Table 2 - Nova Scotia Tier I Environmental Quality Standards (EQS) for Sediment (mg/kg)

Media		Sediment	
Pathway		Freshwater Sediment	Marine Sediment
Parameter	Units	Value	Value
Inorganic Parameters			
Aluminum	mg/kg	-	-
Antimony	mg/kg	25	25
Arsenic	mg/kg	17	41.6
Barium	mg/kg	-	130
Beryllium	mg/kg	-	-
Boron (Total)	mg/kg	-	-
Cadmium	mg/kg	3.5	4.2
Chromium (hexavalent)	mg/kg	-	-
Chromium (total)	mg/kg	90	160
Cobalt	mg/kg	-	-
Copper	mg/kg	197	108
Cyanide	mg/kg	-	-
Iron	mg/kg	43,766	-
Lead	mg/kg	91.3	112
Manganese	mg/kg	1100	-
Mercury (total)	mg/kg	0.486	0.7
Molybdenum	mg/kg	-	-
Nickel	mg/kg	75	50
Selenium	mg/kg	2	2
Silver	mg/kg	0.5	2.2
Strontium	mg/kg	-	-
Thallium	mg/kg	-	-
Tin	mg/kg	-	48
Uranium	mg/kg	-	-
Vanadium	mg/kg	-	-
Zinc	mg/kg	315	271
General Chemistry Parameters			
Chloride	mg/kg	-	-
Sodium	mg/kg	-	-
Petroleum Hydrocarbon (PHC) Parameters			
Benzene	mg/kg	1.2	1.2
Toluene	mg/kg	1.4	1.4
Ethylbenzene	mg/kg	1.2	1.2
Xylene	mg/kg	1.3	1.3
Modified TPH (Gas)	mg/kg	15	15
Modified TPH (Fuel)	mg/kg	25	25
Modified TPH (Lube)	mg/kg	43	43
MTBE	mg/kg	-	-
Polycyclic Aromatic Hydrocarbons (PAH) Parameters			
Naphthalene	mg/kg	0.391	0.391
1 - Methylnaphthalene	mg/kg	0.201	0.201
2 - Methylnaphthalene	mg/kg	0.201	0.201
Acenaphthene	mg/kg	0.0889	0.0889
Acenaphthylene	mg/kg	0.128	0.128
Anthracene	mg/kg	0.245	0.245
Fluoranthene	mg/kg	2.355	1.494

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Media		Sediment	
Pathway		Freshwater Sediment	Marine Sediment
Parameter	Units	Value	Value
Fluorene	mg/kg	0.144	0.144
Phenanthrene	mg/kg	0.515	0.544
Pyrene	mg/kg	0.875	1.398
Benz[a]anthracene	mg/kg	0.385	0.693
Benzo[a]pyrene	mg/kg	0.782	0.763
Benzo[b,j,k]fluoranthene isomers	mg/kg	13.4	4.5
Benzo[g,h,i]perylene	mg/kg	0.32	0.78
Chrysene	mg/kg	0.862	0.846
Dibenz[a,h]anthracene	mg/kg	0.135	0.135
Indeno[1,2,3-c,d]pyrene	mg/kg	3.2	0.88
Volatile Organic Compound (VOC) Parameters			
Bromodichloromethane	mg/kg	-	-
Bromoform	mg/kg	0.65	-
Bromomethane	mg/kg	-	-
Carbon Tetrachloride (Tetrachloromethane)	mg/kg	1.2	-
Chlorobenzene	mg/kg	0.41	-
Chloroethane	mg/kg	-	-
Chloroform	mg/kg	-	-
Chloromethane	mg/kg	-	-
Dibromochloromethane	mg/kg	-	-
1,2-Dichlorobenzene	mg/kg	0.33	0.023
1,3-Dichlorobenzene	mg/kg	1.7	-
1,4-Dichlorobenzene	mg/kg	0.34	0.09
1,1-Dichloroethane	mg/kg	-	-
1,2-Dichloroethane	mg/kg	-	-
1,1-Dichloroethylene	mg/kg	-	-
cis-1,2-Dichloroethylene	mg/kg	-	-
trans-1,2-Dichloroethylene	mg/kg	-	-
1,2-Dichloropropane	mg/kg	-	-
1,3-Dichloropropene	mg/kg	-	-
Ethylene Dibromide	mg/kg	-	-
Methylene Chloride (Dichloromethane)	mg/kg	-	-
Styrene	mg/kg	-	-
1,1,1,2-Tetrachloroethane	mg/kg	-	-
1,1,2,2-Tetrachloroethane	mg/kg	1.4	-
Tetrachloroethylene	mg/kg	0.41	-
1,1,1-Trichloroethane	mg/kg	0.03	-
1,1,2-Trichloroethane	mg/kg	-	-
Trichloroethylene	mg/kg	0.22	-
Vinyl Chloride	mg/kg	-	-
Pesticides			
Aldicarb	mg/kg	-	-
Aldrin	mg/kg	0.08	0.005
Atrazine	mg/kg	-	-
Azinphos-methyl	mg/kg	-	-
Bendiocarb	mg/kg	-	-
Bromoxynil	mg/kg	-	-

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Media		Sediment	
Pathway		Freshwater Sediment	Marine Sediment
Parameter	Units	Value	Value
Carbaryl	mg/kg	-	-
Carbofuran	mg/kg	-	-
Chlorothalonil	mg/kg	-	-
Chlorpyrifos	mg/kg	-	-
Cyanazine	mg/kg	-	-
2,4-D	mg/kg	-	-
DDT	mg/kg	0.00477	0.00477
Diazinon	mg/kg	0.0074	-
Dicamba	mg/kg	-	-
Dichlorfop-methyl	mg/kg	-	-
Dieldrin	mg/kg	0.00667	0.0043
Dimethoate	mg/kg	-	-
Dinoseb	mg/kg	-	-
Diquat	mg/kg	-	-
Diuron	mg/kg	-	-
Endosulfan	mg/kg	0.006	-
Endrin	mg/kg	0.0624	0.0624
Glyphosate	mg/kg	-	-
Heptachlor	mg/kg	0.00274	0.00274
Lindane*	mg/kg	0.00138	0.00099
Linuron	mg/kg	-	-
Malathion*	mg/kg	0.00067	-
MCPA	mg/kg	-	-
Methoxychlor	mg/kg	0.019	-
Metolachlor	mg/kg	-	-
Metribuzin	mg/kg	-	-
Paraquat	mg/kg	-	-
Parathion	mg/kg	-	-
Phorate	mg/kg	-	-
Picloram	mg/kg	-	-
Simazine	mg/kg	-	-
Tebuthiuron	mg/kg	-	-
Terbufos	mg/kg	-	-
Toxaphene*	mg/kg	0.0001	0.0001
Triallate	mg/kg	-	-
Trifluralin	mg/kg	-	-
PFAS Substances			
Perfluorooctane sulfonate (PFOS)	mg/kg	-	-
Perfluorooctanoic acid (PFOA)	mg/kg	-	-
Perfluorobutanoate (PFBA)	mg/kg	-	-
Perfluorobutanesulfonate (PFBS)	mg/kg	-	-
Perfluorohexanesulfonate (PFHxS)	mg/kg	-	-
Perfluoropentanoate (PFPeA)	mg/kg	-	-
Perfluorohexanoate (PFHxA)	mg/kg	-	-
Perfluoroheptanoate (PFHpA)	mg/kg	-	-
Perfluorononanoate (PFNA)	mg/kg	-	-

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Media		Sediment	
Pathway		Freshwater Sediment	Marine Sediment
Parameter	Units	Value	Value
Other Parameters			
Polychlorinated Biphenyls (Total PCBs)	mg/kg	0.277	0.189
Dioxins and Furans (TEQ)	ng·TEQ/kg	21.5	21.5
Pentachlorophenol (PCP)	mg/kg	0.4	0.36
Organotins - Tributyltin	mg/kg	0.07	0.07
Ethylene Glycol	mg/kg	-	-
Propylene Glycol	mg/kg	-	-
Phenol	mg/kg	-	0.42

Notes:

All values expressed in mg/kg (dry weight bulk sediment concentration), unless otherwise noted.

"-" indicates no guideline available.

* indicates that the benchmark value is below currently achievable analytical RDLs. For sites with potential sediment contamination in relation to this substance, additional sediment assessment and/or consultation with provincial regulators should occur to confirm this substance is not likely to be present at levels that could adversely affect sediment biota.

For those organic parameters where partitioning to sediment organic carbon (OC) was considered in the guideline derivation process by the source agency, a default sediment OC content of 1% was assumed (i.e., Foc = 0.01). Such guideline values may be adjustable as a function of sediment OC content. The orginal sediment quality guideline derivation documentation should be consulted to verify the appropriateness of this adjustment (not all sediment quality guidelines for organics are adjustable on the basis of sediment OC), and the appropriate method by which to make such an adjustment, as well as any limits placed by the source agency on such adjustments (For example, Modified TPH dependant on sediment OC; consult Atlantic RBCA V4 User Guidance - Appendix 2 for applicability/application).