

Appendix A - § 35-APX-A1 - Soil Standards
(see notes at end of table)

Analyte	CAS Number	Vermont Soil Standards (TR=1E-06, HQ=1.0)		
		Resident Soil (mg/kg)	Non-Resident Soil (mg/kg)	Urban Background (mg/kg) ^(f)
Acetochlor	34256-82-1	1,216	14,362	
Acetone	67-64-1	63,079	816,169	
Alachlor	15972-60-8	5.0	30	
Aldrin	309-00-2	0.020	0.10	
Aluminum	7429-90-5	72,507	941,748	
Antimony	7440-36-0	29	392	
Arsenic, Inorganic	7440-38-2	0.23	1.41	
Barium	7440-39-3	11,247	127,382	
Benomyl	17804-35-2	116	701	
Benzene	71-43-2	0.70	4.19	
Benzo[a]pyrene ^(a)	50-32-8	0.073	1.54	0.580
Beryllium	7440-41-7	35	289	
Bis(2-chloro-1-methylethyl) ether	108-60-1	2,804	36,274	
Boron	7440-42-8	14,650	195,698	
Bromate	15541-45-4	0.54	3.27	
Bromochloromethane	74-97-5	193	597	
Bromoxynil	1689-84-5	2.69	16.27	
Butylbenzene, n-	104-51-8	3,504	45,343	
Butylbenzene, sec-	135-98-8	7,009	90,685	
Butylbenzene, tert-	98-06-6	7,009	90,685	
Cadmium (food)	7440-43-9	6.86	87.24	
Carbaryl	63-25-2	317	1,915	
Carbon Disulfide	75-15-0	608	661	
Carbon Tetrachloride	56-23-5	0.37	2.23	
Chlorobenzene	108-90-7	267	676	
Chromium(III), Insoluble Salts	16065-83-1	40,223	360,223	
Chromium(VI)	18540-29-9	0.091	1.75	
Cobalt	7440-48-4	22	291	
Copper	7440-50-8	10,407	139,231	
Bis(2-ethylhexyl)phthalate	117-81-7	20	120	
Dibromochloropropane	96-12-8	0.006	0.061	
Dibromoethane, 1,2-	106-93-4	0.023	0.14	
Dichloroethane, 1,1-	75-34-3	2.10	12.59	
Dichloroethane, 1,2-	107-06-2	0.29	1.71	
Dichloroethylene, 1,2-cis-	156-59-2	77	352	
Dichloroethylene, 1,2-trans-	156-60-5	108	296	
Dichloropropane, 1,2-	78-87-5	1.51	9.06	
Dioxane, 1,4-	123-91-1	2.78	16.89	
Ethylbenzene	100-41-4	3.68	22.11	
Fluoranthene	206-44-0	2,301	26,371	
Fluorene	86-73-7	2,301	26,371	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	0.23 ^(c)	3 ^(c)	
Hexachlorobenzene	118-74-1	0.13	0.69	
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	4.60	28.03	
Iron	7439-89-6	51,302	686,351	
Isopropylbenzene (cumene)	98-82-8	256	264	
Lead and Compounds ^(b)	7439-92-1	41	41	111
Manganese (Non-diet)	7439-96-5	1,118	11,350	
Mercury (elemental)	7439-97-6	3.13	3.13	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	16,952	26,991	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	27	165	
Molybdenum	7439-98-7	366	4,900	
Naphthalene	91-20-3	1.2	7.19	
Nickel	7440-02-0	940	9,707	
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	3,698	49,834	
Pentachlorophenol	87-86-5	0.48	2.90	

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Pentaerythritol tetranitrate (PETN)	78-11-5	65	390	
Perchlorate	14797-73-0	51	686	
Perfluorobutane sulfonic acid (PFBS)	375-73-5	18 ^(c)	215 ^(c)	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	1.2 ^(c)	14 ^(c)	
Perfluorononanoic acid (PFNA)	375-95-1	0.18 ^(c)	2.2 ^(c)	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.12 ^(c)	1.4 ^(c)	
Perfluorooctanic Acid (PFOA)	335-67-1	0.18 ^(c)	2.2 ^(c)	
Polychlorinated Biphenyls (high risk)	1336-36-3	0.11 ^(d)	0.68 ^(d)	
Propoxur (Baygon)	114-26-1	79	476	
Propyl benzene, n-	103-65-1	253	261	
Selenium	7782-49-2	366	4,900	
Silver	7440-22-4	237	2,483	
Tetrachlorodibenzo-p-dioxin, 2,3,7,8- (TCDD)	1746-01-6	2.58E-06	1.57E-05	
Tetrachloroethane, 1,1,1,2-	630-20-6	1.32	7.91	
Tetrachloroethylene	127-18-4	2.38	14.29	
Thallium (soluble Thallium)	7440-28-0*	0.73	9.8	
Toluene	108-88-3	705	798	
Trichloroethylene	79-01-6	1.9	6.47	
Trichloropropane, 1,2,3-	96-18-4	3.11E-03	0.071	
Trimethylbenzene, 1,2,3-	526-73-8	144 ^(e)	177 ^(e)	
Trimethylbenzene, 1,2,4-	95-63-6			
Trimethylbenzene, 1,3,5-	108-67-8			
Trinitrotoluene, 2,4,6- (TNT)	118-96-7	12	70	
Uranium (Soluble Salts)	NA	44	588	
Vanadium	7440-62-2	2.8	27.22	
Vinyl Chloride	75-01-4	0.10	0.59	
Xylenes	1330-20-7	252	257	
Zinc	7440-66-6	21,986	294,150	

Notes:

1. mg/kg - milligrams per kilogram

2. In the absence of a compound in the table above, a PRP shall refer to the applicable and most current U.S. EPA Regional Screening Level.

(a) Benzo(a)pyrene cancer-based resident value applicable to benzo(a)pyrene itself and to total benzo(a)pyrene toxic equivalents [B(a)P-TE]. Benzo(a)pyrene noncancer-based value applicable only to benzo(a)pyrene itself.

(b) The Vermont Department of Health used EPA's IEUBK software and Adult Lead Model to find the soil concentration that would result in 95% probability that no exposed child (or fetus) would exceed the BII <3 µg/dL. Vermont DEC conducted a soil background study and determined the rural background level of lead is 41 mg/kg. Because the soil concentration that would result in a 95% probability that no exposed child (or fetus) would exceed the BII <3 µg/dL is less than the Vermont background level, the background level is recommended.

(c) PFAS - RSV and CSV are based on direct contact with soil and do not present concentrations protective for other potential exposure pathways such as leaching from soil to groundwater

(d) PCBs- sum of all PCBs not to exceed 1.1E-01 mg/kg (IRIS high risk and persistence cancer toxicity values used in cancer assessment; oral reference dose for Aroclor 1254 used in noncancer assessment).

(e) Trimethyl benzenes -Sum of the three isomers not to exceed applicable resident or non-resident values, based on the most conservative value derived for an individual isomer.

(f) Urban Background Standards apply to sample locations located within an Urban Background Area.

* CAS Number is for Metallic Thallium