

Draft PA DEP Statewide Health Standard Vapor Intrusion Screening Values

Version 1.2
17 June 2014

Contact:
C. David Brown, P.G.
cdbrown@pa.gov
484-250-5796

List of Tables

Table 1.	Groundwater Statewide health standard vapor intrusion screening values (SV_{GW}).....	2
Table 2.	Soil Statewide health standard vapor intrusion screening values (SV_{SOIL}).....	Error! Bookmark not defined.
Table 3.	Sub-slab soil gas Statewide health standard vapor intrusion screening values (SV_{SS})	Error! Bookmark not defined.
Table 4.	Indoor air Statewide health standard vapor intrusion screening values (SV_{IA}).....	Error! Bookmark not defined.
Table 5.	Near-source soil gas Statewide health standard vapor intrusion screening values (SV_{NS})	Error! Bookmark not defined.
Table 6.	Application of Statewide Health Standard Vapor Intrusion Screening.....	26

Table 1 Groundwater Statewide health standard vapor intrusion screening values (SV_{GW})

Regulated Substance	CAS No.	Residential (µg/L)	Type	Nonresidential (µg/L)	Type	Converted Residential (µg/L)	Type
ACETALDEHYDE	75-07-0	4,800	SV	68,000	SV	20,000	SV
ACETONE	67-64-1	35,000,000	SV	490,000,000	SV	150,000,000	SV
ACETONITRILE	75-05-8	72,000	SV	1,000,000	SV	300,000	SV
ACROLEIN	107-02-8	6.4	SV	89	SV	27	SV
ACRYLAMIDE	79-06-1	3,700,000	SV	160,000,000	SV	47,000,000	SV
ACRYLIC ACID	79-10-7	170,000	SV	2,400,000	SV	730,000	SV
ACRYLONITRILE	107-13-1	110	SV	1,900	SV	560	SV
ALLYL ALCOHOL	107-18-6	1,100	SV	15,000	SV	4,500	SV
AMMONIA	7664-41-7	200,000	SV	2,800,000	SV	840,000	SV
ANILINE	62-53-3	29,000	SV	410,000	SV	120,000	SV
BENZENE	71-43-2	23	SV	380	SV	110	SV
BENZYL CHLORIDE	100-44-7	60	SV	1,000	SV	300	SV
BETA PROPIOLACTONE	57-57-8	0.012	MSC	0.063	MSC	0.063	MSC
BIPHENYL, 1,1-	92-52-4	91	MSC	1,200	SV	430	MSC
BIS(2-CHLOROETHYL)ETHER	111-44-4	270	SV	4,600	SV	1,400	SV
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	1,800	SV	31,000	SV	9,200	SV
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0040	SV	0.067	SV	0.020	SV
BROMOCHLOROMETHANE	74-97-5	1,100	SV	16,000	SV	4,800	SV
BROMODICHLOROMETHANE	75-27-4	80	MSC	220	SV	80	MSC
BROMOMETHANE	74-83-9	23	SV	320	SV	97	SV
BUTADIENE, 1,3-	106-99-0	0.35	SV	5.8	SV	1.7	SV
CARBON DISULFIDE	75-15-0	1,800	SV	25,000	SV	7,600	SV
CARBON TETRACHLORIDE	56-23-5	5.8	SV	97	SV	29	SV
CHLORO-1,1-DIFLUOROETHANE, 1-	75-68-3	1,200,000	SV	1,400,000	Sol.	1,400,000	Sol.
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	3.6	SV	50	SV	15	SV
CHLOROBENZENE	108-90-7	770	SV	11,000	SV	3,200	SV
CHLORODIBROMOMETHANE	124-48-1	80	MSC	680	SV	200	SV
CHLORODIFLUOROMETHANE	75-45-6	110,000	MSC	520,000	SV	440,000	MSC

Table 1 Groundwater Statewide health standard vapor intrusion screening values (SV_{GW})

Regulated Substance	CAS No.	Residential (µg/L)	Type	Nonresidential (µg/L)	Type	Converted Residential (µg/L)	Type
CHLOROETHANE	75-00-3	31,000	SV	440,000	SV	130,000	SV
CHLOROFORM	67-66-3	80	MSC	190	SV	80	MSC
CHLOROPRENE	126-99-8	0.16	MSC	0.83	MSC	0.83	MSC
CHLOROPROPANE, 2-	75-29-6	210	SV	3,000	SV	890	SV
CRESOL(S)	1319-77-3	20,000,000	Sol.	20,000,000	Sol.	20,000,000	Sol.
CUMENE (ISOPROPYL BENZENE)	98-82-8	2,100	SV	30,000	SV	8,900	SV
CYCLOHEXANE	110-82-7	13,000	MSC	53,000	MSC	53,000	MSC
CYCLOHEXANONE	108-94-1	4,300,000	SV	37,000,000	Sol.	18,000,000	SV
DIBROMO-3-CHLOROPROPANE, 1,2-	96-12-8	0.62	SV	27	SV	8.0	SV
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	3.0	SV	50	SV	15	SV
DIBROMOMETHANE	74-95-3	220	SV	3,000	SV	910	SV
DICHLORO-2-BUTENE, 1,4-	764-41-0	0.44	SV	7.3	SV	2.2	SV
DICHLORO-2-BUTENE, TRANS-1,4-	110-57-6	0.45	SV	7.5	SV	2.2	SV
DICHLOROBENZENE, 1,2-	95-50-1	5,900	SV	82,000	SV	25,000	SV
DICHLOROBENZENE, P-	106-46-7	75	MSC	800	SV	240	SV
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	1,000	MSC	1,000	MSC	1,000	MSC
DICHLOROETHANE, 1,1-	75-34-3	100	SV	1,700	SV	520	SV
DICHLOROETHANE, 1,2-	107-06-2	33	SV	550	SV	170	SV
DICHLOROETHYLENE, 1,1-	75-35-4	280	SV	3,900	SV	1,200	SV
DICHLOROETHYLENE, TRANS-1,2-	156-60-5	570	SV	7,900	SV	2,400	SV
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	7,000	SV	99,000	SV	30,000	SV
DICHLOROPROPANE, 1,2-	78-87-5	36	SV	610	SV	180	SV
DICHLOROPROPENE, 1,3-	542-75-6	75	SV	1,300	SV	380	SV
DICYCLOPENTADIENE	77-73-6	15	MSC	62	MSC	62	MSC
DIOXANE, 1,4-	123-91-1	31,000	SV	510,000	SV	150,000	SV
EPICHLOROHYDRIN	106-89-8	700	SV	9,800	SV	2,900	SV

Table 1 Groundwater Statewide health standard vapor intrusion screening values (SV_{GW})

Regulated Substance	CAS No.	Residential (µg/L)	Type	Nonresidential (µg/L)	Type	Converted Residential (µg/L)	Type
ETHOXYETHANOL, 2- (EGEE)	110-80-5	24,000,000	SV	340,000,000	SV	100,000,000	SV
ETHYL BENZENE	100-41-4	6,300	SV	88,000	SV	26,000	SV
ETHYL METHACRYLATE	97-63-2	33,000	SV	460,000	SV	140,000	SV
ETHYLENE GLYCOL	107-21-1	510,000,000	SV	1,000,000,000	Sol.	1,000,000,000	Sol.
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	2,000	MSC	3,600	SV	2,000	MSC
FORMALDEHYDE	50-00-0	170,000	SV	2,900,000	SV	870,000	SV
FORMIC ACID	64-18-6	63,000	SV	880,000	SV	260,000	SV
FURFURAL	98-01-1	750,000	SV	11,000,000	SV	3,200,000	SV
HEXACHLOROETHANE	67-72-1	34	SV	570	SV	170	SV
HEXANE	110-54-3	1,500	MSC	6,200	MSC	6,200	MSC
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	450	SV	7,500	SV	2,300	SV
METHACRYLONITRILE	126-98-7	5,300	SV	74,000	SV	22,000	SV
METHANOL	67-56-1	41,000,000	SV	570,000,000	SV	170,000,000	SV
METHOXYETHANOL, 2-	109-86-4	3,100,000	SV	44,000,000	SV	13,000,000	SV
METHYL ACRYLATE	96-33-3	4,300	SV	61,000	SV	18,000	SV
METHYL CHLORIDE	74-87-3	46	SV	780	SV	230	SV
METHYL ETHYL KETONE	78-93-3	3,800,000	SV	53,000,000	SV	16,000,000	SV
METHYL HYDRAZINE	60-34-4	320	SV	4,500	SV	1,300	SV
METHYL ISOBUTYL KETONE	108-10-1	1,100,000	SV	15,000,000	SV	4,400,000	SV
METHYL ISOCYANATE	624-83-9	40	SV	560	SV	170	SV
METHYL METHACRYLATE	80-62-6	110,000	SV	1,500,000	SV	460,000	SV
METHYL N-BUTYL KETONE (2-HEXANONE)	591-78-6	16,000	SV	230,000	SV	68,000	SV
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	1,100	SV	16,000	SV	4,800	SV
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	6,000	SV	100,000	SV	30,000	SV
METHYLNAPHTHALENE, 2-	91-57-6	480	SV	6,700	SV	2,000	SV
NAPHTHALENE	91-20-3	420	SV	5,900	SV	1,800	SV
NITROBENZENE	98-95-3	1,600	SV	26,000	SV	7,900	SV
NITROPROPANE, 2-	79-46-9	3.5	SV	59	SV	18	SV

Table 1 Groundwater Statewide health standard vapor intrusion screening values (SV_{GW})

Regulated Substance	CAS No.	Residential (µg/L)	Type	Nonresidential (µg/L)	Type	Converted Residential (µg/L)	Type
NITROSODIETHYLAMINE, N-	55-18-5	3.6	SV	150	SV	46	SV
NITROSODIMETHYLAMINE, N-	62-75-9	20	SV	850	SV	250	SV
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	130	SV	2,200	SV	650	SV
PCB-1221 (AROCLOR)	11104-28-2	4.2	SV	71	SV	21	SV
PCB-1232 (AROCLOR)	11141-16-5	4.4	SV	74	SV	22	SV
PHENOL	108-95-2	39,000,000	SV	84,000,000	Sol.	84,000,000	Sol.
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67-63-0	46,000,000	SV	650,000,000	SV	190,000,000	SV
PROPYLBENZENE, N-	103-65-1	5,200	SV	52,000	Sol.	22,000	SV
PROPYLENE OXIDE	75-56-9	3,400	SV	58,000	SV	17,000	SV
STYRENE	100-42-5	18,000	SV	260,000	SV	77,000	SV
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	70	MSC	1,200	SV	350	SV
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	56	SV	940	SV	280	SV
TETRACHLOROETHYLENE (PCE)	127-18-4	110	SV	1,500	SV	450	SV
TETRAHYDROFURAN	109-99-9	26	MSC	130	MSC	130	MSC
TOLUENE	108-88-3	34,000	SV	480,000	SV	140,000	SV
TRIBROMOMETHANE (BROMOFORM)	75-25-2	2,100	SV	35,000	SV	10,000	SV
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	76-13-1	63,000	MSC	170,000	MSC	170,000	MSC
TRICHLOROBENZENE, 1,2,4-	120-82-1	90	SV	1,300	SV	380	SV
TRICHLOROBENZENE, 1,3,5-	108-70-3	66	SV	930	SV	280	SV
TRICHLOROETHANE, 1,1,1-	71-55-6	12,000	SV	170,000	SV	50,000	SV
TRICHLOROETHANE, 1,1,2-	79-00-5	11	SV	160	SV	48	SV
TRICHLOROETHYLENE (TCE)	79-01-6	8.8	SV	120	SV	37	SV
TRICHLOROPROPANE, 1,2,3-	96-18-4	47	SV	650	SV	200	SV
TRICHLOROPROPENE, 1,2,3-	96-19-5	0.86	SV	12	SV	3.6	SV
TRIETHYLAMINE	121-44-8	2,200	SV	31,000	SV	9,200	SV
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	64	SV	890	SV	270	SV
TRIMETHYLBENZENE, 1,3,5-	108-67-8	420	MSC	1,200	MSC	1,200	MSC

Table 1 Groundwater Statewide health standard vapor intrusion screening values (SV_{GW})

Regulated Substance	CAS No.	Residential ($\mu\text{g/L}$)	Type	Nonresidential ($\mu\text{g/L}$)	Type	Converted Residential ($\mu\text{g/L}$)	Type
VINYL ACETATE	108-05-4	17,000	SV	240,000	SV	72,000	SV
VINYL BROMIDE (BROMOETHENE)	593-60-2	2.0	SV	33	SV	10	SV
VINYL CHLORIDE	75-01-4	2.0	MSC	51	SV	15	SV
XYLENES (TOTAL)	1330-20-7	10,000	MSC	14,000	SV	10,000	MSC

Type: SV—calculated screening value

MSC—medium specific concentration (Title 25 Pa. Code Ch. 250, Appendix A, Table 1)

Sol.—aqueous solubility

Table 2 Soil Statewide health standard vapor intrusion screening values (SV_{SOIL})

Regulated Substance	CAS No.	Residential (mg/kg)	Type	Nonresidential (mg/kg)	Type	Converted Residential (mg/kg)	Type
ACETALDEHYDE	75-07-0	0.23	SGN	1.9	SV	0.96	SGN
ACETONE	67-64-1	570	SV	12,000	SV	2,400	SV
ACETONITRILE	75-05-8	1.5	SGN	25	SV	6.0	SGN
ACROLEIN	107-02-8	0.00047	SGN	0.0022	SV	0.0020	SGN
ACRYLAMIDE	79-06-1	110	SV	7,300	SV	1,500	SV
ACRYLIC ACID	79-10-7	5.8	SV	120	SV	24	SV
ACRYLONITRILE	107-13-1	0.010	SGN	0.063	SV	0.051	SGN
ALLYL ALCOHOL	107-18-6	0.019	SV	0.41	SV	0.081	SV
AMMONIA	7664-41-7	360	SGN	360	SGN	360	SGN
ANILINE	62-53-3	3.8	SV	79	SV	16	SV
BENZENE	71-43-2	0.13	SGN	0.13	SGN	0.13	SGN
BENZYL CHLORIDE	100-44-7	0.059	SGN	0.30	SGN	0.30	SGN
BETA PROPIOLACTONE	57-57-8	0.00015	SGN	0.00076	SGN	0.00076	SGN
BIPHENYL, 1,1-	92-52-4	40	SGN	190	SGN	190	SGN
BIS(2-CHLOROETHYL)ETHER	111-44-4	0.017	SV	0.43	SV	0.085	SV
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	8.0	SGN	8.0	SGN	8.0	SGN
BIS(CHLOROMETHYL)ETHER	542-88-1	0.000012	SGN	0.000060	SGN	0.000060	SGN
BROMOCHLOROMETHANE	74-97-5	1.6	SGN	1.6	SGN	1.6	SGN
BROMODICHLOROMETHANE	75-27-4	2.7	SGN	2.7	SGN	2.7	SGN
BROMOMETHANE	74-83-9	0.54	SGN	0.54	SGN	0.54	SGN
BUTADIENE, 1,3-	106-99-0	0.0086	SGN	0.041	SGN	0.041	SGN
CARBON DISULFIDE	75-15-0	130	SGN	530	SGN	530	SGN
CARBON TETRACHLORIDE	56-23-5	0.26	SGN	0.26	SGN	0.26	SGN
CHLORO-1,1-DIFLUOROETHANE, 1-	75-68-3	1,800	SGN	7,300	SGN	7,300	SGN
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	0.049	SGN	0.20	SGN	0.20	SGN
CHLOROBENZENE	108-90-7	6.1	SGN	6.1	SGN	6.1	SGN
CHLORODIBROMOMETHANE	124-48-1	2.5	SGN	2.5	SGN	2.5	SGN
CHLORODIFLUOROMETHANE	75-45-6	2,800	SGN	10,000	SGN	10,000	SGN

Table 2 Soil Statewide health standard vapor intrusion screening values (SV_{SOIL})

Regulated Substance	CAS No.	Residential (mg/kg)	Type	Nonresidential (mg/kg)	Type	Converted Residential (mg/kg)	Type
CHLOROETHANE	75-00-3	5.4	SGN	27	SV	26	SGN
CHLOROFORM	67-66-3	2.0	SGN	2.0	SGN	2.0	SGN
CHLOROPRENE	126-99-8	0.0038	SGN	0.020	SGN	0.020	SGN
CHLOROPROPANE, 2-	75-29-6	16	SGN	67	SGN	67	SGN
CRESOL(S)	1319-77-3	910	SV	19,000	SV	3,800	SV
CUMENE (ISOPROPYL BENZENE)	98-82-8	600	SGN	2,500	SGN	2,500	SGN
CYCLOHEXANE	110-82-7	1,700	SGN	6,900	SGN	6,900	SGN
CYCLOHEXANONE	108-94-1	240	SV	5,000	SV	1,000	SV
DIBROMO-3-CHLOROPROPANE, 1,2-	96-12-8	0.0092	SGN	0.0092	SGN	0.0092	SGN
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	0.0012	SGN	0.0036	SV	0.0012	SGN
DIBROMOMETHANE	74-95-3	0.32	SGN	1.4	SGN	1.4	SGN
DICHLORO-2-BUTENE, 1,4-	764-41-0	0.00067	SGN	0.0034	SGN	0.0034	SGN
DICHLORO-2-BUTENE, TRANS-1,4-	110-57-6	0.00078	SGN	0.0039	SGN	0.0039	SGN
DICHLOROBENZENE, 1,2-	95-50-1	59	SGN	59	SGN	59	SGN
DICHLOROBENZENE, P-	106-46-7	10	SGN	10	SGN	10	SGN
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	100	SGN	100	SGN	100	SGN
DICHLOROETHANE, 1,1-	75-34-3	0.75	SGN	3.9	SGN	3.9	SGN
DICHLOROETHANE, 1,2-	107-06-2	0.10	SGN	0.10	SGN	0.10	SGN
DICHLOROETHYLENE, 1,1-	75-35-4	0.19	SGN	0.32	SV	0.19	SGN
DICHLOROETHYLENE, TRANS-1,2-	156-60-5	2.3	SGN	2.3	SGN	2.3	SGN
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	0.18	SV	3.8	SV	0.76	SV
DICHLOROPROPANE, 1,2-	78-87-5	0.11	SGN	0.11	SGN	0.11	SGN
DICHLOROPROPENE, 1,3-	542-75-6	0.13	SGN	0.61	SGN	0.61	SGN
DICYCLOPENTADIENE	77-73-6	3.2	SGN	13	SGN	13	SGN
DIOXANE, 1,4-	123-91-1	0.63	SV	16	SV	3.2	SV
EPICHLOROHYDRIN	106-89-8	0.042	SGN	0.54	SV	0.17	SGN

Table 2 Soil Statewide health standard vapor intrusion screening values (SV_{SOIL})

Regulated Substance	CAS No.	Residential (mg/kg)	Type	Nonresidential (mg/kg)	Type	Converted Residential (mg/kg)	Type
ETHOXYETHANOL, 2- (EGEE)	110-80-5	560	SV	12,000	SV	2,400	SV
ETHYL BENZENE	100-41-4	46	SGN	46	SGN	46	SGN
ETHYL METHACRYLATE	97-63-2	10	SGN	43	SGN	43	SGN
ETHYLENE GLYCOL	107-21-1	9,600	SV	200,000	SV	40,000	SV
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	87	SGN	87	SGN	87	SGN
FORMALDEHYDE	50-00-0	12	SGN	79	SV	16	SV
FORMIC ACID	64-18-6	1.0	SV	21	SV	4.3	SV
FURFURAL	98-01-1	15	SV	310	SV	62	SV
HEXACHLOROETHANE	67-72-1	0.56	SGN	1.1	SV	0.56	SGN
HEXANE	110-54-3	1,400	SGN	5,600	SGN	5,600	SGN
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	0.0072	SV	0.18	SV	0.036	SV
METHACRYLONITRILE	126-98-7	0.15	SV	3.2	SV	0.64	SV
METHANOL	67-56-1	720	SV	15,000	SV	3,000	SV
METHOXYETHANOL, 2-	109-86-4	50	SV	1,000	SV	210	SV
METHYL ACRYLATE	96-33-3	1.0	SGN	4.5	SGN	4.5	SGN
METHYL CHLORIDE	74-87-3	0.38	SGN	0.38	SGN	0.38	SGN
METHYL ETHYL KETONE	78-93-3	130	SV	2,800	SV	560	SV
METHYL HYDRAZINE	60-34-4	0.0053	SV	0.11	SV	0.022	SV
METHYL ISOBUTYL KETONE	108-10-1	51	SGN	580	SV	140	SGN
METHYL ISOCYANATE	624-83-9	0.029	SGN	0.12	SGN	0.12	SGN
METHYL METHACRYLATE	80-62-6	20	SGN	84	SGN	84	SGN
METHYL N-BUTYL KETONE (2-HEXANONE)	591-78-6	1.6	SGN	16	SV	6.4	SGN
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	47	SGN	200	SGN	200	SGN
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	0.28	SGN	3.5	SV	0.70	SV
METHYLNAPHTHALENE, 2-	91-57-6	680	SGN	1,900	SGN	1,900	SGN
NAPHTHALENE	91-20-3	25	SGN	25	SGN	25	SGN
NITROBENZENE	98-95-3	3.6	SGN	10	SGN	10	SGN
NITROPROPANE, 2-	79-46-9	0.00029	SGN	0.0025	SV	0.0015	SGN

Table 2 Soil Statewide health standard vapor intrusion screening values (SV_{SOIL})

Regulated Substance	CAS No.	Residential (mg/kg)	Type	Nonresidential (mg/kg)	Type	Converted Residential (mg/kg)	Type
NITROSODIETHYLAMINE, N-	55-18-5	0.00011	SV	0.0073	SV	0.0015	SV
NITROSODIMETHYLAMINE, N-	62-75-9	0.00042	SV	0.027	SV	0.0054	SV
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	0.037	SV	0.93	SV	0.19	SV
PCB-1221 (AROCLOR)	11104-28-2	0.18	SGN	0.83	SGN	0.83	SGN
PCB-1232 (AROCLOR)	11141-16-5	0.14	SGN	0.66	SGN	0.66	SGN
PHENOL	108-95-2	1,100	SV	24,000	SV	4,800	SV
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67-63-0	1,400	SV	30,000	SV	6,000	SV
PROPYLBENZENE, N-	103-65-1	400	SGN	1,700	SGN	1,700	SGN
PROPYLENE OXIDE	75-56-9	0.11	SV	2.7	SV	0.54	SV
STYRENE	100-42-5	24	SGN	220	SV	44	SV
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	18	SGN	18	SGN	18	SGN
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	0.026	SGN	0.13	SGN	0.13	SGN
TETRACHLOROETHYLENE (PCE)	127-18-4	0.43	SGN	0.44	SV	0.43	SGN
TETRAHYDROFURAN	109-99-9	0.57	SGN	2.8	SGN	2.8	SGN
TOLUENE	108-88-3	44	SGN	68	SV	44	SGN
TRIBROMOMETHANE (BROMOFORM)	75-25-2	3.5	SGN	4.9	SV	3.5	SGN
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	76-13-1	10,000	SGN	10,000	SGN	10,000	SGN
TRICHLOROBENZENE, 1,2,4-	120-82-1	27	SGN	27	SGN	27	SGN
TRICHLOROBENZENE, 1,3,5-	108-70-3	31	SGN	31	SGN	31	SGN
TRICHLOROETHANE, 1,1,1-	71-55-6	7.2	SGN	19	SV	7.2	SGN
TRICHLOROETHANE, 1,1,2-	79-00-5	0.15	SGN	0.15	SGN	0.15	SGN
TRICHLOROETHYLENE (TCE)	79-01-6	0.17	SGN	0.17	SGN	0.17	SGN
TRICHLOROPROPANE, 1,2,3-	96-18-4	3.2	SGN	3.2	SGN	3.2	SGN
TRICHLOROPROPENE, 1,2,3-	96-19-5	0.037	SGN	0.15	SGN	0.15	SGN
TRIETHYLAMINE	121-44-8	0.36	SGN	2.1	SV	1.5	SGN
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	8.4	SGN	35	SGN	35	SGN
TRIMETHYLBENZENE, 1,3,5-	108-67-8	74	SGN	210	SGN	210	SGN

Table 2 Soil Statewide health standard vapor intrusion screening values (SV_{SOIL})

Regulated Substance	CAS No.	Residential (mg/kg)	Type	Nonresidential (mg/kg)	Type	Converted Residential (mg/kg)	Type
VINYL ACETATE	108-05-4	5.0	SGN	21	SGN	21	SGN
VINYL BROMIDE (BROMOETHENE)	593-60-2	0.073	SGN	0.38	SGN	0.38	SGN
VINYL CHLORIDE	75-01-4	0.027	SGN	0.027	SGN	0.027	SGN
XYLENES (TOTAL)	1330-20-7	990	SGN	990	SGN	990	SGN

Type: SV—calculated screening value

SGN—generic soil-to-groundwater numeric value (Title 25 Pa. Code Ch. 250, Appendix A, Table 3B)

Table 3 Sub-slab soil gas Statewide health standard vapor intrusion screening values (SV_{SS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
ACETALDEHYDE	75-07-0	360	5,100	1,500
ACETONE	67-64-1	1,200,000	17,000,000	5,200,000
ACETONITRILE	75-05-8	2,400	34,000	10,000
ACROLEIN	107-02-8	0.80	11	3.4
ACRYLAMIDE	79-06-1	3.7	160	47
ACRYLIC ACID	79-10-7	40	560	170
ACRYLONITRILE	107-13-1	14	230	69
ALLYL ALCOHOL	107-18-6	4.0	56	17
AMMONIA	7664-41-7	4,000	56,000	17,000
ANILINE	62-53-3	40	560	170
BENZENE	71-43-2	120	2,000	610
BENZYL CHLORIDE	100-44-7	19	320	96
BETA PROPIOLACTONE	57-57-8	0.23	3.9	1.2
BIPHENYL, 1,1-	92-52-4	16	220	67
BIS(2-CHLOROETHYL)ETHER	111-44-4	2.8	48	14
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	94	1,600	470
BIS(CHLOROMETHYL)ETHER	542-88-1	0.015	0.25	0.076
BROMOCHLOROMETHANE	74-97-5	1,600	22,000	6,700
BROMODICHLOROMETHANE	75-27-4	25	430	130
BROMOMETHANE	74-83-9	200	2,800	840
BUTADIENE, 1,3-	106-99-0	31	520	160
CARBON DISULFIDE	75-15-0	28,000	390,000	120,000
CARBON TETRACHLORIDE	56-23-5	160	2,600	790
CHLORO-1,1-DIFLUOROETHANE, 1-	75-68-3	2,000,000	28,000,000	8,400,000
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	40	560	170
CHLOROBENZENE	108-90-7	2,000	28,000	8,400
CHLORODIBROMOMETHANE	124-48-1	35	580	170
CHLORODIFLUOROMETHANE	75-45-6	2,000,000	28,000,000	8,400,000

Table 3 Sub-slab soil gas Statewide health standard vapor intrusion screening values (SV_{SS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
CHLOROETHANE	75-00-3	400,000	5,600,000	1,700,000
CHLOROFORM	67-66-3	41	680	210
CHLOROPRENE	126-99-8	0.31	5.2	1.6
CHLOROPROPANE, 2-	75-29-6	4,000	56,000	17,000
CRESOL(S)	1319-77-3	24,000	340,000	100,000
CUMENE (ISOPROPYL BENZENE)	98-82-8	16,000	220,000	67,000
CYCLOHEXANE	110-82-7	240,000	3,400,000	1,000,000
CYCLOHEXANONE	108-94-1	28,000	390,000	120,000
DIBROMO-3-CHLOROPROPANE, 1,2-	96-12-8	0.062	2.6	0.79
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	1.6	26	7.9
DIBROMOMETHANE	74-95-3	160	2,200	670
DICHLORO-2-BUTENE, 1,4-	764-41-0	0.22	3.7	1.1
DICHLORO-2-BUTENE, TRANS-1,4-	110-57-6	0.22	3.7	1.1
DICHLOROBENZENE, 1,2-	95-50-1	8,000	110,000	34,000
DICHLOROBENZENE, P-	106-46-7	85	1,400	430
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	4,000	56,000	17,000
DICHLOROETHANE, 1,1-	75-34-3	590	9,800	3,000
DICHLOROETHANE, 1,2-	107-06-2	36	610	180
DICHLOROETHYLENE, 1,1-	75-35-4	8,000	110,000	34,000
DICHLOROETHYLENE, TRANS-1,2-	156-60-5	2,400	34,000	10,000
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	24,000	340,000	100,000
DICHLOROPROPANE, 1,2-	78-87-5	94	1,600	470
DICHLOROPROPENE, 1,3-	542-75-6	230	3,900	1,200
DICYCLOPENTADIENE	77-73-6	280	3,900	1,200
DIOXANE, 1,4-	123-91-1	120	2,000	610
EPICHLOROHYDRIN	106-89-8	40	560	170
ETHOXYETHANOL, 2- (EGEE)	110-80-5	8,000	110,000	34,000
ETHYL BENZENE	100-41-4	40,000	560,000	170,000

Table 3 Sub-slab soil gas Statewide health standard vapor intrusion screening values (SV_{SS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
ETHYL METHACRYLATE	97-63-2	12,000	170,000	51,000
ETHYLENE GLYCOL	107-21-1	16,000	220,000	67,000
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	28,000	390,000	120,000
FORMALDEHYDE	50-00-0	72	1,200	360
FORMIC ACID	64-18-6	12	170	51
FURFURAL	98-01-1	2,000	28,000	8,400
HEXACHLOROETHANE	67-72-1	94	1,600	470
HEXANE	110-54-3	28,000	390,000	120,000
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	0.19	3.2	0.96
METHACRYLONITRILE	126-98-7	1,200	17,000	5,100
METHANOL	67-56-1	160,000	2,200,000	670,000
METHOXYETHANOL, 2-	109-86-4	800	11,000	3,400
METHYL ACRYLATE	96-33-3	800	11,000	3,400
METHYL CHLORIDE	74-87-3	520	8,700	2,600
METHYL ETHYL KETONE	78-93-3	200,000	2,800,000	840,000
METHYL HYDRAZINE	60-34-4	0.80	11	3.4
METHYL ISOBUTYL KETONE	108-10-1	120,000	1,700,000	510,000
METHYL ISOCYANATE	624-83-9	40	560	170
METHYL METHACRYLATE	80-62-6	28,000	390,000	120,000
METHYL N-BUTYL KETONE (2-HEXANONE)	591-78-6	1,200	17,000	5,100
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	1,600	22,000	6,700
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	3,600	61,000	18,000
METHYLNAPHTHALENE, 2-	91-57-6	120	1,700	510
NAPHTHALENE	91-20-3	120	1,700	510
NITROBENZENE	98-95-3	23	390	120
NITROPROPANE, 2-	79-46-9	0.35	5.8	1.7
NITROSODIETHYLAMINE, N-	55-18-5	0.0086	0.37	0.11
NITROSODIMETHYLAMINE, N-	62-75-9	0.026	1.1	0.34

Table 3 Sub-slab soil gas Statewide health standard vapor intrusion screening values (SV_{SS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	0.59	9.8	3.0
PCB-1221 (AROCLOR)	11104-28-2	1.6	28	8.3
PCB-1232 (AROCLOR)	11141-16-5	1.6	28	8.3
PHENOL	108-95-2	8,000	110,000	34,000
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67-63-0	280,000	3,900,000	1,200,000
PROPYLBENZENE, N-	103-65-1	40,000	560,000	170,000
PROPYLENE OXIDE	75-56-9	250	4,300	1,300
STYRENE	100-42-5	40,000	560,000	170,000
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	130	2,100	640
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	16	270	81
TETRACHLOROETHYLENE (PCE)	127-18-4	1,600	22,000	6,700
TETRAHYDROFURAN	109-99-9	480	8,100	2,400
TOLUENE	108-88-3	200,000	2,800,000	840,000
TRIBROMOMETHANE (BROMOFORM)	75-25-2	850	14,000	4,300
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	76-13-1	1,200,000	17,000,000	5,100,000
TRICHLOROBENZENE, 1,2,4-	120-82-1	80	1,100	340
TRICHLOROBENZENE, 1,3,5-	108-70-3	80	1,100	340
TRICHLOROETHANE, 1,1,1-	71-55-6	200,000	2,800,000	840,000
TRICHLOROETHANE, 1,1,2-	79-00-5	8.0	110	34
TRICHLOROETHYLENE (TCE)	79-01-6	80	1,100	340
TRICHLOROPROPANE, 1,2,3-	96-18-4	12	170	51
TRICHLOROPROPENE, 1,2,3-	96-19-5	12	170	51
TRIETHYLAMINE	121-44-8	280	3,900	1,200
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	280	3,900	1,200
TRIMETHYLBENZENE, 1,3,5-	108-67-8	280	3,900	1,200
VINYL ACETATE	108-05-4	8,000	110,000	34,000
VINYL BROMIDE (BROMOETHENE)	593-60-2	29	490	150
VINYL CHLORIDE	75-01-4	41	1,700	520

Table 3 Sub-slab soil gas Statewide health standard vapor intrusion screening values (SV_{SS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
XYLENES (TOTAL)	1330-20-7	4,000	56,000	17,000

Table 4 Indoor Air Statewide health standard vapor intrusion screening values (SV_{IA})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)
ACETALDEHYDE	75-07-0	9.4	39
ACETONE	67-64-1	32,000	140,000
ACETONITRILE	75-05-8	63	260
ACROLEIN	107-02-8	0.021	0.088
ACRYLAMIDE	79-06-1	0.096	1.2
ACRYLIC ACID	79-10-7	1.0	4.4
ACRYLONITRILE	107-13-1	0.36	1.8
ALLYL ALCOHOL	107-18-6	0.10	0.44
AMMONIA	7664-41-7	100	440
ANILINE	62-53-3	1.0	4.4
BENZENE	71-43-2	3.1	16
BENZYL CHLORIDE	100-44-7	0.50	2.5
BETA PROPIOLACTONE	57-57-8	0.0061	0.031
BIPHENYL, 1,1-	92-52-4	0.42	1.8
BIS(2-CHLOROETHYL)ETHER	111-44-4	0.074	0.37
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	2.4	12
BIS(CHLOROMETHYL)ETHER	542-88-1	0.00039	0.0020
BROMOCHLOROMETHANE	74-97-5	42	180
BROMODICHLOROMETHANE	75-27-4	0.66	3.3
BROMOMETHANE	74-83-9	5.2	22
BUTADIENE, 1,3-	106-99-0	0.81	4.1
CARBON DISULFIDE	75-15-0	730	3,100
CARBON TETRACHLORIDE	56-23-5	4.1	20
CHLORO-1,1-DIFLUOROETHANE, 1-	75-68-3	52,000	220,000
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	1.0	4.4
CHLOROBENZENE	108-90-7	52	220
CHLORODIBROMOMETHANE	124-48-1	0.90	4.5
CHLORODIFLUOROMETHANE	75-45-6	52,000	220,000
CHLOROETHANE	75-00-3	10,000	44,000

Table 4 Indoor Air Statewide health standard vapor intrusion screening values (SV_{IA})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)
CHLOROFORM	67-66-3	1.1	5.3
CHLOROPRENE	126-99-8	0.0081	0.041
CHLOROPROPANE, 2-	75-29-6	100	440
CRESOL(S)	1319-77-3	630	2,600
CUMENE (ISOPROPYL BENZENE)	98-82-8	420	1,800
CYCLOHEXANE	110-82-7	6,300	26,000
CYCLOHEXANONE	108-94-1	730	3,100
DIBROMO-3-CHLOROPROPANE, 1,2-	96-12-8	0.0016	0.020
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	0.041	0.20
DIBROMOMETHANE	74-95-3	4.2	18
DICHLORO-2-BUTENE, 1,4-	764-41-0	0.0058	0.029
DICHLORO-2-BUTENE, TRANS-1,4-	110-57-6	0.0058	0.029
DICHLOROBENZENE, 1,2-	95-50-1	210	880
DICHLOROBENZENE, P-	106-46-7	2.2	11
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	100	440
DICHLOROETHANE, 1,1-	75-34-3	15	77
DICHLOROETHANE, 1,2-	107-06-2	0.94	4.7
DICHLOROETHYLENE, 1,1-	75-35-4	210	880
DICHLOROETHYLENE, TRANS-1,2-	156-60-5	63	260
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	630	2,600
DICHLOROPROPANE, 1,2-	78-87-5	2.4	12
DICHLOROPROPENE, 1,3-	542-75-6	6.1	31
DICYCLOPENTADIENE	77-73-6	7.3	31
DIOXANE, 1,4-	123-91-1	3.2	16
EPICHLOROHYDRIN	106-89-8	1.0	4.4
ETHOXYETHANOL, 2- (EGEE)	110-80-5	210	880
ETHYL BENZENE	100-41-4	1,000	4,400
ETHYL METHACRYLATE	97-63-2	310	1,300
ETHYLENE GLYCOL	107-21-1	420	1,800

Table 4 Indoor Air Statewide health standard vapor intrusion screening values (SV_{IA})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	730	3,100
FORMALDEHYDE	50-00-0	1.9	9.4
FORMIC ACID	64-18-6	0.31	1.3
FURFURAL	98-01-1	52	220
HEXACHLOROETHANE	67-72-1	2.4	12
HEXANE	110-54-3	730	3,100
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	0.0050	0.025
METHACRYLONITRILE	126-98-7	31	130
METHANOL	67-56-1	4,200	18,000
METHOXYETHANOL, 2-	109-86-4	21	88
METHYL ACRYLATE	96-33-3	21	88
METHYL CHLORIDE	74-87-3	14	68
METHYL ETHYL KETONE	78-93-3	5,200	22,000
METHYL HYDRAZINE	60-34-4	0.021	0.088
METHYL ISOBUTYL KETONE	108-10-1	3,100	13,000
METHYL ISOCYANATE	624-83-9	1.0	4.4
METHYL METHACRYLATE	80-62-6	730	3,100
METHYL N-BUTYL KETONE (2-HEXANONE)	591-78-6	31	130
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	42	180
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	94	470
METHYLNAPHTHALENE, 2-	91-57-6	3.1	13
NAPHTHALENE	91-20-3	3.1	13
NITROBENZENE	98-95-3	0.61	3.1
NITROPROPANE, 2-	79-46-9	0.0090	0.045
NITROSODIETHYLAMINE, N-	55-18-5	0.00022	0.0029
NITROSODIMETHYLAMINE, N-	62-75-9	0.00069	0.0088
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	0.015	0.077
PCB-1221 (AROCLOR)	11104-28-2	0.043	0.22
PCB-1232 (AROCLOR)	11141-16-5	0.043	0.22

Table 4 Indoor Air Statewide health standard vapor intrusion screening values (SV_{IA})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)
PHENOL	108-95-2	210	880
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67-63-0	7,300	31,000
PROPYLBENZENE, N-	103-65-1	1,000	4,400
PROPYLENE OXIDE	75-56-9	6.6	33
STYRENE	100-42-5	1,000	4,400
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	3.3	17
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	0.42	2.1
TETRACHLOROETHYLENE (PCE)	127-18-4	42	180
TETRAHYDROFURAN	109-99-9	13	63
TOLUENE	108-88-3	5,200	22,000
TRIBROMOMETHANE (BROMOFORM)	75-25-2	22	110
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	76-13-1	31,000	130,000
TRICHLOROBENZENE, 1,2,4-	120-82-1	2.1	8.8
TRICHLOROBENZENE, 1,3,5-	108-70-3	2.1	8.8
TRICHLOROETHANE, 1,1,1-	71-55-6	5,200	22,000
TRICHLOROETHANE, 1,1,2-	79-00-5	0.21	0.88
TRICHLOROETHYLENE (TCE)	79-01-6	2.1	8.8
TRICHLOROPROPANE, 1,2,3-	96-18-4	0.31	1.3
TRICHLOROPROPENE, 1,2,3-	96-19-5	0.31	1.3
TRIETHYLAMINE	121-44-8	7.3	31
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	7.3	31
TRIMETHYLBENZENE, 1,3,5-	108-67-8	7.3	31
VINYL ACETATE	108-05-4	210	880
VINYL BROMIDE (BROMOETHENE)	593-60-2	0.76	3.8
VINYL CHLORIDE	75-01-4	1.1	14
XYLENES (TOTAL)	1330-20-7	100	440

Table 5 Near Source soil gas Statewide health standard vapor intrusion screening values (SV_{NS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
ACETALDEHYDE	75-07-0	1,900	39,000	7,900
ACETONE	67-64-1	6,500,000	140,000,000	27,000,000
ACETONITRILE	75-05-8	13,000	260,000	53,000
ACROLEIN	107-02-8	4.2	88	18
ACRYLAMIDE	79-06-1	19	1,200	250
ACRYLIC ACID	79-10-7	210	4,400	880
ACRYLONITRILE	107-13-1	72	1,800	360
ALLYL ALCOHOL	107-18-6	21	440	88
AMMONIA	7664-41-7	21,000	440,000	88,000
ANILINE	62-53-3	210	4,400	880
BENZENE	71-43-2	620	16,000	3,100
BENZYL CHLORIDE	100-44-7	99	2,500	500
BETA PROPIOLACTONE	57-57-8	1.2	31	6.1
BIPHENYL, 1,1-	92-52-4	83	1,800	350
BIS(2-CHLOROETHYL)ETHER	111-44-4	15	370	74
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	490	12,000	2,500
BIS(CHLOROMETHYL)ETHER	542-88-1	0.079	2.0	0.40
BROMOCHLOROMETHANE	74-97-5	8,300	180,000	35,000
BROMODICHLOROMETHANE	75-27-4	130	3,300	660
BROMOMETHANE	74-83-9	1,000	22,000	4,400
BUTADIENE, 1,3-	106-99-0	160	4,100	820
CARBON DISULFIDE	75-15-0	150,000	3,100,000	610,000
CARBON TETRACHLORIDE	56-23-5	810	20,000	4,100
CHLORO-1,1-DIFLUOROETHANE, 1-	75-68-3	10,000,000	220,000,000	44,000,000
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	210	4,400	880
CHLOROBENZENE	108-90-7	10,000	220,000	44,000
CHLORODIBROMOMETHANE	124-48-1	180	4,500	910
CHLORODIFLUOROMETHANE	75-45-6	10,000,000	220,000,000	44,000,000

Table 5 Near Source soil gas Statewide health standard vapor intrusion screening values (SV_{NS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
CHLOROETHANE	75-00-3	2,100,000	44,000,000	8,800,000
CHLOROFORM	67-66-3	210	5,300	1,100
CHLOROPRENE	126-99-8	1.6	41	8.2
CHLOROPROPANE, 2-	75-29-6	21,000	440,000	88,000
CRESOL(S)	1319-77-3	130,000	2,600,000	530,000
CUMENE (ISOPROPYL BENZENE)	98-82-8	83,000	1,800,000	350,000
CYCLOHEXANE	110-82-7	1,300,000	26,000,000	5,300,000
CYCLOHEXANONE	108-94-1	150,000	3,100,000	610,000
DIBROMO-3-CHLOROPROPANE, 1,2-	96-12-8	0.32	20	4.1
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	8.1	200	41
DIBROMOMETHANE	74-95-3	830	18,000	3,500
DICHLORO-2-BUTENE, 1,4-	764-41-0	1.2	29	5.8
DICHLORO-2-BUTENE, TRANS-1,4-	110-57-6	1.2	29	5.8
DICHLOROBENZENE, 1,2-	95-50-1	42,000	880,000	180,000
DICHLOROBENZENE, P-	106-46-7	440	11,000	2,200
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	21,000	440,000	88,000
DICHLOROETHANE, 1,1-	75-34-3	3,000	77,000	15,000
DICHLOROETHANE, 1,2-	107-06-2	190	4,700	940
DICHLOROETHYLENE, 1,1-	75-35-4	42,000	880,000	180,000
DICHLOROETHYLENE, TRANS-1,2-	156-60-5	13,000	260,000	53,000
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	130,000	2,600,000	530,000
DICHLOROPROPANE, 1,2-	78-87-5	490	12,000	2,500
DICHLOROPROPENE, 1,3-	542-75-6	1,200	31,000	6,100
DICYCLOPENTADIENE	77-73-6	1,500	31,000	6,100
DIOXANE, 1,4-	123-91-1	630	16,000	3,200
EPICHLOROHYDRIN	106-89-8	210	4,400	880
ETHOXYETHANOL, 2- (EGEE)	110-80-5	42,000	880,000	180,000
ETHYL BENZENE	100-41-4	210,000	4,400,000	880,000

Table 5 Near Source soil gas Statewide health standard vapor intrusion screening values (SV_{NS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
ETHYL METHACRYLATE	97-63-2	63,000	1,300,000	260,000
ETHYLENE GLYCOL	107-21-1	83,000	1,800,000	350,000
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	150,000	3,100,000	610,000
FORMALDEHYDE	50-00-0	370	9,400	1,900
FORMIC ACID	64-18-6	63	1,300	260
FURFURAL	98-01-1	10,000	220,000	44,000
HEXACHLOROETHANE	67-72-1	490	12,000	2,500
HEXANE	110-54-3	150,000	3,100,000	610,000
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	1.0	25	5.0
METHACRYLONITRILE	126-98-7	6,300	130,000	26,000
METHANOL	67-56-1	830,000	18,000,000	3,500,000
METHOXYETHANOL, 2-	109-86-4	4,200	88,000	18,000
METHYL ACRYLATE	96-33-3	4,200	88,000	18,000
METHYL CHLORIDE	74-87-3	2,700	68,000	14,000
METHYL ETHYL KETONE	78-93-3	1,000,000	22,000,000	4,400,000
METHYL HYDRAZINE	60-34-4	4.2	88	18
METHYL ISOBUTYL KETONE	108-10-1	630,000	13,000,000	2,600,000
METHYL ISOCYANATE	624-83-9	210	4,400	880
METHYL METHACRYLATE	80-62-6	150,000	3,100,000	610,000
METHYL N-BUTYL KETONE (2-HEXANONE)	591-78-6	6,300	130,000	26,000
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	8,300	180,000	35,000
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	19,000	470,000	94,000
METHYLNAPHTHALENE, 2-	91-57-6	630	13,000	2,600
NAPHTHALENE	91-20-3	630	13,000	2,600
NITROBENZENE	98-95-3	120	3,100	610
NITROPROPANE, 2-	79-46-9	1.8	45	9.1
NITROSODIETHYLAMINE, N-	55-18-5	0.045	2.9	0.57
NITROSODIMETHYLAMINE, N-	62-75-9	0.14	8.8	1.8

Table 5 Near Source soil gas Statewide health standard vapor intrusion screening values (SV_{NS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	3.0	77	15
PCB-1221 (AROCLOR)	11104-28-2	8.5	220	43
PCB-1232 (AROCLOR)	11141-16-5	8.5	220	43
PHENOL	108-95-2	42,000	880,000	180,000
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67-63-0	1,500,000	31,000,000	6,100,000
PROPYLBENZENE, N-	103-65-1	210,000	4,400,000	880,000
PROPYLENE OXIDE	75-56-9	1,300	33,000	6,600
STYRENE	100-42-5	210,000	4,400,000	880,000
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	660	17,000	3,300
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	84	2,100	420
TETRACHLOROETHYLENE (PCE)	127-18-4	8,300	180,000	35,000
TETRAHYDROFURAN	109-99-9	2,500	63,000	13,000
TOLUENE	108-88-3	1,000,000	22,000,000	4,400,000
TRIBROMOMETHANE (BROMOFORM)	75-25-2	4,400	110,000	22,000
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	76-13-1	6,300,000	130,000,000	26,000,000
TRICHLOROBENZENE, 1,2,4-	120-82-1	420	8,800	1,800
TRICHLOROBENZENE, 1,3,5-	108-70-3	420	8,800	1,800
TRICHLOROETHANE, 1,1,1-	71-55-6	1,000,000	22,000,000	4,400,000
TRICHLOROETHANE, 1,1,2-	79-00-5	42	880	180
TRICHLOROETHYLENE (TCE)	79-01-6	420	8,800	1,800
TRICHLOROPROPANE, 1,2,3-	96-18-4	63	1,300	260
TRICHLOROPROPENE, 1,2,3-	96-19-5	63	1,300	260
TRIETHYLAMINE	121-44-8	1,500	31,000	6,100
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	1,500	31,000	6,100
TRIMETHYLBENZENE, 1,3,5-	108-67-8	1,500	31,000	6,100
VINYL ACETATE	108-05-4	42,000	880,000	180,000
VINYL BROMIDE (BROMOETHENE)	593-60-2	150	3,800	770
VINYL CHLORIDE	75-01-4	210	14,000	2,700

Table 5 Near Source soil gas Statewide health standard vapor intrusion screening values (SV_{NS})

Regulated Substance	CAS No.	Residential ($\mu\text{g}/\text{m}^3$)	Nonresidential ($\mu\text{g}/\text{m}^3$)	Converted Residential ($\mu\text{g}/\text{m}^3$)
XYLENES (TOTAL)	1330-20-7	21,000	440,000	88,000

Table 6 Application of Statewide Health Standard Vapor Intrusion Screening

Sample	Conditions	Table
Indoor Air	<ul style="list-style-type: none"> • Perform a minimum of two sampling events. • At least one event is during the heating season. • The sampling interval is no less than 45 days. • Sample in the lowest occupied floor (basement) and/or first floor. • Refer to Appendix Z. 	4
Sub-Slab Soil Gas	<ul style="list-style-type: none"> • Perform a minimum of two sampling events. • The sampling interval is no less than 45 days. • Bias sample points towards areas of greatest expected impact. • Refer to Appendix Z. 	3
Near-Source Soil Gas	<ul style="list-style-type: none"> • Perform a minimum of two sampling events. • The sampling interval is no less than 45 days. • The sample depth is within 1 foot of the capillary zone for groundwater sources. • Sample within or no more than 1 foot above vadose zone sources. • Sample at least 5 feet below the ground surface. • Sample at least 5 feet beneath the bottom of the building foundation. • Locate sampling points in the most contaminated areas and near existing or future buildings. • Refer to Appendix Z. 	3 or 5
Soil	<ul style="list-style-type: none"> • Collect an appropriate number of samples to characterize the source(s) or demonstrate attainment of the Statewide health standard. • Contaminated soil cannot be in contact with the building foundation. • The depth to the vadose zone contamination must be at least 5 feet. • At least a 5-foot vertical section of clean soil-like material exists between the contamination and the building foundation. • No NAPL is present. • Properly collect and preserve the samples. 	2
Groundwater	<ul style="list-style-type: none"> • Sample from properly constructed monitoring wells. • Collect an appropriate number of samples to characterize the source(s) or demonstrate attainment of the Statewide health standard. • Contaminated groundwater cannot be in contact with the building foundation. • The depth to the contaminated groundwater must be at least 5 feet. • At least a 5-foot vertical section of clean soil-like material exists between the groundwater and the building foundation. • Monitoring well screens cross the water table. • The wetted length of the well screen is no more than 10 feet. • No NAPL is present. • Properly collect and preserve the samples. 	1