

TABLE 1
NJDEP MASTER TABLE
GENERIC VAPOR INTRUSION SCREENING LEVELS

Chemical	CAS No.	Ground Water Screening Levels $\mu\text{g/L}$	Soil Gas Screening Levels		Indoor Air Screening Levels	
			Residential $\mu\text{g/m}^3$	Nonresidential $\mu\text{g/m}^3$	Residential $\mu\text{g/m}^3$	Nonresidential $\mu\text{g/m}^3$
Acetone (2-propanone)	67-64-1	21,000,000	1,600,000	6,800,000	32,000	140,000
Benzene	71-43-2	20	16	79	2	2
Bromodichloromethane	75-27-4	2	34	34	3	3
Bromoethene (vinyl bromide)	593-60-2	0.2	22	22	2	2
Bromoform	75-25-2	300	110	560	5	11
Bromomethane (methyl bromide)	74-83-9	20	260	1,100	5	22
1,3-Butadiene (vinyl ethylene)	106-99-0	0.3	11	20	1	1
2-Butanone (methyl ethyl ketone)	78-93-3	2,500,000	260,000	1,100,000	5,200	22,000
Carbon disulfide	75-15-0	1,500	36,000	150,000	730	3,100
Carbon tetrachloride	56-23-5	1	31	100	3	3
Chlorobenzene	108-90-7	770	2,600	11,000	52	220
Chloroethane (ethyl chloride)	75-00-3	26,000	520,000	2,200,000	10,000	44,000
Chloroform	67-66-3	70	24	27	2	2
Chloromethane (methyl chloride)	74-87-3	240	4,700	20,000	94	390
3-Chloropropene (allyl chloride)	107-05-1	1	20	100	2	2
Cyclohexane	110-82-7	16,000	310,000	1,300,000	6,300	26,000
Dibromochloromethane	124-48-1	6	43	43	4	4
1,2-Dibromoethane (ethylene dibromide)	106-93-4	0.4	38	38	4	4
1,2-Dichlorobenzene (o)	95-50-1	6,800	10,000	44,000	210	880
1,4-Dichlorobenzene (p)	106-46-7	75	30	56	3	3
Dichlorodifluoromethane (Freon 12)	75-71-8	1,000	5,200	22,000	100	440
1,1-Dichloroethane	75-34-3	50	76	380	2	8
1,2-Dichloroethane	107-06-2	3	20	24	2	2
1,1-Dichloroethene	75-35-4	260	10,000	44,000	210	880
1,2-Dichloroethene (trans)	156-60-5	520	3,100	13,000	63	260
1,2-Dichloropropane	78-87-5	4	23	61	2	2
1,3-Dichloropropene (total) ^a	542-75-6	7	30	150	2	3
Ethylbenzene	100-41-4	700	49	250	2	5
Hexachlorobutadiene	87-68-3	1	53	53	5	5
n-Hexane	110-54-3	160	36,000	150,000	730	3,100
Mercury, elemental	7439-97-6	-	-	-	1	1

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March 2013

Chemical	CAS No.	Ground Water Screening Levels <i>µg/L</i>	Soil Gas Screening Levels		Indoor Air Screening Levels	
			<i>Residential</i> <i>µg/m³</i>	<i>Nonresidential</i> <i>µg/m³</i>	<i>Residential</i> <i>µg/m³</i>	<i>Nonresidential</i> <i>µg/m³</i>
Methylene chloride (dichloromethane)	75-09-2	920	4,800	61,000	96	1,200
4-Methyl-2-pentanone (MIBK)	108-10-1	900,000	160,000	660,000	3,100	13,000
Methyl tert-butyl ether (MTBE)	1634-04-4	580	470	2,400	9	47
Naphthalene*	91-20-3	300	26	26	3	3
Styrene	100-42-5	180,000	52,000	220,000	1,000	4,400
1,1,2,2-Tetrachloroethane	79-34-5	6	34	34	3	3
Tetrachloroethene (PCE)	127-18-4	31	470	2,400	9	47
Toluene	108-88-3	330,000	260,000	1,100,000	5,200	22,000
1,2,4-Trichlorobenzene	120-82-1	130	100	440	4	9
1,1,1-Trichloroethane	71-55-6	13,000	260,000	1,100,000	5,200	22,000
1,1,2-Trichloroethane	79-00-5	8	27	38	3	3
Trichloroethene (TCE)	79-01-6	2	27	150	3	3
Trichlorofluoromethane (Freon 11)	75-69-4	2,000	36,000	150,000	730	3,100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	3,700	1,600,000	6,600,000	31,000	130,000
Vinyl chloride	75-01-4	1	13	140	1	3
Xylenes (total) ^a	1330-20-7	8,600	5,200	22,000	100	440

NOTES

Values updated based on the USEPA Regional Screening Level Table (dated November 2012) toxicity factors and equations.

^a The concentrations of each isomer are added if multiple isomers are present and the results compared to the total screening level.

"-" = Not available.

* = The screening levels for naphthalene will commence 6 months from the implementation date of the updated VISL tables.

The user should refer to the NJDEP VI website at <http://www.nj.gov/dep/srp/guidance/vaporintrusion/> for the latest information on the tables.

TABLE 2
NJDEP RAPID ACTION LEVELS FOR INDOOR AIR

Chemical	CAS No.	Cancer/ Noncancer ^a	Rapid Action Levels ^b	
			Residential	Nonresidential
			ug/m ³	ug/m ³
Acetone (2-propanone)	67-64-1	N	64,000	280,000
Benzene	71-43-2	C	30	200
Bromodichloromethane	75-27-4	C	7	30
Bromoethene (vinyl bromide)	593-60-2	N	6	26
Bromoform	75-25-2	C	200	1,100
Bromomethane (methyl bromide)	74-83-9	N	10	44
1,3-Butadiene (vinyl ethylene)	106-99-0	N	4	18
2-Butanone (methyl ethyl ketone)	78-93-3	N	10,000	44,000
Carbon disulfide	75-15-0	N	1,500	6,200
Carbon tetrachloride	56-23-5	C	40	200
Chlorobenzene	108-90-7	N	100	440
Chloroethane (ethyl chloride)	75-00-3	N	20,000	88,000
Chloroform	67-66-3	C	10	50
Chloromethane (methyl chloride)	74-87-3	N	190	780
3-Chloropropene (allyl chloride)	107-05-1	N	2	8
Cyclohexane	110-82-7	N	13,000	52,000
Dibromochloromethane	124-48-1	C	9	50
1,2-Dibromoethane (ethylene dibromide)	106-93-4	C	4 ^d	4 ^d
1,2-Dichlorobenzene (o)	95-50-1	N	420	1,800
1,4-Dichlorobenzene (p)	106-46-7	C	20	100
Dichlorodifluoromethane (Freon 12)	75-71-8	N	200	880
1,1-Dichloroethane	75-34-3	C	200	800
1,2-Dichloroethane	107-06-2	C	9	50
1,1-Dichloroethene	75-35-4	N	420	1,800
1,2-Dichloroethene (trans)	156-60-5	N	130	520
1,2-Dichloropropane	78-87-5	N	8	36
1,3-Dichloropropene (total) ^c	542-75-6	N	42	180
Ethylbenzene	100-41-4	C	100	500
Hexachlorobutadiene	87-68-3	C	10	60

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Chemical	CAS No.	Cancer/ Noncancer ^a	Rapid Action Levels ^b	
			Residential	Nonresidential
			ug/m ³	ug/m ³
n-Hexane	110-54-3	N	1,500	6,200
Mercury, elemental	7439-97-6	N	1 ^d	2
Methylene chloride (dichloromethane)	75-09-2	N	1,300	5,200
4-Methyl-2-pentanone (MIBK)	108-10-1	N	6,200	26,000
Methyl tert-butyl ether (MTBE)	1634-04-4	C	900	4,700
Naphthalene*	91-20-3	N	6	26
Styrene	100-42-5	N	2,000	8,800
1,1,2,2-Tetrachloroethane	79-34-5	C	4	20
Tetrachloroethene (PCE)	127-18-4	N	84	360
Toluene	108-88-3	N	10,000	44,000
1,2,4-Trichlorobenzene	120-82-1	N	4	18
1,1,1-Trichloroethane	71-55-6	N	10,000	44,000
1,1,2-Trichloroethane	79-00-5	N	3 ^d	3 ^d
Trichloroethene (TCE)	79-01-6	N	4	18
Trichlorofluoromethane (Freon 11)	75-69-4	N	1,500	6,200
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	N	62,000	260,000
Vinyl chloride	75-01-4	C	20	300
Xylenes (total) ^c	1330-20-7	N	200	880
NOTES				
^a Values based on cancer (C) or noncancer (N) effects.				
^b Levels are the lower value generated using a factor of 100x for carcinogens and a factor of 2x for noncarcinogens using the Table A-4 health-based values.				
^c The concentrations of each isomer are added if multiple isomers are present and the results compared to the total screening level.				
^d Value is based on the higher analytical reporting limit.				
* = The screening levels for naphthalene will commence 6 months from the implementation date of the updated VISL tables.				

TABLE 3
NJDEP GROUND WATER SCREENING LEVELS FOR ALTERNATE SOIL TEXTURES

Chemical	CAS No.	LOAMY SAND: Ground Water Screening Levels (µg/L)	SANDY LOAM: Ground Water Screening Levels (µg/L)	LOAM: Ground Water Screening Levels (µg/L)
Acetone (2-Propanone)	67-64-1	21,000,000	24,000,000	29,000,000
Benzene	71-43-2	44 ^b	110 ^b	160 ^b
Bromodichloromethane (Dichlorobromomethane)	75-27-4	3	7	10
Bromoethene (Vinyl bromide)	593-60-2	0.4	1	2
Bromoform	75-25-2	430	580	810
Bromomethane (Methyl bromide)	74-83-9	43	110	160
1,3-Butadiene (Vinyl ethylene)	106-99-0	0.7 ^b	2 ^b	3 ^b
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	2,700,000	3,100,000	3,900,000
Carbon disulfide	75-15-0	3,200	8,100	12,000
Carbon tetrachloride	56-23-5	2	5	7
Chlorobenzene	108-90-7	1,700	3,800	5,800
Chloroethane (Ethyl chloride)	75-00-3	57,000	140,000	220,000
Chloroform	67-66-3	70 ^a	70 ^a	70 ^a
Chloromethane (Methyl chloride)	74-87-3	510	1,300	1,900
3-Chloropropene (Allyl chloride)	107-05-1	3	7	10
Cyclohexane	110-82-7	37,000 ^b	_ ^{b,c}	_ ^{b,c}
Dibromochloromethane (Chlorodibromomethane)	124-48-1	11	18	25
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.6	0.9	1
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	14,000	28,000	41,000
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	75 ^a	75 ^a	75 ^a
Dichlorodifluoromethane (Freon 12)	75-71-8	1,000 ^a	1,000 ^a	1,000 ^a
1,1-Dichloroethane	75-34-3	50 ^a	52	79
1,2-Dichloroethane	107-06-2	6	11	16
1,1-Dichloroethene (1,1-Dichloroethylene)	75-35-4	590	1,600	2,400
1,2-Dichloroethene (trans) (t-1,2-Dichloroethylene)	156-60-5	1,100	2,700	4,000
1,2-Dichloropropane	78-87-5	8	18	27
1,3-Dichloropropane (total) ^d	542-75-6	16	37	56
Ethylbenzene	100-41-4	700 ^{a,b}	700 ^{a,b}	700 ^{a,b}
Hexachloro-1,3-butadiene	87-68-3	3	8	13

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Chemical	CAS No.	LOAMY SAND: Ground Water Screening Levels (µg/L)	SANDY LOAM: Ground Water Screening Levels (µg/L)	LOAM: Ground Water Screening Levels (µg/L)
n-Hexane	110-54-3	380 ^b	1,000 ^b	1,600 ^b
Methylene chloride (Dichloromethane)	75-09-2	1,900	4,400	6,600
4-Methyl-2-pentanone (MIBK)	108-10-1	1,100,000	1,400,000	1,800,000
Methyl tert-butyl ether (MTBE)	1634-04-4	1,100	1,800	2,600
Naphthalene*	91-20-3	300 ^{a,b}	300 ^{a,b}	300 ^{a,b}
Styrene	100-42-5	- ^{b,c}	- ^{b,c}	- ^{b,c}
1,1,2,2-Tetrachloroethane	79-34-5	9	12	17
Tetrachloroethene (PCE) (Tetrachloroethylene)	127-18-4	77	200	320
Toluene	108-88-3	- ^{b,c}	- ^{b,c}	- ^{b,c}
1,2,4-Trichlorobenzene	120-82-1	250	430	620
1,1,1-Trichloroethane	71-55-6	31,000	82,000	130,000
1,1,2-Trichloroethane	79-00-5	16	26	38
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	4	11	17
Trichlorofluoromethane (Freon 11)	75-69-4	2,000 ^a	2,000 ^a	3,000
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon TF)	76-13-1	9,700	27,000	43,000
Vinyl chloride	75-01-4	1 ^a	1 ^a	1 ^a
Xylenes (total) ^d	1330-20-7	19,000 ^b	46,000 ^b	69,000 ^b
NOTES				
^a Value is based on the higher GWQS/PQLs.				
^b Screening level multiplied by a factor of ten to reflect degradation of chemical in the unsaturated soil zone.				
^c Calculated GWSL is above the water solubility limit, indicating that the indoor air screening level cannot be exceeded at any concentration.				
^d The concentrations of each isomer are added if multiple isomers are present and the result compared to the total screening level.				
"- " = Not available.				
* = The screening levels for naphthalene will commence 6 months from the implementation date of the updated VISL tables.				