

Table 5

Migration to Ground Water Soil Remediation Standards

Contaminant	CAS No.	Ground Water Remediation Standard (µg/L)	Migration to Ground Water Soil Criterion (mg/kg)	Soil Saturation Limit (mg/kg)	Soil Reporting Limit (mg/kg)	Migration to Ground Water Soil Remediation Standard (mg/kg)
Acenaphthene	83-32-9	400	82	40	0.17	NA ¹
Acetone (2-Propanone)	67-64-1	6,000	19	160,000	0.01	19
Acetophenone	98-86-2	700	3.6	1,600	0.33	3.6
Aldrin	309-00-2	0.04	0.13	2.8	0.002	0.13
Aluminum (total)	7429-90-5	NA	NA	NA	20	NA ²
Anthracene	120-12-7	2,000	1,300	1.4	0.17	NA ¹
Antimony (total)	7440-36-0	6	5.4	NA	1	5.4
Arsenic (total)	7440-38-2	3	1.6	NA	0.5	19 ³
Atrazine	1912-24-9	3	0.036	21	0.33	0.33 ⁴
Barium (total)	7440-39-3	6,000	2,100	NA	5	2,100
Benzaldehyde	100-52-7	NA	NA	1,200	0.33	NA ⁵
Benzene	71-43-2	1	0.0094	850	0.005	0.0094
Benzo(a)anthracene (1,2-Benzanthracene)	56-55-3	0.1	0.71	3.3	0.17	0.71
Benzo(a)pyrene	50-32-8	0.1	2.3	1.9	0.17	NA ¹
Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	0.2	4.8	1.8	0.17	NA ¹
Benzo(k)fluoranthene	207-08-9	0.5	12	0.94	0.17	NA ¹
Beryllium	7440-41-7	1	0.70	NA	0.5	0.70
1,1'-Biphenyl	92-52-4	400	83	72	0.17	NA ¹
Bis(2-chloroethoxy)methane	111-91-1	NA	NA	1,400	0.17	NA ⁵
Bis(2-chloroethyl)ether	111-44-4	7	0.030	3,700	0.33	0.33 ⁴
Bis(2-ethylhexyl)phthalate	117-81-7	3	14	65	0.17	14
Bromodichloromethane (Dichlorobromomethane)	75-27-4	1	0.0045	690	0.005	0.0050 ⁴
Bromoform	75-25-2	4	0.018	680	0.005	0.018
Bromomethane (Methyl bromide)	74-83-9	10	0.043	3,300	0.005	0.043
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	300	0.98	36,000	0.01	0.98
Butylbenzyl phthalate	85-68-7	100	29	39	0.17	29
Cadmium	7440-43-9	4	1.9	NA	0.5	1.9
Caprolactam	105-60-2	5,000	20	160,000	0.33	20
Carbon disulfide	75-15-0	700	3.7	580	0.005	3.7

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Carbon tetrachloride	56-23-5	1	0.0075	300	0.005	0.0075
Chlordane (alpha and gamma forms summed)	57-74-9	0.5	1.4	7.6	0.002	1.4
4-Chloroaniline	106-47-8	30	0.23	1,500	0.17	0.23
Chlorobenzene	108-90-7	50	0.64	320	0.005	0.64
Chloroethane (Ethyl chloride)	75-00-3	NA	NA	1,700	0.005	NA ⁵
Chloroform	67-66-3	70	0.33	1,900	0.005	0.33
Chloromethane (Methyl chloride)	74-87-3	NA	NA	1,200	0.005	NA ⁵
2-Chloronaphthalene	91-58-7	600	61	60	0.17	NA ¹
2-Chlorophenol (o-Chlorophenol)	95-57-8	40	0.76	11,000	0.17	0.76
Chrysene	218-01-9	5	36	0.72	0.17	NA ¹
Cobalt (total)	7440-48-4	100	90	NA	0.5	90
Copper (total)	7440-50-8	1,300	910	NA	1	910
Cyanide	57-12-5	100	20	NA	0.5	20
Cyclohexane	110-82-7	NA	NA	65	0.005	NA ⁵
4,4'-DDD (p,p'-TDE)	72-54-8	0.1	0.47	21	0.003	0.47
4,4'-DDE (p,p'-DDX)	72-55-9	0.1	0.47	9.4	0.003	0.47
4,4'-DDT	50-29-3	0.1	0.67	1.9	0.003	0.67
Dibenz(a,h)anthracene	53-70-3	0.3	23	9.5	0.17	NA ¹
Dibromochloromethane (Chlorodibromomethane)	124-48-1	1	0.0044	600	0.005	0.0050 ⁴
1,2-Dibromo-3-chloropropane	96-12-8	0.02	0.00015	470	0.005	0.0050 ⁴
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.03	0.00014	920	0.005	0.0050 ⁴
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	600	11	140	0.005	11
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	600	11	110	0.005	11
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	75	1.4	74	0.005	1.4
3,3'-Dichlorobenzidine	91-94-1	30	3.9	20	0.33	3.9
Dichlorodifluoromethane (Freon 12)	75-71-8	1,000	38	540	0.005	38
1,1-Dichloroethane	75-34-3	50	0.24	1,200	0.005	0.24
1,2-Dichloroethane	107-06-2	2	0.0095	2,000	0.005	0.0095
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	1	0.0069	830	0.005	0.0069

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1,2-Dichloroethene (cis) (c-1,2-Dichloroethylene)	156-59-2	70	0.35	1,600	0.005	0.35
1,2-Dichloroethene (trans) (t-1,2-Dichloroethylene)	156-60-5	100	0.51	1,100	0.005	0.51
2,4-Dichlorophenol	120-83-2	20	0.19	2,100	0.17	0.19
1,2-Dichloropropane	78-87-5	1	0.0058	810	0.005	0.0058
1,3-Dichloropropene (total)	542-75-6	1	0.0063	880	0.005	0.0063
Dieldrin	60-57-1	0.03	0.024	7.9	0.003	0.024
Diethylphthalate	84-66-2	6,000	44	390	0.17	44
2,4-Dimethylphenol	105-67-9	100	2.3	8,900	0.17	2.3
Di-n-butyl phthalate	84-74-2	700	35	28	0.17	NA ¹
2,4-Dinitrophenol	51-28-5	40	0.12	430	0.33	0.33 ⁴
2,4-Dinitrotoluene/2,6-Dinitrotoluene (mixture)	25321-14-6	10	0.27	360	0.17	0.27
Di-n-octyl phthalate	117-84-0	100	560	6.2	0.33	NA ¹
1,4-Dioxane	123-91-1	10	0.032	160,000	0.067	0.067 ⁴
Endosulfan I and Endosulfan II (alpha and beta) (summed)	115-29-7	40	11	4.4	0.003	NA ¹
Endrin	72-20-8	2	1.6	10	0.003	1.6
Ethylbenzene	100-41-4	700	15	180	0.005	15
Extractable Petroleum Hydrocarbons (No. 2 Fuel Oil and Diesel)	various	NA	NA	NA	80	NA ⁵
Extractable Petroleum Hydrocarbons (Other)	various	NA	NA	NA	80	NA ⁵
Fluoranthene	206-44-0	300	670	29	0.33	NA ¹
Fluorene	86-73-7	300	110	31	0.17	NA ¹
alpha-HCH (alpha-BHC)	319-84-6	0.02	0.0023	12	0.002	0.0023
beta-HCH (beta-BHC)	319-85-7	0.04	0.0046	1.4	0.002	0.0046
Heptachlor	76-44-8	0.05	0.083	15	0.002	0.083
Heptachlor epoxide	1024-57-3	0.2	0.081	4.1	0.002	0.081
Hexachlorobenzene	118-74-1	0.02	0.005	0.078	0.17	0.17 ⁴
Hexachloro-1,3-butadiene	87-68-3	1	0.038	6.1	0.17	0.17 ⁴
Hexachlorocyclopentadiene	77-47-4	40	2.5	5.6	0.33	2.5
Hexachloroethane	67-72-1	7	0.079	28	0.17	0.17 ⁴
n-Hexane	110-54-3	30	5.5	88	-	5.5
2-Hexanone	591-78-6	300	1.1	3,200	0.01	1.1
Indeno(1,2,3-cd)pyrene	193-39-5	0.2	16	0.086	0.17	NA ¹
Isophorone	78-59-1	40	0.23	3,400	0.17	0.23

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Isopropylbenzene	98-82-8	700	22	98	0.005	22
Lead (total)	7439-92-1	5	90	NA	0.5	90
Lindane (gamma-HCH)(gamma-BHC)	58-89-9	0.03	0.0035	42	0.002	0.0035
Manganese (total)	7439-96-5	NA	NA	NA	0.5	NA ²
Mercury (total)	7439-97-6	2	0.014	NA	0.1	0.10 ⁴
Methoxychlor	72-43-5	40	43	5.4	0.02	NA ¹
Methyl acetate	79-20-9	7,000	22	39,000	0.005	22
Methylene chloride (Dichloromethane)	75-09-2	3	0.013	2,800	0.005	0.013
2-Methylnaphthalene	91-57-6	30	3.1	130	0.17	3.1
4-Methyl-2-pentanone (MIBK)	108-10-1	NA	NA	3,400	0.01	NA ⁵
2-Methylphenol (o-cresol)	95-48-7	NA	NA	20,000	0.33	NA ⁵
4-Methylphenol (p-cresol)	106-44-5	NA	NA	16,000	0.33	NA ⁵
Methyl tert-butyl ether (MTBE)	1634-04-4	70	0.25	9,100	0.005	0.25
Naphthalene	91-20-3	300	19	100	0.17	19
Nickel (total)	7440-02-0	100	48	NA	0.5	48
4-Nitroaniline	100-01-6	NA	NA	270	0.33	NA ⁵
Nitrobenzene	98-95-3	6	0.073	1,300	0.17	0.17 ⁴
N-Nitrosodi-n-propylamine	621-64-7	10	0.14	9,200	0.17	0.17 ⁴
N-Nitrosodiphenylamine	86-30-6	10	1.1	190	0.17	1.1
2,2'-oxybis(1-chloropropane)	108-60-1	300	1.9	540	0.33	1.9
Pentachlorophenol	87-86-5	0.3	0.062	140	0.33	0.33 ⁴
Phenol	108-95-2	2,000	21	44,000	0.33	21
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	1.6	110	0.03	1.6
Pyrene	129-00-0	200	440	15	0.17	NA ¹
Selenium (total)	7782-49-2	40	11	NA	2.5	11
Silver (total)	7440-22-4	40	0.33	NA	0.5	0.50 ⁴
Styrene	100-42-5	100	2.1	330	0.005	2.1
Tertiary butyl alcohol (TBA)	75-65-0	100	0.32	160,000	0.1	0.32
1,2,4,5-Tetrachlorobenzene	95-94-3	NA	NA	2.7	0.17	NA ⁵
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.00001	0.00010	0.10	0.000001	0.00010 ⁶
1,1,2,2-Tetrachloroethane	79-34-5	1	0.0069	980	0.005	0.0069
Tetrachloroethene (PCE) (Tetrachloroethylene)	127-18-4	1	0.0086	89	0.005	0.0086
2,3,4,6-Tetrachlorophenol	58-90-2	200	24	140	0.17	24
Toluene	108-88-3	600	7.8	340	0.005	7.8

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Toxaphene	8001-35-2	2	6.2	110	0.2	6.2
1,2,4-Trichlorobenzene	120-82-1	9	0.52	140	0.005	0.52
1,1,1-Trichloroethane	71-55-6	30	0.20	420	0.005	0.20
1,1,2-Trichloroethane	79-00-5	3	0.017	1,300	0.005	0.017
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	1	0.0065	410	0.005	0.0065
Trichlorofluoromethane (Freon 11)	75-69-4	2,000	29	790	0.005	29
2,4,5-Trichlorophenol	95-95-4	700	68	5,800	0.2	68
2,4,6-Trichlorophenol	88-06-2	20	0.86	1,700	0.2	0.86
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon TF)	76-13-1	NA	NA	530	0.005	NA ⁵
1,2,4-Trimethylbenzene	95-63-6	NA	NA	80	0.076	NA ⁵
Vanadium (total)	7440-62-2	NA	NA	NA	2.5	NA ⁵
Vinyl chloride	75-01-4	1	0.0067	2,900	0.005	0.0067
Xylenes (total)	1330-20-7	1,000	19	100	0.005	19
Zinc (total)	7440-66-6	2,000	930	NA	1	930

NA = Not available/not applicable

1 – Standard not applicable because criterion is above soil saturation limit

2 – Standard not applicable because Ground Water Remediation Standard is a secondary standard

3 – Standard is based on natural background

4 – Standard set to soil reporting limit

5 – Ground Water Remediation Standard not available

6 – This standard is used for comparison to site soil data that have been converted to sample-specific TCDD-TEQ values through application of the Toxicity Equivalence Factor Methodology (USEPA 2010) and using the WHO 2005 Mammalian Toxic Equivalency Factors (TEFs).