

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	Reference
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
F1 (C6-C10)	210	210	ARBCA, 2021	11000	ARBCA, 2021
F2 (C10-C16)	150	150	ARBCA, 2021	9800	ARBCA, 2021
F3 (C16-C34)	1300	300	ARBCA, 2021	16000	ARBCA, 2021
F4 (C34-C50)	5600	2800	ARBCA, 2021	8400	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 - Methylnaphthalene	-	-		-	
2 - Methylnaphthalene	-	-		-	
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
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	-	

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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-Dichloropropene		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		-	-		-	
1,1,2,2-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		-	-		-	
Dichlorfop-methyl		-	-		-	
Dieldrin		0.055	0.044	MOECC, 2011	0.00096	MOECC, 2011
Dimethoate		-	-		-	
Dinoseb		-	-		-	
Diquat		-	-		-	
Diuron		-	-		-	
Endosulfan		0.19	0.15	MOECC, 2011	0.023	MOECC, 2011
Endrin		0.024	0.019	MOECC, 2011	0.0011	MOECC, 2011
Glyphosate		-	-		-	

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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.