



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)
Acetaldehyde	75-07-0	1.3	43	710	5.6	190	3,100	9.4	310	5,200	39	1,300	22,000
Acetone Cyanohydrin	75-86-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2.1	NV	NV	8.8	NV	NV
Acetonitrile	75-05-8	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	77,000	260	8,800	320,000
Acetylaminofluorene, 2-	53-96-3	0.0022	NV	NV	0.0094	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Acrolein	107-02-8	NITI	NITI	NITI	NITI	NITI	NITI	0.021	0.70	6.9	0.088	2.9	29
Acrylamide	79-06-1	0.010	NV	NV	0.12	NV	NV	6.3	NV	NV	26	NV	NV
Acrylic Acid	79-10-7	NITI	NITI	NITI	NITI	NITI	NITI	0.21	7.0	35,000	0.88	29	150,000
Acrylonitrile	107-13-1	0.041	1.4	13	0.18	6.0	58	2.1	70	670	8.8	290	2,800
Adiponitrile	111-69-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	6.3	NV	NV	26	NV	NV
Aldrin	309-00-2	0.00057	0.019	8.1	0.0025	0.083	35	NITI	NITI	NITI	NITI	NITI	NITI
Allyl Alcohol	107-18-6	NITI	NITI	NITI	NITI	NITI	NITI	0.10	3.5	1,100	0.44	15	4,700
Allyl Chloride	107-05-1	0.47	16	1.7	2.0	68	7.5	1.0	35	3.8	4.4	150	16
Aluminum	7429-90-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	5.2	NV	NV	22	NV	NV
Aminobiphenyl, 4-	92-67-1	0.00047	NV	NV	0.0020	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Ammonia	7664-41-7	NITI	NITI	NITI	NITI	NITI	NITI	520	17,000	1,100,000	2,200	73,000	4,600,000
Amyl Alcohol, tert-	75-85-4	NITI	NITI	NITI	NITI	NITI	NITI	3.1	100	12,000	13	440	51,000
Aniline	62-53-3	1.8	NV	NV	7.7	NV	NV	1.0	NV	NV	4.4	NV	NV
Antimony (metallic)	7440-36-0	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.31	NV	NV	1.3	NV	NV
Antimony Trioxide	1309-64-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.21	NV	NV	0.88	NV	NV
Aroclor 1016	12674-11-2	0.14	4.7	17	0.61	20	75	NITI	NITI	NITI	NITI	NITI	NITI
Aroclor 1221	11104-28-2	0.0049	0.16	0.53	0.022	0.72	2.3	NITI	NITI	NITI	NITI	NITI	NITI
Aroclor 1232	11141-16-5	0.0049	0.16	0.16	0.022	0.72	0.71	NITI	NITI	NITI	NITI	NITI	NITI
Aroclor 1242	53469-21-9	0.0049	0.16	1.3	0.022	0.72	5.8	NITI	NITI	NITI	NITI	NITI	NITI
Aroclor 1248	12672-29-6	0.0049	0.16	0.27	0.022	0.72	1.2	NITI	NITI	NITI	NITI	NITI	NITI
Aroclor 1254	11097-69-1	0.0049	0.16	1.7	0.022	0.72	7.2	NITI	NITI	NITI	NITI	NITI	NITI
Aroclor 1260	11096-82-5	0.0049	0.16	0.36	0.022	0.72	1.6	NITI	NITI	NITI	NITI	NITI	NITI
Arsenic, Inorganic	7440-38-2	0.00065	NV	NV	0.0029	NV	NV	0.016	NV	NV	0.066	NV	NV
Arsine	7784-42-1	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.052	NV	NV	0.22	NV	NV
Auramine	492-80-8	0.011	NV	NV	0.049	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Azinphos-methyl	86-50-0	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	10	NV	NV	44	NV	NV
Azobenzene	103-33-3	0.091	3.0	500	0.40	13	2,200	NITI	NITI	NITI	NITI	NITI	NITI
Azodicarbonamide	123-77-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.0073	NV	NV	0.031	NV	NV
Barium	7440-39-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.52	NV	NV	2.2	NV	NV
Benz[a]anthracene	56-55-3	0.017	0.56	190	0.20	6.8	2,300	NITI	NITI	NITI	NITI	NITI	NITI
Benzene	71-43-2	0.36	12	2.8	1.6	52	12	31	1,000	240	130	4,400	1,000
Benzene, Trimethyl	25551-13-7	NITI	NITI	NITI	NITI	NITI	NITI	4.2	140	28	18	580	120
Benzidine	92-87-5	0.000015	NV	NV	0.00018	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Benzo[a]pyrene	50-32-8	0.0017	NV	NV	0.020	NV	NV	0.0021	NV	NV	0.0088	NV	NV
Benzo[b]fluoranthene	205-99-2	0.017	NV	NV	0.20	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Benzo[e]pyrene	192-97-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.0021	NV	NV	0.0088	NV	NV
Benzo[j]fluoranthene	205-82-3	0.026	NV	NV	0.11	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Benzo[k]fluoranthene	207-08-9	0.17	NV	NV	2.0	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Benzyl Chloride	100-44-7	0.057	1.9	7.2	0.25	8.3	31	1.0	35	130	4.4	150	550
Beryllium and compounds	7440-41-7	0.0012	NV	NV	0.0051	NV	NV	0.021	NV	NV	0.088	NV	NV
Biphenyl, 1,1'-	92-52-4	NITI	NITI	NITI	NITI	NITI	NITI	0.42	14	91	1.8	58	380
Bis(2-chloroethyl)ether	111-44-4	0.0085	0.28	32	0.037	1.2	140	NITI	NITI	NITI	NITI	NITI	NITI
Bis(2-ethylhexyl)phthalate	117-81-7	1.2	NV	NV	5.1	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Bis(chloromethyl)ether	542-88-1	0.000045	0.0015	0.0005	0.00020	0.0066	0.0022	NITI	NITI	NITI	NITI	NITI	NITI



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Boron And Borates Only	7440-42-8	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	21	NV	NV	88	NV	NV
Boron Trichloride	10294-34-5	NITI	NITI	NITI	NITI	NITI	NITI	21	700	No EPA Value	88	2,900	No EPA Value
Boron Trifluoride	7637-07-2	NITI	NITI	NITI	NITI	NITI	NITI	14	450	No EPA Value	57	1,900	No EPA Value
Bromate	15541-45-4	0.020	NV	NV	0.088	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Bromo-2-chloroethane, 1-	107-04-0	NITI	NITI	NITI	NITI	NITI	NITI	0.063	2.1	3.5	0.26	8.8	15
Bromobenzene	108-86-1	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	1,500	260	8,800	6,300
Bromochloromethane	74-97-5	NITI	NITI	NITI	NITI	NITI	NITI	42	1,400	1,200	180	5,800	5,000
Bromodichloromethane	75-27-4	0.076	2.5	1.6	0.33	11	6.9	NITI	NITI	NITI	NITI	NITI	NITI
Bromoform	75-25-2	2.6	85	250	11	370	1,100	NITI	NITI	NITI	NITI	NITI	NITI
Bromomethane	74-83-9	NITI	NITI	NITI	NITI	NITI	NITI	5.2	170	25	22	730	110
Bromopropane, 1-	106-94-5	0.76	25	4.3	3.3	110	19	100	3,500	590	440	15,000	2,500
Butadiene, 1,3-	106-99-0	0.094	3.1	0.044	0.41	14	0.19	2.1	70	0.97	8.8	290	4.1
Butyl alcohol, sec-	78-92-2	NITI	NITI	NITI	NITI	NITI	NITI	31,000	1,000,000	190,000,000	22,000	730,000	130,000,000
Butyl Alcohol, t-	75-65-0	NITI	NITI	NITI	NITI	NITI	NITI	5,200	170,000	30,000,000	130,000	4,400,000	800,000,000
Butylated hydroxyanisole	25013-16-5	49	NV	NV	220	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Cadmium (Diet)	7440-43-9	0.0016	NV	NV	0.0068	NV	NV	0.010	NV	NV	0.044	NV	NV
Cadmium (Water)	7440-43-9	0.0016	NV	NV	0.0068	NV	NV	0.010	NV	NV	0.044	NV	NV
Calcium Cyanide	592-01-8	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	9.4	NV	NV	39	NV	NV
Caprolactam	105-60-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2.3	NV	NV	9.6	NV	NV
Captafol	2425-06-1	0.065	NV	NV	0.29	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Captan	133-06-2	4.3	NV	NV	19	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Carbon Disulfide	75-15-0	NITI	NITI	NITI	NITI	NITI	NITI	730	24,000	1,900	3,100	100,000	8,200
Carbon Tetrachloride	56-23-5	0.47	16	0.71	2.0	68	3.1	100	3,500	160	440	15,000	670
Carbonyl Sulfide	463-58-1	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	4.0	440	15,000	17
Ceric oxide	1306-38-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.94	NV	NV	3.9	NV	NV
Chlordane (technical mixture)	12789-03-6	0.028	0.94	150	0.12	4.1	670	0.73	24	4,000	3.1	100	17,000
Chlordecone (Kepone)	143-50-0	0.00061	NV	NV	0.0027	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Chlorine	7782-50-5	NITI	NITI	NITI	NITI	NITI	NITI	0.15	5.0	0.42	0.64	21	1.8
Chlorine Dioxide	10049-04-4	NITI	NITI	NITI	NITI	NITI	NITI	0.21	7.0	0.21	0.88	29	0.87
Chloro-1,1-difluoroethane, 1-	75-68-3	NITI	NITI	NITI	NITI	NITI	NITI	52,000	1,700,000	860,000	220,000	7,300,000	3,600,000
Chloro-1,3-butadiene, 2- (Chloroprene)	126-99-8	0.0034	0.11	0.0027	0.041	1.4	0.033	21	700	17	88	2,900	70
Chloro-2-methylaniline, 4-	95-69-2	0.037	NV	NV	0.16	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Chloroacetophenone, 2-	532-27-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.031	NV	NV	0.13	NV	NV
Chlorobenzene	108-90-7	NITI	NITI	NITI	NITI	NITI	NITI	52	1,700	810	220	7,300	3,400
Chlorobenzilate	510-15-6	0.091	NV	NV	0.40	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Chlorobenzotrifluoride, 4-	98-56-6	0.33	11	0.49	1.4	48	2.1	310	10,000	470	1,300	44,000	2,000
Chlorodifluoromethane	75-45-6	NITI	NITI	NITI	NITI	NITI	NITI	52,000	1,700,000	41,000	220,000	7,300,000	170,000
Chloroform	67-66-3	0.12	4.1	1.4	0.53	18	5.9	2.0	68	23	8.5	280	95
Chloromethane	74-87-3	NITI	NITI	NITI	NITI	NITI	NITI	94	3,100	350	390	13,000	1,500
Chloromethyl Methyl Ether	107-30-2	0.0041	0.14	0.54	0.018	0.59	2.3	NITI	NITI	NITI	NITI	NITI	NITI
Chloronitrobenzene, o-	88-73-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.010	NV	NV	0.044	NV	NV
Chloronitrobenzene, p-	100-00-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2.1	NV	NV	8.8	NV	NV
Chloropicrin	76-06-2	NITI	NITI	NITI	NITI	NITI	NITI	0.42	14	9.4	1.8	58	40
Chlorozotocin	54749-90-5	0.000041	NV	NV	0.00018	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Chromium(III) (Soluble Compounds)	16065-83-1	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.063	NV	NV	0.26	NV	NV
Chromium(VI)	18540-29-9	0.000092	NV	NV	0.0011	NV	NV	0.031	NV	NV	0.13	NV	NV
Chrysene	218-01-9	1.7	NV	NV	20	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Cobalt	7440-48-4	0.00031	NV	NV	0.0014	NV	NV	0.0063	NV	NV	0.026	NV	NV



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Coke Oven Emissions	NA	0.0016	0.055	No EPA Value	0.020	0.66	No EPA Value	NITI	NITI	NITI	NITI	NITI	NITI
Cresol, m-	108-39-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	630	NV	NV	2,600	NV	NV
Cresol, o-	95-48-7	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	630	NV	NV	2,600	NV	NV
Cresol, p-	106-44-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	630	NV	NV	2,600	NV	NV
Cresols	1319-77-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	630	NV	NV	2,600	NV	NV
Cumene	98-82-8	NITI	NITI	NITI	NITI	NITI	NITI	420	14,000	2,200	1,800	58,000	9,100
Cupferron	135-20-6	0.045	NV	NV	0.20	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Cyanide (CN-)	57-12-5	NITI	NITI	NITI	NITI	NITI	NITI	0.83	28	200	3.5	120	840
Cyclohexane	110-82-7	NITI	NITI	NITI	NITI	NITI	NITI	6,300	210,000	1,800	26,000	880,000	7,400
Cyclohexanone	108-94-1	NITI	NITI	NITI	NITI	NITI	NITI	730	24,000	4,900,000	3,100	100,000	21,000,000
Cyclohexene	110-83-8	NITI	NITI	NITI	NITI	NITI	NITI	1,000	35,000	980	4,400	150,000	4,100
Daminozide	1596-84-5	0.55	NV	NV	2.4	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dibenz[a,h]anthracene	53-70-3	0.0017	NV	NV	0.020	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dibenzo[a,e]pyrene	192-65-4	0.0026	NV	NV	0.011	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dibromo-3-chloropropane, 1,2-	96-12-8	0.00017	0.0056	0.067	0.0020	0.068	0.81	0.21	7.0	83	0.88	29	350
Dibromoethane, 1,2-	106-93-4	0.0047	0.16	0.34	0.020	0.68	1.5	9.4	310	680	39	1,300	2,900
Dibromomethane (Methylene Bromide)	74-95-3	NITI	NITI	NITI	NITI	NITI	NITI	4.2	140	230	18	580	950
Dichloro-2-butene, 1,4-	764-41-0	0.00067	0.022	0.0046	0.0029	0.097	0.020	NITI	NITI	NITI	NITI	NITI	NITI
Dichloro-2-butene, cis-1,4-	1476-11-5	0.00067	0.022	0.053	0.0029	0.097	0.23	NITI	NITI	NITI	NITI	NITI	NITI
Dichloro-2-butene, trans-1,4-	110-57-6	0.00067	0.022	0.053	0.0029	0.097	0.23	NITI	NITI	NITI	NITI	NITI	NITI
Dichlorobenzene, 1,2-	95-50-1	NITI	NITI	NITI	NITI	NITI	NITI	210	7,000	5,900	880	29,000	25,000
Dichlorobenzene, 1,4-	106-46-7	0.26	8.5	5.8	1.1	37	25	830	28,000	19,000	3,500	120,000	79,000
Dichlorobenzidine, 3,3'-	91-94-1	0.0083	NV	NV	0.036	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dichlorodifluoromethane	75-71-8	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	9.8	440	15,000	41
Dichlorodiphenyldichloroethane, p,p'- (DDD)	72-54-8	0.041	NV	NV	0.18	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dichlorodiphenyldichloroethylene, p,p'- (DDE)	72-55-9	0.029	0.97	70	0.13	4.2	310	NITI	NITI	NITI	NITI	NITI	NITI
Dichlorodiphenyltrichloroethane, p,p'- (DDT)	50-29-3	0.029	NV	NV	0.13	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dichloroethane, 1,1-	75-34-3	1.8	59	13	7.7	260	55	NITI	NITI	NITI	NITI	NITI	NITI
Dichloroethane, 1,2-	107-06-2	0.11	3.6	4.0	0.47	16	18	7.3	240	270	31	1,000	1,100
Dichloroethylene, 1,1-	75-35-4	NITI	NITI	NITI	NITI	NITI	NITI	4.1	140	6.0	17	580	25
Dichloroethylene, cis-1,2-	156-59-2	NITI	NITI	NITI	NITI	NITI	NITI	42	1,400	430	180	5,800	1,800
Dichloroethylene, trans-1,2-	156-60-5	NITI	NITI	NITI	NITI	NITI	NITI	42	1,400	180	180	5,800	750
Dichloropropane, 1,2-	78-87-5	0.76	25	12	3.3	110	52	4.2	140	65	18	580	270
Dichloropropene, 1,3-	542-75-6	0.70	23	9.2	3.1	100	40	21	700	270	88	2,900	1,100
Dichlorvos	62-73-7	0.034	NV	NV	0.15	NV	NV	0.52	NV	NV	2.2	NV	NV
Dicyclopentadiene	77-73-6	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	0.14	1.3	44	0.60
Dieldrin	60-57-1	0.00061	NV	NV	0.0027	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Diesel Engine Exhaust	NA	0.0094	NV	NV	0.041	NV	NV	5.2	NV	NV	22	NV	NV
Diethanolamine	111-42-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.21	NV	NV	0.88	NV	NV
Diethylene Glycol Monobutyl Ether	112-34-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.10	NV	NV	0.44	NV	NV
Diethylene Glycol Monoethyl Ether	111-90-0	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.31	NV	NV	1.3	NV	NV
Diethylstilbestrol	56-53-1	0.000028	NV	NV	0.00012	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Difluoroethane, 1,1-	75-37-6	NITI	NITI	NITI	NITI	NITI	NITI	42,000	1,400,000	68,000	180,000	5,800,000	280,000
Difluoropropane, 2,2-	420-45-1	NITI	NITI	NITI	NITI	NITI	NITI	31,000	1,000,000	2,100	130,000	4,400,000	8,800
Dihydrosafrole	94-58-6	0.22	7.2	1100	0.94	31	4800	NITI	NITI	NITI	NITI	NITI	NITI
Diisopropyl Ether	108-20-3	NITI	NITI	NITI	NITI	NITI	NITI	730	24,000	12,000	3,100	100,000	50,000
Dimethyl Sulfide	75-18-3	NITI	NITI	NITI	NITI	NITI	NITI	0.21	7.0	5.0	0.88	29	21
Dimethylamino azobenzene [p-]	60-11-7	0.0022	NV	NV	0.0094	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)
Dimethylbenz[a]anthracene, 7,12-	57-97-6	0.000014	NV	NV	0.00017	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dimethylformamide	68-12-2	NITI	NITI	NITI	NITI	NITI	NITI	31	1,000	27,000,000	130	4,400	110,000,000
Dimethylhydrazine, 1,1-	57-14-7	NITI	NITI	NITI	NITI	NITI	NITI	0.0021	0.070	7.1	0.0088	0.29	30
Dimethylhydrazine, 1,2-	540-73-8	0.000018	0.00059	11	0.000077	0.0026	47	NITI	NITI	NITI	NITI	NITI	NITI
Dimethylvinylchloride	513-37-1	0.22	7.2	7.5	0.94	31	33	NITI	NITI	NITI	NITI	NITI	NITI
Dinitroaniline, 3,5-	618-87-1	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2.1	NV	NV	8.8	NV	NV
Dinitrotoluene, 2,4-	121-14-2	0.032	NV	NV	0.14	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Dioxane, 1,4-	123-91-1	0.56	19	5400	2.5	82	24000	31	1,000	300,000	130	4,400	1,300,000
Diphenyl Ether	101-84-8	NITI	NITI	NITI	NITI	NITI	NITI	0.42	14	110	1.8	58	460
Diphenylhydrazine, 1,2-	122-66-7	0.013	NV	NV	0.056	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Direct Black 38	1937-37-7	0.0013	NV	NV	0.0058	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Direct Blue 6	2602-46-2	0.0013	NV	NV	0.0058	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Direct Brown 95	16071-86-6	0.0015	NV	NV	0.0065	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Epichlorohydrin	106-89-8	2.3	78	1800	10	340	7900	1.0	35	810	4.4	150	3,400
Epoxybutane, 1,2-	106-88-7	NITI	NITI	NITI	NITI	NITI	NITI	21	700	4,900	88	2,900	20,000
Ethoxyethanol Acetate, 2-	111-15-9	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	1,100,000	260	8,800	4,800,000
Ethoxyethanol, 2-	110-80-5	NITI	NITI	NITI	NITI	NITI	NITI	42	1,400	5,000,000	180	5,800	21,000,000
Ethyl Acetate	141-78-6	NITI	NITI	NITI	NITI	NITI	NITI	73	2,400	24,000	310	10,000	100,000
Ethyl Acrylate	140-88-5	NITI	NITI	NITI	NITI	NITI	NITI	8.3	280	1,200	35	1,200	4,900
Ethyl Chloride	75-00-3	NITI	NITI	NITI	NITI	NITI	NITI	4200	140,000	14,000	18,000	580,000	57,000
Ethyl Methacrylate	97-63-2	NITI	NITI	NITI	NITI	NITI	NITI	310	10,000	33,000	1,300	44,000	140,000
Ethyl Tertiary Butyl Ether (ETBE)	637-92-3	35	1,200	900	150	5,100	3,900	42,000	1,400,000	1,100,000	180,000	5,800,000	4,500,000
Ethylbenzene	100-41-4	1.1	37	7.1	4.9	160	31	1,000	35,000	6,600	4,400	150,000	27,000
Ethylene Glycol	107-21-1	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	420	NV	NV	1,800	NV	NV
Ethylene Glycol Monobutyl Ether	111-76-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	1,700	NV	NV	7,000	NV	NV
Ethylene Oxide	75-21-8	0.00034	0.011	0.084	0.0041	0.14	1.0	31	1,000	7,800	130	4,400	32,000
Ethylene Thiourea	96-45-7	0.22	NV	NV	0.94	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Ethyleneimine	151-56-4	0.00015	0.0049	0.52	0.00065	0.022	2.3	NITI	NITI	NITI	NITI	NITI	NITI
Fluoride	16984-48-8	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	14	NV	NV	57	NV	NV
Fluorine (Soluble Fluoride)	7782-41-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	14	NV	NV	57	NV	NV
Formaldehyde	50-00-0	0.14	4.6	14,000	1.7	55	170,000	7.3	240	760,000	31	1,000	3,200,000
Formic Acid	64-18-6	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	69,000	1.3	44	290,000
Furfural	98-01-1	NITI	NITI	NITI	NITI	NITI	NITI	52	1,700	810,000	220	7,300	3,400,000
Furium	531-82-8	0.0065	NV	NV	0.029	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Furmecyclox	60568-05-0	0.33	NV	NV	1.4	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Glutaraldehyde	111-30-8	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.083	NV	NV	0.35	NV	NV
Glycidaldehyde	765-34-4	NITI	NITI	NITI	NITI	NITI	NITI	1.0	35	95,000	4.4	150	400,000
Heptachlor	76-44-8	0.0022	0.072	0.60	0.0094	0.31	2.6	NITI	NITI	NITI	NITI	NITI	NITI
Heptachlor Epoxide	1024-57-3	0.0011	0.036	5.7	0.0047	0.16	25	NITI	NITI	NITI	NITI	NITI	NITI
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	0.0025	0.082	1.2	0.011	0.36	5.2	1.4	46	670	5.8	190	2,800
Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	67562-39-4	0.0000074	0.00025	0.013	0.000032	0.0011	0.056	0.0042	0.14	7.2	0.018	0.58	30
Heptanal, n-	111-71-7	NITI	NITI	NITI	NITI	NITI	NITI	3.1	100	640	13	440	2,700
Heptane, N-	142-82-5	NITI	NITI	NITI	NITI	NITI	NITI	420	14,000	9.5	1,800	58,000	40
Hexachlorobenzene	118-74-1	0.0061	0.20	0.29	0.027	0.89	1.3	NITI	NITI	NITI	NITI	NITI	NITI
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	0.0025	0.082	1.6	0.011	0.36	3.8	1.4	46	900	5.8	190	2,100
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	0.0025	0.082	0.37	0.011	0.36	1.6	1.4	46	210	5.8	190	880
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	0.0025	0.082	0.88	0.011	0.36	7.0	1.4	46	500	5.8	190	3,800
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.0000025	0.000082	0.0034	0.000011	0.00036	0.015	0.0014	0.046	1.9	0.0058	0.19	7.9



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)
Hexachlorobutadiene	87-68-3	0.13	4.3	0.74	0.56	19	3.3	NITI	NITI	NITI	NITI	NITI	NITI
Hexachlorocyclohexane, Alpha-	319-84-6	0.0016	NV	NV	0.0068	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Hexachlorocyclohexane, Beta-	319-85-7	0.0053	NV	NV	0.023	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	0.0091	NV	NV	0.040	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Hexachlorocyclohexane, Technical	608-73-1	0.0055	NV	NV	0.024	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Hexachlorocyclopentadiene	77-47-4	NITI	NITI	NITI	NITI	NITI	NITI	0.21	7.0	11	0.88	29	48
Hexachlorodibenzofuran, 1,2,3,4,7,8-	70648-26-9	0.00000074	0.000025	0.00047	0.0000032	NV	NV	0.00042	0.014	0.26	0.0018	NV	NV
Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	39227-28-6	0.00000074	NV	NV	0.0000094	NV	NV	0.00042	NV	NV	NITI	NITI, NV	NITI, NV
Hexachlorodibenzo-p-dioxin, Mixture	34465-46-8	0.0000022	NV	NV	0.0000032	0.00011	0.0020	NITI	NITI, NV	NITI, NV	0.0018	0.058	1.1
Hexachloroethane	67-72-1	0.26	8.5	4.5	1.1	37	20	31	1000	550	130	4,400	2,300
Hexamethylene diisocyanate biuret	4035-89-6	NITI	NITI, NV	NITI, NV	NITI	NITI	NITI	0.420	NV	NV	0.044	1.5	53
Hexamethylene diisocyanate isocyanurate	3779-63-3	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.42	NV	NV	1.8	NV	NV
Hexamethylene Diisocyanate, 1,6-	822-06-0	NITI	NITI	NITI	NITI	NITI, NV	NITI, NV	0.01	0.35	13	1.8	NV	NV
Hexane, Commercial	NA	14	470	0.32	61	2000	1.4	630	21,000	14	2,600	88,000	60
Hexane, N-	110-54-3	NITI	NITI	NITI	NITI	NITI	NITI	730	24,000	17	3,100	100,000	71
Hexanol, 1-,2-ethyl- (2-Ethyl-1-hexanol)	104-76-7	NITI	NITI	NITI	NITI	NITI	NITI	0.42	14	1,300	1.8	58	5,400
Hexanone, 2-	591-78-6	NITI	NITI	NITI	NITI	NITI	NITI	31	1,000	17,000	130	4,400	72,000
HpCDD, 1,2,3,4,6,7,8,-	35822-46-9	0.0000074	0.00025	0.0010	0.000032	0.0011	0.0045	0.0042	0.14	0.58	0.018	0.58	2.4
HpCDF, 1,2,3,4,7,8,9-	55673-89-7	0.0000074	0.00025	0.013	0.000032	0.0011	0.056	0.0042	0.14	7.2	0.018	0.58	30
HxCDD, 1,2,3,6,7,8-	57653-85-7	0.00000074	NV	NV	0.0000032	NV	NV	0.00042	NV	NV	0.0018	NV	NV
HxCDD, 1,2,3,7,8,9-	19408-74-3	0.00000074	NV	NV	0.0000032	NV	NV	0.00042	NV	NV	0.0018	NV	NV
HxCDF, 1,2,3,6,7,8-	57117-44-9	0.00000074	0.000025	0.00047	0.0000032	0.00011	0.0020	0.00042	0.014	0.26	0.0018	0.058	1.1
HxCDF, 1,2,3,7,8,9-	72918-21-9	0.00000074	NV	NV	0.0000032	NV	NV	0.00042	NV	NV	0.0018	NV	NV
HxCDF, 2,3,4,6,7,8-	60851-34-5	0.00000074	NV	NV	0.0000032	NV	NV	0.00042	NV	NV	0.0018	NV	NV
Hydrazine	302-01-2	0.00057	0.019	50	0.0025	0.083	220	0.031	1.0	2,700	0.13	4.4	11,000
Hydrazine Sulfate	10034-93-2	0.00057	NV	NV	0.0025	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Hydrogen Chloride	7647-01-0	NITI	NITI	NITI	NITI	NITI	NITI	21	700	1,200,000,000	88	2900	5,100,000,000
Hydrogen Cyanide	74-90-8	NITI	NITI	NITI	NITI	NITI	NITI	0.83	28	240	3.5	120	1,000
Hydrogen Fluoride	7664-39-3	NITI	NITI	NITI	NITI	NITI	NITI	15	490	3,800	61	2,000	16,000
Hydrogen Sulfide	7783-06-4	NITI	NITI	NITI	NITI	NITI	NITI	2.1	70	7.5	8.8	290	32
Indeno[1,2,3-cd]pyrene	193-39-5	0.017	NV	NV	0.20	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Isobutyl Alcohol	78-83-1	NITI	NITI	NITI	NITI	NITI	NITI	420	14,000	2,400,000	1,800	58,000	10,000,000
Isophorone	78-59-1	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2100	NV	NV	8800	NV	NV
Isopropanol	67-63-0	NITI	NITI	NITI	NITI	NITI	NITI	210	7,000	1,400,000	880	29,000	5,700,000
Isopropyltoluene, p-	99-87-6	NITI	NITI	NITI	NITI	NITI	NITI	42	1,400	210	180	5,800	880
Jet propulsion fuel 7 (JP-7)	NA	NITI	NITI	NITI	NITI	NITI	NITI	310	10,000	770	1,300	44,000	3,200
Lead acetate	301-04-2	0.035	NV	NV	1.0	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Lead Phosphate	7446-27-7	0.23	NV	NV	0.15	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Lead subacetate	1335-32-6	0.26	NV	NV	1.1	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Maleic Anhydride	108-31-6	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.73	NV	NV	3.1	NV	NV
Manganese (Diet)	7439-96-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.052	NV	NV	0.22	NV	NV
Manganese (Non-diet)	7439-96-5	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.052	NV	NV	0.22	NV	NV
Mercuric Chloride	7487-94-7	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.31	NV	NV	1.3	NV	NV
Mercury (elemental)	7439-97-6	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	2.6	1.3	44	11
Methacrylonitrile	126-98-7	NITI	NITI	NITI	NITI	NITI	NITI	31	1,000	5,600	130	4,400	24,000
Methanol	67-56-1	NITI	NITI	NITI	NITI	NITI	NITI	21,000	700,000	210,000,000	88,000	2,900,000	900,000,000
Methoxyethanol Acetate, 2-	110-49-6	NITI	NITI	NITI	NITI	NITI	NITI	1.0	35	210,000	4.4	150	860,000
Methoxyethanol, 2-	109-86-4	NITI	NITI	NITI	NITI	NITI	NITI	7.3	240	1,100,000	31	1,000	4,800,000



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)
Methyl Acrylate	96-33-3	NITI	NITI	NITI	NITI	NITI	NITI	21	700	4,700	88	2,900	20,000
Methyl Ethyl Ketone (2-Butanone)	78-93-3	NITI	NITI	NITI	NITI	NITI	NITI	5,200	170,000	4,000,000	22,000	730,000	17,000,000
Methyl Hydrazine	60-34-4	0.0028	0.094	44	0.012	0.41	190	0.021	0.70	330	0.088	2.9	1,400
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	NITI	NITI	NITI	NITI	NITI	NITI	3,100	100,000	1,100,000	13,000	440,000	4,600,000
Methyl Isocyanate	624-83-9	NITI	NITI	NITI	NITI	NITI	NITI	1.0	35	43	4.4	150	180
Methyl Methacrylate	80-62-6	NITI	NITI	NITI	NITI	NITI	NITI	730	24,000	110,000	3,100	100,000	480,000
Methyl methanesulfonate	66-27-3	0.1	NV	NV	NITI	NITI	NITI	NITI	NITI, NV	NITI, NV	180	5,800	4,600
Methyl Styrene (Mixed Isomers)	25013-15-4	NITI	NITI	NITI	0.44	NV	NV	42	1400	1100	NITI	NITI, NV	NITI, NV
Methyl tert-Butyl Ether (MTBE)	1634-04-4	11	360	740	47	1,600	3,200	3,100	100,000	210,000	13,000	440,000	890,000
Methyl-2-Pentanol, 4-	108-11-2	NITI	NITI	NITI	NITI	NITI	NITI	3,100	100,000	4,300,000	13,000	440,000	18,000,000
Methylaniline Hydrochloride, 2-	636-21-5	0.076	NV	NV	0.0051	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Methylcholanthrene, 3-	56-49-5	0.00016	NV	NV	0.33	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Methylcyclohexane	108-87-2	NITI	NITI	NITI	0.0020	NV	NV	99	3300	10	NITI	NITI, NV	NITI, NV
Methylene Chloride	75-09-2	100	3400	1200	NITI	NITI	NITI	630	21,000	7600	420	14,000	43
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	0.0024	NV	NV	1,200	41,000	15,000	NITI	NITI, NV	NITI, NV	2,600	88,000	32,000
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	0.22	NV	NV	0.029	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Methylenebisbenzenamine, 4,4'-	101-77-9	0.0061	NV	NV	0.94	NV	NV	21	NV	NV	NITI	NITI, NV	NITI, NV
Methylenediphenyl Diisocyanate	101-68-8	NITI	NITI, NV	NITI, NV	0.027	NV	NV	0.63	NV	NV	88	NV	NV
Methylnaphthalene, 1-	90-12-0	NITI	NITI	NITI	NITI	NITI, NV	NITI, NV	0.0031	0.1	0.4	2.6	NV	NV
Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	0.0012	NV	NV	NITI	NITI	NITI	NITI	NITI, NV	NITI, NV	0.013	0.44	1.7
Midrange Aliphatic Hydrocarbon Streams	NA	0.62	21	0.012	2.7	91	0.053	100	3500	2.0	440	15000	8.6
Mirex	2385-85-5	0.00055	0.018	0.017	0.0024	0.080	0.073	NITI	NITI	NITI	NITI	NITI	NITI
Molybdenum	7439-98-7	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2.1	NV	NV	8.8	NV	NV
Naphtha, High Flash Aromatic (HFAN)	64742-95-6	NITI	NITI	NITI	NITI	NITI	NITI	100	3500	5800	440	15000	24000
Naphthalene	91-20-3	0.083	2.8	11	0.36	12	50	3.1	100	430	13	440	1800
Naphthylamine, 2-	91-59-8	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nickel Acetate	373-02-4	0.011	NV	NV	0.047	NV	NV	0.015	NV	NV	0.061	NV	NV
Nickel Carbonate	3333-67-3	0.011	NV	NV	0.047	NV	NV	0.015	NV	NV	0.061	NV	NV
Nickel Carbonyl	13463-39-3	0.011	0.36	0.00086	0.047	1.6	0.0038	0.015	0.49	0.0012	0.061	2.0	0.0049
Nickel Hydroxide	12054-48-7	0.011	NV	NV	0.047	NV	NV	0.015	NV	NV	0.061	NV	NV
Nickel Oxide	1313-99-1	0.011	NV	NV	0.047	NV	NV	0.021	NV	NV	0.088	NV	NV
Nickel Refinery Dust	NA	0.012	NV	NV	0.051	NV	NV	0.015	NV	NV	0.061	NV	NV
Nickel Soluble Salts	7440-02-0	0.011	NV	NV	0.047	NV	NV	0.010	NV	NV	0.044	NV	NV
Nickel Subsulfide	12035-72-2	0.0059	NV	NV	0.026	NV	NV	0.015	NV	NV	0.061	NV	NV
Nickelocene	1271-28-9	0.011	NV	NV	0.047	NV	NV	0.015	NV	NV	0.061	NV	NV
Nitroaniline, 2-	88-74-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.052	NV	NV	0.22	NV	NV
Nitroaniline, 4-	100-01-6	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	6.3	NV	NV	26	NV	NV
Nitrobenzene	98-95-3	0.070	2.3	180	0.31	10	800	9.4	310	25,000	39	1,300	100,000
Nitrofurazone	59-87-0	0.0076	NV	NV	0.033	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitromethane	75-52-5	0.32	11	520	1.4	47	2300	5.2	170	8,400	22	730	35,000
Nitropropane, 2-	79-46-9	0.0048	0.16	2.0	0.021	0.71	8.9	21	700	8,800	88	2,900	37,000
Nitropyrene, 4-	57835-92-4	0.026	NV	NV	0.11	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitrosodibutylamine, N-	924-16-3	0.0018	0.059	6.2	0.0016	NV	NV	NITI	NITI	NITI	NITI	NITI, NV	NITI, NV
Nitrosodiethanolamine, N-	1116-54-7	0.003500	NV	NV	0.00036	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitrosodiethylamine, N-	55-18-5	0.000024	NV	NV	0.0077	0.26	27	NITI	NITI, NV	NITI, NV	NITI	NITI	NITI
Nitrosodimethylamine, N-	62-75-9	0.000072	0.0024	2.1	0.015	NV	NV	0.042	1.4	1200	NITI	NITI, NV	NITI, NV
Nitrosodiphenylamine, N-	86-30-6	1.1	NV	NV	0.00029	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitrosodipropylamine, N-	621-64-7	0.0014	NV	NV	0.00088	0.029	25	NITI	NITI, NV	NITI, NV	0.18	5.8	5,000



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)	RBCair (µg/m ³)	RBCsv (µg/m ³)	RBCwi (µg/L)
Nitrosomethylethylamine, N-	10595-95-6	0.00045	0.015	7.6	4.7	NV	NV	NITI	NITI	NITI	NITI	NITI, NV	NITI, NV
Nitrosomorpholine [N-]	59-89-2	0.0015	NV	NV	0.0061	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitroso-N-ethylurea, N-	759-73-9	0.00013	NV	NV	0.0020	0.065	33	NITI	NITI, NV	NITI, NV	NITI	NITI	NITI
Nitroso-N-methylurea, N-	684-93-5	0.00003	NV	NV	0.0065	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitrosopiperidine [N-]	100-75-4	0.0010	NV	NV	0.0045	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nitrosopyrrolidine, N-	930-55-2	0.0046	NV	NV	0.020	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Nonane, n-	111-84-2	NITI	NITI	NITI	NITI	NITI	NITI	21	700	0.33	88	2,900	1.4
OCDD	3268-87-9	0.00025	NV	NV	0.0011	NV	NV	0.14	NV	NV	0.58	NV	NV
OCDF	39001-02-0	0.00025	NV	NV	0.0011	NV	NV	0.14	NV	NV	0.58	NV	NV
PeCDF, 1,2,3,7,8-	57117-41-6	0.000025	NV	NV	0.000011	NV	NV	0.0014	NV	NV	0.0058	NV	NV
PeCDF, 2,3,4,7,8-	57117-31-4	0.00000025	NV	NV	0.0000011	NV	NV	0.00014	NV	NV	0.00058	NV	NV
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	0.0025	0.082	0.81	0.011	0.36	1.4	1.4	46	450	5.8	190	750
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	0.0025	0.082	0.65	0.011	0.36	3.5	1.4	46	370	5.8	190	1,900
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	0.0025	0.082	0.79	0.011	0.36	3.5	1.4	46	450	5.8	190	1,900
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	0.0025	0.082	0.32	0.011	0.36	2.9	1.4	46	180	5.8	190	1,500
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	0.00000074	0.000025	0.00036	0.0000032	0.00011	0.0016	0.00042	0.014	0.20	0.0018	0.058	0.85
Pentachlorodibenzo-p-dioxin, 1,2,3,7,8-	40321-76-4	0.000000074	NV	NV	0.00000032	NV	NV	0.000042	NV	NV	0.00018	NV	NV
Pentachlorophenol	87-86-5	0.55	NV	NV	2.4	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Pentane, n-	109-66-0	NITI	NITI	NITI	NITI	NITI	NITI	1,000	35,000	32	4,400	150,000	130
Perylene	198-55-0	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.0021	NV	NV	0.0088	NV	NV
Phenacetin	62-44-2	4.5	NV	NV	20	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Phenol	108-95-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	210	NV	NV	880	NV	NV
Phosgene	75-44-5	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	0.75	1.3	44	3.2
Phosphine	7803-51-2	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	0.36	1.3	44	1.5
Phosphoric Acid	7664-38-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	10	NV	NV	44	NV	NV
Phthalic Anhydride	85-44-9	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	21	NV	NV	88	NV	NV
Polybrominated Biphenyls	36355-01-8	0.00033	NV	NV	0.0014	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Polychlorinated Biphenyls (high risk)	1336-36-3	0.0049	0.16	0.29	0.022	0.72	1.3	NITI	NITI	NITI	NITI	NITI	NITI
Polychlorinated Biphenyls (low risk)	1336-36-3	0.028	0.94	1.7	0.12	4.1	7.2	NITI	NITI	NITI	NITI	NITI	NITI
Polychlorinated Biphenyls (lowest risk)	1336-36-3	0.14	4.7	8.3	0.61	20	36	NITI	NITI	NITI	NITI	NITI	NITI
Polymeric Methylene Diphenyl Diisocyanate (PMD)	9016-87-9	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.63	NV	NV	2.6	NV	NV
Potassium Cyanide	151-50-8	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	9.4	NV	NV	39	NV	NV
Propionaldehyde	123-38-6	NITI	NITI	NITI	NITI	NITI	NITI	8.3	280	4,500	35	1,200	19,000
Propyl benzene	103-65-1	NITI	NITI	NITI	NITI	NITI	NITI	1,000	35,000	5,300	4,400	150,000	22,000
Propylene	115-07-1	NITI	NITI	NITI	NITI	NITI	NITI	3,100	100,000	490	13,000	440,000	2,100
Propylene Glycol Dinitrate	6423-43-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.28	NV	NV	1.2	NV	NV
Propylene Glycol Monomethyl Ether	107-98-2	NITI	NITI	NITI	NITI	NITI	NITI	2,100	70,000	110,000,000	8,800	290,000	440,000,000
Propylene Oxide	75-56-9	0.76	25	430	3.3	110	1,900	31	1,000	18,000	130	4,400	74,000
Refractory Ceramic Fibers (units in fibers)	NA	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	31,000	NV	NV	130,000	NV	NV
Safrole	94-59-7	0.016	NV	NV	0.20	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Selenium	7782-49-2	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	21	NV	NV	88	NV	NV
Selenium Sulfide	7446-34-6	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	21	NV	NV	88	NV	NV
Silica (crystalline, respirable)	7631-86-9	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	3.1	NV	NV	13	NV	NV
Sodium Cyanide	143-33-9	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	9.4	NV	NV	39	NV	NV
Sodium Fluoride	7681-49-4	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	15	NV	NV	61	NV	NV
Styrene	100-42-5	NITI	NITI	NITI	NITI	NITI	NITI	1,000	35,000	20,000	4,400	150,000	84,000
Sulfolane	126-33-0	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	2.1	NV	NV	8.8	NV	NV
Sulfur Trioxide	7446-11-9	NITI	NITI	NITI	NITI	NITI	NITI	1.0	35	No EPA Value	4.4	150	No EPA Value



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)
Sulfuric Acid	7664-93-9	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	1.0	NV	NV	4.4	NV	NV
Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)-	140-57-8	0.4	NV	NV	1.7	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
TCDD, 2,3,7,8-	1746-01-6	0.000000074	0.0000025	0.000036	0.00000032	0.000011	0.00016	0.000042	0.0014	0.020	0.00018	0.0058	0.086
TCDF, 2,3,7,8-	51207-31-9	0.00000074	0.000025	0.0011	0.0000032	0.00011	0.0047	0.00042	0.014	0.61	0.0018	0.058	2.6
Tert-Butyl Acetate	540-88-5	2.2	72	61	9.4	310	270	NITI	NITI	NITI	NITI	NITI	NITI
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.00074	NV	NV	0.0032	NV	NV	0.42	NV	NV	1.8	NV	NV
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.00025	0.0082	0.027	0.0011	0.036	0.12	0.14	4.6	15	0.58	19	64
Tetrachloroethane, 1,1,1,2-	630-20-6	0.38	13	8.3	1.7	55	36	NITI	NITI	NITI	NITI	NITI	NITI
Tetrachloroethane, 1,1,2,2-	79-34-5	0.048	1.6	6.8	0.21	7.1	30	NITI	NITI	NITI	NITI	NITI	NITI
Tetrachloroethylene	127-18-4	11	360	29	47	1,600	130	42	1,400	110	180	5,800	470
Tetrafluoroethane, 1,1,1,2-	811-97-2	NITI	NITI	NITI	NITI	NITI	NITI	83,000	2,800,000	57,000	350,000	12,000,000	240,000
Tetrahydrofuran	109-99-9	NITI	NITI	NITI	NITI	NITI	NITI	2,100	70,000	1,200,000	8,800	290,000	5,200,000
Titanium Tetrachloride	7550-45-0	NITI	NITI	NITI	NITI	NITI	NITI	0.10	3.5	No EPA Value	0.44	15	No EPA Value
Toluene	108-88-3	NITI	NITI	NITI	NITI	NITI	NITI	5,200	170,000	36000	22,000	730,000	150,000
Toluene-2,4-diisocyanate	584-84-9	0.26	8.5	1,800	1.1	37	8,100	0.0083	0.28	60	0.035	1.2	250
Toluene-2,6-diisocyanate	91-08-7	0.26	8.5	1,500	1.1	37	6,600	0.0083	0.28	49	0.035	1.2	210
Toluidine, o- (Methylaniline, 2-)	95-53-4	0.055	NV	NV	0.24	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Total Petroleum Hydrocarbons (Aliphatic Low)	NA	NITI	NITI	NITI	NITI	NITI	NITI	420	14,000	390	1,800	58,000	1,700
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	0.75	440	15,000	3.2
Total Petroleum Hydrocarbons (Aromatic High)	NA	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.0021	NV	NV	0.0088	NV	NV
Total Petroleum Hydrocarbons (Aromatic Medium)	NA	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	580	260	8,800	2,400
Toxaphene	8001-35-2	0.0088	NV	NV	0.038	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	NITI	NITI	NITI	NITI	NITI	NITI	5,200	170,000	390	22,000	730,000	1,600
Trichlorobenzene, 1,2,4-	120-82-1	NITI	NITI	NITI	NITI	NITI	NITI	2.1	70	91	8.8	290	380
Trichloroethane, 1,1,1-	71-55-6	NITI	NITI	NITI	NITI	NITI	NITI	5,200	170,000	13,000	22,000	730,000	53,000
Trichloroethane, 1,1,2-	79-00-5	0.18	5.9	10	0.77	26	44	0.21	7.0	12	0.88	29	50
Trichloroethylene	79-01-6	0.48	16	2.1	3.0	100	13	2.1	70	9.2	8.8	290	39
Trichlorophenol, 2,4,6-	88-06-2	0.91	NV	NV	4.0	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Trichloropropane, 1,2,3-	96-18-4	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	47	1.3	44	200
Trichloropropene, 1,2,3-	96-19-5	NITI	NITI	NITI	NITI	NITI	NITI	0.31	10	0.89	1.3	44	3.7
Triethylamine	121-44-8	NITI	NITI	NITI	NITI	NITI	NITI	7.3	240	2,200	31	1,000	9,100
Trifluoroethane, 1,1,1-	420-46-2	NITI	NITI	NITI	NITI	NITI	NITI	21,000	700,000	820	88,000	2,900,000	3,500
Trimethylbenzene, 1,2,3-	526-73-8	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	990	260	8,800	4,100
Trimethylbenzene, 1,2,4-	95-63-6	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	560	260	8,800	2,400
Trimethylbenzene, 1,3,5-	108-67-8	NITI	NITI	NITI	NITI	NITI	NITI	63	2,100	400	260	8,800	1,700
Tris(2,3-dibromopropyl)phosphate	126-72-7	0.0043	0.14	4.8	0.019	0.62	21	NITI	NITI	NITI	NITI	NITI	NITI
Uranium	7440-61-1	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV	0.042	NV	NV	0.18	NV	NV
Urethane	51-79-6	0.0035	NV	NV	0.042	NV	NV	NITI	NITI, NV	NITI, NV	NITI	NITI, NV	NITI, NV
Vanadium and Compounds	7440-62-2	NITI	NITI, NV	NITI, NV	0.0015	NV	NV	0.1	NV	NV	0.031	NV	NV
Vanadium Pentoxide	1314-62-1	0.00034	NV	NV	NITI	NITI, NV	NITI, NV	0.01	NV	NV	0.44	NV	NV
Vinyl Acetate	108-05-4	NITI	NITI	NITI	NITI	NITI	NITI	210	7,000	19,000	880	29,000	80,000
Vinyl Bromide	593-60-2	0.19	6.2	0.54	0.82	27	2.4	3.1	100	9.0	13	440	38
Vinyl Chloride	75-01-4	0.17	5.6	0.20	2.8	93	3.3	53	1,800	63	220	7,500	270
Xylene, m-	108-38-3	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	730	440	15,000	3,000
Xylene, o-	95-47-6	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	1,000	440	15,000	4,300
Xylene, p-	106-42-3	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	750	440	15,000	3,200
Xylenes	1330-20-7	NITI	NITI	NITI	NITI	NITI	NITI	100	3,500	780	440	15,000	3,300



Table 1. Chronic Vapor Intrusion Risk-Based Concentrations

Chemical	CAS Number	Risk-Based Concentration - Cancer						Risk-Based Concentration - Noncancer					
		Residential			Commercial			Residential			Commercial		
		RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)	RBCair (µg/m³)	RBCsv (µg/m³)	RBCwi (µg/L)
Generic TPH													
Gasoline (as NWTPH-Gx)		NITI	NITI	NITI	NITI	NITI	NITI	300	10,000	120	1,200	40,000	520
Diesel/Heating Oil (as NWTPH-Dx)		NITI	NITI	NITI	NITI	NITI	NITI	100	3,300	400	430	14,000	1,700
Transformer Mineral Insulating Oil (as NWTPH-Dx)		NITI	NITI	NITI	NITI	NITI	NITI	140	4,700	360	620	21,000	1,500

Notes:
RBC = Risk-Based Concentration
RBCair = RBC in air medium, (µg/m3)
RBCsv = RBC in soil vapor medium (µg/m3)
RBCwi =RBC for vapor intrusion from groundwater (µg/L)
NV = not volatile
NITI = no inhalation toxicity information
No EPA Value = missing VISL values. No attempt was made to document the reasons.

Non-discrimination statement

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