

NDRBCA Table 6-1(b)
Tier 1 Risk Based Screening Levels for Commercial/Industrial Worker

Chemical	CAS #	Air	Surface Soil	Soil Vapor	Soil*	Groundwater	
		Indoor	Ingestion, dermal contact, and outdoor inhalation of vapors and particulates	(Sub-slab) Indoor Inhalation of Vapors	Protective of Groundwater	Domestic Use (Ingestion, dermal contact)	Inhalation of Vapors
		[µg/m ³]	[mg/kg]	[µg/m ³]	[mg/kg]	[µg/L]	
VOCs							
Benzene	71-43-2	15.7	50.8	524	0.00256	5	69.3
Ethylbenzene	100-41-4	49.1	254	1640	0.785	700	152
Isopropylbenzene (Cumene)	98-82-8	1750	9950 c	58400	0.738	450	3730
Methyl tert-Butyl Ether (MTBE)	1634-04-4	472	2050	15700	0.0322	140	19700
Naphthalene	91-20-3	3.61	85.7	120	0.00385	1.2	201
1,2,4-Trimethylbenzene	95-63-6	263	1770 c	8760	0.0808	56	1040
1,3,5-Trimethylbenzene	108-67-8	263	1510 c	8760	0.0866	60	733
Toluene	108-88-3	21900	46800 c	730000	0.692	1000	80700
Xylene, Total	1330-20-7	438	2490 c	14600	9.9	10000	1620
PAHs							
Acenaphthene	83-32-9	NA	45200	68.1	5.49	530	4170
Anthracene	120-12-7	NA	226000	NA	58.1	1800	NA
Benzo(a)anthracene	56-55-3	2.04	206	NA	0.105	0.3	NA
Benzo (a) Pyrene	50-32-8	0.00876	21.1	NA	0.235	0.2	NA
Benzo(b)fluoranthene	205-99-2	2.04	21.1	NA	3	2.5	NA
Benzo(k)fluoranthene	207-08-9	20.4	2110	NA	29.4	25	NA
Chrysene	218-01-9	204	21100	NA	90.5	250	NA
Ethylene dibromide	106-93-4	0.204	1.59	6.81	0.000014	0.05	7.69
Fluoranthene	206-44-0	NA	30100	NA	89.1	800	NA
Fluorene	86-73-7	NA	30100	NA	5.45	290	NA
Indeno (1,2,3-cd) Pyrene	193-39-5	2.04	211	NA	9.78	2.5	NA
1-Methylnaphthalene	90-12-0	0.0131	0.77 c	0.438	0.0000329	11	0.625
2-Methylnaphthalene	91-57-6	NA	3010	NA	0.185	36	NA
Naphthalene	91-20-3	3.61	85.7	120	0.00385	1.2	201
Pyrene	129-00-0	NA	22600	NA	13.2	120	NA
Metals							
Arsenic	7440-38-2	0.0285	30	NA	0.292	10	NA
Barium	7440-39-3	2.19	217000	NA	82.4	2000	NA
Beryllium	7440-41-7	0.0511	2290	NA	3.16	4	NA
Cadmium (diet)	7440-43-9	0.0438	99.7	NA	NA	NA	NA
Cadmium (water)		0.0438	NA	NA	0.376	5	NA
Chromium (III)	16065-83-1	0.0263	1750000	NA	40400000	22000	NA
Chromium (VI)	18540-29-9	0.00146	63.3	NA	0.00672	0.35	NA
Chromium (total)	7440-47-3	NA	NA	NA	180000	100	NA
Lead	7439-92-1	NA	NA	NA	13.5	15	NA
Manganese (non-diet)	7439-96-5	0.219	25600	NA	28.3	430	NA
Mercury (elemental)	7439-97-6	1.31	45.6 c	43.8	0.104	2	3.73
Selenium	7782-49-2	87.6	5840	NA	0.26	50	NA
Silver	7440-22-4	NA	5840	NA	0.799	94	NA
Chlorinated Solvents							
Hexachloroethane	67-72-1	11.1	80.5	372	0.002	3.3	70.1
Pentachloroethane	76-01-7	NA	363	NA	0.0031	6.5	NA
1,1,1,2-Tetrachloroethane	630-20-6	16.6	87.5	552	0.00219	5.7	162
1,1,2,2-Tetrachloroethane	79-34-5	2.11	26.7	70.5	0.000296	0.76	141
1,1,2-Trichloroethane	79-00-5	0.876	6.31	29.2	0.00162	5	26
1,1,1-Trichloroethane	71-55-6	2190	35600 c	730000	0.0701	200	31100
1,2-Dichloroethane	107-06-2	4.72	20.4	157	0.00142	5	97.8
1,1-Dichloroethane	75-34-3	76.7	155	2560	0.00782	28	334
Chloroethane	75-00-3	17500	22700 c	584000	2.37	8300	38600
Perchloroethene (PCE)	127-18-4	175	389 c	5840	0.00227	5	242
Trichloroethene (TCE)	79-01-6	8.76	18.7	292	0.00179	5	21.8
1,1-Dichloroethene	75-35-4	876	995	29200	0.00251	7	821
cis-1,2-Dichloroethene	156-59-2	175	369	5840	0.0206	70	1050
trans-1,2-Dichloroethene	156-60-5	175	302	5840	0.0313	100	457
Vinyl chloride (VC)	75-01-4	27.9	16.8	929	0.00069	2	24.5
Per- and Polyfluorinated Substances							
PFOA	335-67	NA	NA	NA	NA	4	NA
PFOS	1763-23-1	NA	NA	NA	NA	4	NA
PFHxS	355-46-4	NA	NA	NA	NA	10	NA
PFNA	375-95-1	NA	NA	NA	NA	10	NA
HFPO-DA	13252-13-6	NA	NA	NA	NA	10	NA
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, or PFBS	NA	NA	NA	NA	NA	1 (Unitless) Hazard Index	NA
NDDEQ Specific		[µg/m³]	[mg/kg]	[µg/m³]	[mg/kg]	[mg/L]	[mg/L]
Ammonia	7664-41-7	2190	NA	73000	NA	5	3330
Bromide	7726-95-6	NA	NA	NA	NA	NA	NA
Chloride	16887-00-6	NA	NA	NA	NA	250	NA
Nitrate as total nitrogen	14797-55-8	NA	1870000	NA	500	10	NA
Strontium	7440-24-6	NA	701000	NA	422	12	NA
Total Kjeldahl Nitrogen (TKN)	NA	NA	NA	NA	500	10	NA
Total Petroleum Hydrocarbons (TPH)	NA	NA	NA	NA	100	0.5	NA

Notes:
 *: Surface and subsurface NA: Not available
 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 2024)