TABLE 1. MEDIUM-SPECIFIC
ECOLOGICAL RISK-BASED SCREENING CONCENTRATIONS

Analyte	Terrestrial Plants (mg/kg)	Terrestrial Invertebrates (mg/kg)	Terrestrial Birds (mg/kg)	Terrestrial Mammals (mg/kg)	Terrestrial Life (mg/kg)	Soil ERBSC (mg/kg)	Soil ERBSC Reference
Inorganics & Metals							
Arsenic	9.90E+00	6.00E+01	4.30E+01	9.90E+00	5.70E+00	5.70E+00	Minimum RAIS Soil SL
Barium	5.00E+02	3.30E+02	2.83E+02	2.00E+03	1.04E+00	1.04E+00	Minimum RAIS Soil SL
Cadmium	4.00E+00	2.00E+01	7.70E-01	3.60E-01	2.22E-03	2.22E-03	Minimum RAIS Soil SL
Chromium	1.00E+00	4.00E-01	2.60E+01	3.40E+01	4.00E-01	4.00E-01	ORNL Invertebrate TBVs
Lead	5.00E+01	5.00E+02	1.10E+01	5.60E+01	5.37E-02	5.37E-02	Minimum RAIS Soil SL
Mercury	3.00E-01	1.00E-01	5.10E-04	NV	1.00E-01	5.10E-04	Terrestrial Birds Step 3c
Selenium	5.20E-01	4.10E+00	1.20E+00	2.10E-01	2.76E-02	2.76E-02	Minimum RAIS Soil SL
Silver	2.00E+00	5.00E+01	4.20E+00	1.40E+01	2.00E+00	2.00E+00	ORNL Plant TBVs
PCBs & Dioxins							
PCBs	4.00E+01	NV	NV	3.71E-01	3.32E-04	3.32E-04	Minimum RAIS Soil SL
TCDD, 2,3,7,8-	NV	NV	NV	3.15E-06	1.99E-07	1.99E-07	Minimum RAIS Soil SL
SVOCs							
1-Methylnaphthalene	NV	NV	3.29E+01	1.11E+02	NV	3.24E+00	Use 2-MNAP as surrogate
2-Methylnaphthalene	NV	NV	3.29E+01	1.11E+02	3.24E+00	3.24E+00	Minimum RAIS Soil SL
Acenaphthene	2.00E+01	NV	3.29E+01	1.11E+02	2.00E+01	2.00E+01	ORNL Plant TBVs
Acenaphthylene	NV	NV	3.29E+01	1.11E+02	6.82E+02	3.29E+01	Terrestrial Birds Step 3c
Anthracene	NV	NV	3.29E+01	1.11E+02	1.00E-01	1.00E-01	Minimum RAIS Soil SL
Benzo(a)anthracene	NV	NV	3.29E-01	1.22E+00	5.21E+00	3.29E-01	Terrestrial Birds Step 3c
Benzo(a)pyrene	NV	NV	3.29E-01	1.22E+00	1.00E-01	1.00E-01	Minimum RAIS Soil SL
Benzo(b)fluoranthene	NV	NV	3.29E-01	1.22E+00	5.98E+01	3.29E-01	Terrestrial Birds Step 3c
Benzo(g,h,i)perylene	NV	NV	3.29E-01	1.22E+00	1.19E+02	3.29E-01	Terrestrial Birds Step 3c
Benzo(k)fluoranthene	NV	NV	3.29E-01	1.22E+00	1.48E+02	3.29E-01	Terrestrial Birds Step 3c
Chrysene	NV	NV	3.29E-01	1.22E+00	4.73E+00	3.29E-01	Terrestrial Birds Step 3c
Dibenz(a,h)anthracene	NV	NV	3.29E-01	1.22E+00	1.84E+01	3.29E-01	Terrestrial Birds Step 3c
Fluoranthene	NV	NV	3.29E+01	1.11E+02	1.00E-01	1.00E-01	Minimum RAIS Soil SL
Fluorene	NV	3.00E+01	3.29E+01	1.11E+02	3.00E+01	3.00E+01	ORNL Invertebrate TBVs
Indeno(1,2,3-cd)pyrene	NV	NV	3.29E-01	1.22E+00	1.09E+02	3.29E-01	Terrestrial Birds Step 3c
Naphthalene	NV	NV	3.29E+01	1.11E+02	9.94E-02	9.94E-02	Minimum RAIS Soil SL
PAHs	NV	NV	2.83E-01	1.04E+00	1.00E+00	2.83E-01	Terrestrial Birds Step 3c
PAHs HMW	NV	1.80E+01	3.29E-01	1.10E+00	1.10E+00	3.29E-01	Terrestrial Birds Step 3c
PAHs LMW	NV	2.90E+01	3.29E+01	1.00E+02	2.90E+01	2.90E+01	Eco-SSL Invertebrate Screening Benchmark
Phenanthrene	NV	NV	3.29E+01	1.11E+02	1.00E-01	1.00E-01	Minimum RAIS Soil SL
Pyrene	NV	NV	2.83E-01	1.04E+00	1.00E-01	1.00E-01	Minimum RAIS Soil SL
VOCs							
Benzene	NV	NV	NV	2.41E+03	5.00E-02	5.00E-02	Minimum RAIS Soil SL
Ethylbenzene	NV	NV	NV	8.89E+02	5.00E-02	5.00E-02	Minimum RAIS Soil SL
Toluene	2.00E+02	NV	NV	2.38E+03	5.00E-02	5.00E-02	Minimum RAIS Soil SL
Xylene	NV	NV	NV	1.92E+02	5.00E-02	5.00E-02	Minimum RAIS Soil SL

TABLE 1. MEDIUM-SPECIFIC
ECOLOGICAL RISK-BASED SCREENING CONCENTRATIONS

Analyte	Freshwater Aquatic Life (mg/L)	Aquatic Dependent Birds or Mammals (mg/L)	Freshwater ERBSC (mg/L)	Freshwater ERBSC Reference	Benthic Life ERBSC (mg/kg)	Aquatic Dependent Birds or Mammals (mg/kg)	Sediment ERBSC (mg/kg)	Sediment ERBSC Reference
Inorganics & Metals								
Arsenic	3.10E-03	1.82E-03	1.82E-03	Aquatic Mammals Step 3c	5.90E+00	2.43E-02	2.43E-02	Aquatic Birds Step 3c
Barium	3.90E-03	6.57E-03	3.90E-03	Minimum RAIS SW SL	2.00E+01	4.07E-02	4.07E-02	Aquatic Birds Step 3c
Cadmium	1.30E-05	1.70E-04	1.30E-05	Minimum RAIS SW SL	5.83E-01	2.00E-03	2.00E-03	Aquatic Birds Step 3c
Chromium	2.66E-04	2.52E-02	2.66E-04	Minimum RAIS SW SL	2.60E+01	1.72E-01	1.72E-01	Aquatic Birds Step 3c
Lead	3.50E-04	2.32E+00	3.50E-04	Minimum RAIS SW SL	3.02E+01	1.64E+00	1.64E+00	Aquatic Birds Step 3c
Mercury	1.30E-06	8.06E-06	1.30E-06	Minimum RAIS SW SL	1.30E-01	4.99E-05	4.99E-05	Aquatic Birds Step 3c
Selenium	1.00E-03	2.22E-04	2.22E-04	Aquatic Mammals Step 3c	2.00E+00	2.76E-03	2.76E-03	Aquatic Birds Step 3c
Silver	1.20E-05	4.60E-03	1.20E-05	Minimum RAIS SW SL	5.00E-01	2.85E-02	2.85E-02	Aquatic Birds Step 3c
PCBs & Dioxins								
PCBs	7.40E-08	NV	7.40E-08	Minimum RAIS SW SL	2.16E-02	NV	2.16E-02	Minimum RAIS Sediment
TCDD, 2,3,7,8-	3.00E-12	NV	3.00E-12	Minimum RAIS SW SL	1.20E-07	NV	1.20E-07	Minimum RAIS Sediment
SVOCs								
1-Methylnaphthalene	2.10E-03	9.31E-03	2.10E-03	Minimum RAIS SW SL	2.02E-02	5.76E-02	2.02E-02	Use 2-MNAP as surrogate
2-Methylnaphthalene	4.70E-03	9.31E-03	4.70E-03	Minimum RAIS SW SL	2.02E-02	5.76E-02	2.02E-02	Minimum RAIS Sediment
Acenaphthene	5.80E-03	9.31E-03	5.80E-03	Minimum RAIS SW SL	6.70E-03	5.76E-02	6.70E-03	Minimum RAIS Sediment
Acenaphthylene	4.84E+00	9.31E-03	9.31E-03	Aquatic Birds Step 3c	5.87E-03	5.76E-02	5.87E-03	Minimum RAIS Sediment
Anthracene	1.20E-05	9.31E-03	1.20E-05	Minimum RAIS SW SL	1.00E-02	5.76E-02	1.00E-02	NOAA ARCS TEL FW
Benzo(a)anthracene	1.80E-05	8.00E-05	1.80E-05	Minimum RAIS SW SL	1.57E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Benzo(a)pyrene	1.40E-05	8.00E-05	1.40E-05	Minimum RAIS SW SL	3.19E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Benzo(b)fluoranthene	9.07E-03	8.00E-05	8.00E-05	Aquatic Birds Step 3c	2.72E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Benzo(g,h,i)perylene	7.64E-03	8.00E-05	8.00E-05	Aquatic Birds Step 3c	1.70E-01	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Benzo(k)fluoranthene	9.07E-03	8.00E-05	8.00E-05	Aquatic Birds Step 3c	2.72E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Chrysene	7.00E-03	8.00E-05	8.00E-05	Aquatic Birds Step 3c	2.68E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Dibenz(a,h)anthracene	5.00E-03	8.00E-05	8.00E-05	Aquatic Birds Step 3c	6.22E-03	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Fluoranthene	4.00E-05	9.31E-03	4.00E-05	Minimum RAIS SW SL	3.15E-02	5.76E-02	3.15E-02	NOAA ARCS TEL FW
Fluorene	3.00E-03	9.31E-03	3.00E-03	Minimum RAIS SW SL	1.00E-02	5.76E-02	1.00E-02	NOAA ARCS TEL FW
Indeno(1,2,3-cd)pyrene	4.31E-03	8.00E-05	8.00E-05	Aquatic Birds Step 3c	1.70E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
Naphthalene	1.10E-03	9.31E-03	1.10E-03	Minimum RAIS SW SL	1.47E-02	5.76E-02	1.47E-02	NOAA ARCS TEL FW
PAHs	1.20E-05	8.00E-05	1.20E-05	Use minimum as surrogate	2.64E-01	4.95E-04	4.95E-04	Aquatic Birds Step 3c
PAHs HMW	1.40E-05	8.00E-05	1.40E-05	Use minimum HMW as surrogate	1.90E-01	4.95E-04	4.95E-04	Aquatic Birds Step 3c
PAHs LMW	1.20E-05	9.31E-03	1.20E-05	Use minimum LMW as surrogate	7.60E-02	5.76E-02	5.76E-02	Aquatic Birds Step 3c
Phenanthrene	4.00E-04	9.31E-03	4.00E-04	Minimum RAIS SW SL	1.87E-02	5.76E-02	1.87E-02	NOAA ARCS TEL FW
Pyrene	2.50E-05	8.00E-05	2.50E-05	Minimum RAIS SW SL	4.43E-02	4.95E-04	4.95E-04	Aquatic Birds Step 3c
VOCs								
Benzene	2.10E-02	3.71E-01	2.10E-02	Minimum RAIS SW SL	5.70E-02	7.25E+00	5.70E-02	Minimum RAIS Sediment
Ethylbenzene	7.30E-03	1.62E-02	7.30E-03	Minimum RAIS SW SL	1.75E-01	3.16E-01	1.75E-01	Minimum RAIS Sediment
Toluene	2.00E-03	1.04E-01	2.00E-03	Minimum RAIS SW SL	5.00E-02	2.04E+00	5.00E-02	ORNL PRG
Xylene	1.80E-03	3.15E-03	1.80E-03	Minimum RAIS SW SL	2.50E-02	6.15E-02	2.50E-02	Minimum RAIS Sediment

TABLE 1. MEDIUM-SPECIFIC
ECOLOGICAL RISK-BASED SCREENING CONCENTRATIONS

Reference Key:

Aquatic Birds Step 3c - Table 3 receptor group ERBSC used (i.e., lower than the lowest medium-specific ERBSC).

Aquatic Mammals Step 3c - Table 3 receptor group ERBSC used (i.e., lower than the lowest medium-specific ERBSC).

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Minimum RAIS Sediment -The lowest sediment screening level from RAIS (2011) Ecological Benchmark Tool. http://rais.ornl.gov/tools/eco_search.php

Minimum RAIS Soil SL - The lowest soil screening level from RAIS (2011) Ecological Benchmark Tool. http://rais.ornl.gov/tools/eco_search.php

Minimum RAIS SW SL - The lowest surface water screening level from RAIS (2011) Ecological Benchmark Tool. http://rais.ornl.gov/tools/eco_search.php

NOAA ARCS TEL FW - The freshwater TEL from NOAA. (2008). Screening Quick Reference Tables (SQUIRTS). OR&R Report 08-1.

ORNL PRG - Efroymson, R.A., G.W. Suter II, B.E. Sample and D.S. Jones. 1997. Preliminary Remediation Goals for Ecological Endpoints. Oak Ridge National Laboratory, Oak Ridge, TN.ES/ER/TM-162/R2. August 1997.

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ORNL Plant TBVs - Efroymson, R.A., M.E. Will, G.W. Suter II, and A. C. Wooten. 1997. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision. Oak Ridge National Laboratory, Oak Ridge, N.ES/ER/TM-85/R3. November 1997.

Terrestrial Birds Step 3c -Table 3 receptor group ERBSC used (i.e., lower than the lowest medium-specific ERBSC).

Abbreviations:

2-MNAP - 2-methylnaphthalene

Eco-SSL - USEPA Ecological Soil Screening Level

FW - Freshwater

HMW - High molecular weight

LMW - Low molecular weight

NOAA - National Oceanic and Atmospheric Administration

NV - No value

ORNL - Oak Ridge National Laboratory

PAH - Polynuclear aromatic hydrocarbons

PRG - Preliminary remedial goal

TBV - Toxicity benchmark value

TEL - Threshold effects level

TABLE 2. LIST OF POTENTIALLY BIOACCUMULATIVE CHEMICALS

Chemical Name	Chemical Name	Chemical Name
Arsenic	Biphenyl	PCBs
Cadmium	Chlordane	Dioxins
Chromium	Chlopyrifos	Furans
Chromium VI	DDD	Heptachloronaphthalene
Copper	DDE	Hexachlorocyclohexane, alpha-
Lead	DDT	Hexachlorocyclohexane, beta-
Mercury, Methyl	Dacthal	Hexachlorocyclohexane, delta-
Nickel	Diazinon	Hexachlorocyclohexane, gamma
Selenium	Dicofol	Hexachloronaphthalene
Silver	Dieldrin	Octachloronaphthalene
Zinc	Disulfoton	Pentabromodiphelylether
Tributyltin	Endosulfan	Pentachloronaphthalene
Tetraethyltin	Endrin	Tetrachloronaphthalene
Pentachlorophenol	Ethion	Trichloronaphthalene
1,2,4,5-Tetrachlorobenzene	Ethalfluralin	
Benzo(a)pyrene	Heptachlor	
Fluoranthene	Kelthane	
Perylene	Mirex	
Pyrene	Oxadiazon	
	Parathion	
	Trifluralin	

From: Hoffman, E. 2003. Revisions to the Bioaccumulative Contaminants of Concern List. Washington State Department of Ecology. Dredged Material Management Program. Draft Issue Paper. April.

TABLE 3. RECEPTOR-GROUP
ECOLOGICAL RISK-BASED SCREENING CONCENTRATIONS

Analyte	Soil (mg/kg)																		
	Amphibians	Terrestrial Reptiles	Terrestrial Avian Carnivores		Terrestrial Avian Herbivores	Terrestrial Avian Omnivore/Invertivores		Terrestrial Invertebrates	Unspecified	Terrestrial Mammalian Omnivore/Carnivores				Terrestrial Mammalian Herbivores			Terrestrial Mammalian Invertivores	Terrestrial Plants	Terrestrial Life
	Wyoming Toad, Red-legged Frog	Western Garter Snake	American Kestrel	Loggerhead Shrike	Horned Lark	American Robin	Westen Meadowlark	Terrestrial Invertebrate Community	Terrestrial Life	Deer Mouse	Grasshopper Mouse	Long-Tailed Weasel	Red Fox	Prairie Vole	Pronghorn	Mule Deer	Masked Shrew	Terrestrial Plant Community	Lowest Terrestrial Soil RGERBSC
Inorganics & Metals																			
Arsenic	NV	NV	2.99E+02	4.06E+01	6.84E+01	5.66E+01	5.39E+01	6.00E+01	5.70E+00	4.92E+01	6.63E+01	7.91E+01	4.28E+02	1.62E+02	3.02E+02	3.82E+02	3.13E+01	9.90E+00	5.70E+00
Barium	NV	NV	3.51E+03	4.83E+02	3.41E+02	4.49E+02	4.78E+02	3.30E+02	1.04E+00	1.90E+03	4.41E+03	3.74E+03	2.02E+04	2.63E+03	6.91E+03	8.73E+03	2.27E+03	5.00E+02	1.04E+00
Cadmium	NV	NV	1.09E+00	2.24E-01	6.14E-01	3.63E-01	3.29E-01	2.00E+01	2.22E-03	2.08E-01	2.80E-01	2.75E-01	1.49E+00	6.89E-01	2.24E+00	2.83E+00	1.38E-01	4.00E+00	2.22E-03
Chromium	NV	NV	8.69E+01	2.91E+01	7.93E+01	4.69E+01	4.27E+01	4.00E-01	4.00E-01	6.52E+01	4.80E+01	1.90E+01	1.03E+02	3.52E+02	6.74E+02	8.51E+02	3.74E+01	1.00E+00	4.00E-01
Lead	NV	NV	4.18E+00	4.78E+00	6.48E+00	6.12E+00	5.99E+00	5.00E+02	5.37E-02	2.05E+01	8.85E+00	2.17E+00	1.18E+01	4.30E+01	1.35E+02	1.70E+02	1.70E+01	5.00E+01	5.37E-02
Mercury	NV	NV	4.57E-01	6.64E-02	3.71E-01	1.23E-01	1.07E-01	1.00E-01	1.00E-01	3.00E-01	4.27E-01	3.19E+00	1.72E+01	1.78E+00	5.77E+00	7.29E+00	1.73E-01	3.00E-01	6.64E-02
Selenium	NV	NV	6.26E-01	5.11E-01	2.71E+00	9.43E-01	8.17E-01	4.10E+00	2.76E-02	5.35E-01	2.17E-01	5.90E-02	3.19E-01	3.46E+00	1.01E+01	1.28E+01	3.04E-01	5.20E-01	2.76E-02
Silver	NV	NV	3.03E+01	4.18E+00	7.45E+01	8.63E+00	7.16E+00	5.00E+01	2.00E+00	3.02E+01	3.76E+01	4.82E+02	2.61E+03	1.58E+03	2.28E+03	2.88E+03	1.51E+01	2.00E+00	2.00E+00
SVOCs																			
1-Methylnaphthalene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	3.24E+00	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	3.24E+00
2-Methylnaphthalene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	3.24E+00	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	3.24E+00
Acenaphthene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	2.00E+01	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	2.00E+01	2.00E+01
Acenaphthylene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	6.82E+02	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	3.29E+01
Anthracene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	1.00E-01	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	1.00E-01
Benzo(a)anthracene	NV	NV	2.39E+00	3.29E-01	3.15E+00	6.51E-01	5.49E-01	NV	5.21E+00	2.30E+00	3.05E+00	5.63E+01	3.05E+02	2.94E+01	7.81E+01	9.87E+01	1.22E+00	NV	3.29E-01
Benzo(a)pyrene	NV	NV	2.39E+00	3.29E-01	2.75E+00	6.42E-01	5.44E-01	NV	1.00E-01	2.27E+00	3.05E+00	5.63E+01	3.05E+02	2.43E+01	6.68E+01	8.44E+01	1.22E+00	NV	1.00E-01
Benzo(b)fluoranthene	NV	NV	2.39E+00	3.29E-01	3.41E+00	6.55E-01	5.51E-01	NV	5.98E+01	2.32E+00	3.05E+00	5.63E+01	3.05E+02	3.30E+01	8.57E+01	1.08E+02	1.22E+00	NV	3.29E-01
Benzo(g,h,i)perylene	NV	NV	2.39E+00	3.29E-01	3.48E+00	6.56E-01	5.52E-01	NV	1.19E+02	2.32E+00	3.05E+00	5.63E+01	3.05E+02	3.41E+01	8.79E+01	1.11E+02	1.22E+00	NV	3.29E-01
Benzo(k)fluoranthene	NV	NV	2.39E+00	3.29E-01	3.51E+00	6.57E-01	5.52E-01	NV	1.48E+02	2.33E+00	3.05E+00	5.63E+01	3.05E+02	3.44E+01	8.86E+01	1.12E+02	1.22E+00	NV	3.29E-01
Chrysene	NV	NV	2.39E+00	3.29E-01	3.14E+00	6.51E-01	5.49E-01	NV	4.73E+00	2.30E+00	3.05E+00	5.63E+01	3.05E+02	2.93E+01	7.79E+01	9.83E+01	1.22E+00	NV	3.29E-01
Dibenz(a,h)anthracene	NV	NV	2.39E+00	3.29E-01	3.28E+00	6.53E-01	5.50E-01	NV	1.84E+01	2.31E+00	3.05E+00	5.63E+01	3.05E+02	3.12E+01	8.20E+01	1.04E+02	1.22E+00	NV	3.29E-01
Fluoranthene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	1.00E-01	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	1.00E-01
Fluorene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	3.00E+01	3.00E+01	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	3.00E+01
Indeno(1,2,3-cd)pyrene	NV	NV	2.39E+00	3.29E-01	3.47E+00	6.56E-01	5.52E-01	NV	1.09E+02	2.32E+00	3.05E+00	5.63E+01	3.05E+02	3.39E+01	8.76E+01	1.11E+02	1.22E+00	NV	3.29E-01
Naphthalene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	9.94E-02	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	9.94E-02
PAHs	NV	NV	2.06E+00	2.83E-01	3.84E-01	3.62E-01	3.54E-01	NV	1.00E+00	1.25E+00	2.61E+00	5.63E+01	3.05E+02	2.60E+00	8.34E+00	1.05E+01	1.04E+00	NV	2.83E-01
PAHs HMW	NV	NV	2.39E+00	3.29E-01	2.99E+00	6.48E-01	5.47E-01	1.80E+01	1.10E+00	2.29E+00	3.05E+00	5.63E+01	3.05E+02	2.73E+01	7.35E+01	9.29E+01	1.22E+00	NV	3.29E-01
PAHs LMW	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	2.90E+01	2.90E+01	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	2.90E+01
Phenanthrene	NV	NV	2.39E+02	3.29E+01	4.47E+01	4.22E+01	4.12E+01	NV	1.00E-01	1.33E+02	2.79E+02	6.01E+03	3.25E+04	2.78E+02	8.90E+02	1.12E+03	1.11E+02	NV	1.00E-01
Pyrene	NV	NV	2.06E+00	2.83E-01	3.84E-01	3.62E-01	3.54E-01	NV	1.00E-01	1.25E+00	2.61E+00	5.63E+01	3.05E+02	2.60E+00	8.34E+00	1.05E+01	1.04E+00	NV	1.00E-01
VOCs																			
Benzene	NV	NV	No TRV	No TRV	No TRV	No TRV	No TRV	NV	5.00E-02	6.93E+03	6.19E+03	2.41E+03	1.31E+04	1.18E+04	1.22E+04	1.54E+04	4.90E+03	NV	5.00E-02
Ethylbenzene	NV	NV	No TRV	No TRV	No TRV	No TRV	No TRV	NV	5.00E-02	2.55E+03	2.28E+03	8.89E+02	4.81E+03	4.34E+03	4.50E+03	5.69E+03	1.80E+03	NV	5.00E-02
Toluene	NV	NV	No TRV	No TRV	No TRV	No TRV	No TRV	NV	5.00E-02	6.83E+03	6.11E+03	2.38E+03	1.29E+04	1.16E+04	1.21E+04	1.52E+04	4.83E+03	2.00E+02	5.00E-02
Xylene	NV	NV	No TRV	No TRV	No TRV	No TRV	No TRV	NV	5.00E-02	5.52E+02	4.93E+02	1.92E+02	1.04E+03	9.38E+02	9.74E+02	1.23E+03	3.90E+02	NV	5.00E-02

TABLE 3. RECEPTOR-GROUP
ECOLOGICAL RISK-BASED SCREENING CONCENTRATIONS

Analyte	Sediment (mg/kg)										
	Benthic Life	Amphibians	Aquatic Avian Carnivores/Piscivore		Freshwater Avian Omnivore /Invertivore		Freshwater Avian Herbivore	Freshwater Mammalian Omnivore/ Carnivore	Freshwater Mammalian Herbivore		Freshwater Sediment
	Benthic Invertebrate Community	Wyoming Toad, Red-legged Frog	Kingfisher	Northern Harrier	Western Sandpiper	Red-Winged Blackbird	Mallard Duck	River Otter	Meadow Vole	Raccoon	Lowest Freshwater Sediment RGERBSC
Inorganics & Metals											
Arsenic	5.90E+00	NV	2.43E-02	9.33E+02	1.42E+01	1.68E+01	7.35E+02	3.57E-02	1.04E+02	1.75E+01	2.43E-02
Barium	2.00E+01	NV	4.07E-02	8.23E+03	1.32E+02	1.42E+02	2.25E+03	3.20E-01	1.79E+03	7.90E+02	4.07E-02
Cadmium	5.83E-01	NV	2.00E-03	2.88E+00	2.82E+00	3.15E+00	7.04E+01	3.32E-03	1.20E+01	3.68E+00	2.00E-03
Chromium	2.60E+01	NV	1.72E-01	1.15E+02	3.20E+01	3.79E+01	1.78E+03	4.93E-01	4.59E+02	7.74E+01	1.72E-01
Lead	3.02E+01	NV	1.64E+00	4.13E+00	1.38E+01	1.58E+01	4.61E+02	1.69E+02	4.10E+02	1.03E+02	1.64E+00
Mercury	1.30E-01	NV	4.99E-05	7.86E+00	4.67E+00	4.68E+00	5.27E+01	3.50E-04	3.74E+01	2.35E+01	4.99E-05
Selenium	2.00E+00	NV	2.76E-03	6.55E-01	1.84E+00	2.21E+00	1.48E+02	4.33E-03	2.15E+01	2.45E+00	2.76E-03
Silver	5.00E-01	NV	2.85E-02	8.87E+02	1.28E+01	1.15E+01	8.84E+01	2.68E-01	8.55E+01	7.64E+01	2.85E-02
SVOCs											
1-Methylnaphthalene	2.02E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	2.02E-02
2-Methylnaphthalene	2.02E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	2.02E-02
Acenaphthene	6.70E-03	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	6.70E-03
Acenaphthylene	5.87E-03	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	5.87E-03
Anthracene	1.00E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	1.00E-02
Benzo(a)anthracene	1.57E-02	NV	4.95E-04	1.00E+02	7.75E-01	9.39E-01	9.03E+01	4.81E-03	8.28E+01	6.46E+00	4.95E-04
Benzo(a)pyrene	3.19E-02	NV	4.95E-04	1.00E+02	7.75E-01	9.44E-01	1.17E+02	4.81E-03	1.04E+02	6.49E+00	4.95E-04
Benzo(b)fluoranthene	2.72E-02	NV	4.95E-04	1.00E+02	7.75E-01	9.44E-01	1.18E+02	4.81E-03	1.05E+02	6.49E+00	4.95E-04
Benzo(g,h,i)perylene	1.70E-01	NV	4.95E-04	1.00E+02	7.75E-01	9.44E-01	1.17E+02	4.81E-03	1.04E+02	6.49E+00	4.95E-04
Benzo(k)fluoranthene	2.72E-02	NV	4.95E-04	1.00E+02	7.75E-01	9.44E-01	1.17E+02	4.81E-03	1.04E+02	6.49E+00	4.95E-04
Chrysene	2.68E-02	NV	4.95E-04	1.00E+02	8.80E-01	1.06E+00	9.03E+01	4.81E-03	8.28E+01	7.31E+00	4.95E-04
Dibenz(a,h)anthracene	6.22E-03	NV	4.95E-04	1.00E+02	7.75E-01	9.48E-01	1.51E+02	4.81E-03	1.31E+02	6.52E+00	4.95E-04
Fluoranthene	3.15E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.07E+02	5.84E+03	5.13E-01	5.11E+03	6.76E+02	3.15E-02
Fluorene	1.00E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	1.00E-02
Indeno(1,2,3-cd)pyrene	1.70E-02	NV	4.95E-04	1.00E+02	7.75E-01	9.47E-01	1.41E+02	4.81E-03	1.23E+02	6.51E+00	4.95E-04
Naphthalene	1.47E-02	NV	5.76E-02	1.17E+04	9.02E+01	8.72E+01	8.57E+02	5.13E-01	7.85E+02	5.49E+02	1.47E-02
PAHs	2.64E-01	NV	4.95E-04	1.00E+02	7.75E-01	9.44E-01	1.17E+02	4.81E-03	1.04E+02	6.49E+00	4.95E-04
PAHs HMW	1.90E-01	NV	4.95E-04	1.00E+02	7.75E-01	9.44E-01	1.17E+02	4.81E-03	1.04E+02	6.49E+00	4.95E-04
PAHs LMW	7.60E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	5.76E-02
Phenanthrene	1.87E-02	NV	5.76E-02	1.17E+04	9.02E+01	1.05E+02	3.50E+03	5.13E-01	3.13E+03	6.59E+02	1.87E-02
Pyrene	4.43E-02	NV	4.95E-04	1.00E+02	7.75E-01	8.99E-01	3.01E+01	4.81E-03	2.93E+01	6.18E+00	4.95E-04
VOCs											
Benzene	5.70E-02	NV	No TRV	No TRV	No TRV	No TRV	No TRV	7.25E+00	6.91E+01	7.74E+01	5.70E-02
Ethylbenzene	1.75E-01	NV	No TRV	No TRV	No TRV	No TRV	No TRV	3.16E-01	9.60E+01	6.57E+00	1.75E-01
Toluene	5.00E-02	NV	No TRV	No TRV	No TRV	No TRV	No TRV	2.04E+00	1.50E+02	3.63E+01	5.00E-02
Xylene	2.50E-02	NV	No TRV	No TRV	No TRV	No TRV	No TRV	6.15E-02	2.21E+01	1.30E+00	2.50E-02

TABLE 3. RECEPTOR-GROUP
ECOLOGICAL RISK-BASED SCREENING CONCENTRATIONS

Analyte	Surface Water (mg/L)											
	Freshwater Aquatic Life	Aquatic Avian Carnivores/Piscivore		Freshwater Avian Omnivore /Invertivore		Freshwater Avian Herbivore	Aquatic Mammalian Carnivores / Omnivore	Freshwater Mammalian Herbivore		Amphibians	Freshwater Reptiles	Freshwater Life
	Cutthroat Trout; Aquatic invertebrate community; Aquatic/riparian plant community	Kingfisher	Northern Harrier	Western Sandpiper	Red-Winged Blackbird	Mallard Duck	River Otter	Meadow Vole	Raccoon	Wyoming Toad, Red-legged Frog	Western Pond Turtle	Lowest Freshwater SW RGERBSC
Inorganics & Metals												
Arsenic	3.10E-03	3.93E-03	2.62E+01	1.02E+01	1.23E+01	3.75E+01	1.82E-03	7.13E+00	8.26E+00	NV	NV	1.82E-03
Barium	3.90E-03	6.57E-03	2.44E+02	9.44E+01	1.15E+02	3.48E+02	1.64E-02	3.55E+02	4.11E+02	NV	NV	3.90E-03
Cadmium	1.30E-05	3.24E-04	1.72E+01	6.67E+00	8.10E+00	2.46E+01	1.70E-04	5.28E+00	6.12E+00	NV	NV	1.30E-05
Chromium	2.66E-04	2.79E-02	3.12E+01	1.21E+01	1.47E+01	4.45E+01	2.52E-02	1.64E+01	1.91E+01	NV	NV	2.66E-04
Lead	3.50E-04	2.32E+00	1.91E+01	7.40E+00	8.99E+00	2.73E+01	8.80E+00	3.22E+01	3.73E+01	NV	NV	3.50E-04
Mercury	1.30E-06	8.06E-06	5.27E+00	2.04E+00	2.48E+00	7.54E+00	1.79E-05	6.85E+00	7.94E+00	NV	NV	1.30E-06
Selenium	1.00E-03	4.49E-04	3.40E+00	1.32E+00	1.60E+00	4.86E+00	2.22E-04	9.80E-01	1.14E+00	NV	NV	2.22E-04
Silver	1.20E-05	4.60E-03	2.37E+01	9.16E+00	1.11E+01	3.38E+01	1.37E-02	4.13E+01	4.78E+01	NV	NV	1.20E-05
SVOCs												
1-Methylnaphthalene	2.10E-03	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	2.10E-03
2-Methylnaphthalene	4.70E-03	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	4.70E-03
Acenaphthene	5.80E-03	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	5.80E-03
Acenaphthylene	4.84E+00	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	9.31E-03
Anthracene	1.20E-05	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	1.20E-05
Benzo(a)anthracene	1.80E-05	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	1.80E-05
Benzo(a)pyrene	1.40E-05	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	1.40E-05
Benzo(b)fluoranthene	9.07E-03	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	8.00E-05
Benzo(g,h,i)perylene	7.64E-03	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	8.00E-05
Benzo(k)fluoranthene	9.07E-03	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	8.00E-05
Chrysene	7.00E-03	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	8.00E-05
Dibenz(a,h)anthracene	5.00E-03	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	8.00E-05
Fluoranthene	4.00E-05	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	4.00E-05
Fluorene	3.00E-03	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	3.00E-03
Indeno(1,2,3-cd)pyrene	4.31E-03	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	8.00E-05
Naphthalene	1.10E-03	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	1.10E-03
PAHs	1.20E-05	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	1.20E-05
PAHs HMW	1.40E-05	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	1.40E-05
PAHs LMW	1.20E-05	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	1.20E-05
Phenanthrene	4.00E-04	9.31E-03	2.73E+02	1.06E+02	1.28E+02	3.90E+02	2.62E-02	4.50E+02	5.21E+02	NV	NV	4.00E-04
Pyrene	2.50E-05	8.00E-05	2.34E+00	9.07E-01	1.10E+00	3.35E+00	2.46E-04	4.22E+00	4.88E+00	NV	NV	2.50E-05
VOCs												
Benzene	2.10E-02	No TRV	No TRV	No TRV	No TRV	No TRV	3.71E-01	1.81E+02	2.09E+02	NV	NV	2.10E-02
Ethylbenzene	7.30E-03	No TRV	No TRV	No TRV	No TRV	No TRV	1.62E-02	6.65E+01	7.71E+01	NV	NV	7.30E-03
Toluene	2.00E-03	No TRV	No TRV	No TRV	No TRV	No TRV	1.04E-01	1.78E+02	2.07E+02	NV	NV	2.00E-03
Xylene	1.80E-03	No TRV	No TRV	No TRV	No TRV	No TRV	3.15E-03	1.44E+01	1.67E+01	NV	NV	1.80E-03