

Atlantic RBCA - Ecological Tier II Pathway-Specific Standards (PSS) for Soil - Agricultural Land Use (mg/kg)

Land Use	Agricultural					
	Pathway	Soil Contact			Soil and Food Ingestion	
		Parameter	Fine	Coarse	Reference	Fine/Coarse
Inorganic Parameters						
Aluminum	-	-			-	
Antimony	20	20	AEP, 2019	25	MOECC, 2011	
Arsenic	17.1	17.1	CCME	380	CCME	
Barium	750	750	AEP, 2019	400	BC MOECCS Schedule 3.1	
Beryllium	5	5	AEP, 2019	13	MOECC, 2011	
Boron (Total)	-	-		120	MOECC, 2011	
Boron (mg/L in saturated paste extract)	3.3	3.3	AEP, 2019	-		
Cadmium	10	10	CCME	3.8	CCME	
Chromium (hexavalent)	0.4	0.4	AEP, 2019	150	BC MOECCS Schedule 3.1	
Chromium (total)	64	64	CCME	160	MOECC, 2011	
Cobalt	20	20	AEP, 2019	180	MOECC, 2011	
Copper	63	63	CCME	300	CCME	
Cyanide	0.9	0.9	CCME	11	CCME	
Iron	-	-		-		
Lead	300	300	CCME	70	CCME	
Manganese	-	-		-		
Mercury (total)	12	12	CCME	20	MOECC, 2011	
Molybdenum	4	4	AEP, 2019	6.9	MOECC, 2011	
Nickel	45	45	CCME	528	CCME	
Selenium	1	1	CCME	4.5	CCME	
Silver	20	20	AEP, 2019	-		
Strontium	-	-		-		
Thallium	1.4	1.4	CCME	1	CCME	
Tin	5	5	AEP, 2019	-		
Uranium	500	500	CCME	33	CCME	
Vanadium	130	130	CCME	18	MOECC, 2011	
Zinc	200	200	CCME	640	CCME	
General Chemistry Parameters						
Chloride	350	350	BC MOECCS Schedule 3.1	-		
Sodium	200	200	BC MOECCS Schedule 3.1	-		
Petroleum Hydrocarbons (PHC) Parameters						
Benzene	60	31	ARBCA, 2021	18	ARBCA, 2021	
Toluene	110	75	ARBCA, 2021	980	ARBCA, 2021	
Ethylbenzene	120	55	ARBCA, 2021	640	ARBCA, 2021	
Xylene	65	95	ARBCA, 2021	2600	ARBCA, 2021	
Modified TPH (Gas)	210	210	ARBCA, 2021	11,000	ARBCA, 2021	
Modified TPH (Fuel)	150	150	ARBCA, 2021	9800	ARBCA, 2021	
Modified TPH (Lube)	1300	300	ARBCA, 2021	16,000	ARBCA, 2021	
MTBE	31	25	MOECC, 2011	-		
Polycyclic Aromatic Hydrocarbons (PAH) Parameters						
Non-Carcinogenic PAH Compounds						
Naphthalene	0.75	0.6	MOECC, 2011	8.8	CCME	
1 - Methyl naphthalene	-	-		-		
2 - Methyl naphthalene	-	-		-		
Acenaphthene	-	-		21.5	CCME	
Acenaphthylene	-	-		-		
Anthracene	2.5	2.5	CCME	61.5	CCME	
Fluoranthene	50	50	CCME	15.4	CCME	
Fluorene	-	-		15.4	CCME	
Phenanthrene	7.8	6.2	MOECC, 2011	43	CCME	
Pyrene	-	-		7.7	CCME	
Carcinogenic PAH Compounds						
BaP Total Potency Equivalents						
Benz[a]anthracene	0.63	0.5	MOECC, 2011	6.2	CCME	
Benzo[a]pyrene	20	20	CCME	0.6	CCME	

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Benzo[b,j,k]fluoranthene isomers		9.5	7.6	MOECC, 2011	6.2	CCME
Benzo[g,h,i]perylene		8.3	6.6	MOECC, 2011	-	
Chrysene		8.8	7	MOECC, 2011	6.2	CCME
Dibenz[a,h]anthracene		-	-		-	
Indeno[1,2,3-c,d]pyrene		0.48	0.38	MOECC, 2011	-	
Volatile Organic Compound (VOC) Parameters						
Bromodichloromethane		-	-		-	
Bromoform		-	-		-	
Bromomethane		-	-		-	
Carbon Tetrachloride (Tetrachloromethane)		7.3	5.8	MOECC, 2011	7.6	MOECC, 2011
Chlorobenzene		7.5	6	MOECC, 2011	-	
Chloroethane		-	-		-	
Chloroform		43	34	MOECC, 2011	81	MOECC, 2011
Chloromethane		-	-		-	
Dibromochloromethane		-	-		-	
1,2-Dichlorobenzene		4.3	3.4	MOECC, 2011	-	
1,3-Dichlorobenzene		6	4.8	MOECC, 2011	-	
1,4-Dichlorobenzene		4.5	3.6	MOECC, 2011	-	
1,1-Dichloroethane		11	8.4	MOECC, 2011	-	
1,2-Dichloroethane		60	48	MOECC, 2011	29	MOECC, 2011
1,1-Dichloroethylene		63	50	MOECC, 2011	43	MOECC, 2011
cis-1,2-Dichloroethylene		-	-		84	MOECC, 2011
trans-1,2-Dichloroethylene		-	-		84	MOECC, 2011
1,2-Dichloropropane		31	25	MOECC, 2011	-	
1,3-Dichloropropane		31	25	MOECC, 2011	-	
Ethylene Dibromide		-	-		-	
Methylene Chloride (Dichloromethane)		0.98	0.78	MOECC, 2011	230	MOECC, 2011
Styrene		22	17	MOECC, 2011	-	
1,1,1,2-Tetrachloroethane		-	-		-	
1,1,1,2-Tetrachloroethane		-	-		-	
Tetrachloroethylene		15	15	BC MOECCS Schedule 3.1	4.5	MOECC, 2011
1,1,1-Trichloroethane		22	18	MOECC, 2011	820	MOECC, 2011
1,1,2-Trichloroethane		100	80	MOECC, 2011	-	
Trichloroethylene		3	3	CCME	8.1	MOECC, 2011
Vinyl Chloride		4.3	3.4	MOECC, 2011	6.8	MOECC, 2011
Pesticides						
Aldicarb		-	-		-	
Aldrin		0.055	0.044	MOECC, 2011	0.0024	MOECC, 2011
Atrazine		-	-		-	
Azinphos-methyl		-	-		-	
Bendiocarb		-	-		-	
Bromoxynil		-	-		-	
Carbaryl		-	-		-	
Carbofuran		-	-		-	
Chlorothalonil		-	-		-	
Chlorpyrifos		-	-		-	
Cyanazine		-	-		-	
2,4-D		-	-		-	
DDT		12	12	CCME	0.7	CCME
Diazinon		-	-		-	
Dicamba		-	-		-	
Dichlorop-methyl		-	-		-	
Dieldrin		0.055	0.044	MOECC, 2011	0.00096	MOECC, 2011
Dimethoate		-	-		-	
Dinoseb		-	-		-	
Diquat		-	-		-	

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Diuron	-	-	-	-	-	-
Endosulfan	0.19	0.15	-	MOECC, 2011	0.023	MOECC, 2011
Endrin	0.024	0.019	-	MOECC, 2011	0.0011	MOECC, 2011
Glyphosate	-	-	-	-	-	-
Heptachlor	0.25	0.2	-	MOECC, 2011	3.9	MOECC, 2011
Lindane	-	-	-	-	-	-
Linuron	-	-	-	-	-	-
Malathion	-	-	-	-	-	-
MCPA	-	-	-	-	-	-
Methoxychlor	-	-	-	-	0.13	MOECC, 2011
Metolachlor	-	-	-	-	-	-
Metribuzin	-	-	-	-	-	-
Paraquat	-	-	-	-	-	-
Parathion	-	-	-	-	-	-
Phorate	-	-	-	-	-	-
Picloram	-	-	-	-	-	-
Simazine	-	-	-	-	-	-
Tebuthiuron	0.046	0.046	-	AEP, 2019	-	-
Terbufos	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-
Triallate	-	-	-	-	-	-
Trifluralin	-	-	-	-	-	-
PFAS Substances						
Perfluorooctanoic acid (PFOA)	-	-	-	-	-	-
Perfluorooctane sulfonate (PFOS)	11	11	-	ECCC, 2017	0.01	ECCC, 2017
Perfluorobutanoate (PFBA)	-	-	-	-	-	-
Perfluorobutane sulfonate (PFBS)	-	-	-	-	-	-
Perfluorohexanesulfonate (PFHxS)	-	-	-	-	-	-
Perfluoropentanoate (PFPeA)	-	-	-	-	-	-
Perfluorohexanoate (PFHxA)	-	-	-	-	-	-
Perfluoroheptanoate (PFHpA)	-	-	-	-	-	-
Perfluorononanoate (PFNA)	-	-	-	-	-	-
Other Parameters						
Polychlorinated Biphenyls (Total PCB)	33	33	-	CCME	1.3	CCME
Dioxins and Furans (TEQ) (mg TEQ/kg)	0.00001	0.00001	-	BC MOECCS Schedule 3.1	0.00025	CCME
Pentachlorophenol (PCP)	11	11	-	CCME	0.013	MOECC, 2011
Organotins - Tributyltin	-	-	-	-	-	-
Ethylene Glycol	1100	1100	-	AEP, 2019	-	-
Propylene Glycol	NGR	NGR	-	CCME	-	-
Phenol	20	20	-	CCME	9.4	MOECC, 2011

Notes:

All values in mg/kg unless otherwise noted.

NGR=no guideline required. CCME applies the NGR designation to substances that were considered for ecological soil quality guideline derivation, but were deemed to not require such a guideline. This can be due to various reasons including substance physical-chemical, environmental fate and behaviour and toxicological properties, which may partially or collectively indicate a substance will not occur to any significant extent in soil and/or will not pose an ecological risk if it does occur in soil.

"-" indicates no ecological soil quality guideline was identified.