P E & C D

Projects, Engineering & Construction Division

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To: Distribution

From: Douglas K. Craig

Subject: **ERPGs and TEELs for Chemicals of Concern at SRS: Rev. 12 (July 9, 1997)**

The tables that follow include all chemicals for which official Emergency Response Planning Guideline (ERPG) values had been issued as of January 1, 1997. Temporary emergency exposure limits (TEELs) are provided for nearly 400 additional chemicals. The term "TEEL" to describe interim, temporary, or equivalent exposure limits for which official ERPGs have not yet been developed, was adopted by DOE's Subcommittee on Consequence Assessment and Protective Actions (SCAPA) at its April 1996 meeting in Knoxville, TN. The 471 chemicals listed are sorted alphabetically in Table 1 and by Chemical Abstract Services (CAS) number in Table 2.

Since hierarchy-based values are often unavailable, methodology incorporating the use of published acute toxicity parameters from SAX has been used to derive TEEL-2s and TEEL-3s. The original methodology, documented in Calculation Number S-CLC-G-00074: Description of Methodology for Deriving ERPG-equivalents for Chemicals (July 3, 1995), was updated at the request of SCAPA, and is based on comparison between toxicity parameters and official ERPGs only. At SCAPA's request, TEELs are hierarchy-based (American Industrial Hygiene Association Journal, V.56, pp. 919-925, September, 1995). wherever possible, toxicity-based TEELs being used only if there are no hierarchy-based values. Changes in the recommended TEEL values from those previously published (Rev. 11, PEC-CAT-96-0095, or in more detail, PEC-CAT-96-0101) are indicated in the last column of these tables.

These temporary emergency exposure limits must be regarded as dynamic; if new concentration limits are issued (e.g., ERPGs, PELs or TLVs), TEELs will be revised. Further revisions to this document will be issued as warranted. For onsite SRS use, this document is in my public folder (CRAIG PUBLIC). ERPGs are on SCAPA's home page (http://www.sep.bnl.gov/es/scapa.htm). Rev 11 TEELs are on DOE EH's Chemical Safety home page (http://tis-hq.eh.doe.gov/web/chem_safety/, under DOE documents).

I would welcome suggestions for improvement of this document, for chemicals to be added to the list, to the format, or anything else.

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Table of Contents

Section	Heading	Page
S1	Introduction	1
S1	Table of contents	2
S2	Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)	3
S3	Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)	19
S4	Notes for Tables 1 and 2	35
S4	References	36
S4	Distribution	37

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
1	**Acetaldehyde**	75-07-0	10	**10**	**200**	**1000**	ppm	44.06	1.80	-
2	Acetic acid	64-19-7	10	15	35[1]	50	ppm	60.06	2.46	Ch. T-2
3	Acetone	67-64-1	750	1000	8500	8500	ppm	58.09	2.37	-
4	Acetonitrile	75-05-8	40	60	60[1]	500	ppm	41.06	1.68	Ch.T-1,T-2
5	Acetophenone	98-86-2	10	30	50	300[1]	mg/m^3	120.16	4.91	Ch.T-2,T-3
6	Acetyl chloride	75-36-5	0.4[2]	1.2[3]	2[1]	125[1]	ppm	78.50	3.21	-
7	**Acrolein**	107-02-8	0.1	**0.1**	**0.5**	**3**	ppm	56.07	2.29	-
8	Acrylamide	79-06-1	0.03	0.09	60	60	mg/m^3	71.09	2.91	Ch. T-2
9	**Acrylic acid**	79-10-7	2	**2**	**50**	**750**	ppm	72.07	2.95	-
10	**Acrylonitrile**	107-13-1	2	**10**	**35**	**75**	ppm	53.07	2.17	-
11	Alcohols, C6-C12[4]	68603-15-6	10	30	50	250	mg/m^3			Added
12	Alkylamines[4]	63231-48-1	10	30	50	250	mg/m^3			Added
13	Allyl alcohol	107-18-6	2	4	15	20	ppm	58.09	2.37	-
14	**Allyl chloride**	107-05-1	1	**3**	**40**	**300**	ppm	76.53	3.13	-
15	Aluminum oxide	1344-28-1	10	15	15	25	mg/m^3	101.96	4.17	-
16	Aluminum sulfate (sol. salt,as Al)	10043-01-3	2	6	10	500[1]	mg/m^3	342.14	13.98	Added
17	Aminoethylpiperazine, n-	140-31-8	10[2]	30[3]	50[1]	500[1]	mg/m^3	129.24	5.28	Added
18	Amitrole	61-82-5	0.2	0.6	1	480[1]	mg/m^3	84.10	3.44	-
19	**Ammonia**	7664-41-7	25	**25**	**200**	**1000**	ppm	17.04	0.69	-
20	Ammonium hydroxide (as NH_3)	1336-21-6	25	35	50[1]	300[6]	ppm	35.06	1.43	-
21	Ammonium picrate	131-74-8	10	30	50	250[7]	mg/m^3	246.16	10.06	-
22	Ammonium sulfamate	7773-06-0	10	30	50	1500	mg/m^3	114.14	4.66	-
23	Ammonium vanadate	7803-55-6	10	30	50	70[1]	mg/m^3	116.99	4.78	Ch.all Ts
24	Aniline	62-53-3	2	6	10	100	ppm	93.14	3.81	-
25	Antimony	7440-36-0	0.5	1.5	2.5	50	mg/m^3	121.75	4.98	-
26	Antioxidant	NA	10	30	50	100[8]	mg/m^3	NA		-
27	Arsenic (inorganic compounds as As)	1327-53-3	0.01	0.03	1.4	5	mg/m^3	197.84	3.06	-
28	Arsenic (organic compounds as As)	7440-38-2	0.03	0.03	0.05	330[1]	mg/m^3	74.92	3.06	Ch.T-3
29	Arsine	7784-42-1	0.05	0.15	1	3	ppm	77.95	3.18	-
30	Asbestos (chrysotile)	12001-29-5	0.005	0.05	0.05[5]	500[1]	mg/m^3		10^6f/cc= 0.05mg/m^3	Added

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
31	Auramine	2465-27-2	10	30	50	175[1]	mg/m^3	321.89	13.16	-
32	Barium	7440-39-3	0.5	1.5	2.5	12.5[7]	mg/m^3	137.36	5.62	-
33	Barium chloride	10361-37-2	0.5	1.5	2.5	50	mg/m^3	208.24	8.51	-
34	Barium fluoride	7787-32-8	0.5	1.5	50[1]	100[1]	mg/m^3	175.34	7.16	Ch.T-2,T-3
35	Barium nitrate	10022-31-8	0.5	1.5	2.5	50	mg/m^3	261.36	10.68	-
36	Barium oxide	1304-28-5	0.5	1.5	2.5	20[1]	mg/m^3	153.34	6.27	-
37	Barium sulfate	7727-43-7	10	30	50	250[7]	mg/m^3	233.40	9.54	-
38	Benzal chloride	98-87-3	0.5[2]	1.4[3]	2.3	500[1]	mg/m^3	161.03	6.58	-
39	**Benzene**	71-43-2	1	**50**	**150**	**1000**	ppm	78.12	3.19	-
40	Benzidene	92-87-5	0.7[2]	2[3]	3.5[9]	135[1]	mg/m^3	184.26	7.53	Ch. all Ts
41	Benzo(a)pyrene (coal tar pitch volatiles)	50-32-8	0.2	7[10]	50[1]	80	mg/m^3	252.32	10.31	Ch.T-0,-1,-2
42	Benzoquinone, p-	106-51-4	0.4	1.3	2.2	100	mg/m^3	108.10	4.42	-
43	**Benzyl chloride**	100-44-7	1	**1**	**10**	**25**	ppm	126.59	5.17	-
44	Benzyl trichloride (Trichloromethylbenzene)	98-07-7	0.1[2]	0.4[3]	0.7	20[1]	mg/m^3	195.47	7.99	-
45	**Beryllium***	7440-41-7	0.002	0.01	**0.025**	**0.100**	mg/m^3	9.01	0.37	-
46	Beryllium hydroxide (as Be)	13327-32-7	0.002	0.01	0.005	4	mg/m^3	43.03	1.76	Added
47	Beryllium nitrate (as Be)	13597-99-4	0.002	0.01	0.005	4	mg/m^3	133.03	5.44	Added
48	Bis(0-methylstyryl)benzene, p-	13280-61-0	10	30	50	250[13]	ppm	310.43	12.69	Added
49	Bisphenol A	80-05-7	10	30	50	500[1]	mg/m^3	228.31	9.33	-
50	Boric acid	10043-35-3	10	30	100[12]	130[12]	mg/m^3	61.84	2.53	Ch.T-1,-2,-3
51	Boron carbide	12069-32-8	10	30	50	250[7]	mg/m^3	55.30	2.26	-
52	**Bromine**	7726-95-6	0.1	**0.2**	**1**	**5**	ppm	159.80	6.53	-
53	Bromo-1-chloro-5,5-dimethylhydantoin, 3-	126-06-7	10	30	50	250[1]	mg/m^3	241.49	9.87	-
54	Bromo-3-chloro-5,5-dimethylhydantoin, 1-	32718-18-6	10	30	50	250[11]	mg/m^3			-
55	Bromoacetone	598-31-2	0.1[14]	0.3[10]	2[13]	10[1]	ppm	136.99	5.60	Ch.T-2,T-3
56	Bromoform (Tribromomethane)	75-25-2	0.5	1.5	2.5	850	ppm	252.75	10.33	-
57	Bromotrifluoromethane (Trifluorobromomethane)	75-63-8	1000	3000	25000	40000	ppm	148.92	6.09	-
58	Brucine (as strychnine)	357-57-3	0.2[15]	0.6[3]	24[13]	120[1]	mg/m^3	394.51	16.12	-
59	**Butadiene,1,3-**	106-99-0	2	**10**	**200**	**5000**	ppm	54.10	2.21	-
60	Butanone, 2- (M E K), or (Methyl ethyl ketone)	78-93-3	200	300	1000	3000	ppm	72.12	2.95	-

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits TEEL-0	TEEL-1	TEEL-2	TEEL-3	Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
61	Butoxyethanol acetate, 2- *	112-07-2	5	15[3]	30[13]	160[1]	ppm	160.24	6.55	Added
62	Butoxyethanol, 2- *	111-76-2	50	75	125	700	ppm	118.20	4.83	Added
63	**Butyl acrylate, n-**	141-32-2	0.05	**0.05**	**25**	**250**	ppm	128.19	5.24	-
64	Butyl alcohol, n- (n-Butanol)	71-36-3	50[16]	50[16]	50	1400	ppm	74.14	3.03	-
65	Butyl glycidyl ether, n-	2426-08-6	25	75	125	250	ppm	130.21	5.32	-
66	**Butyl isocyanate, n-**	111-36-4	0.003[14]	**0.01**	**0.05**	**1**	ppm	99.15	4.05	-
67	Cacodylic acid as organic As (Hydroxydimethylarsine oxide)	75-60-5	0.03	0.03	0.05	280[1]	mg/m^3	138.01	5.64	Ch.all Ts
68	Cadmium & compounds as Cd	7440-43-9	0.005	0.03	4	9	mg/m^3	112.40	4.59	-
69	Cadmium nitrate	10325-94-7	0.005	0.03	0.05	500[1]	mg/m^3	236.42	9.66	Added
70	Calcium	7440-70-2	10	30	50	250[7]	mg/m^3	40.08	1.64	Added
71	Calcium carbonate (Dolomite)	1317-65-2	10	30	50	250[7]	mg/m^3	100.09	4.09	Added
72	Calcium chromate	13765-19-0	0.001	0.003	0.7[1]	3.5[7]	mg/m^3	156.08	6.38	Ch.T-2,T-3
73	Calcium hypochlorite	7778-54-3	10	30	50	370[1]	mg/m^3	142.98	5.84	Added
74	Calcium oxide	1305-78-8	5	6	10	25	mg/m^3	56.08	2.29	Del suprscpt
75	Carbanolate (Aldecarb)	116-06-3	0.07	0.3	0.3	0.3[1]	mg/m^3	190.29	7.78	Ch. T-0
76	Carbon dioxide	124-38-9	10000	30000	40000	40000	ppm	44.01	1.80	-
77	**Carbon disulfide**	75-15-0	4	12	**50**	**500**	ppm	76.13	3.11	-
78	**Carbon monoxide**	630-08-0	35	**200**	**350**	**500**	ppm	28.01	1.14	-
79	**Carbon tetrachloride**	56-23-5	2	**20**	**100**	**750**	ppm	153.81	6.29	-
80	Carbonyl sulfide	463-58-1	1[14]	4[10]	27[13]	135[1]	ppm	60.07	2.46	Ch.all Ts
81	Cerium chloride	7790-86-5	10	30	50	500[1]	mg/m^3	246.47	10.07	Added
82	Chlordane	57-74-9	0.5	1.5	50	100	mg/m^3	409.76	16.75	-
83	Chlorinated benzene (Chlorobenzene)	108-90-7	75	75	200	1000	ppm	112.56	4.60	-
84	Chlorinated polyolefins	68410-99-1	10	30	50	250[7]	mg/m^3			Added
85	**Chlorine**	7782-50-5	0.5	**1**	**3**	**20**	ppm	70.90	2.90	-
86	**Chlorine trifluoride**	7790-91-2	0.1	**0.1**	**1**	**10**	ppm	92.45	3.78	-
87	Chloroacetaldehyde	107-20-0	1	1	22	45	ppm	78.50	3.21	-
88	**Chloroacetyl chloride**	79-04-9	0.05	**0.1**	**1**	**10**	ppm	112.94	4.62	-
89	Chloroallyl)-3,5,7-triaza-1-azo-niaadamantane chloride, 1-(3-	4080-31-3	10	30	50	220[1]	mg/m^3	251.19	10.27	Added
90	Chloroaniline, p-	106-47-8	10	30	50	300[1]	mg/m^3	127.58	5.22	Ch. T-3

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
91	Chlorodifluoromethane (Freon 22)	75-45-6	1000	1250	5000	9000[1]	ppm	86.47	3.54	Ch. T-3
92	Chlorodiphenyl (42% Cl)	53469-21-9	1	3	5	5	mg/m^3			-
93	Chlorodiphenyl (54% Cl)	11097-69-1	0.5	1.5	2.5	5	mg/m^3			-
94	Chloroform	67-66-3	2	100	1000	5000	ppm	119.37	4.88	-
95	Chloromethyl methyl ether	107-30-2	0.1[14]	0.3[10]	1.8	135[1]	mg/m^3	80.52	3.29	Ch.T-0,-1,-3
96	Chloronapthalene, beta (2-Chloronapthalene)	91-58-7	0.2	0.6	180[13]	900[1]	mg/m^3	162.62	6.65	-
97	Chlorophenol, o-	95-57-8	0.4[14]	1.2[10]	8[1]	55[1]	ppm	128.56	5.26	Ch. all Ts
98	**Chloropicrin** (Trichloronitromethane)	76-06-2	0.1	0.2	**0.2**	**3**	ppm	164.37	6.72	-
99	**Chlorosulfonic acid** (or Chlorosulfuric)	7790-94-5	1.4	**2**	**10**	**30**	mg/m^3	116.52	4.76	-
100	**Chlorotrifluoroethylene**	79-38-9	5	**20**	**100**	**300**	ppm	116.47	4.76	-
101	Chromic acid (as Cr)	7738-94-5	0.05	0.1	0.1	15	mg/m^3	118.02	4.82	-
102	Chromic oxide, or (Chromium(III) oxide)	1308-38-9	0.5	1.5	2.5	25	mg/m^3	152.00	6.21	Ch. T-3
103	Chromium	7440-47-3	1	1.5	2.5	250	mg/m^3	52.00	2.13	-
104	Chromium nitrate	13548-38-4	0.5	1.5	2.5	25	mg/m^3	238.03	9.73	Added
105	Chrysene (coal tar volatiles)	218-01-9	0.2	0.3[10]	2.1[1]	80	mg/m^3	228.30	9.33	Ch.T-1,T-2
106	Citric acid	77-92-9	10	30	50	500[1]	mg/m^3	192.14	7.85	Added
107	Copper	7440-50-8	1	3	5	100	mg/m^3	63.54	2.60	-
108	Copper chloride (as Cu)	7447-39-4	1	3	5	100	mg/m^3	134.44	5.50	Added
109	Copper nitrate (as Cu)	3251-23-8	1	3	5	100	mg/m^3	187.55	7.67	Added
110	Creosote (coal tar oil)	8001-58-9	0.2	0.6	1	80	mg/m^3		-	-
111	Cresols	1319-77-3	5	15	25	250	ppm	108.15	4.42	-
112	**Crotonaldehyde**	4170-30-3	2	**2**	**10**	**50**	ppm	70.09	2.87	-
113	Cumene	98-82-8	50	150	250	900	ppm	120.21	4.91	-
114	Cupric nitrate hemipentahydrate (as Cu	19004-19-4	1	3	5	100	mg/m^3	241.60	9.87	from MSDS
115	Cyanide (and cyanides)	57-12-5	5	5	5	25	mg/m^3	26.02	1.06	-
116	Cyclohexane	110-82-7	300	900	1300[1]	1300	ppm	84.18	3.44	-
117	Cyclohexylamine	108-91-8	10	30	50	200[1]	ppm	99.20	4.05	Added
118	DDD, or (1,1-bis(4-Chlorophenyl)-2,2-dichloroethane)	72-54-8	10	30	50	50[1]	mg/m^3	320.04	13.08	Ch. all Ts
119	DDE, or (2.2-bis(p-Chlorophenyl)-1,1-dichloroethylene)	72-55-9	10	30	50	385[1]	mg/m^3	318.02	13.00	-
120	DDT, or (Dichlorodiphenyltrichloroethane)	50-29-3	1	3	5	500	mg/m^3	354.48	14.49	-

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
121	Di-sec-octylphthalate	117-81-7	5	10	80[1]	5000	mg/m^3	390.62	15.96	Ch. T-2
122	Dibenza(a,h)anthracene	53-70-3	10	30	35[17]	35[1]	mg/m^3	278.36	11.38	Ch.T-1.-2,-3
123	**Diborane**	19287-45-7	0.1	0.3	**1**	**3**	ppm	27.68	1.13	-
124	Dibutyl phthalate	84-74-2	5	15	25	4000	mg/m^3	278.38	11.38	-
125	Dichloro-2-butene, 1,4-	764-41-0	0.005	0.015	0.025	140[1]	ppm	125.00	5.11	Ch. T-3
126	Dichlorobenzene, m-	541-73-1	10[2]	30[3]	50[13]	250[1]	ppm	147.00	6.01	-
127	Dichlorobenzene, o-	95-50-1	25	50[1]	50	200	ppm	147.00	6.01	-
128	Dichlorobenzene, p-	106-46-7	75	110	150	150	ppm	147.00	6.01	-
129	Dichlorobenzidene, 3,3'-	91-94-1	0.2[14]	0.6[10]	4[1]	220[1]	ppm	253.14	10.34	Ch. all Ts
130	Dichlorodifluoromethane (Freon 12, CFC 12)	75-71-8	1000	3000	10000	15000	ppm	120.91	4.94	-
131	Dichloroethyl ether (Bis(2-chloroethyl) ether	111-44-4	5	10	26	100	ppm	143.02	5.85	-
132	Dichloroethylene, 1,2-	540-59-0	200	600	1000	1000	ppm	96.94	3.96	-
133	Dichlorofluoromethane (Freon 21, CFC 21)	75-43-4	10	30	100	5000	ppm	102.92	4.21	-
134	Dichloroisopropyl ether	108-60-1	3[14]	10[10]	75[13]	375[1]	ppm	171.08	6.99	Ch. all Ts
135	Dichloromethyl ether (Bischloromethyl ether)	542-88-1	0.001	0.003	0.05	0.8[1]	ppm	114.96	4.70	-
136	Dichlorophenol, 2,4-	120-83-2	10	30	50	250[1]	mg/m^3	163.00	6.66	-
137	Dichlorophenol, 2,6-	87-65-0	10	30	50	500[1]	mg/m^3	163.00	6.66	-
138	Dichlorophenoxy acetic acid, 2,4- (2,4- D salts and esters)	94-75-7	10	30	50	100	mg/m^3	221.04	9.03	-
139	Dichloropropane, 1,2- (propylene dichloride)	78-87-5	75	110	250[4]	400	ppm	112.99	4.62	-
140	Dichloropropene, 1,3-	542-75-6	1	3	5	50[1]	ppm	110.97	4.54	Ch.T-3
141	Dichlorotetrafluoroethane (Freon 114, or CFC 114, CAS # 76-14-2)	1320-37-2	1000	3000	10000	15000	ppm	170.92	6.98	-
142	Dieldrin	60-57-1	0.25	0.75	1.25	50	mg/m^3	380.90	15.57	-
143	Diethyl phthalate	84-66-2	5	15	100[1]	500[1]	mg/m^3	222.26	9.09	Ch.T-2,T-3
144	Diethyleneoxide, 1,4- (1,4-Dioxane)	123-91-1	25	75	125	500	ppm	88.11	3.60	-
145	Diethylenetriaminepentaacetic acid	67-43-6	10	30	50	500[1]	mg/m^3	393.40		Added
146	Dihydrogen hexachloroplatinum (IV)	16941-12-1	0.002	0.006	0.01	4	mg/m^3	409.81		Added
147	Diisopropyl methylphosphonate	1445-75-6	10	30	50	360[1]	mg/m^3	180.21	7.37	Added
148	**Diketene** (Ketene dimer)	674-82-8	0.1[14]	**1**	**5**	**50**	ppm	84.08	3.44	-
149	Dimethanonaphthalene, 1,4,5,8- (Aldrin)	309-00-2	0.25	0.75	10	25	mg/m^3	364.90	14.91	-
150	Dimethoxybenzidene 3,3'-	119-90-4	2[14]	5[10]	35[1]	500[1]	mg/m^3	244.32	9.98	Ch. all Ts

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
151	**Dimethyl dichlorosilane** (Dichlorodimethylsilane)	75-78-5	0.25[14]	**0.8**	**5**	**25**	ppm	129.06	5.28	-
152	**Dimethyl disulfide**	624-92-0	0.003[14]	**0.01**	**50**	**250**	ppm	94.20	3.85	-
153	Dimethyl siloxane (Syltherm)	63148-62-9	10	30	50	250[7]	mg/m^3			Added
154	Dimethyl sulfate	77-78-1	0.1	0.3	1	7	ppm	126.14	5.15	-
155	**Dimethyl sulfide** or (2-Thiopropane)	75-18-3	0.15[14]	**0.5**	**500**	**2000**	ppm	62.14	2.54	-
156	Dimethyl sulfoxide, or (DMSO)	67-68-5	25[14]	70[10]	500[1]	500[1]	mg/m^3	78.14	3.19	Ch.T-0,-1,-2
157	**Dimethylamine**	124-40-3	10	15	**100**	**500**	ppm	45.10	1.84	-
158	Dimethylbenzidene 3,3'-	119-93-7	0.02[16]	0.02[16]	0.02	320[1]	mg/m^3	212.32	8.68	Ch. T-3
159	**Dimethylformamide**	68-12-2	2	**2**	**100**	**200**	ppm	73.11	2.99	-
160	Dimethylhydrazine,1,1-	57-14-7	0.06	0.06	5	15	ppm	60.12	2.46	Ch.T-0,T-1
161	Dimethylphthalate	131-11-3	5	15	25	2000	mg/m^3	194.20	7.94	-
162	Dinitrophenol 2,4-	51-28-5	0.3[14]	1[2]	5[17]	5[1]	mg/m^3	184.12	7.52	Ch.T-2,T-3
163	Dinitrophenol, 2,3-	66-56-8	10	30	50	250[1]	mg/m^3	184.12	7.52	Ch. T-3
164	Dinitrotoluene	25321-14-6	0.45	0.45	0.75	50	mg/m^3	182.15	7.45	Ch. T-2
165	Dinitrotoluene 2,4-	121-14-2	0.45	0.45	0.75	50	mg/m^3	182.15	7.45	Ch. T-2,T-3
166	Dinitrotoluene 2,6-	606-20-2	0.45	0.45	0.75	50	mg/m^3	182.15	7.45	Ch. T-2,T-3
167	Dinoseb	88-85-7	4.5	4.5	4.5	120[1]	mg/m^3	240.24	9.82	Ch.T-3
168	Diphenyl (Biphenyl)	92-52-4	1	4	7	100	mg/m^3	154.22	6.30	-
169	Diphenyl mercury (aryl compound)	587-85-9	0.1	0.1	0.1	10	mg/m^3	354.81	14.50	-
170	Diphenylamine	122-39-4	10	30	50	130[1]	mg/m^3	169.24	6.92	Ch.T-3
171	Diphenylhydrazine 1,2,3-	122-66-7	10	30	50	130[1]	mg/m^3	184.26	7.53	Ch.T-3
172	Diphenyloxazole, 2,5-	92-71-7	10	30	50	500[1]	mg/m^3	221.27	9.04	Added
173	Dipropylamine	142-84-7	1[14]	2	100[13]	500[1]	mg/m^3	101.22	4.14	Ch. all Ts
174	Endosulfan	115-29-7	0.1	0.3	0.8	25[1]	mg/m^3	406.91	16.63	-
175	Endrin	72-20-8	0.1	0.3	2	2	mg/m^3	380.90	15.57	-
176	Epibatidine	NF	0.003[14]	0.01[10]	0.05[1]	0.075[1]	mg/m^3			Added
177	**Epichlorohydrin**	106-89-8	2	**2**	**20**	**100**	ppm	92.53	3.78	-
178	Epoxy Resin (EPON 1001)	25068-38-6	10	30	50	500[1]	mg/m^3			Added
179	Epoxy Resin (EPON 1007)	25068-38-6	10	30	50	500[1]	mg/m^3			Added
180	Epoxy Resin (EPON 820)	25068-38-6	10	30	50	500[1]	mg/m^3			Added

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
181	Epoxy Resin ERL-2795	25068-38-6	10	30	50	480[1]	mg/m^3			Added
182	Ethanolamine	141-43-5	3	6	50	50	ppm	61.10	2.50	-
183	Ethoxyethanol, 2-	110-80-5	0.5	15	25	500	ppm	90.14	3.68	-
184	Ethoxylated alcohols, C7-C21	68991-48-0	10	30	50	250[7]	mg/m^3			Added
185	Ethoxylated p-nonylphenol (from MSDS) (Nonyl phenyl polyethylene glycol ether)	9016-45-9	10	30	50	500[1]	mg/m^3			-
186	Ethyl acetate	141-78-6	400	1200	2000	2000	ppm	88.12	3.60	-
187	Ethyl alcohol (ethanol)	64-17-5	1000	3000	3300	3300	ppm	46.08	1.88	-
188	Ethyl benzene	100-41-4	100	125	160[13]	800	ppm	106.18	4.34	-
189	Ethyl chloride (chloroethane or chlorinated ethanes)	75-00-3	1000	3000	3800[17]	3800	ppm	64.52	2.64	-
190	Ethyl ether	60-29-7	400	500	500[18]	1900	ppm	74.14	3.03	Ch. T-2
191	Ethylene dibromide	106-93-4	20	30[5]	30	100	ppm	187.88	7.68	-
192	Ethylene dichloride	107-06-2	1	2	50	50	ppm	98.96	4.05	-
193	Ethylene glycol	107-21-1	4	20	40	60	ppm	62.08	2.54	-
194	**Ethylene oxide**	75-21-8	1	5[16]	**50**	**500**	ppm	44.06	1.80	-
195	Ethylenediaminetetraacetic acid (Tetrasodium EDTA)	64-02-8	10	30	50	430[1]	mg/m^3	380.20	15.54	Added
196	Ethyleneimine	151-56-4	0.5	1.5	2.3	100	ppm	43.08	1.76	-
197	Ethylenethiourea	96-45-7	5[14]	15[10]	80[1]	500[1]	mg/m^3	102.17	4.18	-
198	Ethylidene chloride, 1,1- (Dichloroethane)	75-34-3	100	300	500	3000	ppm	98.96	4.05	-
199	Ferric chloride	7705-08-0	10	30	50	200[1]	mg/m^3	162.20	6.63	Added
200	Ferric nitrate (iron salts, soluble, as Fe)	10421-48-4	1	3	5	25[7]	mg/m^3	241.88	9.89	-
201	Ferric sulfate (iron salts, soluble, as Fe)	10028-22-5	1	3	5	25[7]	mg/m^3	399.88	16.34	-
202	Ferrous sulfate (iron salts, soluble, as Fe)	7720-78-7	1	3	5	140[1]	mg/m^3	151.91	6.21	Ch.T-3
203	Ferrous sulfate heptahydrate (sol salts, Fe)	7782-63-0	1	3	5	500[1]	mg/m^3	278.05	11.37	-
204	Fluorine	7782-41-4	0.1	2	7.5	10	ppm	38.00	1.55	-
205	**Formaldehyde**	50-00-0	0.75	**1**	**10**	**25**	ppm	30.03	1.23	-
206	Formic acid	64-18-6	5	10	20[5]	30	ppm	46.03	1.88	-
207	Fuel oil	68476-33-5	5[14]	15[10]	100[13]	500[1]	mg/m^3			Added
208	Furan	110-00-9	0.02[14]	0.06[10]	0.43	8[1]	ppm	68.08	2.78	Ch.T-0,-1,-3
209	**Furancarboxyaldehyde, 2-,** (Furfural)	98-01-1	2	**2**	**10**	**100**	ppm	96.09	3.93	-
210	Glycerin (mist)	56-81-5	10	30	50	500[1]	mg/m^3	92.11	3.76	-

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits TEEL-0	TEEL-1	TEEL-2	TEEL-3	Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
211	Glyceryl monostearate	31566-31-1	10	30	50	260[1]	mg/m^3	358.63	14.66	Ch. T-3
212	Heavy water	7789-20-0	200[14]	600[10]	4000[1]	20000[7]	ppm	20.02	0.82	Added
213	Heptachlor	76-44-8	0.15	0.15	0.25	35	mg/m^3	373.30	15.26	-
214	Heptachlor epoxide (Epoxyheptachlor)	1024-57-3	0.15	0.15	0.25	7[1]	mg/m^3	389.30	15.91	Ch. T-3
215	Hexachlorobenzene	118-74-1	0.025	0.075	0.125	200[1]	mg/m^3	284.76	11.64	-
216	**Hexachlorobutadiene**	87-68-3	0.02	**3**	**10**	**30**	ppm	260.74	10.66	-
217	Hexachlorocylopentadiene	77-47-4	0.01	0.02	0.02	0.02[1]	ppm	272.75	11.15	Ch.T-3
218	Hexachloroethane	67-72-1	1	3	5	300	ppm	236.72	9.67	-
219	Hexachlorophene	70-30-4	10	30	35[17]	35[1]	mg/m^3	406.89	16.63	Ch. all Ts
220	**Hexafluoroacetone and hydrates**	684-16-2	0.1	0.3	**1**	**50**	ppm	166.03	6.78	-
221	**Hexafluoropropylene** (Hexafluoropropene)	116-15-4	3[14]	**10**	**50**	**500**	ppm	150.03	6.13	-
222	Hexamethylene diisocyanate*	822-06-0	0.005	0.015[5]	0.2	3[1]	ppm	168.22	6.88	Added
223	Hexamethylenetetraamine	100-97-0	10	30	50	500[1]	mg/m^3	140.22	5.73	Added
224	Hexamethylenetetraamine hydrochloride	58713-21-6	10	30	50	500[19]	mg/m^3			Added
225	Hexane	110-54-3	50	150	250	1100	ppm	86.20	3.52	-
226	Hydrazine	302-01-2	0.1	0.3	0.8	10	ppm	32.06	1.31	-
227	Hydrocount(R) (LSC Cocktail)	NF	20	60	100	500[20]	mg/m^3		-	Added
228	**Hydrogen chloride**	7647-01-0	0.5	**3**	**20**	**100**	ppm	36.46	1.49	-
229	**Hydrogen cyanide**	74-90-8	1.6[14]	4.7[16]	**10**	**25**	ppm	27.03	1.10	-
230	**Hydrogen fluoride** (Hydrofluoric acid)	7664-39-3	2	**2**	**20**	**50**	ppm	20.01	0.82	-
231	**Hydrogen peroxide**	7722-84-1	1	**10**	**50**	**100**	ppm	34.02	1.39	-
232	**Hydrogen sulfide**	7783-06-4	10	15	**30**	**100**	ppm	34.08	1.39	-
233	Iconol(R)	NF	10	30	50	250[7]	mg/m^3			Added
234	**Iodine**	7553-56-2	0.3[14]	**0.1**	**0.5**	**5**	ppm	253.80	10.37	-
235	Iron oxide	1309-37-1	10	15	25	2500	mg/m^3	159.70	6.53	-
236	Isoamyl alcohol (primary)	123-51-3	100	125	150[1,5]	500	ppm	88.17	3.60	-
237	Isoamyl alcohol (secondary)	584-02-1	100	125	150[5]	500	ppm	88.17	3.60	-
238	Isoamylnitrite (Isopentyl nitrite)	110-46-3	3[14]	8[10]	60[13]	300[1]	ppm	117.17	4.79	Ch.all Ts
239	Isobutyl alcohol	78-83-1	50	150	250	1600	ppm	74.14	3.03	-
240	**Isobutyronitrile**	78-82-0	8	**10**	**50**	**200**	ppm	69.12	2.82	-

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
241	Isocyanate-bearing waste (as CN)	NA	5	5[16]	5	25	mg/m^3			-
242	**Isocyanatoethyl methacrylate, 2-**	30674-80-7	0.1[17]	0.1[17]	**0.1**	**1**	ppm	155.17	6.34	-
243	Isopropyl alcohol	67-63-0	400	400	400	2000	ppm	60.11	2.46	-
244	Jet fuels (JP-5 and JP-8) (as Kerosene)	NA	100	300	500	500[1]	ppm			Added
245	Kepone	143-50-0	0.001	0.1[10]	0.7[1]	40[1]	mg/m^3	490.60	20.05	Ch.T-1,T-2
246	Kerosene	8008-20-6	100	300	500	500[1]	mg/m^3		6.95	-
247	Lead	7439-92-1	0.05	0.15	0.25	100	mg/m^3	207.19	33.01	-
248	Lead acetate (as Pb)	1335-32-6	0.05	0.15	0.25	100	mg/m^3	807.71	8.47	-
249	Lead nitrate (as Pb)	10099-74-8	0.05	0.45	0.75	100	mg/m^3	331.21	13.54	Added
250	Lead oxide (as Pb), or (Lead monoxide)	1317-36-8	0.05	0.15	0.25	100	mg/m^3	223.19	9.12	-
251	Lead, bis(acetato)trihydroxytri- (as Pb) (Lead acetate trihydrate)	6080-56-4	0.05	0.15	0.25	100	mg/m^3	379.35	15.51	Ch. T-2,T-3
252	Lindane	58-89-9	0.5	1.5	50	50	mg/m^3	290.82	11.89	-
253	Lithium	7439-93-2	10	30	50	250[7]	mg/m^3	6.94	0.28	-
254	Lithium bromide	7550-35-8	1	7	15	500[1]	mg/m^3	86.85	3.55	-
255	Lithium chromate (as soluble Cr(VI))	14307-35-8	0.05	0.05	0.1	0.5[7]	mg/m^3	131.90	6.78	-
256	**Lithium hydride**	7580-67-8	0.025	**.025**	**0.1**	**0.5**	mg/m^3	7.95	0.32	-
257	Lithium hydroxide	1310-65-2	1	1	1	100[1]	mg/m^3	23.95	0.98	Ch.T-3
258	Machine coolant 1	NA	10	30	50	500	mg/m^3		-	-
259	Magnesium	7439-95-4	10	30	50	250[7]	mg/m^3	24.31	0.99	Added
260	Magnesium carbonate (Magnesite)	546-93-0	10	30	50	500	mg/m^3	84.32	3.45	Added
261	Magnesium oxide	1309-48-4	10	30	50	750	mg/m^3	40.31	1.65	-
262	Maleic anhydride	108-31-6	1	3	5	10	mg/m^3	98.06	4.01	Ch. units
263	Manganese dioxide (as Mn)	1313-13-9	0.2	3	5	500	mg/m^3	86.94	3.55	Ch.T-3
264	Manganous sulfate (as Mn)	7785-87-7	0.2	3	5	500	mg/m^3	151.00	6.17	Ch.T-3
265	Mercuric nitrate	10045-94-0	0.025	0.075[5,3]	0.1	10	mg/m^3	324.61	13.27	Ch.T-3
266	Mercury (elemental and inorganic as Hg)	7439-97-6	0.05	0.075[5,3]	0.1	10	mg/m^3	200.59	8.20	-
267	Mercury (II) oxide	21908-53-2	0.025	0.075[5,3]	0.1	10	mg/m^3	216.59	8.85	Added
268	Methane	74-82-8	5000	5000	5000	5000	ppm	16.05	0.65	-
269	Methoxychlor	72-43-5	10	30	50	5000	mg/m^3	345.66	14.13	-
270	**Methyl alcohol (Methanol)**	67-56-1	200	**200**	**1000**	**5000**	ppm	32.05	1.31	-

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits TEEL-0	TEEL-1	TEEL-2	TEEL-3	Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
271	**Methyl bromide**	74-83-9	5	15[3]	**50**	**200**	ppm	94.95	3.88	-
272	**Methyl chloride**	74-87-3	50	100	**400**	**1000**	ppm	50.49	2.06	-
273	Methyl fluoride (as F) (Fluoromethane)	593-53-3	2.5	7.5	12.5	250	mg/m^3	34.03	1.39	-
274	**Methyl Iodide**	74-88-4	2	**25**	**50**	**125**	ppm	141.94	5.80	-
275	Methyl isobutyl ketone (Hexone)	108-10-1	50	75	250[5]	500	ppm	100.18	4.10	-
276	**Methyl isocyanate**	624-83-9	0.02	**0.025**	**0.5**	**5**	ppm	57.06	2.33	-
277	**Methyl mercaptan**	74-93-1	0.5	1.5[21]	**25**	**100**	ppm	48.11	1.97	-
278	Methyl methacrylate	80-62-6	100	300	500	1000	ppm	100.13	4.09	-
279	Methyl parathion	298-00-0	0.2	0.34	0.34	15[1]	mg/m^3	263.22	10.75	Ch. T-3
280	**Methyl trichlorosilane**	75-79-6	0.15[14]	**0.5**	**3**	**15**	ppm	149.48	6.11	-
281	Methyl-1H-benzotriazole	29385-43-1	10	30	50	300[1]	mg/m^3	133.17	5.40	-
282	Methylcellulose	9004-67-5	10	30	50	500[1]	mg/m^3			-
283	Methylcholanthrene 3-	56-49-5	0.6[14]	2[10]	13[1]	260[1]	mg/m^3	268.37	10.97	Ch. all Ts
284	Methylene bis(2-chloro-anilene) , 4,4'- (MBOCA)	101-14-4	0.02	0.03	0.05	45[1]	ppm	267.17	10.92	Ch. T-3
285	**Methylene bisphenyl isocyanate (MDI)***	101-68-8	0.005	**0.2**	**2**	**25**	mg/m^3	250.27	10.23	-
286	**Methylene chloride**	75-09-2	200	**200**	**750**	**4000**	ppm	84.93	3.47	-
287	Methylenedianiline*	101-77-9	0.01	0.1	0.6[1]	18[1]	ppm	198.29	8.10	Added
288	Methyllactonitrile 2- (acetone cyanohydrin)	75-86-5	4[16]	4[16]	12	24[1]	mg/m^3	85.12	3.48	Ch. T-3
289	Mineral oil	8042-47-5	10	30	50	250[7]	mg/m^3			
290	Mineral spirits (85% #311) (Stoddard solv)	8052-41-3	525	1575	1800	20000	mg/m^3		5.19	-
291	**Monomethylamine** (Methylamine)	74-89-5	10	**10**	**100**	**500**	ppm	31.07	1.27	-
292	Monomethylhydrazine (Methyl hydrazene)	60-34-4	0.01	0.2	0.5	20	ppm	46.09	1.88	-
293	Monosodium titanate (& CAS # 12034-36-5)	60704-88-3	10	30	50	500	mg/m^3		8.17	From MSDS
294	Nabumetone (Relafen), or (4-[6-methoxy-2-napthyl]-2-butanone)	42924-53-8	10	30	50	500[1]	mg/m^3	228.31	9.33	-
295	Naphthalenamine 1- (Naphthylamine, 1-)	134-32-7	10[14]	35[10]	260[1]	340[1]	mg/m^3	143.20	5.85	Ch.all Ts
296	Naphthalene	91-20-3	10	15	30[1]	250	ppm	128.18	5.24	Ch. T-2
297	Naphthoquinone, 1,4-	130-15-4	0.2[14]	0.6[10]	4[1]	80[1]	mg/m^3	158.16	6.46	Ch. all Ts
298	Neodynium (III) chloride	10024-93-8	0.2[14]	0.6[10]	4[13]	20[1]	ppm	250.59	10.24	Added
299	Nickel	7440-02-0	1	3	10	10	mg/m^3	58.71	2.40	-
300	Nickel carbonyl	13463-39-3	0.001	0.05	0.05	2	ppm	170.75	6.98	-

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			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
301	Nickel nitrate (soluble salts, as Ni)	13138-45-9	0.1	0.3	0.5	10	mg/m^3	182.73	7.47	-
302	Nickel oxide (insoluble cmpds as Ni)	1313-99-1	1	3	5	20[1]	mg/m^3	74.71	3.05	Ch.T-3
303	Nitric acid	7697-37-2	2	2	15	30	ppm	63.02	2.57	-
304	Nitric oxide	10102-43-9	25	25	25	100	ppm	30.01	1.23	-
305	Nitroaniline, p-	100-01-6	3	9	15	300	mg/m^3	138.14	5.64	Ch.T-2
306	Nitrobenzene	98-95-3	1	3	20	200	ppm	123.12	5.03	-
307	Nitrogen dioxide	10102-44-0	2	2	15	30	ppm	46.01	1.88	-
308	Nitrophenol 4-	100-02-7	10	30	50	165[1]	mg/m^3	139.12	5.69	Ch.T-3
309	Nitropropane. 2-	79-46-9	10	30	50	100	ppm	89.11	3.64	-
310	Nitrous oxide	10024-97-2	50	150	10000	20000	ppm	44.02	1.80	-
311	Nonane (Shell Sol 140) (Aquasol MSDS gives CAS No. 64742-88-7)	111-84-2	200	350[17]	350[17]	350[1]	ppm	128.29	5.24	Ch.T-1,-2,-3
312	Nonyl Phenol (branched)	84852-15-3	5[14]	15[10]	100[13]	500[1]	mg/m^3	220.39	9.01	Added
313	Nonyl Phenol (mixed isomers)	25154-52-3	5[14]	15[10]	100[13]	500[1]	mg/m^3	220.39	9.01	Added
314	Nonyl Phenol, p-	104-40-5	5[14]	15[10]	100[13]	500[1]	mg/m^3	220.39	9.01	Added
315	Norchlorofluoroepibatidine	NF	0.0001[14]	0.00025[10]	0.002[1]	0.0025[1]	mg/m^3		-	Added
316	Oxalic Acid - anhydrous	144-62-7	1	2	100[13]	500	mg/m^3	90.04	3.68	Ch. T-2
317	Oxalic Acid - dihydrate	144-62-7	1	2	100[13]	500	mg/m^3	126.10	5.15	Ch. T-2
318	Ozone	10028-15-6	0.1	0.3	1	5	ppm	48.00	1.96	-
319	Palladium	7440-05-3	10	30	50	250[7]	mg/m^3	106.40	4.35	-
320	Paraffin n-	8002-74-2	2	6	10	50[7]	mg/m^3			-
321	Paraldehyde	123-63-7	10	30	50	500[1]	mg/m^3	132.18	5.40	-
322	Parathion	56-38-2	0.1	0.3	2	10	mg/m^3	291.28	11.91	-
323	Pentachlorobenzene	608-93-5	10	30	50	475[1]	mg/m^3	250.32	10.23	-
324	Pentachloroethane	76-01-7	10	30	500[17]	500[1]	mg/m^3	202.28	8.27	-
325	Pentachloronitrobenzene	82-68-8	0.5	1.5	2.5	500[1]	mg/m^3	295.32	12.07	Ch. T-3
326	Pentachlorophenol	87-86-5	0.5	1.5	2.5	2.5	mg/m^3	266.32	10.89	-
327	**Perchloroethylene (Tetrachloroethylene)**	127-18-4	25	**100**	**200**	**1000**	ppm	165.82	6.78	-
328	**Perfluoroisobutylene** (Octafluoro-sec-butene)	382-21-8	0.01[16]	0.01[16]	**0.1**	**0.3**	ppm	200.04	8.17	-
329	Perlite (Silica)	93763-70-3	15	30	50	500[1]	mg/m^3			Added
330	Petroleum solvent	8002-05-9	10	30	50	250[7]	mg/m^3	978.68	40.00	Added

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits TEEL-0	TEEL-1	TEEL-2	TEEL-3	Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
331	Phenacetin	62-44-2	10	30	50	500[1]	mg/m^3	179.24	7.32	Ch. T-3
332	Phenaglycodol (Ultran), or (2-p-chlorophenyl-3-methyl-2,3-butanediol)	79-93-6	10	30	50	360[1]	mg/m^3	214.71	8.78	Ch. T-3
333	**Phenol**	108-95-2	5	**10**	**50**	**200**	ppm	94.12	3.85	-
334	Phenylthiourea	103-85-5	3	3	3	3[22]	mg/m^3	152.23	6.22	-
335	**Phosgene**	75-44-5	0.1	0.2	**0.2**	**1**	ppm	98.91	4.04	-
336	**Phosphine*** **	7803-51-2	0.3	1	**2.5**	**5**	ppm	34.00	1.39	-
337	Phosphoric Acid	7664-38-2	1	3	100[13]	500[1]	mg/m^3	98.00	4.01	Ch.T-2,T-3
338	**Phosphorous pentoxide**	1314-56-3	1	**5**	**25**	**100**	mg/m^3	141.94	5.80	-
339	Phosphorus (red)	7723-14-0	0.1	0.3	0.5	3[1]	mg/m^3	30.97	1.27	Added
340	Phosphorus (yellow)	7723-14-0	0.1	0.3	3	5	mg/m^3	123.88	5.06	-
341	Phthalic anhydride	85-44-9	6	18	30	60	mg/m^3	148.12	6.05	-
342	Polychlorinated biphenyl	1336-36-3	0.001	0.003	0.005	500[1]	mg/m^3			Added
343	Polyoxyalkyleneamine	9046-10-0	10	30	50	250[7]	mg/m^3			Added
344	Polyvinyl chloride	9002-86-2	5	15	25	500[1]	mg/m^3			Added
345	Potassium carbonate	584-08-7	10	30	50	500[1]	mg/m^3	138.21	5.65	Added
346	Potassium chromate (VI)	7789-00-6	0.05	0.1[16]	0.1	15	mg/m^3	194.20	7.94	Added
347	Potassium cyanide	151-50-8	5	5[16]	5	25	mg/m^3	65.12	2.66	-
348	Potassium dichromate	7778-50-9	0.05	0.1[16]	0.1	15	mg/m^3	294.20	7.94	Ch. T-3
349	Potassium hydroxide	1310-58-3	2	2[16]	2	150[1]	mg/m^3	56.11	2.29	Ch. T-3
350	Potassium permanganate (as Mn)	7722-64-7	0.2	3	5	125[12]	mg/m^3	158.04	6.46	-
351	Potassium tetraphenylborate (as borate)	3244-41-5	1	3	5	25[7]	mg/m^3	358.31	14.64	-
352	Propane	74-98-6	1000	2100[17]	2100[17]	2100	ppm	44.11	1.80	-
353	Propargyl alcohol	107-19-7	1	3	5	65[1]	ppm	56.07	2.29	Ch.T-3
354	Propylene glycol, or (1,2-Propanediol)	57-55-6	50	90[17]	90[1]	2800[1]	ppm	76.11	3.11	Ch. all Ts
355	Propylene glycol monomethyl ether	107-98-2	100	150	800[2]	4000[1]	ppm	90.10	3.68	Ch.T-2,T-3
356	**Propylene oxide**	75-56-9	20	**5**	**250**	**750**	ppm	58.09	2.37	-
357	Propylene-based glycol ether	NF	10	30	50	250[7]	mg/m^3			Added
358	Pyridine	110-86-1	5	15	25	1000	ppm	79.11	3.23	-
359	Resorcinol	108-46-3	10	20	20[5]	25[1]	ppm	110.12	4.50	-
360	Sarin	107-44-8	0.002[14]	0.007[10]	0.05	0.7[1]	mg/m^3	140.11	5.73	Added

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
361	Selenious acid	7783-00-8	0.2	0.6	20[17]	20[1]	mg/m^3	128.98	5.27	Ch. T-2,T-3
362	Selenium	7782-49-2	0.2	0.6	1	1	mg/m^3	78.96	3.23	-
363	Silica, crystalline quartz (Silicon dioxide)	14808-60-7	0.1	0.3	0.5	25	mg/m^3	60.09	2.46	-
364	Silicofluoric acid (as F) (Fluorosilicic acid)	16961-83-4	2.5	7.5	12.5	120[1]	mg/m^3	144.11	5.89	Ch. T-3
365	Silicone (several formulations)	541-02-6	10	30	50	500[1]	mg/m^3	370.85	15.16	-
366	Silver	7440-22-4	0.01	0.3	0.5	10	mg/m^3	107.87	4.41	-
367	Silver chloride	7783-90-6	0.01	0.03	0.05	10	mg/m^3	143.40	5.86	Ch.T-2,T-3
368	Silver cyanide	506-64-9	10	30	50	55[1]	mg/m^3	133.89	5.47	Ch.T-0,-1,-2
369	Silver nitrate	7761-88-8	0.01	0.03	0.05	10	mg/m^3	169.88	6.94	Ch.T-2,T-3
370	Silver oxide	20667-12-3	10	30	50	100[1]	mg/m^3	231.74	9.47	Ch.T-0,-1,-2
371	Sodium	7440-23-5	5[14]	15[10]	100[13]	500[1]	mg/m^3	22.99	0.93	Added
372	Sodium (tetra)borate, di-	1330-43-4	3	3	5	25[7]	mg/m^3	201.22	8.22	-
373	Sodium arsenate (as As)	7631-89-2	0.01	0.03	0.05	120[1]	mg/m^3	202.94	8.29	Ch. T-2
374	Sodium arsenite (as As)	7784-46-5	0.01	0.03	0.05	18[1]	mg/m^3	129.91	5.31	Ch. T-2,T-3
375	Sodium azide	26628-22-8	0.3	0.3	12[17]	12[1]	mg/m^3	65.02	2.66	-
376	Sodium bicarbonate	144-55-8	10	30	50	500[1]	mg/m^3	84.01	3.43	Added
377	Sodium borate decahydrate	1303-96-4	10	15	25	500[1]	mg/m^3	381.40	15.59	-
378	Sodium carbonate	497-19-8	10	30	50	500[1]	mg/m^3	105.99	4.33	-
379	Sodium chromate (as Cr(VI)) (Disodium chromate)	7775-11-3	0.05	0.1[16]	0.1	15	mg/m^3	161.98	6.62	-
380	Sodium chromate.10H_2O	13517-17-4	0.05	0.1[16]	0.1	15	mg/m^3	342.18	13.99	-
381	Sodium cyanide	143-33-9	5	5[16]	5	25	mg/m^3	49.01	2.00	-
382	Sodium dichromate	10588-01-9	0.05	0.1[16]	0.1	15	mg/m^3	261.98	10.71	-
383	Sodium hydroxide	1310-73-2	2[16]	2	40	100	mg/m^3	40.00	1.63	-
384	Sodium metaphophate	10361-03-2	10	30	50	500[1]	mg/m^3	101.96	4.17	Added
385	Sodium monoxide	12401-86-4	10	30	50	250[7]	mg/m^3	61.98	2.53	-
386	Sodium nitrate	7631-99-4	10	30	50	100[12]	mg/m^3	85.00	3.47	Ch. T-3
387	Sodium nitrite	7632-00-0	10	30	50	60[12]	mg/m^3	69.00	2.82	-
388	Sodium oxalate	62-76-0	10	30	50	60[1]	mg/m^3	134.00	5.48	-
389	Sodium peroxide	1313-60-6	10	30	50	250[7]	mg/m^3	77.98	3.19	-
390	Sodium phosphate, tribasic	7601-54-9	5	5	5	500[1]	mg/m^3	163.94	6.70	Ch T-0,T-1

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
391	Sodium sulfate (anhydrous)	7757-82-6	10	30	50	500[1]	mg/m^3	142.04	5.81	-
392	Sodium thiosulfate	7772-98-7	10	30	50	500[1]	mg/m^3	158.10	6.46	Added
393	Sodium thiosulfate pentahydrate	10102-17-7	10	30	50	500[1]	mg/m^3	248.20	10.14	-
394	Sodium-Potassium	11135-81-2	2	2	40	100	mg/m^3			Added[5]
395	Strontium nitrate	10042-76-9	10	30	50	500[1]	mg/m^3	211.64	8.65	-
396	Strychnine & salts	57-24-9	0.15	0.3	0.3	3	mg/m^3	334.45	13.67	-
397	**Styrene**	100-42-5	50	**50**	**250**	**1000**	ppm	104.16	4.26	-
398	**Sulfur dioxide**	7446-09-5	0.3	**0.3**	**3**	**15**	ppm	64.06	2.62	-
399	**Sulfuric acid (including oleum and sulfur.trioxide)**	7664-93-9	1	**2**	**10**	**30**	mg/m^3	98.08	4.01	-
400	Sulphonic acid	61789-85-3	10	30	50	250[7]	mg/m^3			Added
401	Synthetic resins	NA	10	30	50	500	mg/m^3			-
402	Tellurium	13494-80-9	0.1	0.3	20	25	mg/m^3	127.60	5.22	-
403	Tellurium hexafluoride (as Te)	7783-80-4	0.02	0.06	1	1	ppm	241.60	9.87	Ch. T-2
404	Tellurium oxide (dioxide) (as Te)	7446-07-3	0.1	0.3	0.5	140[1]	mg/m^3	159.60	6.52	Ch. T-3
405	Tetrabutyl Titanate	5593-70-4	1[14]	3[10]	20[13]	100[1]	ppm	340.42	13.9	-
406	Tetrachlorobenzene, 1,2,4,5-	95-94-3	10	30	50	500[1]	mg/m^3	215.88	8.82	-
407	Tetrachloroethane 1,1,1,2-	630-20-6	3[14]	9[10]	60[1]	225[1]	ppm	167.84	6.86	Ch.all Ts
408	Tetrachloroethane, 1,1,2,2-	79-34-5	1	3	5	100	ppm	167.84	6.86	-
409	Tetraethyl orthosilicate, or (Ethyl silicate)	78-10-4	10	30	50	700	ppm	208.37	8.51	-
410	**Tetrafluoroethylene**	116-14-3	70[14]	**200**	**1000**	**10000**	ppm	100.02	4.09	-
411	Tetrahydrofuran	109-99-9	200	250	1000[5]	2000	ppm	72.12	2.95	-
412	Tetramethyl-5-decyn-4,7-diol, 2,4,7,9-	126-86-3	10	30	50	250[7]	mg/m^3			Ch. all Ts
413	Tetranitromethane	509-14-8	1	1	1	4	ppm	196.05	8.01	-
414	Tetrasodium EDTA	60-00-4	10	30	50	500[1]	mg/m^3	292.28	11.95	Added
415	Thallium (elemental & soluble compounds)	7440-28-0	0.1	0.3	2	15	mg/m^3	204.37	18.67	-
416	Thallium carbonate (2:1)	6533-73-9	0.1	0.3	2	15	mg/m^3	468.75	19.16	-
417	Thallium chloride	7791-12-0	0.1	0.3	2	15	mg/m^3	239.82	9.80	-
418	Thallium (III) oxide	1314-32-5	2	2	2	20[1]	mg/m^3	456.74	9.80	Added
419	Thenoyl trifluoroacetone	326-91-0	0.1	4[10]	25[13]	130[1]	mg/m^3	222.09	9.08	MSDS data
420	Thioacetamide	62-55-5	10	30	50	130[1]	mg/m^3	75.14	3.07	Ch.T-3

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Table 1: ERPG and Recommended TEELs for Chemicals (sorted alphabetically)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits TEEL-0	TEEL-1	TEEL-2	TEEL-3	Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
421	Thiofanox (Dacamox)	39196-18-4	8.5	8.5	8.5	30[1]	mg/m^3	218.35	8.92	Ch. T-3
422	Thiosemicarbazide	79-19-6	0.1[14]	0.2[10]	1.6[1]	4[1]	mg/m^3	91.15	3.73	Ch. all Ts
423	Thiourea	62-56-6	10	30	50	55[1]	mg/m^3	76.13	3.11	Ch. T-3
424	Tin	7440-31-5	2	6	10	100	mg/m^3	118.71	4.85	-
425	Titanium	7440-32-6	10	30	50	250[7]	mg/m^3	47.90	1.96	-
426	Titanium oxide	13463-67-7	10	30	50	250[7]	mg/m^3	79.90	3.27	Added
427	**Titanium tetrachloride**	7550-45-0	0.5	**5**	**20**	**100**	mg/m^3	189.70	7.75	-
428	**Toluene**	108-88-3	50	**50**	**300**	**1000**	ppm	92.15	3.76	-
429	Toluene diisocyanate, 2,4-	584-84-9	0.005	0.02	1	2.5	ppm	174.17	7.12	-
430	Toluidene, o-	95-53-4	5	6	10	50	ppm	107.17	4.38	-
431	Toxaphene	8001-35-2	0.5	1	20	200	mg/m^3	413.80	16.91	-
432	Tri-n-octyl phosphine oxide	78-50-2	10	30	50	250[7]	mg/m^3	386.00	15.78	-
433	Tributyl phosphate	126-73-8	0.2	0.6	1	30	ppm	266.36	10.88	Ch.all Ts
434	Trichloroacetaldehyde hydrate (Chloral hydrate)	302-17-0	10	30	50	210[1]	mg/m^3	165.40	6.76	Ch.all Ts
435	Trichlorobenzene,1,2,4-	120-82-1	1[2]	3[3]	5	45[1]	ppm	181.44	7.41	-
436	**Trichloroethane, 1,1,1- (Methyl chloroform)**	71-55-6	350	**350**	**700**	**3500**	ppm	133.40	5.45	-
437	Trichloroethane, 1,1,2-	79-00-5	10	30	50	100	ppm	133.40	5.45	-
438	**Trichloroethylene**	79-01-6	50	**100**	**500**	**5000**	ppm	131.38	5.37	-
439	Trichlorofluoromethane (CFC11 or (Fluorotrichloromethane)	75-69-4	500	500	1500	2000	ppm	137.36	5.62	-
440	Trichlorophenol 2,4,5-	95-95-4	10	30	50	360[1]	mg/m^3	197.44	8.07	-
441	Trichlorophenol 2,4,6-	88-06-2	10	30	50	360[1]	mg/m^3	197.44	8.07	-
442	Trichlorophenoxy)propionic acid, 2-(2,4,5- (Silvex)	93-72-1	10	30	50	285[1]	mg/m^3	269.51	11.01	-
443	Trichlorophenoxyacetic acid, 2,4,5- (2,4,5- T)	93-76-5	10	30	50	250	mg/m^3	255.48	10.44	-
444	Trichlorosilane**	10025-78-2	0.3[14]	1	3	15	mg/m^3	135.45	5.45	Added
445	Trichlorotrifluoroethane (CFC 113)	76-13-1	1000	1250	1500	2000	ppm	187.37	7.66	-
446	**Trimethoxysilane**	2487-90-3	0.05	**0.5**	**2**	**5**	ppm	122.22	5.00	Ch. T-0
447	**Trimethylamine**	75-50-3	5	15[21]	**100**	**500**	ppm	59.13	2.42	-
448	Trimethylbenzene, 1,2,4- (Pseudocumene)	95-63-6	125	180[17]	180	500[1]	mg/m^3	120.21	4.91	(25551-13-7)

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No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
449	Trinitrobenzene 1,3,5-	99-35-4	10	30	50	120[1]	mg/m^3	213.12	8.71	Ch. T-3
450	Trypan Blue	72-57-1	10	30	50	500[1]	mg/m^3	964.88	39.4	Ch. all Ts
451	Uranium and compounds as U	7440-61-1	0.05	0.6	2[13]	10	mg/m^3	238.00	9.73	Changed T-0
452	**Uranium hexafluoride** (Uranium fluoride)	7783-81-5	0.05	**5**	**15**	**30**	mg/m^3	352.00	14.39	Changed T-0
453	Uranium hydride (as U)	13598-56-6	0.05	0.6	0.6	10	mg/m^3	241.06	9.85	Changed T-2
454	Uranium telluride (as U)	NF	0.05	0.6	0.6	10	mg/m^3	1224.08	50.03	Changed T-2
455	Uranium telluride, mono (as U)	NF	0.05	0.6	0.6	10	mg/m^3	366.03	14.96	Changed T-2
456	Uranium: insoluble compnds	NA	0.05	0.6	0.6	10	mg/m^3			Ch. T-0, T-2
457	Uranium: soluble compounds	NA	0.05	0.6	0.6	10	mg/m^3			Changed T-2
458	Uranyl nitrate (as U), or (yellow salt)	36478-76-9	0.05	0.6	0.6	10	mg/m^3	394.02	16.10	Ch. T-2,T-3
459	Vanadium pentoxide	1314-62-1	0.05	0.15[5]	7	35	mg/m^3	181.88	7.43	-
460	**Vinyl acetate**	108-05-4	5	**5**	**75**	**500**	ppm	86.10	3.52	-
461	Vinyl chloride	75-01-4	1	5	5	85[1]	ppm	62.50	2.55	-
462	Vinylidene chloride (1,1-dichloroethylene)	75-35-4	1	20	20[18]	680[1]	ppm	96.94	3.96	Ch. T-3
463	Waste Oil	NA	10	30	50	250[7]	mg/m^3			-
464	Xylene	1330-20-7	100	150	200	900	ppm	106.18	4.34	-
465	Xylene, m-	108-38-3	100	150	200	900	ppm	106.18	4.34	-
466	Xylene, o-	95-47-6	100	150	200	900	ppm	106.18	4.34	-
467	Xylene, p-	106-42-3	100	150	200	900	ppm	106.18	4.34	-
468	Zinc	7440-66-6	10	30	50	250[7]	mg/m^3	65.37	2.67	-
469	Zinc nitrate	7779-88-6	10	30	50	250[7]	mg/m^3	189.39	7.74	-
470	Zinc oxide (dust)	1314-13-2	10	15	15	500	mg/m^3	81.37	3.33	-
471	Zirconium & compounds as Zr	7440-67-7	5	10	25[5]	50	mg/m^3	91.22	3.73	-

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
205	**Formaldehyde**	50-00-0	0.75	**1**	**10**	**25**	ppm	30.03	1.23	-
120	DDT, or (Dichlorodiphenyltrichloroethane)	50-29-3	1	3	5	500	mg/m^3	354.48	14.49	-
41	Benzo(a)pyrene (coal tar pitch volatiles)	50-32-8	0.2	7[10]	50[1]	80	mg/m^3	252.32	10.31	Ch.T-0,-1,-2
162	Dinitrophenol 2,4-	51-28-5	0.3[14]	1[2]	5[17]	5[1]	mg/m^3	184.12	7.52	Ch.T-2,T-3
122	Dibenza(a,h)anthracene	53-70-3	10	30	35[17]	35[1]	mg/m^3	278.36	11.38	Ch.T-1.-2,-3
79	**Carbon tetrachloride**	56-23-5	2	**20**	**100**	**750**	ppm	153.81	6.29	-
322	Parathion	56-38-2	0.1	0.3	2	10	mg/m^3	291.28	11.91	-
283	Methylcholanthrene 3-	56-49-5	0.6[14]	2[10]	13[1]	260[1]	mg/m^3	268.37	10.97	Ch. all Ts
210	Glycerin (mist)	56-81-5	10	30	50	500[1]	mg/m^3	92.11	3.76	-
115	Cyanide (and cyanides)	57-12-5	5	5	5	25	mg/m^3	26.02	1.06	-
160	Dimethylhydrazine,1,1-	57-14-7	0.06	0.06	5	15	ppm	60.12	2.46	Ch.T-0,T-1
396	Strychnine & salts	57-24-9	0.15	0.3	0.3	3	mg/m^3	334.45	13.67	-
354	Propylene glycol, or (1,2-Propanediol)	57-55-6	50	90[17]	90[1]	2800[1]	ppm	76.11	3.11	Ch. all Ts
82	Chlordane	57-74-9	0.5	1.5	50	100	mg/m^3	409.76	16.75	-
252	Lindane	58-89-9	0.5	1.5	50	50	mg/m^3	290.82	11.89	-
414	Tetrasodium EDTA	60-00-4	10	30	50	500[1]	mg/m^3	292.28	11.95	Added
190	Ethyl ether	60-29-7	400	500	500[18]	1900	ppm	74.14	3.03	Ch. T-2
292	Monomethylhydrazine (Methyl hydrazene)	60-34-4	0.01	0.2	0.5	20	ppm	46.09	1.88	-
142	Dieldrin	60-57-1	0.25	0.75	1.25	50	mg/m^3	380.90	15.57	-
18	Amitrole	61-82-5	0.2	0.6	1	480[1]	mg/m^3	84.10	3.44	-
331	Phenacetin	62-44-2	10	30	50	500[1]	mg/m^3	179.24	7.32	Ch. T-3
24	Aniline	62-53-3	2	6	10	100	ppm	93.14	3.81	-
420	Thioacetamide	62-55-5	10	30	50	130[1]	mg/m^3	75.14	3.07	Ch.T-3
423	Thiourea	62-56-6	10	30	50	55[1]	mg/m^3	76.13	3.11	Ch. T-3
388	Sodium oxalate	62-76-0	10	30	50	60[1]	mg/m^3	134.00	5.48	-
195	Ethylenediaminetetraacetic acid (Tetrasodium EDTA)	64-02-8	10	30	50	430[1]	mg/m^3	380.20	15.54	Added
187	Ethyl alcohol (ethanol)	64-17-5	1000	3000	3300	3300	ppm	46.08	1.88	-
206	Formic acid	64-18-6	5	10	20[5]	30	ppm	46.03	1.88	-
2	Acetic acid	64-19-7	10	15	35[1]	50	ppm	60.06	2.46	Ch. T-2
163	Dinitrophenol, 2,3-	66-56-8	10	30	50	250[1]	mg/m^3	184.12	7.52	Ch. T-3

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
145	Diethylenetriaminepentaacetic acid	67-43-6	10	30	50	500[1]	mg/m^3	393.40		Added
270	**Methyl alcohol (Methanol)**	67-56-1	200	**200**	**1000**	**5000**	ppm	32.05	1.31	-
243	Isopropyl alcohol	67-63-0	400	400	400	2000	ppm	60.11	2.46	-
3	Acetone	67-64-1	750	1000	8500	8500	ppm	58.09	2.37	-
94	Chloroform	67-66-3	2	100	1000	5000	ppm	119.37	4.88	-
156	Dimethyl sulfoxide, or (DMSO)	67-68-5	25[14]	70[10]	500[1]	500[1]	mg/m^3	78.14	3.19	Ch.T-0,-1,-2
218	Hexachloroethane	67-72-1	1	3	5	300	ppm	236.72	9.67	-
159	**Dimethylformamide**	68-12-2	2	**2**	**100**	**200**	ppm	73.11	2.99	-
219	Hexachlorophene	70-30-4	10	30	35[17]	35[1]	mg/m^3	406.89	16.63	Ch. all Ts
64	Butyl alcohol, n- (n-Butanol)	71-36-3	50[16]	50[16]	50	1400	ppm	74.14	3.03	-
39	**Benzene**	71-43-2	1	**50**	**150**	**1000**	ppm	78.12	3.19	-
436	**Trichloroethane, 1,1,1- (Methyl chloroform)**	71-55-6	350	**350**	**700**	**3500**	ppm	133.40	5.45	-
175	Endrin	72-20-8	0.1	0.3	2	2	mg/m^3	380.90	15.57	-
269	Methoxychlor	72-43-5	10	30	50	5000	mg/m^3	345.66	14.13	-
118	DDD, or (1,1-bis(4-Chlorophenyl)-2,2-dichloroethane)	72-54-8	10	30	50	50[1]	mg/m^3	320.04	13.08	Ch. all Ts
119	DDE, or (2.2-bis(p-Chlorophenyl)-1,1-dichloroethylene)	72-55-9	10	30	50	385[1]	mg/m^3	318.02	13.00	-
450	Trypan Blue	72-57-1	10	30	50	500[1]	mg/m^3	964.88	39.4	Ch. all Ts
268	Methane	74-82-8	5000	5000	5000	5000	ppm	16.05	0.65	-
271	**Methyl bromide**	74-83-9	5	15[3]	**50**	**200**	ppm	94.95	3.88	-
272	**Methyl chloride**	74-87-3	50	100	**400**	**1000**	ppm	50.49	2.06	-
274	**Methyl Iodide**	74-88-4	2	**25**	**50**	**125**	ppm	141.94	5.80	-
291	**Monomethylamine** (Methylamine)	74-89-5	10	**10**	**100**	**500**	ppm	31.07	1.27	-
229	**Hydrogen cyanide**	74-90-8	1.6[14]	4.7[16]	**10**	**25**	ppm	27.03	1.10	-
277	**Methyl mercaptan**	74-93-1	0.5	1.5[21]	**25**	**100**	ppm	48.11	1.97	-
352	Propane	74-98-6	1000	2100[17]	2100[17]	2100	ppm	44.11	1.80	-
189	Ethyl chloride (chloroethane or chlorinated ethanes)	75-00-3	1000	3000	3800[17]	3800	ppm	64.52	2.64	-
461	Vinyl chloride	75-01-4	1	5	5	85[1]	ppm	62.50	2.55	-
4	Acetonitrile	75-05-8	40	60	60[1]	500	ppm	41.06	1.68	Ch.T-1,T-2
1	**Acetaldehyde**	75-07-0	10	**10**	**200**	**1000**	ppm	44.06	1.80	-

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
286	**Methylene chloride**	75-09-2	200	**200**	**750**	**4000**	ppm	84.93	3.47	-
77	**Carbon disulfide**	75-15-0	4	12	**50**	**500**	ppm	76.13	3.11	-
155	**Dimethyl sulfide** (2-Thiopropane)	75-18-3	0.15[14]	**0.5**	**500**	**2000**	ppm	62.14	2.54	-
194	**Ethylene oxide**	75-21-8	1	5[16]	**50**	**500**	ppm	44.06	1.80	-
56	Bromoform (Tribromomethane)	75-25-2	0.5	1.5	2.5	850	ppm	252.75	10.33	-
198	Ethylidene chloride, 1,1- (Dichloroethane, 1,1-)	75-34-3	100	300	500	3000	ppm	98.96	4.05	-
462	Vinylidene chloride (1,1-dichloroethylene)	75-35-4	1	20	20[18]	680[1]	ppm	96.94	3.96	Ch. T-3
6	Acetyl chloride	75-36-5	0.4[2]	1.2[3]	2[1]	125[1]	ppm	78.50	3.21	-
133	Dichlorofluoromethane (Freon 21, CFC 21)	75-43-4	10	30	100	5000	ppm	102.92	4.21	-
335	**Phosgene**	75-44-5	0.1	0.2	**0.2**	**1**	ppm	98.91	4.04	-
91	Chlorodifluoromethane (Freon 22)	75-45-6	1000	1250	5000	9000[1]	ppm	86.47	3.54	Ch. T-3
447	**Trimethylamine**	75-50-3	5	15[21]	**100**	**500**	ppm	59.13	2.42	-
356	**Propylene oxide**	75-56-9	20	**5**	**250**	**750**	ppm	58.09	2.37	-
67	Cacodylic acid as organic As (Hydroxydimethylarsine oxide)	75-60-5	0.03	0.03	0.05	280[1]	mg/m^3	138.01	5.64	Ch.all Ts
57	Bromotrifluoromethane (Trifluorobromomethane)	75-63-8	1000	3000	25000	40000	ppm	148.92	6.09	-
439	Trichlorofluoromethane (CFC11 or (Fluorotrichloromethane)	75-69-4	500	500	1500	2000	ppm	137.36	5.62	-
130	Dichlorodifluoromethane (Freon 12, or CFC 12)	75-71-8	1000	3000	10000	15000	ppm	120.91	4.94	-
151	**Dimethyl dichlorosilane** (Dichlorodimethylsilane)	75-78-5	0.25[14]	**0.8**	**5**	**25**	ppm	129.06	5.28	-
280	**Methyl trichlorosilane**	75-79-6	0.15[14]	**0.5**	**3**	**15**	ppm	149.48	6.11	-
288	Methyllactonitrile 2- (acetone cyanohydrin)	75-86-5	4[16]	4[16]	12	24[1]	mg/m^3	85.12	3.48	Ch. T-3
324	Pentachloroethane	76-01-7	10	30	500[17]	500[1]	mg/m^3	202.28	8.27	-
98	**Chloropicrin** (Trichloronitromethane)	76-06-2	0.1	0.2	**0.2**	**3**	ppm	164.37	6.72	-
445	Trichlorotrifluoroethane (CFC 113)	76-13-1	1000	1250	1500	2000	ppm	187.37	7.66	-
213	Heptachlor	76-44-8	0.15	0.15	0.25	35	mg/m^3	373.30	15.26	-
217	Hexachlorocylopentadiene	77-47-4	0.01	0.02	0.02	0.02[1]	ppm	272.75	11.15	Ch.T-3
154	Dimethyl sulfate	77-78-1	0.1	0.3	1	7	ppm	126.14	5.15	-
106	Citric acid	77-92-9	10	30	50	500[1]	mg/m^3	192.14	7.85	Added
409	Tetraethyl orthosilicate, (Ethyl silicate)	78-10-4	10	30	50	700	ppm	208.37	8.51	-

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No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
432	Tri-n-octyl phosphine oxide	78-50-2	10	30	50	250[7]	mg/m^3	386.00	15.78	-
240	**Isobutyronitrile**	78-82-0	8	**10**	**50**	**200**	ppm	69.12	2.82	-
239	Isobutyl alcohol	78-83-1	50	150	250	1600	ppm	74.14	3.03	-
139	Dichloropropane, 1,2- (propylene dichloride)	78-87-5	75	110	250[4]	400	ppm	112.99	4.62	-
60	Butanone, 2- (M E K), or (Methyl ethyl ketone)	78-93-3	200	300	1000	3000	ppm	72.12	2.95	-
437	Trichloroethane, 1,1,2-	79-00-5	10	30	50	100	ppm	133.40	5.45	-
438	**Trichloroethylene**	79-01-6	50	**100**	**500**	**5000**	ppm	131.38	5.37	-
88	**Chloroacetyl chloride**	79-04-9	0.05	**0.1**	**1**	**10**	ppm	112.94	4.62	-
8	Acrylamide	79-06-1	0.03	0.09	60	60	mg/m^3	71.09	2.91	Ch. T-2
9	**Acrylic acid**	79-10-7	2	**2**	**50**	**750**	ppm	72.07	2.95	-
422	Thiosemicarbazide	79-19-6	0.1[14]	0.2[10]	1.6[1]	4[1]	mg/m^3	91.15	3.73	Ch. all Ts
408	Tetrachloroethane, 1,1,2,2-	79-34-5	1	3	5	100	ppm	167.84	6.86	-
100	**Chlorotrifluoroethylene**	79-38-9	5	**20**	**100**	**300**	ppm	116.47	4.76	-
309	Nitropropane. 2-	79-46-9	10	30	50	100	ppm	89.11	3.64	-
332	Phenaglycodol (Ultran), or (2-p-chlorophenyl-3-methyl-2,3-butanediol)	79-93-6	10	30	50	360[1]	mg/m^3	214.71	8.78	Ch. T-3
49	Bisphenol A	80-05-7	10	30	50	500[1]	mg/m^3	228.31	9.33	-
278	Methyl methacrylate	80-62-6	100	300	500	1000	ppm	100.13	4.09	-
325	Pentachloronitrobenzene	82-68-8	0.5	1.5	2.5	500[1]	mg/m^3	295.32	12.07	Ch. T-3
143	Diethyl phthalate	84-66-2	5	15	100[1]	500[1]	mg/m^3	222.26	9.09	Ch.T-2,T-3
124	Dibutyl phthalate	84-74-2	5	15	25	4000	mg/m^3	278.38	11.38	-
341	Phthalic anhydride	85-44-9	6	18	30	60	mg/m^3	148.12	6.05	-
137	Dichlorophenol, 2,6-	87-65-0	10	30	50	500[1]	mg/m^3	163.00	6.66	-
216	**Hexachlorobutadiene**	87-68-3	0.02	**3**	**10**	**30**	ppm	260.74	10.66	-
326	Pentachlorophenol	87-86-5	0.5	1.5	2.5	2.5	mg/m^3	266.32	10.89	-
441	Trichlorophenol 2,4,6-	88-06-2	10	30	50	360[1]	mg/m^3	197.44	8.07	-
167	Dinoseb	88-85-7	4.5	4.5	4.5	120[1]	mg/m^3	240.24	9.82	Ch.T-3
296	Naphthalene	91-20-3	10	15	30[1]	250	ppm	128.18	5.24	Ch. T-2
96	Chloronapthalene, beta (2-Chloronapthalene)	91-58-7	0.2	0.6	180[13]	900[1]	mg/m^3	162.62	6.65	-
129	Dichlorobenzidene, 3,3'-	91-94-1	0.2[14]	0.6[10]	4[1]	220[1]	ppm	253.14	10.34	Ch. all Ts
168	Diphenyl (Biphenyl)	92-52-4	1	4	7	100	mg/m^3	154.22	6.30	-

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No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
172	Diphenyloxazole, 2,5-	92-71-7	10	30	50	500[1]	mg/m^3	221.27	9.04	Added
40	Benzidene	92-87-5	0.7[2]	2[3]	3.5[9]	135[1]	mg/m^3	184.26	7.53	Ch. all Ts
442	Trichlorophenoxy)propionic acid, 2-(2,4,5- (Silvex)	93-72-1	10	30	50	285[1]	mg/m^3	269.51	11.01	-
443	Trichlorophenoxyacetic acid, 2,4,5- (2,4,5- T)	93-76-5	10	30	50	250	mg/m^3	255.48	10.44	-
138	Dichlorophenoxy acetic acid, 2,4- (2,4- D salts and esters)	94-75-7	10	30	50	100	mg/m^3	221.04	9.03	-
466	Xylene, o-	95-47-6	100	150	200	900	ppm	106.18	4.34	-
127	Dichlorobenzene, o-	95-50-1	25	50[1]	50	200	ppm	147.00	6.01	-
430	Toluidene, o-	95-53-4	5	6	10	50	ppm	107.17	4.38	-
97	Chlorophenol, o-	95-57-8	0.4[14]	1.2[10]	8[1]	55[1]	ppm	128.56	5.26	Ch. all Ts
448	Trimethylbenzene, 1,2,4- (Pseudocumene)	95-63-6	125	180[17]	180	500[1]	mg/m^3	120.21	4.91	(25551-13-7)
406	Tetrachlorobenzene, 1,2,4,5-	95-94-3	10	30	50	500[1]	mg/m^3	215.88	8.82	-
440	Trichlorophenol 2,4,5-	95-95-4	10	30	50	360[1]	mg/m^3	197.44	8.07	-
197	Ethylenethiourea	96-45-7	5[14]	15[10]	80[1]	500[1]	mg/m^3	102.17	4.18	-
209	**Furancarboxyaldehyde, 2-,** (Furfural)	98-01-1	2	**2**	**10**	**100**	ppm	96.09	3.93	-
44	Benzyl trichloride (Trichloromethylbenzene)	98-07-7	0.1[2]	0.4[3]	0.7	20[1]	mg/m^3	195.47	7.99	-
113	Cumene	98-82-8	50	150	250	900	ppm	120.21	4.91	-
5	Acetophenone	98-86-2	10	30	50	300[1]	mg/m^3	120.16	4.91	Ch.T-2,T-3
38	Benzal chloride	98-87-3	0.5[2]	1.4[3]	2.3	500[1]	mg/m^3	161.03	6.58	-
306	Nitrobenzene	98-95-3	1	3	20	200	ppm	123.12	5.03	-
449	Trinitrobenzene 1,3,5-	99-35-4	10	30	50	120[1]	mg/m^3	213.12	8.71	Ch. T-3
305	Nitroaniline, p-	100-01-6	3	9	15	300	mg/m^3	138.14	5.64	Ch.T-2
308	Nitrophenol 4-	100-02-7	10	30	50	165[1]	mg/m^3	139.12	5.69	Ch.T-3
188	Ethyl benzene	100-41-4	100	125	160[13]	800	ppm	106.18	4.34	-
397	**Styrene**	100-42-5	50	**50**	**250**	**1000**	ppm	104.16	4.26	-
43	**Benzyl chloride**	100-44-7	1	**1**	**10**	**25**	ppm	126.59	5.17	-
223	Hexamethylenetetraamine	100-97-0	10	30	50	500[1]	mg/m^3	140.22	5.73	Added
284	Methylene bis(2-chloro-anilene) , 4,4'- (MBOCA)	101-14-4	0.02	0.03	0.05	45[1]	ppm	267.17	10.92	Ch. T-3
285	**Methylene bisphenyl isocyanate (MDI)***	101-68-8	0.005	**0.2**	**2**	**25**	mg/m^3	250.27	10.23	-
287	Methylenedianiline*	101-77-9	0.01	0.1	0.6[1]	18[1]	ppm	198.29	8.10	Added

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No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
334	Phenylthiourea	103-85-5	3	3	3	3[22]	mg/m^3	152.23	6.22	-
314	Nonyl Phenol, p-	104-40-5	5[14]	15[10]	100[13]	500[1]	mg/m^3	220.39	9.01	Added
467	Xylene, p-	106-42-3	100	150	200	900	ppm	106.18	4.34	-
128	Dichlorobenzene, p-	106-46-7	75	110	150	150	ppm	147.00	6.01	-
90	Chloroaniline, p-	106-47-8	10	30	50	300[1]	mg/m^3	127.58	5.22	Ch. T-3
42	Benzoquinone, p-	106-51-4	0.4	1.3	2.2	100	mg/m^3	108.10	4.42	-
177	**Epichlorohydrin**	106-89-8	2	**2**	**20**	**100**	ppm	92.53	3.78	-
191	Ethylene dibromide	106-93-4	20	30[5]	30	100	ppm	187.88	7.68	-
59	**Butadiene,1,3-**	106-99-0	2	**10**	**200**	**5000**	ppm	54.10	2.21	-
7	**Acrolein**	107-02-8	0.1	**0.1**	**0.5**	**3**	ppm	56.07	2.29	-
14	**Allyl chloride**	107-05-1	1	**3**	**40**	**300**	ppm	76.53	3.13	-
192	Ethylene dichloride	107-06-2	1	2	50	50	ppm	98.96	4.05	-
10	**Acrylonitrile**	107-13-1	2	**10**	**35**	**75**	ppm	53.07	2.17	-
13	Allyl alcohol	107-18-6	2	4	15	20	ppm	58.09	2.37	-
353	Propargyl alcohol	107-19-7	1	3	5	65[1]	ppm	56.07	2.29	Ch.T-3
87	Chloroacetaldehyde	107-20-0	1	1	22	45	ppm	78.50	3.21	-
193	Ethylene glycol	107-21-1	4	20	40	60	ppm	62.08	2.54	-
95	Chloromethyl methyl ether	107-30-2	0.1[14]	0.3[10]	1.8	135[1]	mg/m^3	80.52	3.29	Ch.T-0,-1,-3
360	Sarin	107-44-8	0.002[14]	0.007[10]	0.05	0.7[1]	mg/m^3	140.11	5.73	Added
355	Propylene glycol monomethyl ether	107-98-2	100	150	800[2]	4000[1]	ppm	90.10	3.68	Ch.T-2,T-3
460	**Vinyl acetate**	108-05-4	5	**5**	**75**	**500**	ppm	86.10	3.52	-
275	Methyl isobutyl ketone (Hexone)	108-10-1	50	75	250[5]	500	ppm	100.18	4.10	-
262	Maleic anhydride	108-31-6	1	3	5	10	mg/m^3	98.06	4.01	Ch. units
465	Xylene, m-	108-38-3	100	150	200	900	ppm	106.18	4.34	-
359	Resorcinol	108-46-3	10	20	20[5]	25[1]	ppm	110.12	4.50	-
134	Dichloroisopropyl ether	108-60-1	3[14]	10[10]	75[13]	375[1]	ppm	171.08	6.99	Ch. all Ts
428	**Toluene**	108-88-3	50	**50**	**300**	**1000**	ppm	92.15	3.76	-
83	Chlorinated benzene (Chlorobenzene)	108-90-7	75	75	200	1000	ppm	112.56	4.60	-
117	Cyclohexylamine	108-91-8	10	30	50	200[1]	ppm	99.20	4.05	Added
333	**Phenol**	108-95-2	5	**10**	**50**	**200**	ppm	94.12	3.85	-
411	Tetrahydrofuran	109-99-9	200	250	1000[5]	2000	ppm	72.12	2.95	-

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
208	Furan	110-00-9	0.02[14]	0.06[10]	0.43	8[1]	ppm	68.08	2.78	Ch.T-0,-1,-3
238	Isoamylnitrite (Isopentyl nitrite)	110-46-3	3[14]	8[10]	60[13]	300[1]	ppm	117.17	4.79	Ch.all Ts
225	Hexane	110-54-3	50	150	250	1100	ppm	86.20	3.52	-
183	Ethoxyethanol, 2-	110-80-5	0.5	15	25	500	ppm	90.14	3.68	-
116	Cyclohexane	110-82-7	300	900	1300[1]	1300	ppm	84.18	3.44	-
358	Pyridine	110-86-1	5	15	25	1000	ppm	79.11	3.23	-
66	**Butyl isocyanate, n-**	111-36-4	0.003[14]	**0.01**	**0.05**	**1**	ppm	99.15	4.05	-
131	Dichloroethyl ether (Bis(2-chloroethyl) ether	111-44-4	5	10	26	100	ppm	143.02	5.85	-
62	Butoxyethanol, 2- *	111-76-2	50	75	125	700	ppm	118.20	4.83	Added
311	Nonane (Shell Sol 140) (Aquasol MSDS gives CAS No. 64742-88-7)	111-84-2	200	350[17]	350[17]	350[1]	ppm	128.29	5.24	Ch.T-1,-2,-3
61	Butoxyethanol acetate, 2- *	112-07-2	5	15[3]	30[13]	160[1]	ppm	160.24	6.55	Added
174	Endosulfan	115-29-7	0.1	0.3	0.8	25[1]	mg/m^3	406.91	16.63	-
75	Carbanolate (Aldecarb)	116-06-3	0.07	0.3	0.3	0.3[1]	mg/m^3	190.29	7.78	Ch. T-0
410	**Tetrafluoroethylene**	116-14-3	70[14]	**200**	**1000**	**10000**	ppm	100.02	4.09	-
221	**Hexafluoropropylene** (Hexafluoropropene)	116-15-4	3[14]	**10**	**50**	**500**	ppm	150.03	6.13	-
121	Di-sec-octylphthalate	117-81-7	5	10	80[1]	5000	mg/m^3	390.62	15.96	Ch. T-2
215	Hexachlorobenzene	118-74-1	0.025	0.075	0.125	200[1]	mg/m^3	284.76	11.64	-
150	Dimethoxybenzidene 3,3'-	119-90-4	2[14]	5[10]	35[1]	500[1]	mg/m^3	244.32	9.98	Ch. all Ts
158	Dimethylbenzidene 3,3'-	119-93-7	0.02[16]	0.02[16]	0.02	320[1]	mg/m^3	212.32	8.68	Ch. T-3
435	Trichlorobenzene,1,2,4-	120-82-1	1[2]	3[3]	5	45[1]	ppm	181.44	7.41	-
136	Dichlorophenol, 2,4-	120-83-2	10	30	50	250[1]	mg/m^3	163.00	6.66	-
165	Dinitrotoluene 2,4-	121-14-2	0.45	0.45	0.75	50	mg/m^3	182.15	7.45	Ch. T-2,T-3
170	Diphenylamine	122-39-4	10	30	50	130[1]	mg/m^3	169.24	6.92	Ch.T-3
171	Diphenylhydrazine 1,2,3-	122-66-7	10	30	50	130[1]	mg/m^3	184.26	7.53	Ch.T-3
236	Isoamyl alcohol (primary)	123-51-3	100	125	150[1,5]	500	ppm	88.17	3.60	-
321	Paraldehyde	123-63-7	10	30	50	500[1]	mg/m^3	132.18	5.40	-
144	Diethyleneoxide, 1,4- (1,4-Dioxane)	123-91-1	25	75	125	500	ppm	88.11	3.60	-
76	Carbon dioxide	124-38-9	10000	30000	40000	40000	ppm	44.01	1.80	-
157	**Dimethylamine**	124-40-3	10	15	**100**	**500**	ppm	45.10	1.84	-
53	Bromo-1-chloro-5,5-dimethylhydantoin, 3-	126-06-7	10	30	50	250[1]	mg/m^3	241.49	9.87	-

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
433	Tributyl phosphate	126-73-8	0.2	0.6	1	30	ppm	266.36	10.88	Ch.all Ts
412	Tetramethyl-5-decyn-4,7-diol, 2,4,7,9-	126-86-3	10	30	50	250[7]	mg/m^3			Ch. all Ts
327	**Perchloroethylene (Tetrachloroethylene)**	127-18-4	25	**100**	**200**	**1000**	ppm	165.82	6.78	-
297	Naphthoquinone, 1,4-	130-15-4	0.2[14]	0.6[10]	4[1]	80[1]	mg/m^3	158.16	6.46	Ch. all Ts
161	Dimethylphthalate	131-11-3	5	15	25	2000	mg/m^3	194.20	7.94	-
21	Ammonium picrate	131-74-8	10	30	50	250[7]	mg/m^3	246.16	10.06	-
295	Naphthalenamine 1- (Naphthylamine, 1-)	134-32-7	10[14]	35[10]	260[1]	340[1]	mg/m^3	143.20	5.85	Ch.all Ts
17	Aminoethylpiperazine, n-	140-31-8	10[2]	30[3]	50[1]	500[1]	mg/m^3	129.24	5.28	Added
63	**Butyl acrylate, n-**	141-32-2	0.05	**0.05**	**25**	**250**	ppm	128.19	5.24	-
182	Ethanolamine	141-43-5	3	6	50	50	ppm	61.10	2.50	-
186	Ethyl acetate	141-78-6	400	1200	2000	2000	ppm	88.12	3.60	-
173	Dipropylamine	142-84-7	1[14]	2	100[13]	500[1]	mg/m^3	101.22	4.14	Ch. all Ts
381	Sodium cyanide	143-33-9	5	5[16]	5	25	mg/m^3	49.01	2.00	-
245	Kepone	143-50-0	0.001	0.1[10]	0.7[1]	40[1]	mg/m^3	490.60	20.05	Ch.T-1,T-2
376	Sodium bicarbonate	144-55-8	10	30	50	500[1]	mg/m^3	84.01	3.43	Added
316	Oxalic Acid - anhydrous	144-62-7	1	2	100[13]	500	mg/m^3	90.04	3.68	Ch. T-2
317	Oxalic Acid - dihydrate	144-62-7	1	2	100[13]	500	mg/m^3	126.10	5.15	Ch. T-2
347	Potassium cyanide	151-50-8	5	5[16]	5	25	mg/m^3	65.12	2.66	-
196	Ethyleneimine	151-56-4	0.5	1.5	2.3	100	ppm	43.08	1.76	-
105	Chrysene (coal tar volatiles)	218-01-9	0.2	0.3[10]	2.1[1]	80	mg/m^3	228.30	9.33	Ch.T-1,T-2
279	Methyl parathion	298-00-0	0.2	0.34	0.34	15[1]	mg/m^3	263.22	10.75	Ch. T-3
226	Hydrazine	302-01-2	0.1	0.3	0.8	10	ppm	32.06	1.31	-
434	Trichloroacetaldehyde hydrate (Chloral hydrate)	302-17-0	10	30	50	210[1]	mg/m^3	165.40	6.76	Ch.all Ts
149	Dimethanonaphthalene, 1,4,5,8- (Aldrin)	309-00-2	0.25	0.75	10	25	mg/m^3	364.90	14.91	-
419	Thenoyl trifluoroacetone	326-91-0	0.1	4[10]	25[13]	130[1]	mg/m^3	222.09	9.08	MSDS data
58	Brucine (as strychnine)	357-57-3	0.2[15]	0.6[3]	24[13]	120[1]	mg/m^3	394.51	16.12	-
328	**Perfluoroisobutylene** (Octafluoro-sec-butene)	382-21-8	0.01[16]	0.01[16]	**0.1**	**0.3**	ppm	200.04	8.17	-
80	Carbonyl sulfide	463-58-1	1[14]	4[10]	27[13]	135[1]	ppm	60.07	2.46	Ch.all Ts
378	Sodium carbonate	497-19-8	10	30	50	500[1]	mg/m^3	105.99	4.33	-
368	Silver cyanide	506-64-9	10	30	50	55[1]	mg/m^3	133.89	5.47	Ch.T-0,-1,-2

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
413	Tetranitromethane	509-14-8	1	1	1	4	ppm	196.05	8.01	-
132	Dichloroethylene, 1,2-	540-59-0	200	600	1000	1000	ppm	96.94	3.96	-
365	Silicone (several formulations)	541-02-6	10	30	50	500[1]	mg/m^3	370.85	15.16	-
126	Dichlorobenzene, m-	541-73-1	10[2]	30[3]	50[13]	250[1]	ppm	147.00	6.01	-
140	Dichloropropene, 1,3-	542-75-6	1	3	5	50[1]	ppm	110.97	4.54	Ch.T-3
135	Dichloromethyl ether (Bischloromethyl ether)	542-88-1	0.001	0.003	0.05	0.8[1]	ppm	114.96	4.70	-
260	Magnesium carbonate (Magnesite)	546-93-0	10	30	50	500	mg/m^3	84.32	3.45	Added
237	Isoamyl alcohol (secondary)	584-02-1	100	125	150[5]	500	ppm	88.17	3.60	-
345	Potassium carbonate	584-08-7	10	30	50	500[1]	mg/m^3	138.21	5.65	Added
429	Toluene diisocyanate, 2,4-	584-84-9	0.005	0.02	1	2.5	ppm	174.17	7.12	-
169	Diphenyl mercury (aryl compound)	587-85-9	0.1	0.1	0.1	10	mg/m^3	354.81	14.50	-
273	Methyl fluoride (as F), or (Fluoromethane)	593-53-3	2.5	7.5	12.5	250	mg/m^3	34.03	1.39	-
55	Bromoacetone	598-31-2	0.1[14]	0.3[10]	2[13]	10[1]	ppm	136.99	5.60	Ch.T-2,T-3
166	Dinitrotoluene 2,6-	606-20-2	0.45	0.45	0.75	50	mg/m^3	182.15	7.45	Ch. T-2,T-3
323	Pentachlorobenzene	608-93-5	10	30	50	475[1]	mg/m^3	250.32	10.23	-
276	**Methyl isocyanate**	624-83-9	0.02	**0.025**	**0.5**	**5**	ppm	57.06	2.33	-
152	**Dimethyl disulfide**	624-92-0	0.003[14]	**0.01**	**50**	**250**	ppm	94.20	3.85	-
78	**Carbon monoxide**	630-08-0	35	**200**	**350**	**500**	ppm	28.01	1.14	-
407	Tetrachloroethane 1,1,1,2-	630-20-6	3[14]	9[10]	60[1]	225[1]	ppm	167.84	6.86	Ch.all Ts
148	**Diketene** (Ketene dimer)	674-82-8	0.1[14]	**1**	**5**	**50**	ppm	84.08	3.44	-
220	**Hexafluoroacetone and hydrates**	684-16-2	0.1	0.3	**1**	**50**	ppm	166.03	6.78	-
125	Dichloro-2-butene, 1,4-	764-41-0	0.005	0.015	0.025	140[1]	ppm	125.00	5.11	Ch. T-3
222	Hexamethylene diisocyanate*	822-06-0	0.005	0.015[5]	0.2	3[1]	ppm	168.22	6.88	Added
214	Heptachlor epoxide (Epoxyheptachlor)	1024-57-3	0.15	0.15	0.25	7[1]	mg/m^3	389.30	15.91	Ch. T-3
377	Sodium borate decahydrate	1303-96-4	10	15	25	500[1]	mg/m^3	381.40	15.59	-
36	Barium oxide	1304-28-5	0.5	1.5	2.5	20[1]	mg/m^3	153.34	6.27	-
74	Calcium oxide	1305-78-8	5	6	10	25	mg/m^3	56.08	2.29	Del suprscpt
102	Chromic oxide, or (Chromium(III) oxide)	1308-38-9	0.5	1.5	2.5	25	mg/m^3	152.00	6.21	Ch. T-3
235	Iron oxide	1309-37-1	10	15	25	2500	mg/m^3	159.70	6.53	-
261	Magnesium oxide	1309-48-4	10	30	50	750	mg/m^3	40.31	1.65	-
349	Potassium hydroxide	1310-58-3	2	2[16]	2	150[1]	mg/m^3	56.11	2.29	Ch. T-3

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No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
257	Lithium hydroxide	1310-65-2	1	1	1	100[1]	mg/m^3	23.95	0.98	Ch.T-3
383	Sodium hydroxide	1310-73-2	2[16]	2	40	100	mg/m^3	40.00	1.63	-
263	Manganese dioxide (as Mn)	1313-13-9	0.2	3	5	500	mg/m^3	86.94	3.55	Ch.T-3
389	Sodium peroxide	1313-60-6	10	30	50	250[7]	mg/m^3	77.98	3.19	-
302	Nickel oxide (insoluble cmpds as Ni)	1313-99-1	1	3	5	20[1]	mg/m^3	74.71	3.05	Ch.T-3
470	Zinc oxide (dust)	1314-13-2	10	15	15	500	mg/m^3	81.37	3.33	-
418	Thallium (III) oxide	1314-32-5	2	2	2	20[1]	mg/m^3	456.74	9.80	Added
338	**Phosphorous pentoxide**	1314-56-3	1	**5**	**25**	**100**	mg/m^3	141.94	5.80	-
459	Vanadium pentoxide	1314-62-1	0.05	0.15[5]	7	35	mg/m^3	181.88	7.43	-
250	Lead oxide (as Pb), or (Lead monoxide)	1317-36-8	0.05	0.15	0.25	100	mg/m^3	223.19	9.12	-
71	Calcium carbonate (Dolomite)	1317-65-2	10	30	50	250[7]	mg/m^3	100.09	4.09	Added
111	Cresols	1319-77-3	5	15	25	250	ppm	108.15	4.42	-
141	Dichlorotetrafluoroethane (Freon 114, or CFC 114, CAS # 76-14-2)	1320-37-2	1000	3000	10000	15000	ppm	170.92	6.98	-
27	Arsenic (inorganic compounds as As)	1327-53-3	0.01	0.03	1.4	5	mg/m^3	197.84	3.06	-
464	Xylene	1330-20-7	100	150	200	900	ppm	106.18	4.34	-
372	Sodium (tetra)borate, di-	1330-43-4	3	3	5	25[7]	mg/m^3	201.22	8.22	-
248	Lead acetate (as Pb)	1335-32-6	0.05	0.15	0.25	100	mg/m^3	807.71	8.47	-
20	Ammonium hydroxide (as NH_3)	1336-21-6	25	35	50[1]	300[6]	ppm	35.06	1.43	-
342	Polychlorinated biphenyl	1336-36-3	0.001	0.003	0.005	500[1]	mg/m^3			Added
15	Aluminum oxide	1344-28-1	10	15	15	25	mg/m^3	101.96	4.17	-
147	Diisopropyl methylphosphonate	1445-75-6	10	30	50	360[1]	mg/m^3	180.21	7.37	Added
65	Butyl glycidyl ether, n-	2426-08-6	25	75	125	250	ppm	130.21	5.32	-
31	Auramine	2465-27-2	10	30	50	175[1]	mg/m^3	321.89	13.16	-
446	**Trimethoxysilane**	2487-90-3	0.05	**0.5**	**2**	**5**	ppm	122.22	5.00	Ch. T-0
351	Potassium tetraphenylborate (as borate)	3244-41-5	1	3	5	25[7]	mg/m^3	358.31	14.64	-
109	Copper nitrate (as Cu)	3251-23-8	1	3	5	100	mg/m^3	187.55	7.67	Added
89	Chloroallyl)-3,5,7-triaza-1-azo-niaadamantane chloride, 1-(3-	4080-31-3	10	30	50	220[1]	mg/m^3	251.19	10.27	Added
112	**Crotonaldehyde**	4170-30-3	2	**2**	**10**	**50**	ppm	70.09	2.87	-
405	Tetrabutyl Titanate	5593-70-4	1[14]	3[10]	20[13]	100[1]	ppm	340.42	13.9	-
251	Lead, bis(acetato)trihydroxytri- (as Pb) (Lead acetate trihydrate)	6080-56-4	0.05	0.15	0.25	100	mg/m^3	379.35	15.51	Ch. T-2,T-3

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			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
416	Thallium carbonate (2:1)	6533-73-9	0.1	0.3	2	15	mg/m^3	468.75	19.16	-
247	Lead	7439-92-1	0.05	0.15	0.25	100	mg/m^3	207.19	33.01	-
253	Lithium	7439-93-2	10	30	50	250^{7}	mg/m^3	6.94	0.28	-
259	Magnesium	7439-95-4	10	30	50	250^{7}	mg/m^3	24.31	0.99	Added
266	Mercury (elemental and inorganic as Hg)	7439-97-6	0.05	$0.075^{5,3}$	0.1	10	mg/m^3	200.59	8.20	-
299	Nickel	7440-02-0	1	3	10	10	mg/m^3	58.71	2.40	-
319	Palladium	7440-05-3	10	30	50	250^{7}	mg/m^3	106.40	4.35	-
366	Silver	7440-22-4	0.01	0.3	0.5	10	mg/m^3	107.87	4.41	-
371	Sodium	7440-23-5	5^{14}	15^{10}	100^{13}	500^{1}	mg/m^3	22.99	0.93	Added
415	Thallium (elemental & soluble compounds)	7440-28-0	0.1	0.3	2	15	mg/m^3	204.37	18.67	-
424	Tin	7440-31-5	2	6	10	100	mg/m^3	118.71	4.85	-
425	Titanium	7440-32-6	10	30	50	250^{7}	mg/m^3	47.90	1.96	-
25	Antimony	7440-36-0	0.5	1.5	2.5	50	mg/m^3	121.75	4.98	-
28	Arsenic (organic compounds as As)	7440-38-2	0.03	0.03	0.05	330^{1}	mg/m^3	74.92	3.06	Ch.T-3
32	Barium	7440-39-3	0.5	1.5	2.5	12.5^{7}	mg/m^3	137.36	5.62	-
45	**Beryllium***	7440-41-7	0.002	0.01	**0.025**	**0.100**	mg/m^3	9.01	0.37	-
68	Cadmium & compounds as Cd	7440-43-9	0.005	0.03	4	9	mg/m^3	112.40	4.59	-
103	Chromium	7440-47-3	1	1.5	2.5	250	mg/m^3	52.00	2.13	-
107	Copper	7440-50-8	1	3	5	100	mg/m^3	63.54	2.60	-
451	Uranium and compounds as U	7440-61-1	0.05	0.6	2^{13}	10	mg/m^3	238.00	9.73	Changed T-0
468	Zinc	7440-66-6	10	30	50	250^{7}	mg/m^3	65.37	2.67	-
471	Zirconium & compounds as Zr	7440-67-7	5	10	25^{5}	50	mg/m^3	91.22	3.73	-
70	Calcium	7440-70-2	10	30	50	250^{7}	mg/m^3	40.08	1.64	Added
404	Tellurium oxide (dioxide) (as Te)	7446-07-3	0.1	0.3	0.5	140^{1}	mg/m^3	159.60	6.52	Ch. T-3
398	**Sulfur dioxide**	7446-09-5	0.3	**0.3**	**3**	**15**	ppm	64.06	2.62	-
108	Copper chloride (as Cu)	7447-39-4	1	3	5	100	mg/m^3	134.44	5.50	Added
254	Lithium bromide	7550-35-8	1	7	15	500^{1}	mg/m^3	86.85	3.55	-
427	**Titanium tetrachloride**	7550-45-0	0.5	**5**	**20**	**100**	mg/m^3	189.70	7.75	-
234	**Iodine**	7553-56-2	0.3^{14}	**0.1**	**0.5**	**5**	ppm	253.80	10.37	-
256	**Lithium hydride**	7580-67-8	0.025	**.025**	**0.1**	**0.5**	mg/m^3	7.95	0.32	-
390	Sodium phosphate, tribasic	7601-54-9	5	5	5	500^{1}	mg/m^3	163.94	6.70	Ch T-0,T-1

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
373	Sodium arsenate (as As)	7631-89-2	0.01	0.03	0.05	120[1]	mg/m^3	202.94	8.29	Ch. T-2
386	Sodium nitrate	7631-99-4	10	30	50	100[12]	mg/m^3	85.00	3.47	Ch. T-3
387	Sodium nitrite	7632-00-0	10	30	50	60[12]	mg/m^3	69.00	2.82	-
228	**Hydrogen chloride**	7647-01-0	0.5	**3**	**20**	**100**	ppm	36.46	1.49	-
337	Phosphoric Acid	7664-38-2	1	3	100[13]	500[1]	mg/m^3	98.00	4.01	Ch.T-2,T-3
230	**Hydrogen fluoride** (Hydrofluoric acid)	7664-39-3	2	**2**	**20**	**50**	ppm	20.01	0.82	-
19	**Ammonia**	7664-41-7	25	**25**	**200**	**1000**	ppm	17.04	0.69	-
399	**Sulfuric acid (including oleum and sulfur.trioxide)**	7664-93-9	1	**2**	**10**	**30**	mg/m^3	98.08	4.01	-
303	Nitric acid	7697-37-2	2	2	15	30	ppm	63.02	2.57	-
199	Ferric chloride	7705-08-0	10	30	50	200[1]	mg/m^3	162.20	6.63	Added
202	Ferrous sulfate (iron salts, soluble, as Fe)	7720-78-7	1	3	5	140[1]	mg/m^3	151.91	6.21	Ch.T-3
350	Potassium permanganate (as Mn)	7722-64-7	0.2	3	5	125[12]	mg/m^3	158.04	6.46	-
231	**Hydrogen peroxide**	7722-84-1	1	**10**	**50**	**100**	ppm	34.02	1.39	-
339	Phosphorus (red)	7723-14-0	0.1	0.3	0.5	3[1]	mg/m^3	30.97	1.27	Added
340	Phosphorus (yellow)	7723-14-0	0.1	0.3	3	5	mg/m^3	123.88	5.06	-
52	**Bromine**	7726-95-6	0.1	**0.2**	**1**	**5**	ppm	159.80	6.53	-
37	Barium sulfate	7727-43-7	10	30	50	250[7]	mg/m^3	233.40	9.54	-
101	Chromic acid (as Cr)	7738-94-5	0.05	0.1	0.1	15	mg/m^3	118.02	4.82	-
391	Sodium sulfate (anhydrous)	7757-82-6	10	30	50	500[1]	mg/m^3	142.04	5.81	-
369	Silver nitrate	7761-88-8	0.01	0.03	0.05	10	mg/m^3	169.88	6.94	Ch.T-2,T-3
392	Sodium thiosulfate	7772-98-7	10	30	50	500[1]	mg/m^3	158.10	6.46	Added
22	Ammonium sulfamate	7773-06-0	10	30	50	1500	mg/m^3	114.14	4.66	-
379	Sodium chromate (as Cr(VI)) (Disodium chromate)	7775-11-3	0.05	0.1[16]	0.1	15	mg/m^3	161.98	6.62	-
348	Potassium dichromate	7778-50-9	0.05	0.1[16]	0.1	15	mg/m^3	294.20	7.94	Ch. T-3
73	Calcium hypochlorite	7778-54-3	10	30	50	370[1]	mg/m^3	142.98	5.84	Added
469	Zinc nitrate	7779-88-6	10	30	50	250[7]	mg/m^3	189.39	7.74	-
204	Fluorine	7782-41-4	0.1	2	7.5	10	ppm	38.00	1.55	-
362	Selenium	7782-49-2	0.2	0.6	1	1	mg/m^3	78.96	3.23	-
85	**Chlorine**	7782-50-5	0.5	**1**	**3**	**20**	ppm	70.90	2.90	-
203	Ferrous sulfate heptahydrate (sol salts, Fe)	7782-63-0	1	3	5	500[1]	mg/m^3	278.05	11.37	-

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
361	Selenious acid	7783-00-8	0.2	0.6	20[17]	20[1]	mg/m^3	128.98	5.27	Ch. T-2,T-3
232	**Hydrogen sulfide**	7783-06-4	10	15	**30**	**100**	ppm	34.08	1.39	-
403	Tellurium hexafluoride (as Te)	7783-80-4	0.02	0.06	1	1	ppm	241.60	9.87	Ch. T-2
452	**Uranium hexafluoride** (Uranium fluoride)	7783-81-5	0.05	**5**	**15**	**30**	mg/m^3	352.00	14.39	Changed T-0
367	Silver chloride	7783-90-6	0.01	0.03	0.05	10	mg/m^3	143.40	5.86	Ch.T-2,T-3
29	Arsine	7784-42-1	0.05	0.15	1	3	ppm	77.95	3.18	-
374	Sodium arsenite (as As)	7784-46-5	0.01	0.03	0.05	18[1]	mg/m^3	129.91	5.31	Ch. T-2,T-3
264	Manganous sulfate (as Mn)	7785-87-7	0.2	3	5	500	mg/m^3	151.00	6.17	Ch.T-3
34	Barium fluoride	7787-32-8	0.5	1.5	50[1]	100[1]	mg/m^3	175.34	7.16	Ch.T-2,T-3
346	Potassium chromate (VI)	7789-00-6	0.05	0.1[16]	0.1	15	mg/m^3	194.20	7.94	Added
212	Heavy water	7789-20-0	200[14]	600[10]	4000[1]	20000[7]	ppm	20.02	0.82	Added
81	Cerium chloride	7790-86-5	10	30	50	500[1]	mg/m^3	246.47	10.07	Added
86	**Chlorine trifluoride**	7790-91-2	0.1	**0.1**	**1**	**10**	ppm	92.45	3.78	-
99	**Chlorosulfonic acid** (Chlorosulfuric acid)	7790-94-5	1.4	**2**	**10**	**30**	mg/m^3	116.52	4.76	-
417	Thallium chloride	7791-12-0	0.1	0.3	2	15	mg/m^3	239.82	9.80	-
336	**Phosphine*** **	7803-51-2	0.3	1	**2.5**	**5**	ppm	34.00	1.39	-
23	Ammonium vanadate	7803-55-6	10	30	50	70[1]	mg/m^3	116.99	4.78	Ch.all Ts
431	Toxaphene	8001-35-2	0.5	1	20	200	mg/m^3	413.80	16.91	-
110	Creosote (coal tar oil)	8001-58-9	0.2	0.6	1	80	mg/m^3		-	-
330	Petroleum solvent	8002-05-9	10	30	50	250[7]	mg/m^3	978.68	40.00	Added
320	Paraffin n-	8002-74-2	2	6	10	50[7]	mg/m^3			-
246	Kerosene	8008-20-6	100	300	500	500[1]	mg/m^3		6.95	-
289	Mineral oil	8042-47-5	10	30	50	250[7]	mg/m^3			
290	Mineral spirits (85% nonane) (Stoddard solvent)	8052-41-3	525	1575	1800	20000	mg/m^3		5.19	-
344	Polyvinyl chloride	9002-86-2	5	15	25	500[1]	mg/m^3			Added
282	Methylcellulose	9004-67-5	10	30	50	500[1]	mg/m^3			-
185	Ethoxylated p-nonylphenol (from MSDS) (Nonyl phenyl polyethylene glycol ether)	9016-45-9	10	30	50	500[1]	mg/m^3			-
343	Polyoxyalkyleneamine	9046-10-0	10	30	50	250[7]	mg/m^3			Added
35	Barium nitrate	10022-31-8	0.5	1.5	2.5	50	mg/m^3	261.36	10.68	-

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
298	Neodynium (III) chloride	10024-93-8	0.2[14]	0.6[10]	4[13]	20[1]	ppm	250.59	10.24	Added
310	Nitrous oxide	10024-97-2	50	150	10000	20000	ppm	44.02	1.80	-
444	Trichlorosilane**	10025-78-2	0.3[14]	1	3	15	mg/m^3	135.45	5.45	Added
318	Ozone	10028-15-6	0.1	0.3	1	5	ppm	48.00	1.96	-
201	Ferric sulfate (iron salts, soluble, as Fe)	10028-22-5	1	3	5	25[7]	mg/m^3	399.88	16.34	-
395	Strontium nitrate	10042-76-9	10	30	50	500[1]	mg/m^3	211.64	8.65	-
16	Aluminum sulfate (sol. salt,as Al)	10043-01-3	2	6	10	500[1]	mg/m^3	342.14	13.98	Added
50	Boric acid	10043-35-3	10	30	100[12]	130[12]	mg/m^3	61.84	2.53	Ch.T-1,-2,-3
265	Mercuric nitrate	10045-94-0	0.025	0.075[5,3]	0.1	10	mg/m^3	324.61	13.27	Ch.T-3
249	Lead nitrate (as Pb)	10099-74-8	0.05	0.45	0.75	100	mg/m^3	331.21	13.54	Added
393	Sodium thiosulfate pentahydrate	10102-17-7	10	30	50	500[1]	mg/m^3	248.20	10.14	-
304	Nitric oxide	10102-43-9	25	25	25	100	ppm	30.01	1.23	-
307	Nitrogen dioxide	10102-44-0	2	2	15	30	ppm	46.01	1.88	-
69	Cadmium nitrate	10325-94-7	0.005	0.03	0.05	500[1]	mg/m^3	236.42	9.66	Added
384	Sodium metaphophate	10361-03-2	10	30	50	500[1]	mg/m^3	101.96	4.17	Added
33	Barium chloride	10361-37-2	0.5	1.5	2.5	50	mg/m^3	208.24	8.51	-
200	Ferric nitrate (iron salts, soluble, as Fe)	10421-48-4	1	3	5	25[7]	mg/m^3	241.88	9.89	-
382	Sodium dichromate	10588-01-9	0.05	0.1[16]	0.1	15	mg/m^3	261.98	10.71	-
93	Chlorodiphenyl (54% Cl)	11097-69-1	0.5	1.5	2.5	5	mg/m^3			-
394	Sodium-Potassium	11135-81-2	2	2	40	100	mg/m^3			Added[5]
30	Asbestos (chrysotile)	12001-29-5	0.005	0.05	0.05[5]	500[1]	mg/m^3		10^{6}f/cc=0.05mg/m^3	Added
51	Boron carbide	12069-32-8	10	30	50	250[7]	mg/m^3	55.30	2.26	-
385	Sodium monoxide	12401-86-4	10	30	50	250[7]	mg/m^3	61.98	2.53	-
301	Nickel nitrate (soluble salts, as Ni)	13138-45-9	0.1	0.3	0.5	10	mg/m^3	182.73	7.47	-
48	Bis(0-methylstyryl)benzene, p-	13280-61-0	10	30	50	250[13]	ppm	310.43	12.69	Added
46	Beryllium hydroxide (as Be)	13327-32-7	0.002	0.01	0.005	4	mg/m^3	43.03	1.76	Added
300	Nickel carbonyl	13463-39-3	0.001	0.05	0.05	2	ppm	170.75	6.98	-
426	Titanium oxide	13463-67-7	10	30	50	250[7]	mg/m^3	79.90	3.27	Added
402	Tellurium	13494-80-9	0.1	0.3	20	25	mg/m^3	127.60	5.22	-
380	Sodium chromate.10H_2O	13517-17-4	0.05	0.1[16]	0.1	15	mg/m^3	342.18	13.99	-
104	Chromium nitrate	13548-38-4	0.5	1.5	2.5	25	mg/m^3	238.03	9.73	Added

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
47	Beryllium nitrate (as Be)	13597-99-4	0.002	0.01	0.005	4	mg/m^3	133.03	5.44	Added
453	Uranium hydride (as U)	13598-56-6	0.05	0.6	0.6	10	mg/m^3	241.06	9.85	Changed T-2
72	Calcium chromate	13765-19-0	0.001	0.003	0.7[1]	3.5[7]	mg/m^3	156.08	6.38	Ch.T-2,T-3
255	Lithium chromate (as soluble Cr(VI))	14307-35-8	0.05	0.05	0.1	0.5[7]	mg/m^3	131.90	6.78	-
363	Silica, crystalline quartz (Silicon dioxide)	14808-60-7	0.1	0.3	0.5	25	mg/m^3	60.09	2.46	-
146	Dihydrogen hexachloroplatinum (IV)	16941-12-1	0.002	0.006	0.01	4	mg/m^3	409.81		Added
364	Silicofluoric acid (as F) (Fluorosilicic acid)	16961-83-4	2.5	7.5	12.5	120[1]	mg/m^3	144.11	5.89	Ch. T-3
114	Cupric nitrate hemipentahydrate (as Cu) (Data, including MW, from MSDS)	19004-19-4	1	3	5	100	mg/m^3	241.60	9.87	-
123	**Diborane**	19287-45-7	0.1	0.3	**1**	**3**	ppm	27.68	1.13	-
370	Silver oxide	20667-12-3	10	30	50	100[1]	mg/m^3	231.74	9.47	Ch.T-0,-1,-2
267	Mercury (II) oxide	21908-53-2	0.025	0.075[5,3]	0.1	10	mg/m^3	216.59	8.85	Added
178	Epoxy Resin (EPON 1001)	25068-38-6	10	30	50	500[1]	mg/m^3			Added
179	Epoxy Resin (EPON 1007)	25068-38-6	10	30	50	500[1]	mg/m^3			Added
180	Epoxy Resin (EPON 820)	25068-38-6	10	30	50	500[1]	mg/m^3			Added
181	Epoxy Resin ERL-2795	25068-38-6	10	30	50	480[1]	mg/m^3			Added
313	Nonyl Phenol (mixed isomers)	25154-52-3	5[14]	15[10]	100[13]	500[1]	mg/m^3	220.39	9.01	Added
164	Dinitrotoluene	25321-14-6	0.45	0.45	0.75	50	mg/m^3	182.15	7.45	Ch. T-2
375	Sodium azide	26628-22-8	0.3	0.3	12[17]	12[1]	mg/m^3	65.02	2.66	-
281	Methyl-1H-benzotriazole	29385-43-1	10	30	50	300[1]	mg/m^3	133.17	5.40	-
242	**Isocyanatoethyl methacrylate, 2-**	30674-80-7	0.1[17]	0.1[17]	**0.1**	**1**	ppm	155.17	6.34	-
211	Glyceryl monostearate	31566-31-1	10	30	50	260[1]	mg/m^3	358.63	14.66	Ch. T-3
54	Bromo-3-chloro-5,5-dimethylhydantoin, 1-	32718-18-6	10	30	50	250[11]	mg/m^3			-
458	Uranyl nitrate (as U), or (yellow salt)	36478-76-9	0.05	0.6	0.6	10	mg/m^3	394.02	16.10	Ch. T-2,T-3
421	Thiofanox (Dacamox)	39196-18-4	8.5	8.5	8.5	30[1]	mg/m^3	218.35	8.92	Ch. T-3
294	Nabumetone (Relafen), or (4-[6-methoxy-2-napthyl]-2-butanone)	42924-53-8	10	30	50	500[1]	mg/m^3	228.31	9.33	-
92	Chlorodiphenyl (42% Cl)	53469-21-9	1	3	5	5	mg/m^3			-
224	Hexamethylenetetraamine hydrochloride	58713-21-6	10	30	50	500[19]	mg/m^3			Added
293	Monosodium titanate (MSDS #18858-00 CAS # 12034-36-5)	60704-88-3	10	30	50	500	mg/m^3		8.17	-
400	Sulphonic acid	61789-85-3	10	30	50	250[7]	mg/m^3			Added
153	Dimethyl siloxane (Syltherm)	63148-62-9	10	30	50	250[7]	mg/m^3			Added

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Table 2: ERPG and Recommended TEELs for Chemicals (sorted by CAS number)

No.	CHEMICAL NAME	CAS Number	Recommended Temporary Emergency Exposure Limits				Units	Molecular Weight	ppm to mg/m^3	Changes from Rev 11
			TEEL-0	TEEL-1	TEEL-2	TEEL-3				
12	Alkylamines[4]	63231-48-1	10	30	50	250	mg/m^3			Added
84	Chlorinated polyolefins	68410-99-1	10	30	50	250[7]	mg/m^3			Added
207	Fuel oil	68476-33-5	5[14]	15[10]	100[13]	500[1]	mg/m^3			Added
11	Alcohols, C6-C12[4]	68603-15-6	10	30	50	250	mg/m^3			Added
184	Ethoxylated alcohols, C7-C21	68991-48-0	10	30	50	250[7]	mg/m^3			Added
312	Nonyl Phenol (branched)	84852-15-3	5[14]	15[10]	100[13]	500[1]	mg/m^3	220.39	9.01	Added
329	Perlite (Silica)	93763-70-3	15	30	50	500[1]	mg/m^3			Added
26	Antioxidant	NA	10	30	50	100[8]	mg/m^3	NA		-
241	Isocyanate-bearing waste (as CN)	NA	5	5[16]	5	25	mg/m^3			-
244	Jet fuels (JP-5 and JP-8) (as Kerosene)	NA	100	300	500	500[1]	ppm			Added
258	Machine coolant 1	NA	10	30	50	500	mg/m^3		-	-
401	Synthetic resins	NA	10	30	50	500	mg/m^3			-
456	Uranium: insoluble compnds	NA	0.05	0.6	0.6	10	mg/m^3			Ch. T-0, T-2
457	Uranium: soluble compounds	NA	0.05	0.6	0.6	10	mg/m^3			Changed T-2
463	Waste Oil	NA	10	30	50	250[7]	mg/m^3			-
176	Epibatidine	NF	0.003[14]	0.01[10]	0.05[1]	0.075[1]	mg/m^3			Added
227	Hydrocount(R) (LSC Cocktail)	NF	20	60	100	500[20]	mg/m^3		-	Added
233	Iconol(R)	NF	10	30	50	250[7]	mg/m^3			Added
315	Norchlorofluoroepibatidine	NF	0.0001[14]	0.00025[10]	0.002[1]	0.0025[1]	mg/m^3		-	Added
357	Propylene-based glycol ether	NF	10	30	50	250[7]	mg/m^3			Added
454	Uranium telluride (as U)	NF	0.05	0.6	0.6	10	mg/m^3	1224.08	50.03	Changed T-2
455	Uranium telluride, mono (as U)	NF	0.05	0.6	0.6	10	mg/m^3	366.03	14.96	Changed T-2

Note: Lack of a superscript implies that the TEEL values are hierarchy-derived (see AIHAJ, V.56, pp 919-925, 1995)

Notes for Tables 1 and 2:

"Added" means that the chemical was added in Rev.12. Ch T-x, where x = 0, 1, 2, or 3, means that the TEEL value was changed in Rev. 12 from previously recommended values (see introductory text).

1 TEEL-2- and/or TEEL-3 are based on toxicity data from reference 5, with a 500 mg/m^3 maximum for particulate materials.
2 (TEEL-2) / 5, rounded as appropriate.
3 (TEEL-0) x 3, rounded as appropriate.
3 Values based on 3 x TLV-TWA.
4 TEELs chosen arbitrarily by comparison with related chemicals.
5 Values depart from the usual guidelines, and are estimates based on existing concentration limits (at other TEEL values) and/or a comparison with similar chemicals and/or a review of available toxicity data.
6 The IDLH of 300 ppm for ammonia is considered to be appropriate. The TEEL-3 estimated from the human LC_{LO} of 5000 ppm is 250 ppm, while that estimated from the rat LD_{50} of 350 mg/kg is 220 ppm.
7 TEEL-3 based on (5 x TEEL-2), rounded as appropriate, based on statistical analysis of TEEL-3 to TEEL-2 ratios.
8 This value is derived from the toxicity-based TEEL-3s for five antioxidants listed in reference 2, and for which some toxicity information was available in reference 5.
9 Toxicity-based values using TD_{LO}, not TC_{LO}.
10 Value based on (TEEL-2) /7, rounded as appropriate, based on statistical analysis of TEEL-2 to TEEL-1 ratios.
11 The TEEL-3 value for 1-Bromo-3-chloro-5,5-dimethylhydantoin is estimated from the toxicity-based TEEL-3 for 3-Bromo-1-chloro-5,5-dimethylhydantoin.
11 Value adjusted upwards to the PEL-TWA value.
12 Toxicity-based values, using human data for TD_{LO} and/or LD_{LO}.
13 Value based on (TEEL-3) / 5, rounded as appropriate, based on statistical analysis of TEEL-3 to TEEL-2 ratios.
14 Value based on (TEEL-1) /3 rounded as appropriate.
15 Value based on the strychnine TLV-TWA of 0.15 mg/m^3.
16 TEEL-1 and TEEL-0 values are limited by the OSHA or ACGIH ceiling concentration.
17 Hierarchy values reduced to the limit dictated by the next higher category (i.e., if TEEL-1 > TEEL-2, TEEL-1 = TEEL-2).
18 Toxicity-based value adjusted upwards to PEL-STEL or TLV-STEL.
19 Since no data were found for this chemical, values are based on the toxicity of hexamethylenetetraamine.
20 Values based on TEELs of components listed in MSDS.
21 Odor-based ERPG-1 value adjusted upwards to PEL-STEL or (3 x TLV-TWA).
22 The toxicity-based TEEL-3 would be 1.3 mg/m^3.

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1 NIOSH Pocket Guide to Chemical Hazards: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control (June 1990). A revised "Guide" was issued in June, 1994.

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3 Douglas K. Craig: Description of Methodology for deriving ERPG-equivalents for Chemicals. WSRC Technical Calculation Number S-CLC-G-00074, Rev. 0 (July 3, 1995).

4 Douglas K. Craig: SWMF Chemicals on "Master File" Requiring Independent Verification. Technical Calculation Number S-CLC-G-00079, Rev. 0 (July 13, 1995).
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5. Lewis, R.J.,Sr.: Sax's Dangerous Properties of Industrial Materials, 9th Ed. Van Nostrand Reinhold, New York, (1996)

6 Lewis, R.J.,Sr.: Hawley's Condensed Chemical Dictionary, 12th Ed. Van Nostrand Reinhold, New York, (1993)

7. ACGIH Guide to Occupational Exposure Values-1996. American Conference of Governmental Industrial Hygienists, Cincinnati, OH (1996)

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