Table 1A - Nova Scotia Tier I Environmental Quality Standards (EQS) for Soil - All Land Uses; Potable Groundwater Condition (mg/kg)

Land Use	Agricultural		Residential / Parkland		Commercial		Industrial	
Parameter	**Fine**	**Coarse**	**Fine**	**Coarse**	**Fine**	**Coarse**	**Fine**	**Coarse**
Inorganic Parameters								
Aluminum	15,400	15,400	15,400	15,400	15,400	15,400	220,000	220,000
Antimony	7.5	7.5	7.5	7.5	7.5	7.5	63	63
Arsenic	10	10	10	10	10	10	10	10
Barium	350	350	350	350	350	350	350	350
Beryllium	1	1	1	1	1	1	1	1
Boron (Total)	120	120	4300	4300	4300	4300	24,000	24,000
Boron (mg/L in saturated paste extract)	3.3	3.3	65	118	65	118	65	118
Cadmium	1	1	1	1	1	1	1	1
Chromium (hexavalent)	0.4	0.4	60	60	60	60	60	60
Chromium (total)	64	64	220	220	630	630	6700	6700
Cobalt	20	20	22	22	22	22	25	25
Copper	63	63	250	250	250	250	250	250
Cyanide	0.9	0.9	6.5	6.5	6.5	6.5	6.5	6.5
Iron	11,000	11,000	11,000	11,000	11,000	11,000	164,000	164,000
Lead	70	70	120	120	120	120	120	120
Manganese	360	360	360	360	360	360	2000	2000
Mercury (total)	6.6	6.6	6.6	6.6	24	24	99	99
Molybdenum	4	4	15	15	15	15	15	15
Nickel	45	45	70	70	70	70	70	70
Selenium	1	1	1	1	1	1	1	1
Silver	20	20	77	77	77	77	490	490
Strontium	9400	9400	9400	9400	9400	9400	140,000	140,000
Thallium	1	1	1	1	1	1	1	1
Tin	5	5	9400	9400	9400	9400	140,000	140,000
Uranium	23	23	23	23	30	30	30	30
Vanadium	18	18	39	39	39	39	100	100
Zinc	200	200	200	200	200	200	200	200
General Chemistry Parameters								
Chloride	100	100	100	100	100	100	100	100
Sodium	200	200	15,000	15,000	15,000	15,000	15,000	15,000
Petroleum Hydrocarbons (PHC) Parameters								
Benzene	0.094	0.021	0.094	0.021	0.094	0.042	0.094	0.042
Toluene	0.74	0.35	0.74	0.35	0.74	0.35	0.74	0.35
Ethylbenzene	0.089	0.043	0.089	0.043	0.089	0.043	0.089	0.043
Xylene	1.5	0.73	1.5	0.73	1.5	0.73	1.5	0.73
Modified TPH (Gas)	210	75	1900	75	1900	940	1900	940
Modified TPH (Fuel)	150	150	4700	320	4700	1800	4700	1800
Modified TPH (Lube)	1,300	300	10,000	1800	10,000	10,000	10,000	10,000
Modified TPH F1 (C6-C10)	210	75	-	-	-	-	-	-
Modified TPH F2 (C10-C16)	150	150	-	-	-	-	-	-
Modified TPH F3 (C16-C34)	1,300	300	-	-	-	-	-	-
Modified TPH F4 (C34-C50)	5,600	2800	-	-	-	-	-	-
MTBE	0.044	0.046	0.044	0.046	0.044	0.062	0.044	0.062
Polycyclic Aromatic Hydrocarbons (PAH) Parameters								
Non-Carcinogenic PAH Compounds								
Naphthalene	0.75	0.6	28	2.2	28	25	28	25
1 - Methylnaphthalene	42	30	42	30	42	30	42	30
2 - Methylnaphthalene	42	30	42	30	42	30	42	30
Acenaphthene	21.5	21.5	5300	3900	8000	8000	75,000	43,000
Acenaphthylene	32	4.5	32	4.5	32	23	32	23
Anthracene	3	3	24,000	24,000	37,000	37,000	300,000	300,000

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Land Use	Agricultural		Residential / Parkland		Commercial		Industrial	
Parameter	**Fine**	**Coarse**	**Fine**	**Coarse**	**Fine**	**Coarse**	**Fine**	**Coarse**
Fluoranthene	15.4	15.4	3500	3500	5300	5300	50,000	50,000
Fluorene	15.4	15.4	2700	2700	4100	4100	39,000	39,000
Phenanthrene	7.8	6.2	24	17	24	17	24	17
Pyrene	7.7	7.7	2100	2100	3200	3200	30,000	30,000
Carcinogenic PAH Compounds								
BaP Total Potency Equivalents	5.3 and IACR<1.0	5.3 and IACR<1.0	5.3 and IACR<1.0	5.3 and IACR<1.0	5.3 and IACR<1.0	5.3 and IACR<1.0	5.3 and IACR<1.0	5.3 and IACR<1.0
Benz[a]anthracene	0.63	0.5	6.4	12	6.4	12	6.4	12
Benzo[a]pyrene	0.6	0.6	7	14	7	14	7	14
Benzo[b,j,k]fluoranthene isomers	6.2	6.2	0.64	1.2	0.64	1.2	0.64	1.2
Benzo[g,h,i]perylene	8.3	6.6	130	250	130	250	130	250
Chrysene	6.2	6.2	40	78	40	78	40	78
Dibenz[a,h]anthracene	4.4	8.8	4.4	8.8	4.4	8.8	4.4	8.8
Indeno[1,2,3-c,d]pyrene	0.48	0.38	51	98	51	98	51	98
Volatile Organic Compound (VOC) Parameters								
Bromodichloromethane	1.9	1.5	1.9	1.5	1.9	1.5	1.9	1.5
Bromoform	2.6	2.3	2.6	2.3	2.9	2.3	2.9	2.3
Bromomethane*	0.0034	0.00034	0.0034	0.00034	0.012	0.0016	0.012	0.0016
Carbon Tetrachloride* (Tetrachloromethane)	0.013	0.00057	0.013	0.00057	0.037	0.0069	0.037	0.0069
Chlorobenzene	0.39	0.018	0.39	0.018	0.61	0.22	0.61	0.22
Chloroethane	-	-	-	-	-	-	-	-
Chloroform	0.22	0.011	0.22	0.011	0.53	0.14	0.53	0.14
Chloromethane	-	-	-	-	-	-	-	-
Dibromochloromethane	0.91	0.27	0.91	0.27	0.91	1.5	0.91	1.5
1,2-Dichlorobenzene	0.097	0.18	0.097	0.18	0.097	0.18	0.097	0.18
1,3-Dichlorobenzene	6	4.8	34	24	34	24	34	24
1,4-Dichlorobenzene	0.051	0.098	0.051	0.098	0.051	0.098	0.051	0.098
1,1-Dichloroethane	0.6	0.47	0.6	0.47	0.6	0.47	0.6	0.47
1,2-Dichloroethane*	0.025	0.0027	0.025	0.0027	0.025	0.033	0.025	0.033
1,1-Dichloroethylene	0.38	0.039	0.38	0.039	0.38	0.17	0.38	0.17
cis-1,2-Dichloroethylene*	0.52	0.019	0.52	0.019	1.0	0.24	1.0	0.24
trans-1,2-Dichloroethylene*	0.56	0.02	0.56	0.02	1.4	0.25	1.4	0.25
1,2-Dichloropropane	0.085	0.01	0.085	0.01	0.68	0.16	0.68	0.16
1,3-Dichloropropene	0.81	0.27	0.81	0.27	0.81	0.59	0.81	0.59
Ethylene Dibromide*	0.0054	0.0048	0.0054	0.0048	0.0062	0.0048	0.0062	0.0048
Methylene Chloride (Dichloromethane)	0.21	0.32	0.21	0.32	0.21	0.32	0.21	0.32
Styrene	19	16	19	16	66	42	66	42
1,1,1,2-Tetrachloroethane	0.2	0.15	0.2	0.15	0.2	0.15	0.2	0.15
1,1,2,2-Tetrachloroethane	0.096	0.045	0.096	0.045	0.19	0.14	0.19	0.14
Tetrachloroethylene*	0.39	0.016	0.39	0.016	0.57	0.2	0.57	0.2
1,1,1-Trichloroethane	3.4	0.38	3.4	0.38	27	6.1	27	6.1
1,1,2-Trichloroethane	0.18	0.3	0.18	0.3	0.73	0.42	0.73	0.42
Trichloroethylene*	0.02	0.00081	0.02	0.00081	0.13	0.01	0.13	0.01
Vinyl Chloride*	0.0087	0.00031	0.0087	0.00031	0.06	0.0079	0.06	0.016
Pesticides								
Aldicarb	0.041	0.065	0.041	0.065	0.041	0.065	0.041	0.065
Aldrin	0.0024	0.0024	3.4	3.4	5.1	5.1	5.9	11
Atrazine	0.1	0.17	0.1	0.19	0.1	0.19	0.1	0.19
Azinphos-methyl	0.41	0.75	0.41	0.75	0.41	0.75	0.41	0.75
Bendiocarb	0.14	0.21	0.14	0.21	0.14	0.21	0.14	0.21
Bromoxynil	0.18	0.35	0.18	0.35	0.18	0.35	0.18	0.35
Carbaryl	1.9	3.6	1.9	3.6	1.9	3.6	1.9	3.6
Carbofuran	0.68	1.2	0.68	1.2	0.68	1.2	0.68	1.2

Table 1A - Nova Scotia Tier I Environmental Quality Standards (EQS) for Soil - All Land Uses; Potable Groundwater Condition (mg/kg)

Land Use	Agricultural		Residential / Parkland		Commercial		Industrial	
Parameter	**Fine**	**Coarse**	**Fine**	**Coarse**	**Fine**	**Coarse**	**Fine**	**Coarse**
Chlorothalonil	27	53	27	53	27	53	27	53
Chlorpyrifos	49	95	49	95	49	95	49	95
Cyanazine	0.12	0.21	0.12	0.21	0.12	0.21	0.12	0.21
2,4-D	0.43	0.69	0.43	0.67	0.43	0.67	0.43	0.67
DDT	0.7	0.7	220	220	340	340	1600	1600
Diazinon	2.2	4.2	2.2	4.2	2.2	4.2	2.2	4.2
Dicamba	0.5	0.79	0.5	0.79	0.5	0.79	0.5	0.79
Dichlorfop-methyl	22	22	22	22	34	34	160	160
Dieldrin	0.00096	0.00096	0.59	1.1	0.59	1.1	0.59	1.1
Dimethoate	0.077	0.12	0.077	0.12	0.077	0.12	0.077	0.12
Dinoseb	2.8	5.5	2.8	5.5	2.8	5.5	2.8	5.5
Diquat	11	21	11	21	11	21	11	21
Diuron	1.9	3.5	1.9	3.5	1.9	3.5	1.9	3.5
Endosulfan	0.023	0.023	99	190	99	190	99	190
Endrin	0.0011	0.0011	2.4	4.7	2.4	4.7	2.4	4.7
Glyphosate	0.95	1.4	0.95	1.4	0.95	1.4	0.95	1.4
Heptachlor	0.039	0.012	0.039	0.012	0.039	0.076	0.039	0.076
Lindane	0.31	0.6	0.31	0.6	0.31	0.6	0.31	0.6
Linuron	0.56	1.1	0.56	1.1	0.56	1.1	0.56	1.1
Malathion	0.82	1.3	0.82	1.3	0.82	1.3	0.82	1.3
MCPA	0.42	0.66	0.42	0.66	0.42	0.66	0.42	0.66
Methoxychlor	0.13	0.13	3500	3500	5300	5300	50,000	50,000
Metolachlor	1.3	2.4	1.3	2.4	1.3	2.4	1.3	2.4
Metribuzin	7.8	15	7.8	15	7.8	15	7.8	15
Paraquat	1.1	2.2	1.1	2.2	1.1	2.2	1.1	2.2
Parathion	7.2	14	7.2	14	7.2	14	7.2	14
Phorate	0.075	0.14	0.075	0.14	0.075	0.14	0.075	0.14
Picloram	0.64	0.94	0.64	0.94	0.64	0.94	0.64	0.94
Simazine	0.14	0.25	0.14	0.25	0.14	0.25	0.14	0.25
Tebuthiuron	0.046	0.046	2.5	3.7	2.5	3.7	2.5	3.7
Terbufos	0.08	0.015	0.08	0.15	0.08	0.15	0.08	0.15
Toxaphene	3.3	4.8	3.3	4.8	3.3	6.3	3.3	6.3
Triallate	16	31	16	31	16	31	16	31
Trifluralin	110	110	110	110	160	160	770	770
PFAS Substances								
Perfluorooactanoic acid (PFOA) [3]	0.7	0.7	0.7	0.7	1.05	1.05	9.94	9.94
Perfluorooctane sulfonate (PFOS) [3]	0.01	0.01	0.35	0.35	0.35	0.35	0.35	0.35
Perfluorobutanoate (PFBA)	114	114	114	114	173	173	1630	1630
Perfluorobutane sulfonate (PFBS)	61	61	61	61	92	92	872	872
Perfluorohexanesulfonate (PFHxS)	2.3	2.3	2.3	2.3	3.5	3.5	33	33
Perfluoropentanoate (PFPeA)	0.8	0.8	0.8	0.8	1.21	1.21	11.41	11.41
Perfluorohexanoate (PFHxA)	0.8	0.8	0.8	0.8	1.21	1.21	11.41	11.41
Perfluoroheptanoate (PFHpA)	0.8	0.8	0.8	0.8	1.21	1.21	11.41	11.41
Perfluorononanoate (PFNA)	0.08	0.08	0.08	0.08	0.13	0.13	1.2	1.2
Other Parameters								
Polychlorinated Biphenyl (Total PCB)	1.3	1.3	22	22	33	33	160	160
Dioxins and Furans (TEQ) (mg TEQ/kg)	0.000004	0.000004	0.000004	0.000004	0.000004	0.000004	0.000004	0.000004
Pentachlorophenol (PCP)	0.013	0.013	7.6	7.6	7.6	7.6	7.6	7.6
Organotins - Tributyltin	3.8	3.8	3.8	3.8	3.8	3.8	50	50
Ethylene Glycol	60	68	60	68	60	68	60	68
Propylene Glycol	-	-	-	-	-	-	-	-
Phenol	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8

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Land Use	Agricultural		Residential / Parkland		Commercial		Industrial	
Parameter	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse

Notes:

[1] All values are in units of mg/kg unless otherwise noted.

[2] "-" indicates no guideline available; In the Tier I EQS soil tables, the Upper Concentration Limit (UCL) of 10,000 mg/kg in soil has been applied to any petroleum hydrocrbon calculated concentration that is >RES (residual concentration) or exceeds 10,000 mg/kg, following Atlantic RBCA guidance; IACR means the CCME Index of Additive Cancer Risk for carcinogenic PAHs.

[3] When PFOS and PFOA co-occur in soil or groundwater, it is recommended that both chemicals be considered together when comparing to screening values. Refer to Health Canada's "Summary Table: Health Canada Draft Guidelines, Screening Values and Toxicological Reference Values (TRVs) for Perfluoroalkyl Substances (PFAS). May, 2019." for specific guidance on calculating PFOS/PFOA ratios and hazard indices.

* Indicates the derived guideline value is below currently achievable analytical RDLs (the value is not reliably attainable with current analytical methods). For sites where VOCs are identified as a contaminant of potential concern and where the indoor air guidelines are not achievable for the VOC parameters (parent and associated daughter products), soil vapour or subslab vapour testing is required to determine potential exposures. In any such testing program, the site professional must consult with and abide by the guidance provided in ARBCA (2021), with respect to CVOCs, and the Atlantic RBCA Guidance for Vapour Intrusion Assessments posted at: www.atlanticrbca.com/technical-documents/.