



LIMITS FOR TOXIC AND HAZARDOUS CHEMICALS IN SOIL

		Soil (mg/kg or ppm)	0	0
		Residential	Agricultural	Industrial
Heavy Metals				
Arsenic	Mining/Smelting, Pesticides	20-30 (NLD)	20 (CAN)	50 (CAN)
Cadmium	Copper/Lead/Zinc Smelters, Phosphate fertilizers	5 (CAN)	3 (CAN)	20 (CAN)
Chromium	Chemical Manufacture, Tanning, Dye	250 (CAN)	750 (CAN)	800 (CAN)
Lead	Mining/Smelting, ULABs, Ammunition Factories	400 (EPA)**	-	1200 (EPA)**
Mercury	Mining/Smelting, Batteries, Burning Fossil Fuels	2 (CAN)	0.8 (CAN)	10 (CAN)
Other Contaminants				
Asbestos	Insulation, Brakes, Pipes	NO STANDARDS SET FOR SOIL	0	0
Coal Dust	Mining, Hazardous Waste Sites, Industrial Power	NO STANDARDS SET FOR SOIL	0	0
Cyanide	Vehicle Exhaust, Burning plastics, Plating/Chem Indus	10 (FREE) 50 (TOTAL) (CAN)	.5 (FREE) 5.0 (TOTAL) (CAN)	100 (FREE) 500 (TOTAL)
Dioxin (TCDD - TETRACHLORODIBE NZO)	Herbicides manufacture, Paper/ Pulp bleaching	0.0000045 (NY)	0	0
Fluorides	Coal Combustion/ Phosphate plants	1,100 (NJ)	0	10,000 (NJ)
PAH (Polycyclic Aromatic Hydrocarbons)	Incomplete burning of coal, oil and gas, garbage			
Benzo(a)Pyrene (a common PAH)		0	1 (CAN)	.1 (CAN)
Pesticides	Runoff, Dumping, Agriculture			
Atrazine	Runoff, Dumping, Agriculture	5.8 (MI)	-	68 (MI)
Cyanazine	Runoff, Dumping, Agriculture	200 (MI)	-	1300 (MI)
Simazine	Runoff, Dumping, Agriculture	23 (AZ)	-	-
Alachlor	Runoff, Dumping, Agriculture	7.95 (TX)	-	71 (TX)
Metolachlor	Runoff, Dumping, Agriculture	1800 (AZ)	-	-
Aldrin (POP)	Runoff, Dumping, Agriculture	0.041 (NY)	-	.03 (OR)
Chlordane (POP)	Runoff, Dumping, Agriculture	.493 (TX)	-	4.4 (TX)
DDT (POP)	Runoff, Dumping, Agriculture	2 (Surface), 100 (Sub-surface) (NJ)	-	9 (NJ)
Dieldrin (POP)	Runoff, Dumping, Agriculture	.042 (Surface, NJ)	-	.18 (NJ)
Endrin (POP)	Runoff, Dumping, Agriculture	17 (Surface, NJ)	-	310 (NJ)
Furan (POP)	Runoff, Dumping, Agriculture	80 (CIS)	-	-
Heptachlor (POP)	Runoff, Dumping, Agriculture	.15 (Surface, NJ)	-	2 (NJ)
Hexachlorobenzene (POP)	Runoff, Dumping, Agriculture	.42 (Surface, NJ)	-	2 (NJ)
Toxaphene (POP)	Runoff, Dumping, Agriculture	.62 (Surface, NJ)	-	2.7 (NJ)
Mirex (POP)	Runoff, Dumping, Agriculture	.2 (NY)	-	-
Polychlorinated Biphenyls (PCBs)	Hazardous Waste, Transformers, Capacitors	5 (CAN)	.5 (CAN)	50 (CAN)
VOCs (Volatile Organic Compounds)	Paints, Varnishes, Industrial Machinery			
Trichloroethylene		0	23 (Surface, NJ)	-
Toluene	Oil/Petroleum Spills, Industrial waste		1000 (NJ)	-
Xylenes	Oil/Petroleum Spills, Industrial waste		360 (NJ)	-
Ethylbenzene	Oil/Petroleum Spills, Industrial waste		1000 (NJ)	-
Benzene	Oil/Petroleum Spills, Industrial waste		.5 (CAN)	.05 (CAN)
Sulfur Dioxide	coal/petro burning, apricot preservative, wine making	NO STANDARDS SET FOR SOIL	0	0

All data from Sittig 1994, excluding

*EPA Memorandum 11/10/98

**http://www.atsdr.cdc.gov/csem/lead/pb_standards2.html