



# **RCRA Draft Supplemental Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway (Vapor Intrusion Guidance)**

Table 1: Question 1 Summary Sheet

December 2001

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CAS No.	Chemical	Maximum Pure Component Vapor Concentration at T=25 C C <sub>max</sub> (ug/m <sup>3</sup> )	Target Indoor Air Concentration to Satisfy Both the Prescribed Risk Level and the Target Hazard Index C <sub>target</sub>		Is Chemical Sufficiently Volatile or Toxic? (R >10 <sup>-3</sup> , HI>1) Question #1	Check Here If Known Or Reasonably Suspected To Be Present
			(ug/m <sup>3</sup> )	(ppbv)		
71556	1,1,1-Trichloroethane	9.4E+08	1.0E+03	1.8E+02	YES	
79345	1,1,2,2-Tetrachloroethane	4.2E+07	1.7E-01	2.5E-02	YES	
79005	1,1,2-Trichloroethane	1.7E+08	6.3E-01	1.1E-01	YES	
75343	1,1-Dichloroethane	1.2E+09	5.0E+02	1.2E+02	YES	
75354	1,1-Dichloroethylene	2.4E+09	2.0E-01	5.0E-02	YES	
120821	1,2,4-Trichlorobenzene	1.7E+07	2.0E+02	2.7E+01	YES	
95501	1,2-Dichlorobenzene	1.2E+07	2.0E+02	3.3E+01	YES	
107062	1,2-Dichloroethane	3.4E+08	3.8E-01	9.5E-02	YES	
78875	1,2-Dichloropropane	3.2E+08	4.0E+00	8.7E-01	YES	
542756	1,3-Dichloropropene	2.0E+09	2.5E+00	5.5E-01	YES	
106467	1,4-Dichlorobenzene	7.4E+06	8.0E+02	1.3E+02	YES	
95954	2,4,5-Trichlorophenol	2.1E+05	3.5E+02	4.3E+01	YES	
88062	2,4,6-Trichlorophenol	2.6E+05	3.2E+00	4.0E-01	YES	
120832	2,4-Dichlorophenol	5.9E+05	1.1E+01	1.7E+00	YES	
105679	2,4-Dimethylphenol	6.5E+05	7.0E+01	1.4E+01	YES	
51285	2,4-Dinitrophenol	5.1E+04	7.0E+00	9.3E-01	YES	
121142	2,4-Dinitrotoluene	1.0E+03	5.3E-02	7.1E-03	YES	
606202	2,6-Dinitrotoluene	5.6E+03	5.3E-02	7.1E-03	YES	
95578	2-Chlorophenol	3.5E+08	1.8E+01	3.4E+00	YES	
95487	2-Methylphenol (o-cresol)	1.3E+06	1.8E+02	4.1E+01	YES	
91941	3,3-Dichlorobenzidine	5.1E-01	7.7E-02	7.4E-03	YES	
83329	Acenaphthene	2.7E+04	2.1E+02	3.3E+01	YES	
67641	Acetone	1.6E+09	3.5E+02	1.5E+02	YES	
309002	Aldrin	1.3E+03	2.0E-03	1.4E-04	YES	
319846	alpha-HCH (alpha-BHC)	8.7E+02	5.6E-03	4.7E-04	YES	
120127	Anthracene	1.2E+02	NA	NA	NO	
56553	Benz(a)anthracene	1.3E+00	4.8E-02	5.1E-03	YES	
71432	Benzene	4.0E+08	1.3E+00	4.0E-01	YES	
50328	Benzo(a)pyrene	7.5E-02	4.8E-03	4.6E-04	YES	
205992	Benzo(b)fluoranthene	6.8E+00	4.8E-02	4.6E-03	YES	
207089	Benzo(k)fluoranthene	2.7E-02	NA	NA	NO	
65850	Benzoic Acid	2.2E+05	1.4E+04	2.8E+03	YES	
319857	beta-HCH (beta-BHC)	7.3E+00	1.9E-02	1.6E-03	YES	
111444	Bis(2-chloroethyl)ether	1.3E+07	3.0E-02	5.2E-03	YES	
117817	Bis(2-ethylhexyl)phthalate	1.4E+00	NA	NA	NO	
75274	Bromodichloromethane	4.4E+08	5.6E-01	8.3E-02	YES	
75252	Bromoform	6.8E+07	9.1E+00	8.8E-01	YES	
71363	Butanol	2.7E+07	3.5E+02	1.2E+02	YES	
85687	Butyl benzyl phthalate	1.4E+02	NA	NA	NO	
86748	Carbazole	4.7E+00	1.8E+00	2.6E-01	YES	
75150	Carbon disulfide	1.5E+09	7.0E+02	2.2E+02	YES	
56235	Carbon tetrachloride	9.9E+08	6.7E-01	1.1E-01	YES	
57749	Chlordane	1.1E+02	1.0E-01	6.0E-03	YES	
108907	Chlorobenzene	7.2E+07	2.0E+01	4.3E+00	YES	
124481	Chlorodibromomethane	8.3E+07	4.2E-01	4.9E-02	YES	
67663	Chloroform	1.2E+09	4.3E-01	8.9E-02	YES	
218019	Chrysene	6.2E+00	4.8E+00	5.1E-01	YES	
156592	cis-1,2-Dichloroethylene	5.8E+08	3.5E+01	8.8E+00	YES	
72548	DDD	1.5E+01	1.4E-01	1.1E-02	YES	
72559	DDE	1.0E+02	1.0E-01	7.9E-03	YES	
50293	DDT	8.3E+00	1.0E-01	7.1E-03	YES	
84742	Di-n-butyl phthalate	4.3E-01	NA	NA	NO	
117840	Di-n-octyl phthalate	5.5E+01	NA	NA	NO	
53703	Dibenz(a,h)anthracene	1.5E-03	NA	NA	NO	
60571	Dieldrin	1.2E+02	2.2E-03	1.4E-04	YES	
84662	Diethylphthalate	2.0E+04	2.8E+03	3.1E+02	YES	
115297	Endosulfan	2.3E+02	2.1E+01	1.3E+00	YES	

Table 1: Question 1 Summary Sheet.

CAS No.	Chemical	Maximum Pure Component Vapor Concentration at T=25 C C <sub>max</sub> (ug/m <sup>3</sup> )	Target Indoor Air Concentration to Satisfy Both the Prescribed Risk Level and the Target Hazard Index C <sub>target</sub>		Is Chemical Sufficiently Volatile or Toxic? (R >10 <sup>-3</sup> , HI>1) Question #1	Check Here If Known Or Reasonably Suspected To Be Present
			(ug/m <sup>3</sup> )	(ppbv)		
72208	Endrin	7.7E+01	1.1E+00	7.1E-02	YES	
100414	Ethylbenzene	5.5E+07	1.0E+03	2.3E+02	YES	
206440	Fluoranthene	1.4E+02	NA	NA	NO	
86737	Fluorene	5.2E+03	1.4E+02	2.1E+01	YES	
58899	gamma-HCH (Lindane)	3.9E+03	2.7E-02	2.3E-03	YES	
76448	Heptachlor	8.0E+03	7.7E-03	5.0E-04	YES	
1024573	Heptachlor epoxide	7.8E+01	3.8E-03	2.4E-04	YES	
87683	Hexachloro-1,3-butadiene	1.1E+06	4.5E-01	4.3E-02	YES	
118741	Hexachlorobenzene	3.4E+05	2.2E-02	1.9E-03	YES	
77474	Hexachlorocyclopentadiene	2.0E+06	2.0E-01	1.8E-02	YES	
67721	Hexachloroethane	8.0E+06	2.5E+00	2.6E-01	YES	
193395	Indeno(1,2,3-cd)pyrene	1.4E-03	NA	NA	NO	
78591	Isophorone	3.3E+06	3.7E+01	6.6E+00	YES	
108383	m-Xylene	4.8E+07	7.0E+03	1.6E+03	YES	
7439976	Mercury (elemental)	2.6E+04	3.0E-01	3.7E-02	YES	
72435	Methoxychlor	2.9E+01	1.8E+01	1.3E+00	YES	
74839	Methyl bromide	3.9E+09	5.0E+00	1.3E+00	YES	
75092	Methylene chloride	1.2E+09	2.1E+01	6.1E+00	YES	
1634044	MTBE	1.2E+09	3.0E+03	8.3E+02	YES	
621647	N-Nitrosodi-n-propylamine	9.1E+05	5.0E-03	9.4E-04	YES	
86306	N-Nitrosodiphenylamine	7.2E+03	7.1E+00	8.8E-01	YES	
91203	Naphthalene	6.1E+05	3.0E+00	5.7E-01	YES	
98953	Nitrobenzene	2.1E+06	2.0E+00	4.0E-01	YES	
95476	o-Xylene	3.8E+07	7.0E+03	1.6E+03	YES	
106478	p-Chloroaniline	7.2E+04	1.4E+01	2.7E+00	YES	
106423	p-Xylene	5.8E+07	7.0E+03	1.6E+03	YES	
87865	Pentachlorophenol	2.0E+03	2.9E-01	2.7E-02	YES	
108952	Phenol	1.3E+06	2.1E+03	5.5E+02	YES	
129000	Pyrene	6.1E+01	NA	NA	NO	
100425	Styrene	3.5E+07	1.0E+03	2.3E+02	YES	
127184	Tetrachloroethylene	1.5E+08	1.7E+01	2.5E+00	YES	
108883	Toluene	1.4E+08	4.0E+02	1.1E+02	YES	
8001352	Toxaphene	1.8E+02	3.1E-02	1.8E-03	YES	
156605	trans-1,2-Dichloroethylene	2.4E+09	7.0E+01	1.8E+01	YES	
79016	Trichloroethylene	4.6E+08	5.9E+00	1.1E+00	YES	
108054	Vinyl acetate	4.2E+08	2.0E+02	5.7E+01	YES	
75014	Vinyl chloride (chloroethene)	3.1E+09	2.3E+00	8.9E-01	YES	

NA - health-based target breathing concentration exceeds maximum possible chemical vapor concentration (pathway incomplete)

A review of historical site operations, and chemical use, storage and handling practices should be used to identify chemicals known or reasonably suspected to be present, and the list of target analytes for a particular site can then be established as a subset of the list of chemicals in Tables 1, 2, and 3, subject to review and approval by the lead regulatory authority