

THIS IS A COURTESY COPY OF REMEDIATION STANDARDS COMPARISON TABLES ASSOCIATED WITH THE REMEDIATION STANDARDS, N.J.A.C. 7:26D. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THE VALUES IN THESE TABLES AND THE OFFICIAL VERSION OF THE RULE, THE OFFICAL VERSION OF THE RULE WILL GOVERN. ALL OF THE DEPARTMENT'S RULES ARE COMPILED IN TITLE 7 OF THE NEW JERSEY ADMINISTRATIVE CODE.

2023 Soil, Soil Leachate and Indoor Air Standards Sorted by Chemical Fraction

Chemical	CAS No.	Ingestion-Dermal		Inhalation		Migration to Groundwater		Indoor Air (Vapor Intrusion)	
		Residential (mg/kg)	Nonresidential (mg/kg)	Residential (mg/kg)	Nonresidential (mg/kg)	Soil RS (mg/kg)	Soil Leachate (µg/L)	Residential (µg/m3)	Nonresidential (µg/m3)
Volatile Organic Compounds									
Acetone (2-Propanone)	67-64-1	70,000	NA (2)	NA (1)	NA (1)	19	120,000	NA (i)	NA (i)
Benzene	71-43-2	3.0	16	2.2	11	0.0094	20	0.64 (ii)	1.6
Bromodichloromethane (Dichlorobromomethane)	75-27-4	11	59	NA (1)	NA (1)	0.0050 (8)	20	NA (i)	NA (i)
Bromoform	75-25-2	88	460	NA (1)	NA (1)	0.018	80	NA (i)	NA (i)
Bromomethane (Methyl bromide)	74-83-9	110	1,800	18	82	0.043	200	5.2	22
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	47,000	780,000	NA (2,3)	NA (2,3)	0.98	6,000	5,200	22,000
Carbon disulfide	75-15-0	NA (1)	NA (1)	NA (2,3)	NA (2,3)	3.7	14,000	730	3,100
Carbon tetrachloride	56-23-5	7.6	40	1.4	6.9	0.0075	20	1.3 (ii)	2.0
Chlorobenzene	108-90-7	510	8,400	NA (2,3)	NA (2,3)	0.64	1,000	52	220
Chloroethane (Ethyl chloride)	75-00-3	NA (1)	NA (1)	NA (2,3)	NA (2,3)	NA (6)	NA (6)	10,000	44,000
Chloroform	67-66-3	780	13,000	590	NA (2,3)	0.33	1,400	100	430
Chloromethane (Methyl chloride)	74-87-3	NA (1)	NA (1)	270	1,200	NA (6)	NA (6)	94	390
Cyclohexane	110-82-7	NA (1)	NA (1)	NA (2,3)	NA (2,3)	NA (6)	NA (6)	6,300	26,000
Dibromochloromethane (Chlorodibromomethane)	124-48-1	8.3	43	NA (1)	NA (1)	0.0050 (8)	20	NA (i)	NA (i)
1,2-Dibromo-3-chloropropane	96-12-8	0.87	4.5	0.026	0.12	0.0050 (8)	0.40		
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.35	1.8	0.085	0.41	0.0050 (8)	0.60	1.5 (ii)	1.5 (ii)
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	6,700	110,000	NA (2,3)	NA (2,3)	11	12,000	210	880
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	6,700	110,000	NA (1)	NA (1)	11	12,000		
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	780	13,000	NA (2,3)	NA (2,3)	1.4	1,500	830	3,500

Dichlorodifluoromethane (Freon 12)	75-71-8	16,000	260,000	NA (1)	NA (1)	38	20,000	NA (i)	NA (i)
1,1-Dichloroethane	75-34-3	120	640	NA (1)	NA (1)	0.24	1,000	NA (i)	NA (i)
1,2-Dichloroethane	107-06-2	5.8	30	71	320	0.0095	40	7.3	31
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	11	180	52	240	0.0069	20	21	88
1,2-Dichloroethene (cis) (c-1,2-Dichloroethylene)	156-59-2	780	13,000	NA (1)	NA (1)	0.35	1,400	NA (i)	NA (i)
1,2-Dichloroethene (trans) (t-1,2-Dichloroethylene)	156-60-5	1,300	22,000	NA (1)	NA (1)	0.56	2,000	NA (i)	NA (i)
1,2-Dichloropropane	78-87-5	19	98	5.7	27	0.0058	20	0.92 (ii)	3.3
1,3-Dichloropropene (total)	542-75-6	7.0	36	4.8	23	0.0063	20	0.91 (ii)	3.1
1,4-Dioxane	123-91-1	7.0	36	45	210	0.067 (8)	8.0	0.72 (ii)	2.5
Ethylbenzene	100-41-4	7,800	130,000	10	48	15	14,000	1.1	4.9
n-Hexane	110-54-3	NA (1)	NA (1)	NA (2,3)	NA (2,3)	5.5	600	730	3,100
2-Hexanone	591-78-6	390	6,500	1,000	NA (2,3)	0.15	800		
Isopropylbenzene	98-82-8	7,800	130,000	NA (2,3)	NA (2,3)	22	14,000		
Methyl acetate	79-20-9	78,000	NA (2)	NA (1)	NA (1)	22	140,000		
Methylene chloride (Dichloromethane)	75-09-2	50	260	1,400	NA (2,3)	0.013	60	280	1,200
4-Methyl-2-pentanone (MIBK)	108-10-1	NA (1)	NA (1)	NA (2,3)	NA (2,3)	NA (6)	NA (6)	3,100	13,000
Methyl tert-butyl ether (MTBE)	1634-04-4	780	13,000	140	650	0.25	1,400	11	47
Styrene	100-42-5	16,000	260,000	NA (2,3)	NA (2,3)	2.1	2,000	1,000	4,400
Tertiary butyl alcohol (TBA)	75-65-0	1,400	23,000	NA (1)	NA (1)	0.32	2,000		
1,1,2,2-Tetrachloroethane	79-34-5	3.5	18	NA (1)	NA (1)	0.0069	20	NA (i)	NA (i)
Tetrachloroethene (PCE) (Tetrachloroethylene)	127-18-4	330	1,700	47	NA (2,3)	0.0086	20	11	47
Toluene	108-88-3	6,300	100,000	NA (2,3)	NA (2,3)	7.8	12,000	5,200	22,000
1,2,4-Trichlorobenzene	120-82-1	780	13,000	94	NA (2,3)	0.52	180	3.7 (ii)	8.8
1,1,1-Trichloroethane	71-55-6	160,000	NA (2)	NA (2,3)	NA (2,3)	0.20	600	5,200	22,000
1,1,2-Trichloroethane	79-00-5	12	64	NA (1)	NA (1)	0.017	60	NA (i)	NA (i)
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	15	79	3.0	14	0.0065	20	1.1 (ii)	3.0
Trichlorofluoromethane (Freon 11)	75-69-4	23,000	390,000	NA (1)	NA (1)	29	40,000	NA (i)	NA (i)
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon TF)	76-13-1	NA (1)	NA (1)	NA (2,3)	NA (2,3)	NA (3)	NA (4)	5,200	22,000
1,2,4-Trimethylbenzene	95-63-6	780	13,000	NA (2,3)	NA (2,3)	NA (6)	NA (6)	63	260
Vinyl chloride	75-01-4	0.97	5.0	1.4	6.4	0.0067	20	0.64	2.8
Xylenes (total)	1330-20-7	12,000	190,000	NA (2,3)	NA (2,3)	19	20,000	100	440

Semi-Volatile Organic Compounds									
Acenaphthene	83-32-9	3,600	50,000	NA (1)	NA (1)	NA (3)	NA (4)		
Acetophenone	98-86-2	7,800	130,000	NA (1)	NA (1)	3.6	14,000		
Anthracene	120-12-7	18,000	250,000	NA (1)	NA (1)	NA (3)	NA (4)		
Atrazine	1912-24-9	220	3,200	NA (1)	NA (1)	0.33 (8)	60		
Benzaldehyde	100-52-7	170	910	NA (1)	NA (1)	NA (6)	NA (6)		
Benzo(a)anthracene (1,2-Benzanthracene)	56-55-3	5.1	23	78,000 (9)	370,000 (9)	0.71	2.0		
Benzo(a)pyrene	50-32-8	0.51	2.3	3,500 (9)	16,000 (9)	NA (3)	NA (4)		
Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	5.1	23	78,000 (9)	370,000 (9)	NA (3)	NA (4)		
Benzo(k)fluoranthene	207-08-9	51	230	780,000 (9)	NA (2,3)	NA (3)	NA (4)		
1,1'-Biphenyl	92-52-4	87	450	NA (1)	NA (1)	NA (3)	NA (4)		
Bis(2-chloroethoxy)methane	111-91-1	190	2,700	NA (1)	NA (1)	NA (6)	NA (6)		
Bis(2-chloroethyl)ether	111-44-4	0.63	3.3	NA (1)	NA (1)	0.33 (8)	140		
Bis(2-ethylhexyl)phthalate	117-81-7	39	180	NA (1)	NA (1)	14	60		
Butylbenzyl phthalate	85-68-7	290	1,300	NA (1)	NA (1)	29	2,000		
Caprolactam	105-60-2	32,000	460,000	290	1,300	16	80,000		
4-Chloroaniline	106-47-8	2.7	13	NA (1)	NA (1)	0.23	600		
2-Chloronaphthalene	91-58-7	4,800	67,000	NA (1)	NA (1)	NA (3)	NA (4)		
2-Chlorophenol (o-Chlorophenol)	95-57-8	390	6,500	NA (1)	NA (1)	0.76	800		
Chrysene	218-01-9	510	2,300	NA (2,3)	NA (2,3)	NA (3)	NA (4)		
Dibenz(a,h)anthracene	53-70-3	0.51	2.3	7,800 (9)	37,000 (9)	NA (3)	NA (4)		
3,3'-Dichlorobenzidine	91-94-1	1.2	5.7	NA (1)	NA (1)	3.9	600		
2,4-Dichlorophenol	120-83-2	190	2,700	NA (1)	NA (1)	0.19	400		
Diethylphthalate	84-66-2	51,000	730,000	NA (1)	NA (1)	44	120,000		
2,4-Dimethylphenol	105-67-9	1,300	18,000	NA (1)	NA (1)	2.3	2,000		
Di-n-butyl phthalate	84-74-2	6,300	91,000	NA (1)	NA (1)	NA (3)	NA (4)		
2,4-Dinitrophenol	51-28-5	130	1,800	NA (1)	NA (1)	0.33 (8)	800		
2,4-Dinitrotoluene/2,6-Dinitrotoluene (mixture)	25321-14-6	0.80	3.8	NA (1)	NA (1)	0.27	200		
Di-n-octyl phthalate	117-84-0	630	9,100	NA (1)	NA (1)	NA (3)	NA (4)		
Extractable Petroleum Hydrocarbons (Category 1)	various	5,300 (14)	75,000 (14)	NA (1)	NA (1)	NA (6)	NA (6)		
Extractable Petroleum Hydrocarbons (Category 2)	various	Sample-specific (15)	Sample-specific (15)	NA (1)	NA (1)	NA (6)	NA (6)		
Fluoranthene	206-44-0	2,400	33,000	NA (1)	NA (1)	NA (3)	NA (4)		
Fluorene	86-73-7	2,400	33,000	NA (1)	NA (1)	NA (3)	NA (4)		
Hexachlorobenzene	118-74-1	0.43	2.3	NA (1)	NA (1)	0.17 (8)	0.40		
Hexachloro-1,3-butadiene	87-68-3	8.9	47	NA (1)	NA (1)	0.17 (8)	20	NA (i)	NA (i)

Hexachlorocyclopentadiene	77-47-4	470	7,800	2.7	NA (2,3)	2.5	800		
Hexachloroethane	67-72-1	17	91	NA (2,3)	NA (2,3)	0.17 (8)	140		
Indeno(1,2,3-cd)pyrene	193-39-5	5.1	23	78,000 (9)	370,000 (9)	NA (3)	NA (4)		
Isophorone	78-59-1	570	2,700	NA (2,3)	NA (2,3)	0.23	800		
2-Methylnaphthalene	91-57-6	240	3,300	NA (1)	NA (1)	3.1	600		
2-Methylphenol (o-cresol)	95-48-7	320	4,600	NA (1)	NA (1)	0.77	1,000		
4-Methylphenol (p-cresol)	106-44-5	630	9,100	NA (1)	NA (1)	0.75	1,000		
Naphthalene	91-20-3	2,500	34,000	5.7	27	19	6,000	2.6 (ii)	2.6 (ii)
4-Nitroaniline	100-01-6	27	130	NA (2,3)	NA (2,3)	NA (6)	NA (6)		
Nitrobenzene	98-95-3	160	2,600	7.5	36	0.17 (8)	120		
N-Nitrosodi-n-propylamine	621-64-7	0.17 (8)	0.36	NA (1)	NA (1)	0.17 (8)	200		
N-Nitrosodiphenylamine	86-30-6	110	520	NA (1)	NA (1)	1.1	200		
2,2'-oxybis(1-chloropropane)	108-60-1	3,100	52,000	NA (1)	NA (1)	1.9	6,000		
Pentachlorophenol	87-86-5	1.0	4.4	NA (1)	NA (1)	0.33 (8)	6.0		
Phenol	108-95-2	19,000	270,000	39,000	NA (2,3)	21	40,000		
Pyrene	129-00-0	1,800	25,000	NA (1)	NA (1)	NA (3)	NA (4)		
1,2,4,5-Tetrachlorobenzene	95-94-3	23	390	NA (1)	NA (1)	NA (6)	NA (6)		
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.000051 (12)	0.00081 (12)	NA (1)	NA (1)	0.00010 (12)	0.00020 (13)		
2,3,4,6-Tetrachlorophenol	58-90-2	1,900	27,000	NA (1)	NA (1)	26	4,000		
2,4,5-Trichlorophenol	95-95-4	6,300	91,000	NA (1)	NA (1)	68	14,000		
2,4,6-Trichlorophenol	88-06-2	49	230	NA (1)	NA (1)	0.86	400		
Pesticides/PCBs									
Aldrin	309-00-2	0.041	0.21	NA (1)	NA (1)	0.13	0.80		
Chlordane (alpha and gamma forms summed)	57-74-9	0.27	1.4	NA (2,3)	NA (2,3)	1.4	10		
4,4'-DDD (p,p'-TDE)	72-54-8	2.3	11	NA (1)	NA (1)	0.47	2.0		
4,4'-DDE (p,p'-DDX)	72-55-9	2.0	11	NA (1)	NA (1)	0.47	2.0		
4,4'-DDT	50-29-3	1.9	9.5	NA (1)	NA (1)	0.67	2.0		
Dieldrin	60-57-1	0.034	0.16	NA (1)	NA (1)	0.024	0.60		
Endosulfan I and Endosulfan II (alpha and beta) (summed)	115-29-7	470	7,800	NA (1)	NA (1)	NA (3)	NA (4)		
Endrin	72-20-8	19	270	NA (1)	NA (1)	1.6	40		
alpha-HCH (alpha-BHC)	319-84-6	0.086	0.41	NA (1)	NA (1)	0.0023	0.40		
beta-HCH (beta-BHC)	319-85-7	0.30	1.4	NA (1)	NA (1)	0.0046	0.80		
Heptachlor	76-44-8	0.15	0.81	NA (1)	NA (1)	0.083	1.0		
Heptachlor epoxide	1024-57-3	0.076	0.40	NA (1)	NA (1)	0.081	4.0		
Lindane (gamma-HCH)(gamma-BHC)	58-89-9	0.57	2.8	NA (1)	NA (1)	0.0035	0.60		
Methoxychlor	72-43-5	320	4,600	NA (1)	NA (1)	NA (3)	NA (4)		

Polychlorinated biphenyls (PCBs)	1336-36-3	0.25	1.1	NA (1)	NA (1)	1.6	10		
Toxaphene	8001-35-2	0.49	2.3	NA (1)	NA (1)	6.2	40		
Metals									
Aluminum (total)	7429-90-5	78,000	NA (2)	NA (2)	NA (2)	NA (5)	NA (5)		
Antimony (total)	7440-36-0	31	520	NA (1)	NA (1)	5.4	120		
Arsenic (total)	7440-38-2	19 (7)	19 (7)	1,100	5,200	19 (7)	60		
Barium (total)	7440-39-3	16,000	260,000	870,000	NA (2)	2,100	120,000		
Beryllium	7440-41-7	160	2,600	2,000	9,300	0.70	20		
Cadmium	7440-43-9	71	1,100	2,600	12,000	1.9	80		
Cobalt (total)	7440-48-4	23	390	520	2,500	90	2,000		
Copper (total)	7440-50-8	3,100	52,000	NA (1)	NA (1)	910	26,000		
Cyanide	57-12-5	47	780	NA (2)	NA (2)	20	2,000		
Lead (total)	7439-92-1	400 (10)	800 (11)	NA (1)	NA (1)	90	100		
Manganese (total)	7439-96-5	1,900	31,000	87,000	400,000	NA (5)	NA (5)		
Mercury (total) (elemental for indoor air)	7439-97-6	23	390	520,000 (9)	NA (2,3)	0.10 (8)	40	1.0 (ii,iii)	1.3 (iii)
Nickel (total)	7440-02-0	1,600	26,000	20,000	93,000	48	2,000		
Selenium (total)	7782-49-2	390	6,500	NA (1)	NA (1)	11	800		
Silver (total)	7440-22-4	390	6,500	NA (1)	NA (1)	0.50 (8)	800		
Vanadium (total)	7440-62-2	390	6,500	170,000	800,000	NA (6)	NA (6)		
Zinc (total)	7440-66-6	23,000	390,000	NA (1)	NA (1)	930	40,000		
PFAS									
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6 & 6203780-3	0.23 (16)	3.9 (16)	NA (17)	NA (17)	AOC/Site-Specific (18)	0.40 (16)		
Perfluorononanoic acid (PFNA)	375-95-1	0.047 (16)	0.67 (16)	NA (17)	NA (17)	AOC/Site-Specific (18)	0.26 (16)		
Perfluorooctane sulfonate (PFOS)	1763-23-1	0.11 (16)	1.6 (16)	NA (17)	NA (17)	AOC/Site-Specific (18)	0.26 (16)		
Perfluorooctanoic acid (PFOA)	335-67-1	0.13 (16)	1.8 (16)	NA (17)	NA (17)	AOC/Site-Specific (18)	0.28 (16)		

Footnotes

NA: Standard Not Applicable

AOC: Area of Concern

Soil Remediation Standards

(1) Not applicable because toxicological information that meets the Site Remediation and Waste Management Program's policy is not available

- (2) Not applicable because the calculated health-based criterion exceeds one million mg/kg
- (3) Not applicable because the calculated health-based criterion exceeds the soil saturation limit
- (4) Not applicable because the calculated health-based soil criterion exceeds the soil saturation limit
- (5) Not applicable because ground water remediation standard is a secondary standard
- (6) Not applicable because a ground water remediation standard does not exist
- (7) Standard is based on natural background
- (8) Standard set at reporting limit
- (9) Exceeds soil saturation limit; however, health-based criterion based on particulate portion of the equation
- (10) Standard based on the Integrated Exposure Uptake Biokinetic (IEUBK) model for lead in children
- (11) Standard based on the Adult Lead Model (ALM)
- (12) 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)
- (13) This standard is used for comparison to site soil leachate data that have been converted to sample-specific TCDD-TEQ values through application of the Toxicity Equivalence Factor Methodology (USEPA 2010)
- (14) Special calculation for EPH - see at N.J.A.C. 7:26D Appendix 2
- (15) Sample-specific calculation using EPH calculator - see at N.J.A.C. 7:26D Appendix 2
- (16) Interim remediation standard
- (17) Not applicable because adequate chemical properties and toxicity information is not available
- (18) Interim remediation standard to be calculated using the synthetic precipitation leaching procedure (SPLP) and the Department's PFAS SPLP calculator

Indoor Air Remediation standards

- (i) Not applicable because toxicological information that meets the Site Remediation and Waste Management's policy is not available
- (ii) Standard set at reporting limit
- (iii) Value is for elemental mercury