200.7	0.02 mg/L	0.0050 mg/L	70-130	20	80-120	1.5 mg/L	f
Thallium	6020	1.0 µg/L	0.20 µg/L*	75-125	20	80-120	0.8 µg/L	e
Thallium	200.8	1.0 µg/L	0.20 µg/L	70-130	20	80-120	0.8 µg/L	e
Thorium	200.8	1.0 µg/L	0.5 µg/L	70-130	20	80-120		
Thorium-232	200.8	1.0 µg/L	0.5 µg/L	70-130	20	80-120		
Thorium-232 Activity	200.8 (Calculated)	0.1 pCi/L	0.1 pCi/L	NA	NA	NA	NA	
Tin	200.7	100 µg/L	12 µg/L*	70-130	20	80-120	73 µg/L	f
Titanium	200.7	0.005 mg/L	0.002 mg/L	70-130	20	80-120		
Uranium	200.8	1.0 µg/L	0.50 µg/L	70-130	20	80-120	2.6 µg/L	f
Vanadium	6020	2.0 µg/L	0.70 µg/L	75-125	20	80-120	20 µg/L	f
Vanadium	200.8	2.0 µg/L	0.70 µg/L	70-130	20	80-120	20 µg/L	f
Zinc	6020	20 µg/L	2.5 µg/L	75-125	20	80-120	120 µg/L	g
Zinc	200.8	10 µg/L	2.5 µg/L	70-130	20	80-120	120 µg/L	g
Chloride	300.0	0.5 mg/L	0.25 mg/L	75-125	20	80-120	230 mg/L	g
Fluoride	300.0	0.5 mg/L	0.15 mg/L	75-125	20	80-120	2.2 mg/L	c
Nitrate	300.0	0.10 mg/L	0.060 mg/L	75-125	20	80-120	13 mg/L	e
Nitrite	300.0	0.10 mg/L	0.060 mg/L*	75-125	20	80-120	0.06 mg/L	e
Nitrate/Nitrite	300.0	0.10 mg/L	0.060 mg/L*	75-125	20	80-120	0.06 mg/L	e
Sulfate	300.0	0.5 mg/L	0.2 mg/L	75-125	20	80-120		
Phosphate (ortho)	300.0	0.5 mg/L	0.4 mg/L	75-125	20	80-120		
Phosphorus, total	365.3	0.15 mg/L	0.05 mg/L	75-125	20	80-120		
Alkalinity, Total	2320B	2.0 mg/L	2.0 mg/L	NA	20	80-120	20 mg/L	g
Alkalinity, Bicarbonate	2320B	2.0 mg/L	2.0 mg/L	NA	20	80-120		
Alkalinity, Carbonate	2320B	2.0 mg/L	2.0 mg/L	NA	20	80-120		

Table E-1. Aqueous Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued

Parameter	Analytical Method	Reporting Limit	Method Detection Limit[d]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Alkalinity, Hydroxide	2320B	2.0 mg/L	2.0 mg/L	NA	20	80-120		
pH	150.1	0.10 pH Units	0.10 pH Units	NA	20	80-120	6.5-9 pH Units	g
pH	4500B	0.10 pH Units	0.10 pH Units	NA	20	80-120	6.5-9 pH Units	g
Total Dissolved Solids (TDS)	160.1	10 mg/L	10 mg/L	NA	20	80-120		
Total Dissolved Solids (TDS)	2540C	10 mg/L	10 mg/L	NA	20	80-120		
Total Organic Carbon (TOC)	415.1	1.0 mg/L	0.5 mg/L	75-125	20	80-120		
Total Organic Carbon (TOC)	5310B	1.0 mg/L	0.5 mg/L	75-125	20	80-120		
Total Solids (TS)	160.3	10 mg/L	10 mg/L	NA	20	80-120		
Gross α	900.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125		
Gross β	900.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125		
Radium-226	903.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	4.08 pCi/L	h
Radium-228	904.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	3.4 pCi/L	h
Thorium-228	907.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	374 pCi/L	h
Thorium-230	907.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	2570 pCi/L	h
Thorium-232	907.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	304 pCi/L	h
Uranium-234	907.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	202 pCi/L	h
Uranium-235	907.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	217 pCi/L	h
Uranium-238	907.0	1 pCi/L	1 pCi/L	70-130	RPD<20 or RER< 2	75-125	223 pCi/L	h
Total Uranium	907.0 (Calculated)	0.1 µg/L	0.1 µg/L	NA	NA	NA	NA	

Notes:
NA Not Applicable

Appendix E-3: Ecological Risk Assessment Criteria

a The goals for accuracy and precision are reflective of the data validation/verification usability limits. .
b Precision limit for matrix spike/matrix spike duplicate, laboratory duplicate, or laboratory control sample/ laboratory control sample duplicate analyses.
c EPA Regional Screening Levels (Residential) for Chemical Contaminants at Superfund Sites, May 20, 2008.
d The method detection limits presented are laboratory-derived limits. These limits will periodically be updated; however, the updated limits are not expected to be significantly different than those herein.
e Canadian Council of Ministers of the Environment Water Quality Guidelines, 2007.
f Toxicological Benchmarks for Screening of Potential Contaminants of Concern for Effects on Aquatic Biota on Oak Ridge Reservation, Suter, G.W. II, and C.L. Tsao, 1996.
g EPA National Recommended Water Quality Criteria, 2006.
h DOE Graded Approach for Evaluating Radiation Does to Aquatic and Terrestrial Biota, 2002 and 2006.
* Method detection limit is used as the required reporting limit in order to meet the screening value.

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a]								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[f]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
Benzene	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	160 µg/kg	h
Bromobenzene	5035A-8260B	5.0 µg/kg	0.84 µg/kg	70-130	30	70-130		
Bromochloromethane	5035A-8260B	5.0 µg/kg	0.90 µg/kg	70-130	30	70-130		
Bromodichloromethane	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	10,000 µg/kg	c
Bromoform	5035A-8260B	5.0 µg/kg	0.80 µg/kg	70-130	30	70-130	61,000 µg/kg	c
Bromomethane	5035A-8260B	5.0 µg/kg	0.92 µg/kg	70-130	30	70-130	7,900 µg/kg	c
n-Butylbenzene	5035A-8260B	5.0 µg/kg	0.72 µg/kg	70-130	30	70-130		
sec-Butylbenzene	5035A-8260B	5.0 µg/kg	0.67 µg/kg	70-130	30	70-130		
tert-Butylbenzene	5035A-8260B	5.0 µg/kg	0.62 µg/kg	70-130	30	70-130		
Carbon tetrachloride	5035A-8260B	5.0 µg/kg	0.50 µg/kg	70-130	30	70-130	47 µg/kg	h
Chlorobenzene	5035A-8260B	2.0 µg/kg	0.52 µg/kg	70-130	30	70-130	410 µg/kg	h
Chloroethane	5035A-8260B	5.0 µg/kg	1.5 µg/kg	70-130	30	70-130	15,000,000 µg/kg	c
2-Chlorotoluene	5035A-8260B	5.0 µg/kg	0.87 µg/kg	70-130	30	70-130	1,600,000 µg/kg	c
4-Chlorotoluene	5035A-8260B	5.0 µg/kg	0.74 µg/kg	70-130	30	70-130	5,500,000 µg/kg	c
Chloroform	5035A-8260B	2.0 µg/kg	0.70 µg/kg	70-130	30	70-130	22 µg/kg	h
Chloromethane	5035A-8260B	5.0 µg/kg	1.0 µg/kg	70-130	30	70-130	1,700 µg/kg	c
1,2-Dibromo-3-chloropropane	5035A-8260B	5.0 µg/kg	1.5 µg/kg	70-130	30	70-130	5.6 µg/kg	c
Dibromochloromethane	5035A-8260B	2.0 µg/kg	0.70 µg/kg	70-130	30	70-130	5,800 µg/kg	c
1,2-Dibromoethane	5035A-8260B	2.0 µg/kg	0.80 µg/kg	70-130	30	70-130	34 µg/kg	c
Dibromomethane	5035A-8260B	2.0 µg/kg	0.90 µg/kg	70-130	30	70-130	780,000 µg/kg	c
1,2-Dichlorobenzene	5035A-8260B	2.0 µg/kg	0.95 µg/kg	70-130	30	70-130	2,000,000 µg/kg	c
1,3-Dichlorobenzene	5035A-8260B	2.0 µg/kg	0.84 µg/kg	70-130	30	70-130		
1,4-Dichlorobenzene	5035A-8260B	2.0 µg/kg	0.94 µg/kg	70-130	30	70-130	2,600 µg/kg	c
Dichlorodifluoromethane	5035A-8260B	5.0 µg/kg	1.5 µg/kg	70-130	30	70-130	190,000 µg/kg	c
1,1-Dichloroethane	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	27 µg/kg	h
1,2-Dichloroethane	5035A-8260B	2.0 µg/kg	0.80 µg/kg	70-130	30	70-130	250 µg/kg	h
1,1-Dichloroethene	5035A-8260B	5.0 µg/kg	0.60 µg/kg	70-130	30	70-130	31 µg/kg	h
cis-1,2-Dichloroethene	5035A-8260B	2.0 µg/kg	0.83 µg/kg	70-130	30	70-130	780,000 µg/kg	c
trans-1,2-Dichloroethene	5035A-8260B	2.0 µg/kg	0.70 µg/kg	70-130	30	70-130	110,000 µg/kg	c

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[f]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
Dichlorofluoromethane	5035A-8260B	5.0 µg/kg	1.0 µg/kg	70-130	30	70-130		
1,2-Dichloropropane	5035A-8260B	2.0 µg/kg	0.80 µg/kg	70-130	30	70-130	700,000 µg/kg	g
1,3-Dichloropropane	5035A-8260B	2.0 µg/kg	0.63 µg/kg	70-130	30	70-130	1,600,000 µg/kg	c
2,2-Dichloropropane	5035A-8260B	2.0 µg/kg	0.60 µg/kg	70-130	30	70-130		
1,1-Dichloropropene	5035A-8260B	2.0 µg/kg	0.40 µg/kg	70-130	30	70-130		
Ethylbenzene	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	89µg/kg	h
Hexachlorobutadiene	5035A-8260B	5.0 µg/kg	0.80 µg/kg	70-130	30	70-130	6,200 µg/kg	c
Isopropylbenzene	5035A-8260B	2.0 µg/kg	0.54 µg/kg	70-130	30	70-130	2,200,000 µg/kg	c
p-Isopropyltoluene	5035A-8260B	2.0 µg/kg	0.72 µg/kg	70-130	30	70-130		
Methylene chloride	5035A-8260B	20 µg/kg	6.5 µg/kg	70-130	30	70-130	370 µg/kg	h
Naphthalene	5035A-8260B	5.0 µg/kg	1.1 µg/kg	70-130	30	70-130	3,900 µg/kg	c
n-Propylbenzene	5035A-8260B	2.0 µg/kg	0.61 µg/kg	70-130	30	70-130		
Styrene	5035A-8260B	2.0 µg/kg	0.58 µg/kg	70-130	30	70-130	6,500,000 µg/kg	c
tert-butyl methyl ether	5035A-8260B	5.0 µg/kg	2.0 µg/kg	70-130	30	70-130	39,000 µg/kg	c
1,1,2,2-Tetrachloroethane	5035A-8260B	2.0 µg/kg	0.86 µg/kg	70-130	30	70-130	5,400 µg/kg	h
1,1,2,2-Tetrachloroethene	5035A-8260B	2.0 µg/kg	1.0 µg/kg	70-130	30	70-130	570 µg/kg	c
1,1,1,2-Tetrachloroethane	5035A-8260B	5.0 µg/kg	0.57 µg/kg	70-130	30	70-130	2,000 µg/kg	c
Toluene	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	50 µg/kg	h
1,2,3-Trichlorobenzene	5035A-8260B	5.0 µg/kg	1.0 µg/kg	70-130	30	70-130	20,000 µg/kg	g
1,2,4-Trichlorobenzene	5035A-8260B	5.0 µg/kg	1.0 µg/kg	70-130	30	70-130	180,000 µg/kg	c
1,1,1-Trichloroethane	5035A-8260B	2.0 µg/kg	0.70 µg/kg	70-130	30	70-130	30 µg/kg	h
1,1,2-Trichloroethane	5035A-8260B	2.0 µg/kg	0.87 µg/kg	70-130	30	70-130	1200 µg/kg	h
Trichloroethene	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	220 µg/kg	h
Trichlorofluoromethane	5035A-8260B	5.0 µg/kg	0.54 µg/kg	70-130	30	70-130	800,000 µg/kg	c
1,2,3-Trichloropropane	5035A-8260B	10 µg/kg	1.0 µg/kg	70-130	30	70-130	91 µg/kg	c
1,2,4-Trimethylbenzene	5035A-8260B	2.0 µg/kg	0.78 µg/kg	70-130	30	70-130	67,000 µg/kg	c
1,3,5-Trimethylbenzene	5035A-8260B	2.0 µg/kg	0.63 µg/kg	70-130	30	70-130		
Vinyl chloride	5035A-8260B	5.0 µg/kg	0.91 µg/kg	70-130	30	70-130	60 µg/kg	c
Xylene (total)	5035A-8260B	2.0 µg/kg	0.80 µg/kg	70-130	30	70-130	160 µg/kg	h
o-Xylene	5035A-8260B	2.0 µg/kg	0.50 µg/kg	70-130	30	70-130	160 µg/kg	h
m-Xylene	5035A-8260B	2.0 µg/kg	0.80 µg/kg	70-130	30	70-130	160 µg/kg	h
p-Xylene	5035A-8260B	2.0 µg/kg	0.80 µg/kg	70-130	30	70-130	160 µg/kg	h

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[f]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
2-Chlorophenol	8270C	330 µg/kg	70 µg/kg	50-130	35	50-130	390,000 µg/kg	c
4-Chloro-3-methylphenol	8270C	330 µg/kg	70 µg/kg	50-130	35	50-130		
2,4-Dichlorophenol	8270C	330 µg/kg	60 µg/kg	50-130	35	50-130	180,000 µg/kg	c
2,4-Dimethylphenol	8270C	330 µg/kg	100 µg/kg	50-130	35	50-130	1,200,000 µg/kg	c
2,4-Dintrophenol	8270C	660 µg/kg	110 µg/kg	50-130	35	50-130	20,000 µg/kg	g
4,6-Dintiro-*o*-cresol	8270C	420 µg/kg	110 µg/kg	50-130	35	50-130		
3&4-Methylphenol	8270C	330 µg/kg	80 µg/kg	50-130	35	50-130	3,100,000 µg/kg	c
2-Nitrophenol	8270C	330 µg/kg	60 µg/kg	50-130	35	50-130		
4-Nitrophenol	8270C	830 µg/kg	140 µg/kg	50-130	35	50-130		
Pentachlorophenol	8270C	830 µg/kg	150 µg/kg	50-130	35	50-130	2,100 µg/kg	k
2,4,5-Trichlorophenol	8270C	330 µg/kg	130 µg/kg	50-130	35	50-130	9,000 µg/kg	g
2,4,6-Trichlorophenol	8270C	330 µg/kg	75 µg/kg	50-130	35	50-130	10,000 µg/kg	g
Benzoic acid	8270C	830 µg/kg	70 µg/kg	50-130	35	50-130	240,000,000 µg/kg	c
4-Bromophenyl phenyl ether	8270C	330 µg/kg	75 µg/kg	50-130	35	50-130	1,200 µg/kg	h
Butyl benzyl phthalate	8270C	330 µg/kg	80 µg/kg	50-130	35	50-130	11,000 µg/kg	h
2-Chloronaphthalene	8270C	330 µg/kg	65 µg/kg	50-130	35	50-130	6,300,000 µg/kg	c
4-Chloroaniline	8270C	330 µg/kg	80 µg/kg	50-130	35	50-130	240,000 µg/kg	c
Carbazole	8270C	330 µg/kg	50 µg/kg	50-130	35	50-130	24,000 µg/kg	c
bis(2-Chloroethoxy)methane	8270C	330 µg/kg	70 µg/kg	50-130	35	50-130	180,000 µg/kg	c
bis(2-Chloroethyl)ether	8270C	170 µg/kg	60 µg/kg	50-130	35	50-130	190 µg/kg	c
bis(2-Chloroisopropyl)ether	8270C	330 µg/kg	60 µg/kg	50-130	35	50-130	3,500 µg/kg	c
4-Chlorophenyl phenyl ether	8270C	330 µg/kg	85 µg/kg	50-130	35	50-130		
2,4-Dintitrotoluene	8270C	330 µg/kg	80 µg/kg	50-130	35	50-130	120,000 µg/kg	c
2,6-Dinitrotoluene	8270C	330 µg/kg	95 µg/kg	50-130	35	50-130	61,000 µg/kg	c
3,3′-Dichlorobenzidine	8270C	830 µg/kg	150 µg/kg	50-130	35	50-130	1,100 µg/kg	c
Dibenzofuran	8270C	330 µg/kg	60 µg/kg	50-130	35	50-130	420 µg/kg	h
1,3-Dichlorobenzene	8270C	330 µg/kg	90 µg/kg	50-130	35	50-130	1,700 µg/kg	h
1,4-Dichlorobenzene	8270C	330 µg/kg	65 µg/kg	50-130	35	50-130	340 µg/kg	h
di-n-Butyl phthalate	8270C	330 µg/kg	90 µg/kg	50-130	35	50-130	11,000 µg/kg	H

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[f]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
di-n-Octyl phthalate	8270C	330 µg/kg	90 µg/kg	50-130	35	50-130		
Diethyl phthalate	8270C	330 µg/kg	95 µg/kg	50-130	35	50-130	600 µg/kg	h
Dimethyl phthalate	8270C	330 µg/kg	65 µg/kg	50-130	35	50-130	200,000 µg/kg	g
bis(2-Ethylhexyl)phthalate	8270C	330 µg/kg	90 µg/kg	50-130	35	50-130	890,000 µg/kg	h
Hexachlorobenzene	8270C	330 µg/kg	70 µg/kg*	50-130	35	50-130	300 µg/kg	c
Hexachlorobutadiene	8270C	330 µg/kg	60 µg/kg	50-130	35	50-130	6,200 µg/kg	c
Hexachlorocyclopentadiene	8270C	830 µg/kg	90 µg/kg	50-130	35	50-130	10,000 µg/kg	g
Hexachloroethane	8270C	330 µg/kg	65 µg/kg	50-130	35	50-130	1,000 µg/kg	h
Isophorone	8270C	330 µg/kg	50 µg/kg	50-130	35	50-130	510,000 µg/kg	c
2-Methylnaphthalene	8270C	330 µg/kg	70 µg/kg	50-130	35	50-130	310,000 µg/kg	c
2-Nitroaniline	8270C	330 µg/kg	60 µg/kg	50-130	35	50-130		
3-Nitroaniline	8270C	330 µg/kg	75 µg/kg	50-130	35	50-130		
4-Nitroaniline	8270C	830 µg/kg	90 µg/kg	50-130	35	50-130		
Nitrobenzene	8270C	330 µg/kg	70 µg/kg	50-130	35	50-130	40,000 µg/kg	g
N-Nitroso-*di-n*-propylamine	8270C	250 µg/kg	70 µg/kg*	50-130	35	50-130	69 µg/kg	c
N-Nitrosodiphenylamine	8270C	330 µg/kg	80 µg/kg	50-130	35	50-130	20,000 µg/kg	g
1,2,4-Trichlorobenzene	8270C	330 µg/kg	50 g/kg	50-130	35	50-130	9,600 µg/kg	h
Phenol	8270C SIM	30 µg/kg	15 µg/kg	50-130	35	50-130	31 µg/kg	g
2-Methylphenol	8270C SIM	30 µg/kg	10 µg/kg*	50-130	35	50-130	12 µg/kg	h
Acenaphthene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	3,400,000 µg/kg	c
Acenaphthylene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130		
Anthracene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	57.2 µg/kg	j
Benzo(a)anthracene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	108 µg/kg	j
Benzo(a)pyrene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	150 µg/kg	j
Benzo(b)fluoranthene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	150 µg/kg	c
Benzo(g,h,i)perylene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130		
Benzo(k)fluoranthene	8270C SIM	30 µg/kg	2.0 µg/kg*	50-130	35	50-130	27.2 µg/kg	i
Chrysene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	166 µg/kg	j
Dibenzo(a,h)anthracene	8270C SIM	30 µg/kg	2.5 µg/kg	50-130	35	50-130	33 µg/kg	j
Fluoranthene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	423 µg/kg	j

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued

Parameter	Analytical Method	Reporting Limit	Method Detection Limit[f]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Fluorene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	30,000 µg/kg	g
Indeno(1,2,3-cd)pyrene	8270C SIM	30 µg/kg	2.5 µg/kg*	50-130	35	50-130	17.32 µg/kg	i
Naphthalene	8270C SIM	30 µg/kg	3.5 µg/kg	50-130	35	50-130	176 µg/kg	j
Phenanthrene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130		
Pyrene	8270C SIM	30 µg/kg	2.0 µg/kg	50-130	35	50-130	195 µg/kg	j
Diesel (C12-C23)-TPH	8015B	5.0 mg/kg	3.5 mg/kg	50-130	35	50-130	100 mg/kg	d
Motor Oil (C23-C40)-TPH	8015B	5.0 mg/kg	3.5 mg/kg	50-130	35	50-130	100 mg/kg	d
Gasoline (C4-C12)-TPH	5035A-8015B	0.4 mg/kg	0.15 mg/kg	70-130	30	70-130	100 mg/kg	d
alpha-BHC	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130	77 µg/kg	c
beta-BHC	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130	120 µg/kg	h
gamma-BHC (Lindane)	8081A	5.0 µg/kg	1.5 µg/kg*	50-130	35	50-130	2.37 µg/kg	j
delta-BHC	8081A	10 µg/kg	1.5 µg/kg	50-130	35	50-130	120 µg/kg	h
Heptachlor	8081A	5.0 µg/kg	2.0 µg/kg	50-130	35	50-130	68 µg/kg	h
Aldrin	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130	29 µg/kg	c
Heptachlor epoxide	8081A	5.0 µg/kg	2.0 µg/kg*	50-130	35	50-130	2.47 µg/kg	j
Endosulfan I	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130	5.5 µg/kg	h
Dieldrin	8081A	5.0 µg/kg	1.5 µg/kg*	50-130	35	50-130	1.9 µg/kg	j
Endrin aldehyde	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130		
Endrin	8081A	5.0 µg/kg	1.5 µg/kg*	50-130	35	50-130	2.22 µg/kg	j
Endosulfan II	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130	5.5 µg/kg	h
4,4′- DDD	8081A	5.0 µg/kg	1.5 µg/kg*	50-130	35	50-130	4.88 µg/kg	j
Endosulfan sulfate	8081A	10 µg/kg	2.0 µg/kg*	50-130	35	50-130	5.5 µg/kg	h
4,4′-DDT	8081A	5.0 µg/kg	1.5 µg/kg*	50-130	35	50-130	4.16 µg/kg	j
4,4′-DDE	8081A	5.0 µg/kg	1.5 µg/kg*	50-130	35	50-130	3.16 µg/kg	j
Methoxychlor	8081A	5.0 µg/kg	1.5 µg/kg	50-130	35	50-130	19 µg/kg	h
Endrin ketone	8081A	5.0 µg/kg	2.0 µg/kg	50-130	35	50-130		
alpha-Chlordane	8081A	50 µg/kg	10 µg/kg	50-130	35	50-130	1,600 µg/kg	c
gamma-Chlordane	8081A	50 µg/kg	10 µg/kg	50-130	35	50-130	1,600 µg/kg	c
Toxaphene	8081A	200 µg/kg	75 µg/kg	NA	NA	NA	440 µg/kg	c
Aroclor-1016	8082	33 µg/kg	8.3 µg/kg*	50-130	35	50-130	31.62 µg/kg	i
Aroclor-1221	8082	33 µg/kg	10.5 µg/kg	NA	NA	NA	120 µg/kg	h

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[f]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
Aroclor-1232	8082	33 µg/kg	8.3 µg/kg	NA	NA	NA	600 µg/kg	h
Aroclor-1242	8082	33 µg/kg	8.3 µg/kg	NA	NA	NA	170 µg/kg	h
Aroclor-1248	8082	33 µg/kg	8.3 µg/kg	NA	NA	NA	1,000 µg/kg	h
Aroclor-1254	8082	33 µg/kg	8.3 µg/kg	NA	NA	NA	810 µg/kg	h
Aroclor-1260	8082	33 µg/kg	8.3 µg/kg	50-130	35	50-130	4,500,000 µg/kg	h
2,4,5-T	8151A	20 µg/kg	3.8 µg/kg	50-130	35	50-130	610,000 µg/kg	c
2,4-D	8151A	80 µg/kg	16 µg/kg	50-130	35	50-130	690,000 µg/kg	c
2,4-DB	8151A	80 µg/kg	13 µg/kg	50-130	35	50-130		
Dalapon	8151A	40 µg/kg	5.6 µg/kg	50-130	35	50-130	1,800,000 µg/kg	c
Dichloroprop	8151A	80 µg/kg	17 µg/kg	50-130	35	50-130		
Dicamba	8151A	40 µg/kg	4.2 µg/kg	50-130	35	50-130	1,800,000 µg/kg	c
Dinoseb	8151A	12 µg/kg	1.9 µg/kg	50-130	35	50-130	61,000 µg/kg	c
MCPA	8151A	8,000 µg/kg	2,524 µg/kg	50-130	35	50-130	31,000 µg/kg	c
MCPP	8151A	8,000 µg/kg	1,580 µg/kg	50-130	35	50-130	61,000 µg/kg	c
Silvex	8151A	20 µg/kg	1.8 µg/kg	50-130	35	50-130	490,000 µg/kg	c
Aluminum	6010B	10 mg/kg	5.0 mg/kg	75-125	35	75-125	77,000 mg/kg	c
Antimony[e]	6020	1000 µg/kg	100 µg/kg*	75-125	35	75-125	270 µg/kg	k
Arsenic	6020	500 µg/kg	350 µg/kg	75-125	35	75-125	9790 µg/kg	j
Barium	6020	500 µg/kg	200 µg/kg	75-125	35	75-125	330,000 µg/kg	k
Beryllium	6020	300 µg/kg	100 µg/kg	75-125	35	75-125	21,000 µg/kg	k
Boron	6010B	5.0 mg/kg	2.1 mg/kg*	75-125	35	75-125	0.50 mg/kg	g
Cadmium	6020	500 µg/kg	60 µg/kg*	75-125	35	75-125	360 µg/kg	k
Calcium	6010B	15 mg/kg	6.2 mg/kg	75-125	35	75-125		
Chromium	6020	1,000 µg/kg	350 µg/kg	75-125	35	75-125	26,000 µg/kg	k
Cobalt	6020	500 µg/kg	80 µg/kg	75-125	35	75-125	13,000 µg/kg	k
Copper	6020	1,000 µg/kg	380 µg/kg	75-125	35	75-125	28,000 µg/kg	k
Iron	6010B	5.0 mg/kg	1.5 mg/kg	75-125	35	75-125	55,000 mg/kg	c
Lead	6020	500 µg/kg	150 µg/kg	75-125	35	75-125	11,000 µg/kg	k
Magnesium	6010B	10 mg/kg	1.0 mg/kg	75-125	35	75-125		
Manganese	6020	500 µg/kg	380 µg/kg	75-125	35	75-125	220,000 µg/kg	k
Mercury	1631	1.0 µg/kg	0.24 µg/kg	70-130	35	75-125	10 µg/kg	g
Molybdenum	6020	1,000 µg/kg	100 µg/kg	75-125	35	75-125	2,000 µg/kg	g

Table E-2. Soil/Sediment Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued								
Parameter	**Analytical Method**	**Reporting Limit**	**Method Detection Limit[f]**	**MS Accuracy, Percent**	**Precision, RPD or RER[b]**	**LCS Accuracy, Percent**	**Screening Value**	**Note**
Nickel	6020	1,000 µg/kg	450 µg/kg	75-125	35	75-125	22,700 µg/kg	k
Potassium	6010B	50 mg/kg	19 mg/kg	75-125	35	75-125		
Selenium	6020	1,000 µg/kg	450 µg/kg*	75-125	35	75-125	520 µg/kg	k
Silver	6010B	1,000 µg/kg	800 µg/kg	75-125	35	75-125	4,200 µg/kg	k
Silver	6020	500 µg/kg	150 µg/kg	75-125	35	75-125	4,200 µg/kg	k
Sodium	6010B	50 mg/kg	24 mg/kg	75-125	35	75-125		
Thallium	6020	500 µg/kg	100 µg/kg	75-125	35	75-125	1,000 µg/kg	g
Thorium	6020	0.20 mg/kg	0.042mg/kg	75-125	35	75-125		
Uranium	6020	0.10 mg/kg	0.020mg/kg	75-125	35	75-125	230 mg/kg	c
Vanadium	6020	1,000 µg/kg	350 µg/kg	75-125	35	75-125	7,800 µg/kg	k
Zinc	6020	10,000 µg/kg	1,300 µg/kg	75-125	35	75-125	46,000 µg/kg	k
Gross α	9310	1.0 pCi/g	1.0 pCi/g	NA	RPD<30 or RER< 2	75-125		
Gross β	9310	1.0 pCi/g	1.0 pCi/g	NA	RPD<30 or RER< 2	75-125		
Radium-226	HASL 300 (Section 4.5.2.3)	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	50.6 pCi/g	l
Radium-228	HASL 300 (Section 4.5.2.3)	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	43.9 pCi/g	l
Thorium-228	HASL 300	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	530 pCi/g	l
Thorium-230	HASL 300	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	9980 pCi/g	l
Thorium-232	HASL 300	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	1300 pCi/g	l
Uranium-234	HASL 300	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	5130 pCi/g	l
Uranium-235	HASL 300	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	2770 pCi/g	l
Uranium-238	HASL 300	1.0 pCi/g	1.0 pCi/g	70-130	RPD<30 or RER< 2	75-125	1580 pCi/g	l
TS	160.3	0.05%	0.05%	NA	35	NA	NA	
TS	2540G	0.05%	0.05%	NA	35	NA	NA	

Appendix E-3: Ecological Risk Assessment Criteria

Notes:

NA	Not Applicable
a	The goals for accuracy and precision are reflective of the data validation/verification usability limits.
b	Precision limit for matrix spike/matrix spike duplicate, laboratory duplicate, or laboratory control sample/ laboratory control sample duplicate analyses.
c	EPA Regional Screening Levels (Residential) for Chemical Contaminants at Superfund Sites, May 20, 2008.
d	Nevada DEP Corrective Action Level as defined by Nevada Administrative Code 445A.2272.
e	Antimony will be digested using SW-836 Method 3050B (aqua-regia), which is a modification of Method 3050B shown to improve the recovery of antimony matrix spikes.
f	The method detection limits presented are laboratory-derived limits. These limits will periodically be updated; however, the updated limits are not expected to be significantly different than those herein.
g	Toxicological Benchmarks for Screening of Potential Contaminants of Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process, Efroymson, R. A., M. E. Will, and G. W. Suter II, 1997b.
h	Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Sediment-Associated Biota, Jones, D.S., G.W. Suter, and R.N. Hull, 1997.
i	NOAA Screening Quick Reference Tables, 1999.
j	Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems, MacDonald, D.D., C.G. Ingersoll, and T.A. Berger, 2000.
K	EPA Interim Final Ecological Soil Screening Levels, 2007.
l	DOE Graded Approach for Evaluating Radiation Does to Aquatic and Terrestrial Biota, 2002 and 2006.
*	Method detection limit is used as the required reporting limit in order to meet the screening value.

Table E-3. Air Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a]

Parameter	Analytical Method	Reporting Limit[d]	Method Detection Limit[g]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Aluminum	6010B	0.15 μg/m^3	0.025 μg/m^3	NA	20	75-125	5.2 μg/m^3	c
Aluminum	IO3.3	0.00017 μg/m^3	0.00017 μg/m^3	NA	20	75-125	5.2 μg/m^3	c
Arsenic	6020	0.0022 μg/m^3	0.00054 μg/m^3*	NA	20	75-125	0.00057 μg/m^3	c
Arsenic	IO3.3	0.0000055 μg/m^3	0.0000055 μg/m^3	NA	20	75-125	0.00057 μg/m^3	c
Barium	6020	0.074 μg/m^3	0.0053 μg/m^3	NA	20	75-125	0.52 μg/m^3	c
Beryllium	6020	0.00074 μg/m^3	0.0000065 μg/m^3	NA	20	75-125	0.001 μg/m^3	c
Cadmium	6020	0.00074 μg/m^3	0.000017 μg/m^3	NA	20	75-125	0.0014 μg/m^3	c
Cadmium	IO3.3	0.000090 μg/m^3	0.000090 μg/m^3	NA	20	75-125	0.0014 μg/m^3	c
Calcium	6010B	1.8 μg/m^3	0.55 μg/m^3	NA	20	75-125		
Chromium	6020	0.0074 μg/m^3	0.0014 μg/m^3	NA	20	75-125		
Chromium	IO3.3	0.000015 μg/m^3	0.000015 μg/m^3	NA	20	75-125		
Cobalt	6020	0.0074 μg/m^3	0.0014 μg/m^3	NA	20	75-125		
Cobalt	IO3.3	0.000012 μg/m^3	0.000012 μg/m^3	NA	20	75-125		
Copper	6020	0.0037 μg/m^3	0.00081 μg/m^3	NA	20	75-125		
Copper	IO3.3	0.000017 μg/m^3	0.000017 μg/m^3	NA	20	75-125		
Iron	6010B	0.074 μg/m^3	0.0088 μg/m^3	NA	20	75-125		
Lead	6020	0.00074 μg/m^3	0.00014 μg/m^3	NA	20	75-125		
Magnesium	6010B	0.37 μg/m^3	0.060 μg/m^3	NA	20	75-125		
Manganese	6020	0.0037 μg/m^3	0.0013 μg/m^3	NA	20	75-125	0.052 μg/m^3	c
Manganese	IO3.3	0.000050 μg/m^3	0.000050 μg/m^3	NA	20	75-125	0.052 μg/m^3	c
Mercury	7471A	0.000074 μg/m^3	0.00000037 μg/m^3	NA	20	75-125	0.31 μg/m^3	c
Molybdenum	6020	0.0037 μg/m^3	0.00065 μg/m^3	NA	20	75-125		
Nickel	6020	0.0037 μg/m^3	0.00073 μg/m^3	NA	20	75-125	0.01 μg/m^3	c
Nickel	IO3.3	0.000013 μg/m^3	0.000013 μg/m^3	NA	20	75-125	0.01 μg/m^3	c
Selenium	6020	0.0022 μg/m^3	0.00018 μg/m^3	NA	20	75-125		
Sodium	6010B	3.7 μg/m^3	1.2 μg/m^3	NA	20	75-125		

Table E-3. Air Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a] - Continued

Parameter	Analytical Method	Reporting Limit[d]	Method Detection Limit[g]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Vanadium	6020	0.0074 μg/m^3	0.0018 μg/m^3	NA	20	75-125		
Zinc	6020	0.015 μg/m^3	0.0031 μg/m^3	NA	20	75-125		
Sulfate	9056	0.000025 mg/m^3	0.0000025 mg/m^3	NA	20	80-120		
Gross α	900.0	0.012 pCi/m^3	0.012 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Gross β	900.0	0.0031 pCi/m^3	0.0031 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Radium-226	903.1	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Radium-228	904.0	0.0019 pCi/m^3	0.0019 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Radium, Total	IO3.3	0.000061 μg/m^3	0.000061 μg/m^3	NA	NA	75-125		
Thorium-228	IsoTh	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Thorium-230	IsoTh	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Thorium-232	IsoTh	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Thorium, Total	IO3.3	0.000061 μg/m^3	0.000061 μg/m^3	NA	NA	75-125		
Uranium-234	908.0 Modified	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Uranium-235	908.0 Modified	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Uranium-238	908.0 Modified	0.00061 pCi/m^3	0.00061 pCi/m^3	NA	RPD<30 or RER< 2	75-125		
Uranium, Total	IO3.3	0.000061 μg/m^3	0.000061 μg/m^3	NA	NA	75-125		
TSP	40 CFR Appendix B	0.061 μg/m^3	NA	NA	NA	NA	75 μg/m^3/260 μg/m^3	e
PM-10	40 CFR Appendix J	0.061 μg/m^3	NA	NA	NA	NA	50 μg/m^3/150 μg/m^3	f

Notes:

NA	Not Applicable
a	The goals for accuracy and precision are reflective of the data validation/verification usability limits.
b	Precision limit for laboratory duplicate or laboratory control sample/ laboratory control sample duplicate analyses.
c	EPA Regional Screening Levels (Residential) for Chemical Contaminants at Superfund Sites, May 20, 2008.
d	The laboratory reporting limits were based on an assumed target air volume of 1630 m^3.
e	NAAQS for particulate matter based on TSP was discontinued by EPA in 1987. Annual and 24-hour averages were set at 75 ug/m3 and 260 ug/m3, respectively.
f	NAAQS for particulate matter currently based on PM10 annual average of 50 ug/m3 and 24-hour average of 150 ug/m3.
g	The method detection limits presented are laboratory-derived limits. These limits will periodically be updated; however, the updated limits are not expected to be significantly different than those herein.
*	Method detection limit is used as the required reporting limit in order to meet the screening value.

Table E-4. Biota Samples Analytical Methods, Reporting Limits, Accuracy, and Precision Goals[a]

Parameter	Analytical Method	Reporting Limit	Method Detection Limit[c]	MS Accuracy, Percent	Precision, RPD or RER[b]	LCS Accuracy, Percent	Screening Value	Note
Aluminum	6010B	20 mg/kg	6.0 mg/kg*	70-130	35	75-125	8.2 mg/kg	d
Antimony	6020	2.0 mg/kg	0.012 mg/kg*	70-130	35	75-125	0.34 mg/kg	d
Arsenic	6020	0.20 mg/kg	0.020 mg/kg	70-130	35	75-125	2.7 mg/kg	d
Barium	6020	10 mg/kg	0.11 mg/kg	70-130	35	75-125	104 mg/kg	d
Beryllium	6020	0.20 mg/kg	0.013 mg/kg	70-130	35	75-125	5.0 mg/kg	d
Boron	6020	4.0 mg/kg	0.33 mg/kg	70-130	35	75-125	220 mg/kg	d
Cadmium	6020	0.20 mg/kg	0.0034 mg/kg	70-130	35	75-125	3.5 mg/kg	d
Chromium	6020	0.40 mg/kg	0.090 mg/kg	70-130	35	75-125	10 mg/kg	d
Cobalt	6020	1.0 mg/kg	0.010 mg/kg	70-130	35	75-125	6.9 mg/kg	d
Copper	6020	2.0 mg/kg	0.070 mg/kg	70-130	35	75-125	14 mg/kg	d
Lead	6020	0.20 mg/kg	0.012 mg/kg	70-130	35	75-125	4.7 mg/kg	d
Manganese	6020	0.40 mg/kg	0.018 mg/kg	70-130	35	75-125	113 mg/kg	d
Mercury	7471A	0.033 mg/kg	0.0070 mg/kg	70-130	35	75-125	0.30 mg/kg	d
Molybdenum	6020	2.0 mg/kg	0.070 mg/kg*	70-130	35	75-125	1.1 mg/kg	d
Nickel	6020	2.0 mg/kg	0.068 mg/kg	70-130	35	75-125	10 mg/kg	d
Selenium	6020	0.20 mg/kg	0.027 mg/kg	70-130	35	75-125	0.54 mg/kg	d
Silver	6010B	1.0 mg/kg	0.18 mg/kg	70-130	35	75-125	1.3 mg/kg	d
Strontium	6010B	2.0 mg/kg	0.013 mg/kg	70-130	35	75-125	2063 mg/kg	d
Thallium	6020	0.20 mg/kg	0.0037 mg/kg	70-130	35	75-125	5.3 mg/kg	d
Thorium	6020	0.20 mg/kg	0.075 mg/kg	70-130	35	75-125		
Tungsten	6020	0.20 mg/kg	0.030 mg/kg	70-130	35	75-125	5.5 mg/kg	d
Uranium	6020	0.20 mg/kg	0.050 mg/kg	70-130	35	75-125	13 mg/kg	d
Vanadium	6020	0.40 mg/kg	0.014 mg/kg*	70-130	35	75-125	0.21 mg/kg	d
Zinc	6020	2.0 mg/kg	0.14 mg/kg	70-130	35	75-125	103 mg/kg	d
Fluoride	340.2	1.0 mg/kg	0.14 mg/kg	70-130	35	75-125	74 mg/kg	d
Aroclor-1016	8082	0.017 mg/kg	0.0032 mg/kg	50-130	35	50-130	0.86 mg/kg	d
Aroclor-1221	8082	0.017 mg/kg	0.0023 mg/kg	NA	NA	NA	0.86 mg/kg	d
Aroclor-1232	8082	0.017 mg/kg	0.0023 mg/kg	NA	NA	NA	0.86 mg/kg	d
Aroclor-1242	8082	0.017 mg/kg	0.0033 mg/kg	NA	NA	NA	0.86 mg/kg	d
Aroclor-1248	8082	0.017 mg/kg	0.0054 mg/kg	NA	NA	NA	0.86 mg/kg	d
Aroclor-1254	8082	0.017 mg/kg	0.0019 mg/kg	NA	NA	NA	0.86 mg/kg	d
Aroclor-1260	8082	0.017 mg/kg	0.0026 mg/kg	50-130	35	50-130	0.86 mg/kg	d

Notes:

NA	Not Applicable
a	The goals for accuracy and precision are reflective of the data validation/verification usability limits.
b	Precision limit for laboratory duplicate or laboratory control sample/ laboratory control sample duplicate analyses.
c	The method detection limits presented are laboratory-derived limits. These limits will periodically be updated; however, the updated limits are not expected to be significantly different than those herein.
d	Screening Level Values and Target Detection Limits for Chemicals in Plant and Animal Tissue for the Yerington Site, Intergral Consulting, Inc. (Technical Memorandum, May 2, 2008)
*	Method detection limit is used as the required reporting limit in order to meet the screening value.