

Table 6-1(a)
Tier 1 Risk Based Screening Levels for Resident

Chemical	CAS #	Air	Surface Soil	Subsurface Soil	Soil*	Soil Vapor	Groundwater	
		Indoor	Ingestion, dermal contact, and outdoor inhalation of vapors and particulates	Indoor Inhalation of Vapors	Protective of Groundwater	Indoor Inhalation of Vapors	Domestic Use (Ingestion, dermal contact, and inhalation of vapors)	Indoor Inhalation of Vapors
		[µg/m ³]	[mg/kg]	[mg/kg]	[mg/kg]	[µg/m ³]	[µg/L]	
VOCs								
Benzene	71-43-2	3.6	12	NA	0.0026	NA	5	NA
Ethylbenzene	100-41-4	11	58	NA	0.78	NA	700	NA
Isopropylbenzene (Cumene)	98-82-8	420	1900 c	NA	0.74	NA	450	NA
Methyl tert-Butyl Ether (MTBE)	1634-04-4	110	470	NA	0.032	NA	140	NA
Naphthalene	91-20-3	0.83	20	NA	0.0038	NA	1.2	NA
1,2,4-Trimethylbenzene	95-63-6	63	300 c	NA	0.081	NA	56	NA
1,3,5-Trimethylbenzene	108-67-8	63	270 c	NA	0.087	NA	60	NA
Toluene	108-88-3	5200	4900 c	NA	0.69	NA	1000	NA
Xylene, Total	1330-20-7	100	580 c	NA	9.9	NA	10000	NA
PAHs								
Acenaphthene	83-32-9	NA	3600	NA	5.5	NA	530	NA
Anthracene	120-12-7	NA	18000	NA	58	NA	1800 s	NA
Benzo(a)anthracene	56-55-3	0.17	11	NA	0.11	NA	0.3	NA
Benzo (a) Pyrene	50-32-8	0.017	1.1	NA	0.24	NA	0.2	NA
Benzo(b)fluoranthene	205-99-2	0.17	11	NA	3	NA	2.5 s	NA
Benzo(k)fluoranthene	207-08-9	1.7	110	NA	29	NA	25 s	NA
Chrysene	218-01-9	17	1100	NA	90	NA	250 s	NA
Ethylene dibromide	106-93-4	0.047	0.36	NA	0.000014	NA	0.05	NA
Fluoranthene	206-44-0	NA	2400	NA	89	NA	800 s	NA
Fluorene	86-73-7	NA	2400	NA	5.4	NA	290	NA
Indeno (1,2,3-cd) Pyrene	193-39-5	0.17	11	NA	9.8	NA	2.5 s	NA
1-Methylnaphthalene	90-12-0	NA	180	NA	0.06	NA	11	NA
2-Methylnaphthalene	91-57-6	NA	240	NA	0.19	NA	36	NA
Naphthalene	91-20-3	0.83	20	NA	0.0038	NA	1.2	NA
Pyrene	129-00-0	NA	1800	NA	13	NA	120	NA
Metals								
Arsenic	7440-38-2	0.0065	6.8	NA	0.29	NA	10	NA
Barium	7440-39-3	0.52	15000	NA	82	NA	2000	NA

Beryllium	7440-41-7	0.012	160	NA	3.2	NA	4	NA
Cadmium (diet)	7440-43-9	0.016	7.1	NA	NA	NA	NA	NA
Cadmium (water)		0.016	NA	NA	0.38	NA	5	NA
Chromium (III)	16065-83-1	NA	120000	NA	40000000	NA	22000	NA
Chromium (VI)	18540-29-9	0.00012	3	NA	0.0067	NA	0.35	NA
Chromium (total)	7440-47-3	NA	NA	NA	180000	NA	100	NA
Lead	7439-92-1	0.15	400	NA	14	NA	15	NA
Manganese (non-diet)	7439-96-5	0.052	1800	NA	28	NA	430	NA
Mercury (elemental)	7439-97-6	0.31	11	c	NA	0.1	NA	2
Selenium	7782-49-2	21	390	NA	0.26	NA	50	NA
Silver	7440-22-4	NA	390	NA	0.8	NA	94	NA
Chlorinated Solvents								
Hexachloroethane	67-72-1	2.6	18	NA	0.002	NA	3.3	NA
Pentachloroethane	76-01-7	NA	77	NA	0.0031	NA	6.5	NA
1,1,1,2-Tetrachloroethane	630-20-6	3.8	20	NA	0.0022	NA	5.7	NA
1,1,2,2-Tetrachloroethane	79-34-5	0.48	6	NA	0.0003	NA	0.76	NA
1,1,2-Trichloroethane	79-00-5	1.8	11	NA	0.0016	NA	5	NA
1,1,1-Trichloroethane	71-55-6	5200	8100	c	NA	0.07	NA	200
1,2-Dichloroethane	107-06-2	1.1	4.6	NA	0.0014	NA	5	NA
1,1-Dichloroethane	75-34-3	18	36	NA	0.0078	NA	28	NA
Chloroethane	75-00-3	4200	5400	c	NA	2.4	NA	8300
Perchloroethene (PCE)	127-18-4	110	240	c	NA	0.0023	NA	5
Trichloroethene (TCE)	79-01-6	4.8	9.4	NA	0.0018	NA	5	NA
1,1-Dichloroethene	75-35-4	210	230	NA	0.0025	NA	7	NA
cis-1,2-Dichloroethene	156-59-2	NA	160	NA	0.021	NA	70	NA
trans-1,2-Dichloroethene	156-60-5	42	70	NA	0.031	NA	100	NA
Vinyl chloride (VC)	75-01-4	1.7	0.59	NA	0.00069	NA	2	NA
NDDEQ Specific					[mg/kg]	[mg/L]		
Ammonia	7664-41-7	NA	NA	NA	NA	NA	5	NA
Bromide	7726-95-6	NA	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	NA	NA	NA	NA	NA	250	s
Nitrate as total nitrogen	14797-55-8	NA	130000	NA	500	NA	10	NA
Strontium	7440-24-6	NA	47000	NA	420	NA	12	NA
Total Kjeldahl Nitrogen (TKN)		NA	NA	NA	500	NA	10000	NA
Total Petroleum Hydrocarbons (TPH)		NA	NA	NA	100	NA	.5	NA

Notes:

*: Surface and subsurface soil

NA: Not available

Domestic water use RBSL in bold font represents maximum contaminant level (MCL)

c: calculated RBSL shown in the table exceeded the saturated soil concentration

p: calculated soil vapor RBTL shown in the table exceeded the chemical vapor pressure

s: calculated RBSL shown in the table exceeded the chemical solubility

The above values were obtained from Regional Screening Level (RSL) Summary Tables (USEPA, May 2022)