

Table 3

Residential Inhalation Soil Remediation Standards (mg/kg)

Contaminant	CAS No.	Carcinogenic Inhalation Human Health-based Criterion	Non- carcinogenic Inhalation Human Health-based Criterion	Soil saturation concentration	Soil RL	Residential Inhalation Soil Remediation Standard
Acenaphthene	83-32-9	NA ¹	NA ¹	40	0.17	NA ¹
Acetone (2-Propanone)	67-64-1	NA ¹	NA ¹	160,000	0.01	NA ¹
Acetophenone	98-86-2	NA ¹	NA ¹	1,600	0.33	NA ¹
Aldrin	309-00-2	NA ¹	NA ¹	2.8	0.002	NA ¹
Aluminum (total)	7429-90-5	NA ¹	NA ²	NA	20	NA ²
Anthracene	120-12-7	NA ¹	NA ¹	1.4	0.17	NA ¹
Antimony (total)	7440-36-0	NA ¹	NA ¹	NA	1	NA ¹
Arsenic (total)	7440-38-2	1100	NA ¹	NA	0.5	1,100
Atrazine	1912-24-9	NA ¹	NA ¹	21	0.33	NA ¹
Barium (total)	7440-39-3	NA ¹	870,000	NA	5	870,000
Benzaldehyde	100-52-7	NA ¹	NA ¹	1200	0.33	NA ¹
Benzene	71-43-2	2.2	190	850	0.005	2.2
Benzo(a)anthracene (1,2-Benzanthracene)	56-55-3	43,000 ⁴	NA ¹	3.3	0.17	43,000 ⁴
Benzo(a)pyrene	50-32-8	4,300 ⁴	NA ¹	1.9	0.17	4,300 ⁴
Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	43,000 ⁴	NA ¹	1.8	0.17	43,000 ⁴
Benzo(k)fluoranthene	207-08-9	43,000 ⁴	NA ¹	0.94	0.17	43,000 ⁴
Beryllium	7440-41-7	2,000	35,000	NA	0.5	2,000
1,1'-Biphenyl	92-52-4	NA ¹	NA ¹	72	0.17	NA ¹
Bis(2-chloroethoxy)methane	111-91-1	NA ¹	NA ¹	1,400	0.17	NA ¹
Bis(2-chloroethyl)ether	111-44-4	NA ¹	NA ¹	3,700	0.33	NA ¹
Bis(2-ethylhexyl)phthalate	117-81-7	NA ¹	NA ¹	65	0.17	NA ¹
Bromodichloromethane (Dichlorobromomethane)	75-27-4	NA ¹	NA ¹	690	0.005	NA ¹
Bromoform	75-25-2	NA ¹	NA ¹	680	0.005	NA ¹
Bromomethane (Methyl bromide)	74-83-9	NA ¹	18	3,300	0.005	18
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	NA ¹	NA ^{2,3}	36,000	0.01	NA ^{2,3}
Butylbenzyl phthalate	85-68-7	NA ¹	NA ³	39	0.17	NA ³
Cadmium	7440-43-9	2,600	17,000	NA	0.5	2,600
Caprolactam	105-60-2	NA ¹	290	160,000	0.33	290
Carbon disulfide	75-15-0	NA ¹	NA ³	580	0.005	NA ³
Carbon tetrachloride	56-23-5	1.4	NA ³	300	0.005	1.4
Chlordane (alpha and gamma forms summed)	57-74-9	NA ¹	NA ³	7.6	0.002	NA ³

4-Chloroaniline	106-47-8	NA ¹	NA ¹	1,500	0.17	NA ¹
Chlorobenzene	108-90-7	NA ¹	NA ³	320	0.005	NA ³
Chloroethane (Ethyl chloride)	75-00-3	NA ¹	NA ³	1,700	0.005	NA ³
Chloroform	67-66-3	NA ¹	590	1,900	0.005	590
Chloromethane (Methyl chloride)	74-87-3	NA ¹	270	1,200	0.005	270
2-Chloronaphthalene	91-58-7	NA ¹	NA ¹	60	0.17	NA ¹
2-Chlorophenol (o-Chlorophenol)	95-57-8	NA ¹	NA ¹	11,000	0.17	NA ¹
Chrysene	218-01-9	430,000 ⁴	NA ¹	0.72	0.17	430,000 ⁴
Cobalt (total)	7440-48-4	520	10,000	NA	0.5	520
Copper (total)	7440-50-8	NA ¹	NA ¹	NA	1	NA ¹
Cyanide	57-12-5	NA ¹	NA ²	NA	0.5	NA ²
Cyclohexane	110-82-7	NA ¹	NA ^{2,3}	65	0.005	NA ^{2,3}
4,4'-DDD (p,p'-TDE)	72-54-8	NA ¹	NA ¹	21	0.003	NA ¹
4,4'-DDE (p,p'-DDX)	72-55-9	NA ¹	NA ¹	9.4	0.003	NA ¹
4,4'-DDT	50-29-3	NA ¹	NA ¹	1.9	0.003	NA ¹
Dibenz(a,h)anthracene	53-70-3	3,900 ⁴	NA ¹	9.5	0.17	3,900 ⁴
Dibromochloromethane (Chlorodibromomethane)	124-48-1	NA ¹	NA ¹	600	0.005	NA ¹
1,2-Dibromo-3-chloropropane	96-12-8	0.026	11	470	0.005	0.026
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.085	170	920	0.005	0.085
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	NA ¹	NA ³	140	0.005	NA ³
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	NA ¹	NA ¹	110	0.005	NA ¹
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	NA ¹	NA ³	74	0.005	NA ³
3,3'-Dichlorobenzidine	91-94-1	NA ¹	NA ¹	20	0.33	NA ¹
Dichlorodifluoromethane (Freon 12)	75-71-8	NA ¹	NA ¹	540	0.005	NA ¹
1,1-Dichloroethane	75-34-3	NA ¹	NA ¹	1,200	0.005	NA ¹
1,2-Dichloroethane	107-06-2	NA ¹	71	2,000	0.005	71
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	NA ¹	52	830	0.005	52
1,2-Dichloroethene (cis) (c-1,2-Dichloroethylene)	156-59-2	NA ¹	NA ¹	1,600	0.005	NA ¹
1,2-Dichloroethene (trans) (t-1,2-Dichloroethylene)	156-60-5	NA ¹	NA ¹	1,100	0.005	NA ¹
2,4-Dichlorophenol	120-83-2	NA ¹	NA ¹	2,100	0.17	NA ¹
1,2-Dichloropropane	78-87-5	NA ¹	31	810	0.005	31
1,3-Dichloropropene (total)	542-75-6	4.8	140	880	0.005	4.8
Dieldrin	60-57-1	NA ¹	NA ¹	7.9	0.003	NA ¹
Diethylphthalate	84-66-2	NA ¹	NA ¹	390	0.17	NA ¹
2,4-Dimethylphenol	105-67-9	NA ¹	NA ¹	8,900	0.17	NA ¹
Di-n-butyl phthalate	84-74-2	NA ¹	NA ¹	28	0.17	NA ¹

2,4-Dinitrophenol	51-28-5	NA ¹	NA ¹	430	0.33	NA ¹
2,4-Dinitrotoluene/2,6-Dinitrotoluene (mixture)	25321-14-6	NA ¹	NA ¹	360	0.17	NA ¹
Di-n-octyl phthalate	117-84-0	NA ¹	NA ¹	6.2	0.33	NA ¹
1,4-Dioxane	123-91-1	45	2,500	160,000	0.067	45
Endosulfan I and Endosulfan II (alpha and beta) (summed)	115-29-7	NA ¹	NA ¹	4.4	0.003	NA ¹
Endrin	72-20-8	NA ¹	NA ¹	10	0.003	NA ¹
Ethylbenzene	100-41-4	10	NA ³	180	0.005	10
Extractable Petroleum Hydrocarbons (No. 2 Fuel Oil and Diesel)	various	NA ¹	NA ¹	NA	80	NA ¹
Extractable Petroleum Hydrocarbons (Other)	various	NA ¹	NA ¹	NA	80	NA ¹
Fluoranthene	206-44-0	NA ¹	NA ¹	29	0.33	NA ¹
Fluorene	86-73-7	NA ¹	NA ¹	31	0.17	NA
alpha-HCH (alpha-BHC)	319-84-6	NA ¹	NA ¹	12	0.002	NA ¹
beta-HCH (beta-BHC)	319-85-7	NA ¹	NA ¹	1.4	0.002	NA ¹
Heptachlor	76-44-8	NA ¹	NA ¹	15	0.002	NA ¹
Heptachlor epoxide	1024-57-3	NA ¹	NA ¹	4.1	0.002	NA ¹
Hexachlorobenzene	118-74-1	NA ¹	NA ¹	0.078	0.17	NA ¹
Hexachloro-1,3-butadiene	87-68-3	NA ¹	NA ¹	6.1	0.17	NA ¹
Hexachlorocyclopentadiene	77-47-4	NA ¹	2.7	5.6	0.33	2.7
Hexachloroethane	67-72-1	NA ¹	NA ³	28	0.17	NA ³
n-Hexane	110-54-3	NA ¹	NA ³	88	NA	NA ³
2-Hexanone	591-78-6	NA ¹	1,000	3200	0.01	1,000
Indeno(1,2,3-cd)pyrene	193-39-5	43,000 ⁴	NA ¹	0.086	0.17	43,000 ⁴
Isophorone	78-59-1	NA ¹	NA ³	3,400	0.17	NA ³
Isopropylbenzene	98-82-8	NA ¹	NA ³	98	0.005	NA ³
Lead (total)	7439-92-1	NA ¹	NA ¹	NA	0.5	NA ¹
Lindane (gamma-HCH)(gamma-BHC)	58-89-9	NA ¹	NA ¹	42	0.002	NA ¹
Manganese (total)	7439-96-5	NA ¹	87,000	NA	0.5	87,000
Mercury (total)	7439-97-6	NA ¹	520,000 ⁴	3.1	0.1	520,000 ⁴
Methoxychlor	72-43-5	NA ¹	NA ¹	5.4	0.02	NA ¹
Methyl acetate	79-20-9	NA ¹	NA ¹	39,000	0.005	NA ¹
Methylene chloride (Dichloromethane)	75-09-2	1,400	NA ³	2,800	0.005	1,400
2-Methylnaphthalene	91-57-6	NA ¹	NA ¹	130	0.17	NA ¹
4-Methyl-2-pentanone (MIBK)	108-10-1	NA ¹	NA ³	3,400	0.01	NA ³
2-Methylphenol (o-cresol)	95-48-7	NA ¹	NA ¹	20,000	0.33	NA ¹
4-Methylphenol (p-cresol)	106-44-5	NA ¹	NA ¹	16,000	0.33	NA ¹
Methyl tert-butyl ether (MTBE)	1634-04-4	140	NA ³	9,100	0.005	140
Naphthalene	91-20-3	5.7	NA ³	100	0.17	5.7
Nickel (total)	7440-02-0	20,000	24,000	NA	0.5	20,000

4-Nitroaniline	100-01-6	NA ¹	NA ³	270	0.33	NA ³
Nitrobenzene	98-95-3	7.5	1,000	1,300	0.17	7.5
N-Nitrosodi-n-propylamine	621-64-7	NA ¹	NA ¹	9,200	0.17	NA ¹
N-Nitrosodiphenylamine	86-30-6	NA ¹	NA ¹	190	0.17	NA ¹
2,2'-oxybis(1-chloropropane)	108-60-1	NA ¹	NA ¹	540	0.33	NA ¹
Pentachlorophenol	87-86-5	NA ¹	NA ¹	140	0.33	NA ¹
Phenol	108-95-2	NA ¹	39,000	44,000	0.33	39,000
Polychlorinated biphenyls (PCBs)	1336-36-3	NA ¹	NA ¹	110	0.03	NA ¹
Pyrene	129-00-0	NA ¹	NA ¹	15	0.17	NA ¹
Selenium (total)	7782-49-2	NA ¹	NA ¹	NA	2.5	NA ¹
Silver (total)	7440-22-4	NA ¹	NA ¹	NA	0.5	NA ¹
Styrene	100-42-5	NA ¹	NA ³	330	0.005	NA ³
Tertiary butyl alcohol (TBA)	75-65-0	NA ¹	NA ¹	160,000	0.1	NA ¹
1,2,4,5-Tetrachlorobenzene	95-94-3	NA ¹	NA ¹	2.7	0.17	NA ¹
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	NA ¹	NA ¹	0.10	0.000001	NA ¹
1,1,2,2-Tetrachloroethane	79-34-5	NA ¹	NA ¹	980	0.005	NA ¹
Tetrachloroethene (PCE) (Tetrachloroethylene)	127-18-4	47	NA ³	89	0.005	47
2,3,4,6-Tetrachlorophenol	58-90-2	NA ¹	NA ¹	140	0.17	NA ¹
Toluene	108-88-3	NA ¹	NA ³	340	0.005	NA ³
Toxaphene	8001-35-2	NA ¹	NA ¹	110	0.2	NA ¹
1,2,4-Trichlorobenzene	120-82-1	NA ¹	94	140	0.005	94
1,1,1-Trichloroethane	71-55-6	NA ¹	NA ³	420	0.005	NA ³
1,1,2-Trichloroethane	79-00-5	NA ¹	NA ¹	1,300	0.005	NA ¹
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	3.0	9.1	410	0.005	3.0
Trichlorofluoromethane (Freon 11)	75-69-4	NA ¹	NA ¹	790	0.005	NA ¹
2,4,5-Trichlorophenol	95-95-4	NA ¹	NA ¹	5,800	0.2	NA ¹
2,4,6-Trichlorophenol	88-06-2	NA ¹	NA ¹	1,700	0.2	NA ¹
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon TF)	76-13-1	NA ¹	NA ³	530	0.005	NA ³
1,2,4-Trimethylbenzene	95-63-6	NA ¹	NA ³	80	0.076	NA ³
Vanadium (total)	7440-62-2	NA ¹	170,000	NA	2.5	170,000
Vinyl chloride	75-01-4	1.4	220	2,900	0.005	1.4
Xylenes (total)	1330-20-7	NA ¹	NA ³	100	0.005	NA ³
Zinc (total)	7440-66-6	NA ¹	NA ¹	NA	1	NA ¹

NA = Not available/applicable

1 – Appropriate toxicological information not available

2 – Health-based criterion exceeds one million parts per million

3 – Exceeds soil saturation limit

4 – Exceeds soil saturation limit; however, human health-based criterion based on particulate portion of the equation