APPENDIX C

Contaminants of Potential Concern

Summary Statistics for Soil, Sediment, Air, Biota Tissue, and Ground Water Contaminant Levels

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TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution) [1]	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [2]	Rationale
Onsite Surface Soil	Inorganics								
	Aluminum	mg/kg	5.5E+03	5.9E+03	1.6E+04	5.9E+03	mg/kg	95% H-UCL	(1)
	Antimony	mg/kg	8.4E+00	8.7E+00	2.1E+02 L	8.7E+00	mg/kg	95% H-UCL	(1)
	Arsenic	mg/kg	1.9E+02	1.0E+02	2.6E+04	1.0E+02	mg/kg	95% H-UCL	(1)
	Barium	mg/kg	1.4E+02	2.0E+02	2.0E+03	2.0E+02	mg/kg	95% Chebyshev (Mean, Std)	(2)
	Cadmium	mg/kg	1.2E+00	1.6E+00	1.0E+01 L	1.6E+00	mg/kg	95% Chebyshev (Mean, Std)	(2)
	Chromium	mg/kg	3.3E+01	4.5E+01	3.9E+02 L	4.5E+01	mg/kg	95 % Chebyshev (Mean, Std)	(2)
	Cobalt	mg/kg	1.4E+01	2.6E+01	2.1E+02	2.6E+01	mg/kg	97.5% Chebyshev (Mean, Std)	(3)
	Copper	mg/kg	3.3E+02	3.7E+02	5.7E+03 L	3.7E+02	mg/kg	95% H-UCL	(1)
	Iron	mg/kg	3.2E+04	4.4E+04	3.0E+05	4.4E+04	mg/kg	95% Chebyshev (Mean, Std)	(2)
	Manganese	mg/kg	1.5E+02	1.6E+02	9.8E+02 J	1.6E+02	mg/kg	95% H-UCL	(1)
	Mercury	mg/kg	9.6E-01	1.5E+00	1.2E+01 L	1.5E+00	mg/kg	97.5% Chebyshev (Mean, Std)	(3)
	Nickel	mg/kg	2.4E+01	4.7E+01	1.3E+03 L	4.7E+01	mg/kg	95% Chebyshev (Mean, Std)	(2)
	Silver	mg/kg	2.4E+00	5.1E+00	5.2E+01	5.1E+00	mg/kg	97.5% Chebyshev (Mean, Std)	(3)
	Thallium	mg/kg	1.6E+00	3.5E+00	1.0E+02 L	3.5E+00	mg/kg	95% Chebyshev (Mean, Std)	(2)
	Vanadium	mg/kg	4.8E+01	6.5E+01	4.6E+02	6.5E+01	mg/kg	95% Chebyshev (Mean, Std)	(2)
	Zinc	mg/kg	4.6E+02	6.5E+02	6.2E+03	6.5E+02	mg/kg	95% Chebyshev (Mean, Std)	(2)

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution) [1]	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [2]	Rationale
Onsite Surface Soil (cont.)	Organics								
	Total Dioxin TEQ	ug/kg	4.2E+00	1.0E+01	2.5E+01	1.0E+01	ug/kg	95% H-UCL	(1)
	Acenaphthene	ug/kg	3.5E+04	1.7E+05	4.0E+06 D	1.7E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Anthracene	ug/kg	2.0E+05	9.5E+05	2.3E+07 D	9.5E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(a)anthracene	ug/kg	5.7E+04	1.3E+05	1.0E+06	1.3E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(a)pyrene	ug/kg	4.7E+04	8.1E+04	8.9E+05 D	8.1E+04	ug/kg	95% H-UCL	(1)
	Benzo(b)fluoranthene	ug/kg	7.3E+04	1.2E+05	1.8E+06 D	1.2E+05	ug/kg	95% H-UCL	(1)
	Benzo(g,h,i)perylene	ug/kg	2.6E+04	4.2E+04	5.6E+05	4.2E+04	ug/kg	95% H-UCL	(1)
	Benzo(k)fluoranthene	ug/kg	4.3E+04	1.0E+05	8.2E+05 D	1.0E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Chrysene	ug/kg	7.2E+04	1.6E+05	1.3E+06 D	1.6E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Dibenz(a,h)anthracene	ug/kg	1.0E+04	1.9E+04	2.4E+05 J	1.9E+04	ug/kg	97.5% Chebyshev (Mean, Std)	(3)
	Fluoranthene	ug/kg	1.5E+05	4.0E+05	4.3E+06 DJ	4.0E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Fluorene	ug/kg	5.0E+04	2.0E+05	3.3E+06 D	2.0E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Indeno(1,2,3-c,d)Pyrene	ug/kg	2.8E+04	4.7E+04	5.5E+05 D	4.7E+04	ug/kg	95% H-UCL	(1)
	Naphthalene	ug/kg	2.4E+04	9.8E+04	3.9E+06 D	9.8E+04	ug/kg	97.5% Chebyshev (Mean, Std)	(3)
	Pentachlorophenol	ug/kg	2.0E+04	4.1E+04	8.6E+05 JD	4.1E+04	ug/kg	97.5% Chebyshev (Mean, Std)	(3)

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution) [1]	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [2]	Rationale
Onsite Surface Soil (cont.)	Phenanthrene	ug/kg	1.2E+05	4.5E+05	8.7E+06 D	4.5E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Pyrene	ug/kg	1.4E+05	3.6E+05	4.0E+06 D	3.6E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)

Compounds on this table exceed their respective risk-based concentrations for residential soil.

J = Estimated Value

L = Estimate Value - Biased Low

D = Diluted Result

Surface soil includes almost all surface soil (0 to 6 inches below ground surface (bgs)) and sediment samples collected during the pre-remedial design investigation. It does not include any samples collected from the ABM or Acetylene Sludge Areas.

EPC values used for "Industrial Worker", "Other Worker", and "Trespasser/Visitor" receptor evaluations.

1. 95% UCL values are calculated using ProUCL software, Version 2.0 (EPA 2001). See Appendix D for full ProUCL results tables.
2. Statistics:

95% H-UCL = 95% H-statistical based H-UCL of mean

95% Chebyshev (mean, Std) = 95% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

97.5% Chebyshev (mean, Std) = 97.5% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

99% Chebyshev (mean, Std) = 99% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

Rationale:

(1) Data are log-normally distributed. ProUCL recommended 95% H-UCL value for EPC.

(2) Data are neither normally nor lognormally distributed. Since standard deviation of the log-transformed data is low (less than 1), use 95% Chebyshev (Mean, Std) UCL value as the EPC value.

(3) Data are neither normally nor lognormally distributed. Since standard deviation of the log-transformed data is moderate (1 to 2), use 97.5% Chebyshev (Mean, Std) UCL value as the EPC value.

(4) Data are neither normally nor lognormally distributed. Since standard deviation of the log-transformed data is high, use 99% Chebyshev (Mean, Std) UCL value as the EPC value.

TABLE 3.2.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Air

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [1]	Rationale
Inhalation of	Inorganics								
particulates onsite	Arsenic	ug/m^3	NA	NA	1.9E-03	1.9E-03	ug/m^3	Max	(1)
(soil to air pathway)	Chromium	ug/m^3	NA	NA	2.2E-04	2.2E-04	ug/m^3	Max	(1)

Compounds on this table exceed their respective risk-based concentrations for ambient air.

NA = Not Available

Surface soil includes almost all surface soil (0 to 6 inches below ground surface (bgs)) and sediment samples collected during the pre-remedial design investigation. It does not include any samples collected from the ABM or Acetylene Sludge Areas.

1. Statistics:

Max - Maximum concentration modeled by EPA using the EPA ISCST3 Model. See Appendix C for detailed modeling results.

Rationale:

(1) Maximum concentration modeled onsite for "Industrial Worker", "Other Worker", and "Trespasser/Visitor" receptor evaluations.

TABLE 3.3.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Air

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [1]	Rationale
Inhalation of particulates offsite (soil to air pathway)	Inorganics Arsenic	ug/m^3	NA	NA	8.6E-04	8.6E-04	ug/m^3	Max	(1)

Compounds on this table exceed their respective risk-based concentrations for ambient air.

NA = Not Available

Surface soil includes almost all surface soil (0 to 6 inches below ground surface (bgs)) and sediment samples collected during the pre-remedial design investigation. It does not include any samples collected from the ABM or Acetylene Sludge Areas.

1. Statistics:

Max - Maximum concentration modeled by EPA using the EPA ISCST3 Model. See Appendix C for detailed modeling results.

Rationale:

(1) Maximum offsite concentration modeled at fence line adjacent to Navy properties for "Other Worker" receptor.

TABLE 3.4.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)[1]	Maximum Concentration (Qualifier)		Exposure Point Concentration			
							Value	Units	Statistic[2]	Rationale
Onsite Soil	Inorganics									
	Aluminum	mg/kg	5.9E+03	6.3E+03	2.3E+04	J	6.3E+03	mg/kg	95% H-UCL	(1)
	Antimony	mg/kg	8.8E+00	1.6E+01	2.1E+02	L	1.6E+01	mg/kg	97.5% Chebyshev (Mean, Std)	(2)
	Arsenic	mg/kg	1.3E+02	8.5E+01	2.6E+04		8.5E+01	mg/kg	95% H-UCL	(1)
	Barium	mg/kg	1.4E+02	1.9E+02	2.0E+03		1.9E+02	mg/kg	95% Chebyshev (Mean, Std)	(3)
	Cadmium	mg/kg	1.1E+00	1.7E+00	1.3E+01		1.7E+00	mg/kg	97.5% Chebyshev (Mean, Std)	(2)
	Chromium	mg/kg	2.4E+01	3.1E+01	3.9E+02	L	3.1E+01	mg/kg	95% Chebyshev (Mean, Std)	(3)
	Cobalt	mg/kg	1.2E+01	1.9E+01	2.1E+02		1.9E+01	mg/kg	97.5% Chebyshev (Mean, Std)	(2)
	Copper	mg/kg	4.0E+02	4.6E+02	2.0E+04		4.6E+02	mg/kg	95% H-UCL	(1)
	Iron	mg/kg	3.3E+04	4.3E+04	3.8E+05		4.3E+04	mg/kg	95% Chebyshev (Mean, Std)	(3)
	Manganese	mg/kg	1.3E+02	1.5E+02	9.8E+02	J	1.5E+02	mg/kg	95% Chebyshev (Mean, Std)	(3)
	Mercury	mg/kg	8.6E-01	1.3E+00	1.5E+01		1.3E+00	mg/kg	97.5% Chebyshev (Mean, Std)	(2)
	Nickel	mg/kg	2.0E+01	3.2E+01	1.3E+03	L	3.2E+01	mg/kg	95% Chebyshev (Mean, Std)	(3)
	Silver	mg/kg	2.9E+00	5.0E+00	5.2E+01		5.0E+00	mg/kg	97.5% Chebyshev (Mean, Std)	(2)
	Thallium	mg/kg	1.7E+00	2.9E+00	1.0E+02	L	2.9E+00	mg/kg	95% Chebyshev (Mean, Std)	(3)
	Vanadium	mg/kg	4.0E+01	5.0E+01	4.6E+02		5.0E+01	mg/kg	95% Chebyshev (Mean, Std)	(3)

TABLE 3.4.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)[1]	Maximum Concentration (Qualifier)		Exposure Point Concentration			
							Value	Units	Statistic[2]	Rationale
Onsite Soil (cont.)	Zinc	mg/kg	4.3E+02	6.1E+02	6.2E+03		6.1E+02	mg/kg	97.5% Chebyshev (Mean, Std)	(2)
	Organics									
	Total Dioxin TEQ	ug/kg	3.2E+00	7.7E+00	2.5E+01		7.7E+00	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Acenaphthene	ug/kg	8.4E+04	2.8E+05	7.5E+06	D	2.8E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Anthracene	ug/kg	4.5E+05	2.8E+06	1.5E+08	D	2.8E+06	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(a)anthracene	ug/kg	7.7E+04	2.4E+05	6.4E+06	D	2.4E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(a)pyrene	ug/kg	6.0E+04	1.9E+05	5.6E+06	D	1.9E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(b)fluoranthene	ug/kg	7.4E+04	2.1E+05	5.3E+06	D	2.1E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(g,h,i)perylene	ug/kg	3.0E+04	9.5E+04	2.8E+06		9.5E+04	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Benzo(k)fluoranthene	ug/kg	4.6E+04	1.3E+05	4.1E+06		1.3E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Chrysene	ug/kg	8.7E+04	2.5E+05	6.0E+06		2.5E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Dibenz(a,h)anthracene	ug/kg	1.4E+04	3.5E+04	1.5E+06		3.5E+04	ug/kg	97.5% Chebyshev (Mean, Std)	(2)
	Fluoranthene	ug/kg	2.3E+05	7.1E+05	1.7E+07		7.1E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Fluorene	ug/kg	1.2E+05	4.7E+05	1.9E+07		4.7E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Indeno(1,2,3-c,d)Pyrene	ug/kg	3.1E+04	9.5E+04	2.8E+06		9.5E+04	ug/kg	99% Chebyshev (Mean, Std)	(4)

TABLE 3.4.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution) [1]	Maximum Concentration (Qualifier)		Exposure Point Concentration			
							Value	Units	Statistic [2]	Rationale
Onsite Soil (cont.)	Naphthalene	ug/kg	1.2E+05	6.8E+05	3.5E+07	D	6.8E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Pentachlorophenol	ug/kg	5.1E+04	1.7E+05	1.1E+07	D	1.7E+05	ug/kg	97.5% Chebyshev (Mean, Std)	(2)
	Phenanthrene	ug/kg	3.1E+05	1.1E+06	3.9E+07	D	1.1E+06	ug/kg	99% Chebyshev (Mean, Std)	(4)
	Pyrene	ug/kg	2.0E+05	6.0E+05	1.4E+07		6.0E+05	ug/kg	99% Chebyshev (Mean, Std)	(4)

Compounds on this table exceed their respective risk-based concentrations for residential soil.

Soil includes all almost soil (0 to 4 feet below ground surface (bgs)) and sediment samples collected during the pre-remedial design investigation.

It does not include any samples collected from the ABM or Acetylene Sludge Areas.

EPC values used for "Industrial Worker", "Other Worker", "Trespasser/Visitor", and "Construction Worker" receptor evaluations.

J = Estimated Value

L = Estimate Value - Biased Low

D = Diluted Result

1. 95% UCL values are calculated using ProUCL software, Version 2.0 (EPA 2001). See Appendix D for full ProUCL results tables.

2. Statistics:

95% H-UCL = 95% H-statistical based H-UCL of mean

95% Chebyshev (mean, Std) = 95% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

97.5% Chebyshev (mean, Std) = 97.5% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

99% Chebyshev (mean, Std) = 99% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

Rationale:

(1) Data are log-normally distributed. ProUCL recommended 95% H-UCL value for EPC.

(2) Data are neither normally nor lognormally distributed. Since standard deviation of the log-transformed data is moderate, use 97.5% Chebyshev (Mean, Std) UCL value as the EPC value.

(3) Data are neither normally nor lognormally distributed. Since standard deviation of the log-transformed data is low (less than 1), use 95% Chebyshev (Mean, Std) UCL value as the EPC value.

(4) Data are neither normally nor lognormally distributed. Since standard deviation of the log-transformed data is high, use 99% Chebyshev (Mean, Std) UCL value as the EPC value.

TABLE 3.5.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Air

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [1]	Rationale
Inhalation of particulates onsite (soil to air pathway)	Inorganics Arsenic	ug/m^3	NA	NA	1.1E-03	1.1E-03	ug/m^3	Max	(1)

Compounds on this table exceed their respective risk-based concentrations for ambient air.

Soil includes almost all soil (0 to 4 feet below ground surface (bgs)) and sediment samples collected during the pre-remedial design investigation. It does not include any samples collected from the ABM or Acetylene Sludge Areas.

1. Statistics:

Max - Maximum concentration modeled by EPA using the EPA ISCST3 Model. See Appendix C for detailed modeling results.

Rationale:

(1) Maximum concentration modeled onsite for "Industrial Worker", "Other Worker", "Trespasser/Visitor", and "Construction Worker" receptor evaluations.

TABLE 3.6.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site OU1

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Air

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic [1]	Rationale
Inhalation of particulates offsite (soil to air pathway)	Inorganics Arsenic	ug/m^3	NA	NA	4.9E-04	4.9E-04	ug/m^3	Max	(1)

Compounds on this table exceed their respective risk-based concentrations for ambient air.

NA = Not Available

Soil includes almost all soil (0 to 4 feet below ground surface (bgs)) and sediment samples collected during the pre-remedial design investigation. It does not include any samples collected from the ABM or Acetylene Sludge Areas.

1. Statistics:

Max - Maximum concentration modeled by EPA using the EPA ISCST3 Model. See Appendix C for detailed modeling results.

Rationale:

(1) Maximum concentration modeled offsite for "Other Worker" receptor evaluation.

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Shallow Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale
Contact with Shallow Groundwater during Excavation/ Trenching Activities	Organics								
	Total Dioxin TEQ (EPA)	pg/L	25	66	212	66	pg/L	95% Chebyshev (Mean, Std) UCL	(1)
	Total Dioxin TEQ (WHO)	pg/L	11	40	125	40	pg/L	95% Chebyshev (Mean, Std) UCL	(1)
	Benzene	ug/L	14	72	180	72	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Xylenes (total)	ug/L	16	72	130	72	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	1,1'-Biphenyl	ug/L	11	28	96 J	28	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	2,4,6-Trichlorophenol	ug/L	8.1	17	17	17	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	2,4-Dichlorophenol	ug/L	8.0	17	21	17	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	2,4-Dimethylphenol	ug/L	83	765	2200	765	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	2-Chlorophenol	ug/L	6.5	8.9	9 J	8.9	ug/L	Student's-t UCL	(1)
	2-Methylnaphthalene	ug/L	51	283	530 J	283	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	2-Methylphenol (o-cresol)	ug/L	23	169	470	169	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	4-Methylphenol (p-cresol)	ug/L	17	110	300	110	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Acenaphthene	ug/L	80	325	530	325	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Benzo(a)anthracene	ug/L	7.2	16	3 J	3	ug/L	Max	(2)
	Benzo(a)pyrene	ug/L	7.4	16	1 J	1	ug/L	Max	(2)

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future

Medium: Groundwater

Exposure Medium: Shallow Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale
	Benzo(b)fluoranthene	ug/L	7.6	16	1 J	1	ug/L	Max	(2)
	Benzo(k)fluoranthene	ug/L	7.6	16	0.9 J	0.9	ug/L	Max	(2)
	bis(2-Ethylhexyl)phthalate	ug/L	4.9	22	31	22	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Carbazole	ug/L	48	257	510 J	257	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Dibenzofuran	ug/L	36	164	290 J	164	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Fluorene	ug/L	32	139	250 J	139	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Indeno(1,2,3-cd)pyrene	ug/L	7.7	16	0.7 J	0.7	ug/L	Max	(2)
	Naphthalene	ug/L	541	3259	7200	3259	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Pentachlorophenol	ug/L	260	2553	7400	2553	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Phenanthrene	ug/L	28	134	240 J	134	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Pyrene	ug/L	8.1	15	24	15	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	4,4'-DDT	ug/L	0.10	0.23	0.92 J	0.23	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	alpha-BHC	ug/L	0.026	0.028	0.063 J	0.028	ug/L	Mod-t UCL	(1)
	beta-BHC	ug/L	0.026	0.027	0.05	0.027	ug/L	Mod-t UCL	(1)
	delta-BHC	ug/L	0.025	0.026	0.039 J	0.026	ug/L	Mod-t UCL	(1)
	Dieldrin	ug/L	0.051	0.055	0.11	0.055	ug/L	Mod-t UCL	(1)
	Heptachlor Epoxide	ug/L	0.025	0.026	0.033 J	0.026	ug/L	Mod-t UCL	(1)
	Inorganics								

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Shallow Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale
	Aluminum	ug/L	345	1856	4750	1856	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Arsenic	ug/L	20	72	141	72	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Cadmium	ug/L	2.6	4.1	12.2	4.1	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	Chromium	ug/L	6.8	15	51	15	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	Copper	ug/L	101	715	1870	715	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Iron	ug/L	13353	21570	83500	21570	ug/L	Approx. Gamma UCL	(3)
	Lead	ug/L	4.9	NA	31.6	4.9	ug/L	Mean	(5)
	Manganese	ug/L	313	371	640	371	ug/L	Student's-t UCL	(4)
	Mercury	ug/L	0.15	0.26	0.86	0.26	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	Vanadium	ug/L	9.9	30	10.8 []	10.8	ug/L	Max	(2)
	Zinc	ug/L	268	1797	4650	1797	ug/L	99% Chebyshev (Mean, Std) UCL	(1)

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for tap water.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See **Appendix D** for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.

J = Analyte presented. Reported value may not be accurate or precise.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

[ ] = Analyte present. As value approaches the instrument detection limit (IDL), the quantitation may not be accurate.

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future

Medium: Groundwater

Exposure Medium: Shallow Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale

5. EPC values used for "Construction Worker" receptor evaluation.

6. Statistics:

Max = Maximum value

95% Chebyshev (Mean, Std) UCL = 95% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

99% Chebyshev (Mean, Std) UCL = 99% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

Mod-t UCL = modified-t statistic (adjusted for skewness) based UCL

Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic

Approx. Gamma UCL = approximate gamma UCL using chi-square

Mean = arithmetic mean

EPC Selection Rationale:

(1) Data are neither normally nor lognormally distributed. ProUCL recommended UCL value for EPC will be used in the risk assessment.

(2) ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is EPC value that will be used in the risk assessment.

(3) Data follows a gamma distribution. ProUCL recommended UCL value for EPA will be used in the risk assessment.

(4) Data are normally distributed. ProUCL recommended UCL value for EPA will be used in the risk assessment.

(5) Lead will be evaluated using the IEUBK model using the arithmetic mean value.

TABLE 3.2.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future

Medium: Groundwater

Exposure Medium: Mixed Shallow and Intermediate Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale
Tap Water from Mixed Shallow and Intermediate Groundwater	Organics								
	Total Dioxin TEQ)EPA)	pg/L	22	55	212	55	pg/L	95% Chebyshev (Mean, Std) UCL	(1)
	Total Dioxin TEQ (WHO)	pg/L	11	32	125	32	pg/L	95% Chebyshev (Mean, Std) UCL	(1)
	Benzene	ug/L	12	59	180	59	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Xylenes (total)	ug/L	16	65	130	65	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	1,1'-Biphenyl	ug/L	11	25	96 J	25	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	2,4,6-Trichlorophenol	ug/L	8.7	17	17	17	ug/L	Max	(2)
	2,4-Dichlorophenol	ug/L	8.8	17	21	17	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	2,4-Dimethylphenol	ug/L	71	617	2200	617	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	2-Chlorophenol	ug/L	7.5	15	9 J	9	ug/L	Max	(2)
	2-Methylnaphthalene	ug/L	47	237	530 J	237	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	2-Methylphenol (o-cresol)	ug/L	22	139	470 J	139	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	4-Methylphenol (p-cresol)	ug/L	19	98	300	98	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Acenaphthene	ug/L	68	268	530	268	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Benzo(a)anthracene	ug/L	8.1	17	3 J	3	ug/L	Max	(2)
	Benzo(a)pyrene	ug/L	8.2	17	1 J	1	ug/L	Max	(2)
	Benzo(b)fluoranthene	ug/L	8.4	17	1 J	1	ug/L	Max	(2)

TABLE 3.2.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Mixed Shallow and Intermediate Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale
	Benzo(k)fluoranthene	ug/L	8.4	17	0.9 J	0.9	ug/L	Max	(2)
	bis(2-Ethylhexyl)phthalate	ug/L	5.6	24	31	24	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Carbazole	ug/L	45	226	510 J	226	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Dibenzofuran	ug/L	33	136	290 J	136	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Fluorene	ug/L	27	114	250 J	114	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Indeno(1,2,3-cd)pyrene	ug/L	8.5	17	0.7 J	0.7	ug/L	Max	(2)
	Naphthalene	ug/L	473	2666	7200	2666	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Pentachlorophenol	ug/L	216	2051	7400	2051	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Phenanthrene	ug/L	25	110	240 J	110	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Pyrene	ug/L	8.7	16	24	16	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	4,4'-DDT	ug/L	0.09	0.33	0.92 J	0.33	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	alpha-BHC	ug/L	0.024	0.027	0.063 J	0.027	ug/L	Mod-t UCL	(1)
	beta-BHC	ug/L	0.024	0.026	0.05	0.026	ug/L	Student's-t UCL	(1)
	delta-BHC	ug/L	0.024	0.025	0.039 J	0.025	ug/L	Student's-t UCL	(1)
	Dieldrin	ug/L	0.048	0.052	0.11	0.052	ug/L	Mod-t UCL	(1)
	Heptachlor Epoxide	ug/L	0.024	0.025	0.033 J	0.025	ug/L	Student's-t UCL	(1)
	Inorganics								(1)
	Aluminum	ug/L	595	3472	10800	3472	ug/L	99% Chebyshev (Mean, Std) UCL	(1)

TABLE 3.2.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future

Medium: Groundwater

Exposure Medium: Mixed Shallow and Intermediate Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale
	Arsenic	ug/L	17	60	141	60	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Cadmium	ug/L	2.6	3.8	12.2	3.8	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	Chromium	ug/L	6.9	14	51	14	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	Copper	ug/L	83	575	1870	575	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Iron	ug/L	16296	24630	83500	24630	ug/L	Approx. Gamma UCL	(3)
	Lead	ug/L	5.2	NA	31.6	5.2	ug/L	Mean	(4)
	Manganese	ug/L	477	1332	3020 J	1332	ug/L	99% Chebyshev (Mean, Std) UCL	(1)
	Mercury	ug/L	0.14	0.23	0.86	0.23	ug/L	95% Chebyshev (Mean, Std) UCL	(1)
	Vanadium	ug/L	12	31	24.5 [ ]	24.5	ug/L	Max	(2)
	Zinc	ug/L	219	1449	4650	1449	ug/L	99% Chebyshev (Mean, Std) UCL	(1)

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for tap water.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximu
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See **Appendix D** for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for "Industrial Worker" and "Other Worker" receptor evaluations.

J = Analyte presented. Reported value may not be accurate or precise.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

[ ] = Analyte present. As value approaches the instrument detection limit (IDL), the quantitation may not be accurate.

TABLE 3.2.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future

Medium: Groundwater

Exposure Medium: Mixed Shallow and Intermediate Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale

6. Statistics:

Max = Maximum value

95% Chebyshev (Mean, Std) UCL = 95% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

99% Chebyshev (Mean, Std) UCL = 99% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

Mod-t UCL = modified-t statistic (adjusted for skewness) based UCL

Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic

Approx. Gamma UCL = approximate gamma UCL using chi-square

Mean = arithmetic mean

EPC Selection Rationale:

(1) Data are neither normally nor lognormally distributed. ProUCL recommended UCL value for EPC will be used in the risk assessment.

(2) ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is EPC value that will be used in the risk assessment.

(3) Data follows a gamma distribution. ProUCL recommended UCL value for EPA will be used in the risk assessment.

(4) Lead will be evaluated using the IEUBK model using the arithmetic mean value.

TABLE 3.3.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Deep Groundwater [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean [2]	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration [3]			
						Value	Units	Statistic [4]	Rationale
Tap Water from Deep Groundwater	Organics								
	Chloroform	ug/L	0.44	NA	0.9 J	9.0E-01	ug/L	Max	(1)
	Inorganics								
	Arsenic	ug/L	4.4	NA	7.6 [ ]	7.6E+00	ug/L	Max	(1)
	Iron	ug/L	5120	NA	9720	9.7E+03	ug/L	Max	(1)
	Manganese	ug/L	190	NA	282	2.8E+02	ug/L	Max	(1)

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for tap water.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. EPC values used for "Industrial Worker" and "Other Worker" receptor evaluations.
4. Statistics: Maximum Detected Value (Max)

EPC Selection Rationale:

(1) For data sets less than five samples, the maximum detected concentration is used as the RME EPC value.

J = Analyte presented. Reported value may not be accurate or precise.

[ ] = Analyte present. As value approaches the instrument detection limit (IDL), the quantitation may not be accurate.

TABLE 3.4.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries Superfund Site - OU2

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Air [1]

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	One Hour Ambient Air Concentration (Qualifier) 2	Exposure Point Concentration [3]			
						Value	Units	Statistic [4]	Rationale
Vapors from Shallow Groundwater entering Excavation/ Trench	Organics								
	Benzene	ug/m^3	NA	NA	2.39E+00	2.39E+00	ug/m^3	1-hr Ambient Air	(1)
	2-Methylnaphthalene	ug/m^3	NA	NA	4.75E+00	4.75E+00	ug/m^3	1-hr Ambient Air	(1)
	Dibenzofuran	ug/m^3	NA	NA	2.28E+00	2.28E+00	ug/m^3	1-hr Ambient Air	(1)
	Naphthalene	ug/m^3	NA	NA	1.31E+00	1.31E+00	ug/m^3	1-hr Ambient Air	(1)

Notes:

NA = Not available

1. Compounds on this table exceed their respective risk-based concentrations for ambient air.
2. One-hour ambient air concentrations at ground surface generated by EPA (See Appendix C for details of the air modeling rationale and results).
3. EPC values used for "Construction Worker" receptor evaluation.
4. Statistics:

   1-hr Ambient Air = One-hour ambient air concentration at ground surface

EPC Selection Rationale:

(1) One-hour ambient air concentration generated by EPA used as EPC.

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish Tissue

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Crab meat from crabs collected adjacent to the AWI Site	Total Dioxin TEQ(1989)	MG/KG	0.000000087	0.00000014	0.00000026	0.00000014	MG/KG	Student's-t UCL	a
	Total Dioxin TEQ(1998 WHO)	MG/KG	0.000000080	0.00000014	0.00000025	0.00000014	MG/KG	Student's-t UCL	a
	Mercury	MG/KG	0.055	0.062	0.071	0.062	MG/KG	Student's-t UCL	a
	Arsenic	MG/KG	2.7	2.9	3.2	2.9	MG/KG	Student's-t UCL	a
	Cobalt	MG/KG	0.011	0.013	0.017 J	0.013	MG/KG	Student's-t UCL	a
	Copper	MG/KG	12	13	14	13	MG/KG	Approx. Gamma UCL	b
	Selenium	MG/KG	0.70	0.76	0.92 J	0.76	MG/KG	Approx. Gamma UCL	b
	Thallium	MG/KG	0.22	0.33	0.029 J	0.029	MG/KG	Max	c
	4,4'-DDE	MG/KG	0.0064	0.0084	0.013	0.0084	MG/KG	Approx. Gamma UCL	b
	Aroclor-1260	MG/KG	0.012	0.049	0.052 J	0.049	MG/KG	97.5% Chebyshev (Mean, Sd) UCL	d
	Dieldrin	MG/KG	0.00058	0.00081	0.0014 J	0.00081	MG/KG	Mod-t UCL	d
	Heptachlorepoxide	MG/KG	0.00032	0.00049	0.00091 J	0.00049	MG/KG	Mod-t UCL	d
	Benzo(a)anthracene	MG/KG	0.0065	0.010	0.018	0.010	MG/KG	Approx. Gamma UCL	b
	Benzo(a)pyrene	MG/KG	0.0057	0.0083	0.012	0.0083	MG/KG	Student's-t UCL	a
	Benzo(b)fluoranthene	MG/KG	0.011	0.017	0.028	0.017	MG/KG	Student's-t UCL	a
	Dibenzo(a,h)anthracene	MG/KG	0.0024	0.0033	0.0020 J	0.0020	MG/KG	Max	c
	Indeno(1,2,3-cd)pyrene	MG/KG	0.0028	0.0039	0.0053 J	0.0039	MG/KG	Student's-t UCL	a

J = Analyte present. Reported value may not be accurate or precise.

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for fish tissue ingestion.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for Subsistence and Recreational Fisher receptors evaluation.
6. Statistics:
   Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic
   Approx. Gamma UCL = approximate gamma UCL using chi-square
   Max = Maximum value
   97.5% Chebyshev (Mean, Std) UCL = 97.5% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation
7. EPC Selection Rationale:

a. Data are normally distributed. ProUCL recommended UCL value is used as the EPC value.
b. Data follows a gamma distribution. ProUCL recommended UCL value is used as the EPC value.
c. ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is used as the EPC value.

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish Tissue

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]

d. Data are non-parametric. ProUCL recommended UCL value is used as the EPC value.

TABLE 3.2.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Crab meat from crabs collected near Scuffletown Creek	Total Dioxin TEQ (1989)	MG/KG	0.000000034	0.000000062	0.000000023	0.000000023	MG/KG	Max	a
	Mercury	MG/KG	0.039	0.043	0.052	0.043	MG/KG	Student's-t UCL	b
	Arsenic	MG/KG	1.6	1.7	1.8	1.7	MG/KG	Student's-t UCL	b
	Cobalt	MG/KG	0.024	0.084	0.015 J	0.015	MG/KG	95% Chebyshev (Mean, Sd) UCL	c
	Copper	MG/KG	11	11	12	11	MG/KG	Student's-t UCL	b
	Selenium	MG/KG	0.47	0.58	0.71 J	0.58	MG/KG	Student's-t UCL	b
	Aroclor-1260	MG/KG	0.011	0.015	0.022	0.015	MG/KG	Student's-t UCL	b
	Benzo(a)pyrene	MG/KG	0.0020	0.0032	0.0024 J	0.0024	MG/KG	Max	a
	Benzo(b)fluoranthene	MG/KG	0.0032	0.0045	0.0073 J	0.0045	MG/KG	Student's-t UCL	b

J = Analyte present. Reported value may not be accurate or precise.

Notes:
1. Compounds on this table exceed their respective risk-based concentrations for fish tissue ingestion.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for Subsistence and Recreational Fisher receptors evaluation.
6. Statistics:
   Max = Maximum value
   Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic
   95% Chebyshev (Mean, Std) UCL = 95% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation
7. EPC Selection Rationale:
a. ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is used as the EPC value.
b. Data are normally distributed. ProUCL recommended UCL value is used as the EPC value.
c. Data are non-parametric. ProUCL recommended UCL value is used as the EPC value.

TABLE 3.3.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries Superfund Site - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Whole crab (meat and hepatopancreas) from crabs collected adjacent to the AWI Site	Total Dioxin TEQ(1989)	MG/KG	0.0000047	0.0000072	0.000012	0.0000072	MG/KG	Approx. Gamma UCL	a
	Total Dioxin TEQ(1998 WHO)	MG/KG	0.0000055	0.0000081	0.000013	0.0000081	MG/KG	Approx. Gamma UCL	a
	Mercury	MG/KG	0.044	0.049	0.058	0.049	MG/KG	Student's-t UCL	b
	Arsenic	MG/KG	3.0	3.2	3.4	3.2	MG/KG	Student's-t UCL	b
	Cadmium	MG/KG	0.43	0.50	0.62	0.50	MG/KG	Student's-t UCL	b
	Cobalt	MG/KG	0.083	0.092	0.11	0.092	MG/KG	Student's-t UCL	b
	Copper	MG/KG	36	41	48	41	MG/KG	Student's-t UCL	b
	Selenium	MG/KG	1.0	1.1	1.2	1.1	MG/KG	Student's-t UCL	b
	Thallium	MG/KG	0.22	0.25	0.09	0.09	MG/KG	Max	c
	Vanadium	MG/KG	0.14	0.26	0.20	0.20	MG/KG	Max	c
	Zinc	MG/KG	40	41	42	41	MG/KG	Student's-t UCL	b
	4,4'-DDE	MG/KG	0.019	0.024	0.035	0.024	MG/KG	Student's-t UCL	b
	4-4'-DDT	MG/KG	0.0036	0.020	0.022	0.020	MG/KG	97.5% Chebyshev (Mean, Sd) UCL	d
	Aroclor-1260	MG/KG	0.18	0.25	0.39	0.25	MG/KG	95% H-UCL	e
	alpha-BHC	MG/KG	0.00036	0.00044	0.00053	0.00044	MG/KG	Student's-t UCL	b
	beta-BHC	MG/KG	0.00095	0.0017	0.0023	0.0017	MG/KG	Approx. Gamma UCL	a
	Dieldrin	MG/KG	0.0058	0.0071	0.010	0.0071	MG/KG	Approx. Gamma UCL	a
	delta-BHC	MG/KG	0.00085	0.0013	0.0022	0.0013	MG/KG	Student's-t UCL	b
	Heptachlor	MG/KG	0.00038	0.00076	0.00089	0.00076	MG/KG	95% Chebyshev (Mean, Sd) UCL	d
	Heptachlorepoxide	MG/KG	0.0038	0.0044	0.0053	0.0044	MG/KG	Student's-t UCL	b
	Benzo(a)anthracene	MG/KG	0.013	0.035	0.034	0.034	MG/KG	Max	c
	Benzo(a)pyrene	MG/KG	0.010	0.015	0.025	0.015	MG/KG	Student's-t UCL	b
	Benzo(b)fluoranthene	MG/KG	0.023	0.033	0.050	0.033	MG/KG	Student's-t UCL	b
	Dibenzo(a,h)anthracene	MG/KG	0.0026	0.0033	0.0041	0.0033	MG/KG	Student's-t UCL	b
	Indeno(1,2,3-cd)pyrene	MG/KG	0.0043	0.0061	0.010	0.0061	MG/KG	Student's-t UCL	b

Notes:
1. Compounds on this table exceed their respective risk-based concentrations for fish tissue ingestion.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for Subsistence and Recreational Fisher receptors evaluation.
6. Statistics:

TABLE 3.3.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries Superfund Site - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]

Approx. Gamma UCL = approximate gamma UCL using chi-square
Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic
Max = Maximum value
97.5% Chebyshev (Mean, Std) UCL = 97.5% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation
95% H-UCL = 95% UCL of the mean based upon the H-statistic
95% Chebyshev (Mean, Std) UCL = 95% Chebyshev UCL of mean computed using the sample arithmetic mean and standard deviation

7. EPC Selection Rationale:

a. Data follows a gamma distribution. ProUCL-recommended UCL value is used as the EPC value.
b. Data are normally distributed. ProUCL recommended UCL value is used as the EPC value.
c. ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is used as the EPC value.
d. Data are non-parametric. ProUCL recommended UCL value is used as the EPC value.
e. Data are lognormally distributed. ProUCL recommended UCL value is used as the EPC value.

TABLE 3.4.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Whole crabs (meat and hepatopancreas) from crabs collected near Scuffletown Creek	Total Dioxin TEQ(1989)	MG/KG	0.0000021	0.0000029	0.0000042	0.0000029	MG/KG	Student's-t UCL	a
	Total Dioxin TEQ(1998 WHO)	MG/KG	0.0000024	0.0000034	0.0000047	0.0000034	MG/KG	Student's-t UCL	a
	Mercury	MG/KG	0.031	0.035	0.04	0.035	MG/KG	Student's-t UCL	a
	Arsenic	MG/KG	2.0	2.2	2.3	2.2	MG/KG	Student's-t UCL	a
	Cadmium	MG/KG	0.43	0.49	0.53	0.49	MG/KG	Student's-t UCL	a
	Cobalt	MG/KG	0.081	0.11	0.17	0.11	MG/KG	Approx. Gamma UCL	b
	Copper	MG/KG	29	33	36	33	MG/KG	Student's-t UCL	a
	Selenium	MG/KG	0.79	0.89	0.96	0.89	MG/KG	Student's-t UCL	a
	Thallium	MG/KG	0.28	0.62	0.03	0.03	MG/KG	Max	c
	Vanadium	MG/KG	0.14	0.26	0.20	0.20	MG/KG	Max	c
	Zinc	MG/KG	42	46	52	46	MG/KG	Student's-t UCL	a
	4,4'-DDE	MG/KG	0.022	0.028	0.037	0.028	MG/KG	Student's-t UCL	a
	Aroclor-1260	MG/KG	0.10	0.11	0.14	0.11	MG/KG	Student's-t UCL	a
	alpha-BHC	MG/KG	0.00050	0.00063	0.00081	0.00063	MG/KG	Student's-t UCL	a
	beta-BHC	MG/KG	0.0011	0.0015	0.0020	0.0015	MG/KG	Approx. Gamma UCL	b
	Dieldrin	MG/KG	0.0041	0.0053	0.0065	0.0053	MG/KG	Student's-t UCL	a
	delta-BHC	MG/KG	0.0013	0.0017	0.0024	0.0017	MG/KG	Student's-t UCL	a
	Heptachlor	MG/KG	0.00054	0.00094	0.0013	0.00094	MG/KG	Approx. Gamma UCL	b
	Heptachlorepoxide	MG/KG	0.0027	0.0036	0.0055	0.0036	MG/KG	Student's-t UCL	a
	Benzo(a)pyrene	MG/KG	0.0032	0.0044	0.0069	0.0044	MG/KG	Student's-t UCL	a
	Benzo(b)fluoranthene	MG/KG	0.011	0.021	0.033	0.021	MG/KG	Approx. Gamma UCL	a
	Dibenzo(a,h)anthracene	MG/KG	0.0034	0.0038	0.0041	0.0038	MG/KG	Student's-t UCL	a
	Indeno(1,2,3-cd)pyrene	MG/KG	0.0037	0.0052	0.0082	0.0052	MG/KG	Student's-t UCL	a
	Pentachlorophenol	MG/KG	0.077	0.082	0.058	0.058	MG/KG	Max	c

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for fish tissue ingestion.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for Subsistence and Recreational Fisher receptors evaluation.
6. Statistics:

Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic

TABLE 3.4.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]

Approx. Gamma UCL = approximate gamma UCL using chi-square
Max = Maximum value
7. EPC Selection Rationale:
a. Data are normally distributed. ProUCL recommended UCL value is used as the EPC value.
b. Data follows a gamma distribution. ProUCL recommended UCL value is used as the EPC value.
c. ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is used as the EPC value.

TABLE 3.5.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Shellfish

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) 3	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Oyster Meat from Oysters collected adjacent to the AWI Site	Dioxin TEQ(1989)	MG/KG	0.00000074	0.0000010	0.0000014	0.0000010	MG/KG	Student's-t UCL	a
	Dioxin TEQ(1998WHO)	MG/KG	0.00000086	0.0000015	0.0000024	0.0000015	MG/KG	Approx. Gamma UCL	b
	Mercury	MG/KG	0.031	0.035	0.042	0.035	MG/KG	Student's-t UCL	a
	Arsenic	MG/KG	0.86	0.93	1.1	0.93	MG/KG	Approx. Gamma UCL	b
	Barium	MG/KG	0.22	0.33	0.58	0.33	MG/KG	Approx. Gamma UCL	b
	Cadmium	MG/KG	0.88	0.92	1.0	0.92	MG/KG	Student's-t UCL	a
	Cobalt	MG/KG	0.17	0.18	0.19	0.18	MG/KG	Student's-t UCL	a
	Copper	MG/KG	91	102	125	102	MG/KG	Mod-t UCL	c
	Iron	MG/KG	53	60	69	60	MG/KG	Student's-t UCL	a
	Zinc	MG/KG	1321	1436	1,600	1,436	MG/KG	Student's-t UCL	a
	Aldrin	MG/KG	0.00061	0.00084	0.0014 J	0.00084	MG/KG	Mod-t UCL	c

J = Analyte present. Reported value may not be accurate or precise.

Notes:
1. Compounds on this table exceed their respective risk-based concentrations for fish tissue ingestion.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for Subsistence and Recreational Fisher receptors evaluation.
6. Statistics:
   Approx. Gamma UCL = approximate gamma UCL using chi-square
   Mod-t UCL = modified-t statistic (adjusted for skewness) based UCL
   Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic
7. EPC Selection Rationale:
a. Data are normally distributed. ProUCL recommended UCL value is used as the EPC value.
b. Data follows a gamma distribution. ProUCL recommended UCL value is used as the EPC value.
c. Data are non-parametric. ProUCL recommended UCL value is used as the EPC value.

TABLE 3.6.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Atlantic Wood Industries - OU3

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Shallow Sediment in the vicinity of the AWI Site	Total Dioxin TEQ (EPA 1989)	PG/G	572	4500	2674	2674	PG/G	Max	a
	Total Dioxin TEQ (WHO 1998)	PG/G	341	2654	1564	1564	PG/G	Max	a
	4,6-dinitro-2-methylphenol	UG/KG	6524	43848	2000 J	2000	UG/KG	Max	a
	benzo(a)anthracene	UG/KG	71516	698326	330000 J	330000	UG/KG	Max	a
	benzo(a)pyrene	UG/KG	53496	428088	190000	190000	UG/KG	Max	a
	benzo(b)fluoranthene	UG/KG	56096	467877	190000 J	190000	UG/KG	Max	a
	benzo(k)fluoranthene	UG/KG	41266	313645	130000	130000	UG/KG	Max	a
	chrysene	UG/KG	87350	796059	350000 J	350000	UG/KG	Max	a
	dibenz(a,h)anthracene	UG/KG	12293	87128	32000	32000	UG/KG	Max	a
	indeno(1,2,3-c,d)pyrene	UG/KG	23787	177526	75000	75000	UG/KG	Max	a
	aluminum	MG/KG	21669	28073	30100	28073	MG/KG	Student's-t UCL	b
	arsenic	MG/KG	17	26	38.6	26	MG/KG	Student's-t UCL	b
	cobalt	MG/KG	10	17	13.4 J	13.4	MG/KG	Max	a
	iron	MG/KG	29873	37906	39800	37906	MG/KG	Student's-t UCL	b

J = Analyte presented. Reported value may not be accurate or precise.

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for residential soil modified for sediment exposure.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated arithmetic mean may be higher than the maximum detected concentration.
3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.

TABLE 3.6.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries - OU3

Scenario Timeframe: Future

Medium: Sediment

Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]

5. EPC values used for "Trespasser" and "Other Recreational Person" receptors evaluation.

6. Statistics:

Max = Maximum value

Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic

7. EPC Selection Rationale:

a. ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is EPC value that will be used in the risk assessment.

b. Data are normally distributed. ProUCL recommended UCL value for EPA will be used in the risk assessment.

TABLE 3.7.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries - OU3

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]
Sediment in the vicinity of the AWI Site	Total Dioxin TEQ (EPA 89)	PG/G	358	861	2674	861	PG/G	Adj. Gamma UCL	a
	Total Dioxin TEQ (WHO 98)	PG/G	216	512	1564	512	PG/G	Adj. Gamma UCL	a
	2-methylnaphthalene	UG/KG	14893	64304	360000 J	64304	UG/KG	97.5% Chebyshev UCL	b
	4,6-dinitro-2-methylphenol	UG/KG	5133	14092	2000 J	2000	UG/KG	Max	c
	benzo(a)anthracene	UG/KG	19040	91034	330000 J	91034	UG/KG	99% Chebyshev UCL	b
	benzo(a)pyrene	UG/KG	14095	60611	190000	60611	UG/KG	99% Chebyshev UCL	b
	benzo(b)fluoranthene	UG/KG	15172	64338	190000 J	64338	UG/KG	99% Chebyshev UCL	b
	benzo(k)fluoranthene	UG/KG	11961	34295	130000	34295	UG/KG	97.5% Chebyshev UCL	b
	chrysene	UG/KG	22474	102155	350000 J	102155	UG/KG	99% Chebyshev UCL	b
	di-n-octylphthalate	UG/KG	2034	5606	290 J	290	UG/KG	Max	c
	dibenz(a,h)anthracene	UG/KG	2996	8429	32000	8429	UG/KG	97.5% Chebyshev UCL	b
	dibenzofuran	UG/KG	12078	47623	240000 J	47623	UG/KG	97.5% Chebyshev UCL	b
	indeno(1,2,3-c,d)pyrene	UG/KG	6379	19150	75000	19150	UG/KG	97.5% Chebyshev UCL	b
	aluminum	MG/KG	23732	29386	35900	29386	MG/KG	95% Chebyshev UCL	b
	antimony	MG/KG	9.6	13.3	23.2	13.3	MG/KG	95% Chebyshev UCL	b
	arsenic	MG/KG	14.4	16.7	42	16.7	MG/KG	Student's-t UCL	d
	cobalt	MG/KG	10.5	12.7	17.6 J	12.7	MG/KG	95% Chebyshev UCL	b
	iron	MG/KG	33342	40639	62300	40639	MG/KG	95% Chebyshev UCL	b
	thallium	MG/KG	2.9	3.3	5.9 J	3.3	MG/KG	Student's-t UCL	b
	vanadium	MG/KG	49	61	103	61	MG/KG	95% Chebyshev UCL	b

Notes:

1. Compounds on this table exceed their respective risk-based concentrations for residential soil modified for sediment exposure.
2. Arithmetic mean uses one-half the Sample Quantitation Limit (SQL) for samples with non-detected results. Therefore, the calculated

J = Analyte presented. Reported value may not be accurate or precise.

TABLE 3.7.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Atlantic Wood Industries - OU3

Scenario Timeframe: Future

Medium: Sediment

Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern [1]	Units	Arithmetic Mean [2]	95% UCL (Distribution) [3]	Maximum Concentration (Qualifier) [4]	Exposure Point Concentration [5]			
						Value	Units	Statistic [6]	Rationale [7]

arithmetic mean may be higher than the maximum detected concentration.

3. 95% UCL values are calculated using ProUCL software, Version 3.00.02 (EPA 2004). See Appendix E for full ProUCL results tables.
4. Maximum concentration is the maximum concentration detected at the site, not maximum value from the ProUCL runs. Maximum values from the ProUCL runs could be one-half the SQL from a sample with non-detected results, and therefore, may be higher than the maximum value found onsite.
5. EPC values used for "Trespasser" and "Other Recreational Person" receptors evaluation.
6. Statistics:

   Max = Maximum value

   Student's-t UCL = 95% UCL of the mean based upon the student's-t statistic
7. EPC Selection Rationale:

a. Data follows a gamma distribution. ProUCL recommended UCL value is used as the EPC value.

b. Data are non-parametric. ProUCL recommeneded UCL value is used as the EPC value.

c. ProUCL recommended UCL exceeds maximum concentration. Therefore, maximum concentration is used as the EPC value.

d. Data are normally distributed. ProUCL recommeneded UCL value is used as the EPC value.