Table A-4
Background Metals Distributions and Upper Tolerance Limits

Metal	Data Set	Distribution	P value (Shapiro-Wilks Goodness of Fit)	N used for fit	Outliers Excluded	Rationale for Draft Final RI Update	Draft RI UTL (Used in RI/FS except where noted)	Draft Final RI UTL
Aluminum	RI Background	Normal	0.81	17	no	1 duplicate in RI background removed	18,000	18,000
Antimony	Combined Background	Data Max	*	42	no	1 duplicate in RI background removed	4	4
Arsenic	Combined Background	Lognormal	0.48	42	no	1 duplicate in RI background removed	22	23
Barium	Combined Background	Lognormal	0.64	41	yes - 1	1 duplicate in RI background removed	174	174
Beryllium	RI Background	Logormal	0.43	17	no	4 duplicates in RI background removed	0.91	0.95
Cadmium	Combined Background	Data Max	*	42	no	1 duplicate in RI background removed	3.2	3.2
Chromium	Combined Background	Normal	0.96	42	no	historic data for chromium added	47 (b)	64 (b)
Cobalt	Combined Background	Logormal	0	42	no	1 duplicate in RI background removed	20	20
Copper	Combined Background	Lognormal	0.05	35	yes - 7	1 duplicate in RI background removed	19	19
Lead	Combined Background	Data Max	*	35	yes - 7	1 duplicate in RI background removed	11.9	11.9
Magnesium	RI Background	Lognormal	0.89	17	no	1 duplicate in RI background removed	5500	5660
Manganese	RI Background	Normal	0.37	17	no	1 duplicate in RI background removed	330	330
Mercury	RI Background	Data Max	*	17	no	1 duplicate in RI background removed	0.026	0.026
Molybdenum	Combined Background	Lognormal	*	41	yes - 1	1 duplicate in RI background removed	10	11
Nickel	Combined Background	Lognormal	0.53	42	no	1 duplicate in RI background removed	49	50
Selenium	Combined Background	Data Max	*	42	no	1 duplicate in RI background removed	3.3	3.3
Thallium	RI Background	Lognormal	0.37	16/17(c)	yes - 1(c)	1 duplicate in RI background removed	0.64(c)	0.64(c)
Tin	Site-wide Ambient Analysis	Normal	0(a)	547	yes		65	*na*
Vanadium	Combined Background	Lognormal	0.25	42	no	1 duplicate in RI background removed	83	83
Zinc	Combined Background	Lognormal	0.31	42	no	1 duplicate in RI background removed	105	105
Dioxin Avian TEQ	Site-wide Ambient Analysis	Lognormal	0.65	133	no		16	*na*
Dioxin Mammalian TEQ	Site-wide Ambient Analysis	Lognormal	0.79	133	no		13	*na*

na not applicable

UTL = Upper Tolerance Limit

* fit uncertain due to censoring

(a) Graphical assessment of fit is good even though p value is low due to very large sample size.

(b) Draft RI Chromium UTL used in Appendix B data mapping and COPC selection, Draft Final UTL used in RI Section 5 figures and final risk characterization

(c) The UTL for Thallium was assigned a value intermediate to the lognormal UTLs reflecting two different outlier treatments:
0.65 mg/kg (low outlier excluded - see Figure A1-17) and 0.63 mg/kg (outlier assigned its PQL instead of MDL).

(1) Historic data for Be, Hg, Th, excluded because of excessively high DLs.

(2) Historic data not available for Al, Mg, Mn.