

**Table 1. Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division  
List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order**

CAS No.	Chemical	Note	1 <sup>o</sup> ITSL (µg/m <sup>3</sup> )	ITSL Avg Time	2 <sup>o</sup> ITSL (µg/m <sup>3</sup> )	ITSL Avg Time	IRSL (µg/m <sup>3</sup> )	SRSL (µg/m <sup>3</sup> )	IRSL Avg Time
3052-70-8	(1-methylethylidene)bis(1,1-dimethylpropyl)peroxide		0.1	annual					
6713-03-7	1-(2-hydroxyethylthio)propane		0.1	annual					
630-20-6	1,1,1,2-tetrachloroethane						0.1	1	annual
811-97-2	1,1,1,2-tetrafluoroethane		80000	annual					
460-73-1	1,1,1,3,3-pentafluoropropane		2000	annual					
79-34-5	1,1,2,2-tetrachloroethane						0.02	0.2	annual
18387-19-4	1,1,2,4-tetramethyl-1-1-sila-2-aza-cyclopentane		0.7	annual					
76-13-1	1,1,2-trichloro-1,2,2-trifluoroethane		19140	24 hr					
79-00-5	1,1,2-trichloroethane		11	annual	160	24 hr	0.063	0.63	annual
13879-32-8	1,1'[methylenebis(oxyethane-1,2-diloxy)]bisbenzene		0.1	annual					
3006-86-8	1,1-di-(tert-butylperoxy)cyclohexane		0.1	annual					
1717-00-6	1,1-dichloro-1-fluoroethane		12800	annual					
75-34-3	1,1-dichloroethane		500	annual					
75-37-6	1,1-difluoroethane		400000	annual					
612-00-0	1,1-diphenylethane		7	annual					
26447-40-5	1,1'-methylene bisisocyanatobenzene		0.6	24 hr					
2403-89-6	1,2,2,6,6-pentamethyl-4-piperidinol		0.1	annual					
634-66-2	1,2,3,4-tetrachlorobenzene		120	annual					
634-90-2	1,2,3,5-tetrachlorobenzene		12	annual					
68002-20-0	1,2,3-triazine-2,4,6-triamine polymer with methylated formaldehyde		0.1	annual					
87-61-6	1,2,3-trichlorobenzene		27	annual					
96-18-4	1,2,3-trichloropropane		0.3	annual					
526-73-8	1,2,3-trimethylbenzene	14	185	annual	1200	8 hr			
95-94-3	1,2,4,5-tetrachlorobenzene		1	annual					

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95-93-2	1,2,4,5-tetramethyl benzene		20	annual					
120-82-1	1,2,4-trichlorobenzene		4	annual					
95-63-6	1,2,4-trimethylbenzene	14	185	annual	1200	8 hr			
2634-33-5	1,2-Benzisothiazol-3(2H)-one	43							
106-88-7	1,2-butylene oxide		20	annual			1.2	12	annual
694-83-7	1,2-Diaminocyclohexane		2	annual					
106-93-4	1,2-dibromoethane		9	annual			0.002	0.02	annual
540-49-8	1,2-dibromoethylene		0.1	annual					
95-50-1	1,2-dichlorobenzene		300	annual					
107-06-2	1,2-dichloroethane						0.04	0.4	annual
540-59-0	1,2-dichloroethylene		35	24 hr					
106-86-5	1,2-epoxy-4-vinylcyclohexane		6	annual					
23410-40-4	1,2-ethanediamine, n-(3-(dimethoxymethylsilyl)-2-methylpropyl)		0.1	annual					
75-55-8	1,2-propylenimine		5	8 hr					
1072-53-3	1,3,2-dioxathiolane,2,2-dioxide		0.1	annual					
544-25-2	1,3,5-cycloheptatriene		0.18	annual					
4719-04-4	1,3,5-triazine-1,3,5(2h,4h,6h)-triethanol		0.015	annual					
87-90-1	1,3,5-trichloroisocyanuric acid		2	annual					
108-67-8	1,3,5-trimethyl benzene	14	185	annual	1200	8 hr			
110839-13-9	1,3-benzenedimethanamine polymer with 2,2'-((1-methylethylidene) bis(4		0.1	annual					
1477-55-0	1,3-bis(aminomethyl)benzenen		1	1 hr					
106-99-0	1,3-butadiene		33	annual			0.03	0.3	annual
77-48-5	1,3-dibromo-5,5-dimethylhydantoin		2	8 hr					
96-23-1	1,3-dichloro-2-propanol		3	annual			0.07	0.7	annual
118-52-5	1,3-dichloro-5,5-dimethylhydantoin		2	8 hr					
541-73-1	1,3-dichlorobenzene		3	annual					

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542-75-6	1,3-dichloropropene		20	annual			0.2	2	annual
646-06-0	1,3-dioxolane		10	annual					
16883-83-3	1,3-pentanediol-2,2,4-trimethyl-3-(benzyl phthalate)-isobutyrate		0.1	annual					
1120-71-4	1,3-propane sultone		2	annual					
110-63-4	1,4 butanediol		79	annual					
106-46-7	1,4-dichlorobenzene		800	annual			0.25	2.5	annual
123-91-1	1,4-dioxane		100	annual	7200	1 hr	0.2	2	annual
592-42-7	1,5-hexanediene		264	annual					
629-11-8	1,6-hexanediol		14	annual					
6674-22-2	1,8-diazabicyclo[5.4.0]undec-7-ene		25	annual					
58-36-6	10,10'-oxybisphenoxarsine oxide		0.2	annual					
13209-41-1	17,21-dihydroxy-16 alpha-methylpregna-1,4,9(11)-triene-3,20-dione		0.1	annual					
16079-88-2	1-bromo-3-chloro-5,5-dimethylhydantoin		2	8 hr					
109-70-6	1-bromo-3-chloropropane		0.1	annual					
109-65-9	1-bromobutane		9	annual					
111-83-1	1-bromooctane		16	annual					
75-68-3	1-chloro-1,1-difluoroethane		50000	annual					
88-73-3	1-chloro-2-nitrobenzene						0.21	2.1	annual
112-41-4	1-dodecene		29	annual					
611-14-3	1-ethyl-2-methylbenzene		0.1	annual					
2687-91-4	1-ethyl-2-pyrrolidone		4.9	annual					
592-76-7	1-heptene		24	annual					
629-73-2	1-hexadecene		17	annual					
947-19-3	1-hydroxycyclohexyl phenyl ketone		0.1	annual					
123333-53-9	1-hydroxy benzotriazole		0.1	annual					
90-12-0	1-methyl naphthalene		250	annual			0.14	1.4	annual

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2958-75-0	1-methyldecahydronaphthalene		0.1	annual					
108-03-2	1-nitropropane		900	8 hr					
107-03-9	1-propanethiol		16	1 hr					
1569-01-3	1-propoxy-2-propanol		86	annual					
1120-36-1	1-tetradecene		29	annual					
1072-63-5	1-vinylimidazol		180	24 hr					
3731-51-9	2-(aminomethyl)pyridine		0.1	annual					
540-84-1	2,2,4-Trimethyl Pentane	1	3500	8 hr					
6846-50-0	2,2,4-trimethylpentanediol-1,3-diisobutyrate		106	annual					
366-18-7	2,2'-bipyridyl		0.8	annual					
77-76-9	2,2-dimethoxypropane		0.1	annual					
166524-75-0	2,2'-dithiobis(5-ethoxy-7-fluoro[1,2,4]triazolo(1,5-c)pyrimidine		0.8	annual					
1746-01-6	2,3,7,8-tetrachlorodibenzo(p)dioxin	33	0.000002	annual			2.3E-08	2.3E-07	annual
513-85-9	2,3-butanediol		15	annual					
526-75-0	2,3-dimethyl phenol		2	annual					
79-29-8	2,3-dimethylbutane		3500	8 hr					
565-59-3	2,3-dimethylpentane		3500	8 hr					
95-95-4	2,4,5-trichlorophenol		350	annual					
90-72-2	2,4,6-tri(dimethylaminomethyl)phenol		7	annual					
88-06-2	2,4,6-trichlorophenol						0.3	3	annual
3764-01-0	2,4,6-trichloropyrimidine		0.1	annual					
696-82-2	2,4,6-trifluoropyrimidine		0.1	annual					
126-86-3	2,4,7,9-tetramethyl-5-decyn-4,7-diol	26							
94-75-7	2,4-D		35	annual	100	8 hr			
25168-26-7	2,4-D, isooctyl ester		3	annual					
120-83-2	2,4-dichlorophenol		11	24 hr					
108-08-7	2,4-dimethylpentane		3500	8 hr					

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105-67-9	2,4-dimethylphenol		70	annual					
51-28-5	2,4-dinitrophenol		7	annual					
121-14-2	2,4-dinitrotoluene		2	8 hr			0.009	0.09	annual
123-54-6	2,4-pentanedione		25	annual					
584-84-9	2,4-toluene diisocyanate	13	0.07	annual	0.4	8 hr			
5779-94-2	2,5-dimethylbenzaldehyde		0.1	annual					
95-87-4	2,5-dimethylphenol		0.7	annual					
608-31-1	2,6-dichlorobenzeneamine		0.1	annual					
87-65-0	2,6-dichlorophenol		3.8	annual					
5509-65-9	2,6-difluoroaniline		2	annual					
18063-03-1	2,6-difluorobenzamide		11	annual					
385-00-2	2,6-difluorobenzoic acid		0.1	annual					
1897-52-5	2,6-difluorobenzonitrile		0.2	annual					
141-91-3	2,6-dimethyl morpholine		377	annual					
576-26-1	2,6-dimethyl phenol		2	annual					
108-82-7	2,6-dimethyl-4-heptanol		30	annual					
128-37-0	2,6-di-tert-butyl-p-cresol						1	10	annual
91-08-7	2,6-toluene diisocyanate	13	0.07	annual	0.4	8 hr			
87-62-7	2,6-xylydine						0.78	7.8	annual
124-68-5	2-amino-2-methyl-1-propanol		4	annual					
77820-58-7	2-amino-3-chlorobenzoic acid methyl ester		7	annual					
359-07-9	2-bromo-1,1-difluoro ethane		0.1	annual					
103-63-9	2-bromoethyl benzene		3	annual					
28476-83-7	2-butenedioic acid (z)-dibutyl ester, polymer with chloroethene		0.1	annual					
111-76-2	2-butoxyethanol	10	1600	annual					
111-75-1	2-butylaminoethanol		4	annual					
2837-89-0	2-chloro-1,1,1,2-tetrafluoroethane		5000	annual					

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363-51-9	2-chloro-6-fluorobenzenamine		0.1	annual					
95-51-2	2-chloroaniline		10	annual					
95-57-8	2-chlorophenol		18	24 hr					
75-29-6	2-chloropropane		100	24 hr					
100-37-8	2-diethylaminoethanol (deae)		4	annual					
100-36-7	2-diethylaminoethylamine		9	annual					
166524-65-8	2-ethoxy-4,6-difluoropyrimidine		20	annual					
110-80-5	2-ethoxyethanol		200	annual					
97-95-0	2-ethyl butanol		40	annual					
94-96-2	2-ethyl-1,3-hexanediol		30	annual					
1758-88-9	2-ethyl-1,4-dimethyl benzene		0.1	annual					
10431-98-8	2-ethyl-2-oxazoline		53	annual					
110-73-6	2-ethylaminoethanol		1	annual					
3814-34-4	2-ethylbutyl bromide		0.1	annual					
123-05-7	2-ethylhexanal		10	annual					
149-57-5	2-ethylhexanoic acid		70	annual					
104-76-7	2-ethylhexanol		70	annual					
103-09-3	2-ethylhexyl acetate		15	annual					
103-11-7	2-ethylhexyl acrylate		18	annual					
104-75-6	2-ethylhexylamine		0.1	annual					
1070-10-6	2-ethylhexyltitanate		0.1	annual					
7473-98-5	2-hydroxy-2-methyl-1-phenyl-1-propanone		0.1	annual					
56780-58-6	2-hydroxy-3-trimethylammonioethyl ether starch		0.1	annual					
68092-49-9	2-hydroxy-4(2'-hydroxy-3'dacyloxypropoxy)-benzophenone		0.1	annual					
68083-40-9	2-hydroxy-4(2'-hydroxy-3'octoxypropoxy)-benzophenone		0.1	annual					
868-77-9	2-hydroxyethyl methacrylate		10	annual					

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149-30-4	2-mercaptobenzothiazole						0.54	5.4	annual
1589-47-5	2-methoxy-1-propanol		660	annual					
70657-70-4	2-methoxy-1-propanol acetate		500	24 hr					
116-11-0	2-methoxy-1-propene		6	annual					
109-86-4	2-methoxyethanol		20	24 hr					
78-78-4	2-methyl butane		17700	8 hr					
624-41-9	2-methyl butyl acetate		1100	annual					
137-32-6	2-methyl-1-butanol		13	annual					
2682-20-4	2-methyl-4-isothiazolin-3-one		0.1	annual					
27646-80-6	2-methylamino-2-methyl-1-propanol		0.1	annual					
109-83-1	2-methylaminoethanol		38	annual					
96-17-3	2-methylbutyraldehyde		700	annual					
591-76-4	2-methylhexane		3500	8 hr					
91-57-6	2-methylnaphthalene		10	annual					
107-83-5	2-methylpentane		17600	8 hr					
96-47-9	2-methyltetrahydrofuran		420	annual					
91-59-8	2-naphthylamine						0.00013	0.0013	annual
102-81-8	2-n-dibutylaminoethanol		28	annual					
88-75-5	2-nitrophenol		18	24 hr					
79-46-9	2-nitropropane		20	annual			0.00037	0.0037	annual
111-13-7	2-octanone		6.9	annual					
626-38-0	2-pentyl acetate		2600	8 hr					
10215-30-2	2-propoxy-1-propanol		0.1	annual					
7580-85-0	2-tert-butoxyethanol		7	annual					
71945-54-5	3-(1,1-dimethylethoxy)-heptane		6	annual					
677-21-4	3,3,3-trifluoropropene		280	annual					
22431-89-6	3,3,6,6-tetramethyl-1,2-dioxane		0.1	annual					

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119-90-4	3,3'-dimethoxybenzidine		9.8	annual			0.039	0.39	annual
6574-99-8	3,4-dichlorobenzonitrile		2	annual					
64248-62-0	3,4-difluorobenzonitrile		0.6	annual					
95-65-8	3,4-dimethyl phenol		3.5	annual					
68575-36-0	3,5-dichloro-a-methyl st		16	annual					
107-54-0	3,5-dimethyl-1-hexyn-3-o		0.1	annual					
108-68-9	3,5-dimethylphenol		0.8	annual					
35794-11-7	3,5-dimethylpiperidine		0.1	annual					
591-22-0	3,5-lutidine		0.1	annual					
16691-43-3	3-amino-5-mercapto-1,2,4-triazole		7	annual					
126-06-7	3-bromo-1-chloro-5,5-dimethylhydantoin		2	8 hr					
627-30-5	3-chloro-1-propanol		0.1	annual					
563-47-3	3-chloro-2-methylpropene						0.03	0.3	annual
117482-84-5	3-chloro-4-fluorobenzonitrile		2	annual					
95-74-9	3-chloro-p-toluidine	30	2	annual					
100-54-9	3-cyanopyridine		1.5	annual					
4420-74-0	3-mercaptopropyltrimethoxysilane		2.4	annual					
56539-66-3	3-methoxy-3methyl-1butanol		13	annual					
103429-90-9	3-methoxy-3methyl-1butyl acetate		0.1	annual					
56-49-5	3-methylcholanthrene	5							
589-34-4	3-methylhexane		3500	8 hr					
96-14-0	3-methylpentane		3500	8 hr					
108-39-4	3-methylphenol	30	100	8 hr					
108-99-6	3-picoline		80	annual					
67812-17-3	3-trimethoxysilyl propylmethyl methylphosphonate		0.1	annual					
28984-69-2	4,4-(5h)-oxazoledimethanol, 2-(hepadecanyl)		0.1	annual					
1761-71-3	4,4'-diaminodicyclohexylmethane		6	annual					



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5436-21-5	4,4-dimethoxy-2-butanone		20	annual					
101-77-9	4,4'-methylene dianiline						0.022	0.22	annual
40758-65-4	4,6-dichloro-2-ethoxypyrimidine		0.1	annual					
1074-40-4	4,6-dichloro-2-methoxypyrimidine		0.1	annual					
27078-75-7	4,6-difluoro-2-methoxypyrimidine		0.1	annual					
19549-80-5	4,6-dimethyl-2-heptanone	19	0.1	annual					
103335-54-2	4-aza acid		17	annual					
56076-20-1	4-chloro-2-ethoxy-6-fluoropyrimidine		0.1	annual					
110888-15-8	4-chloro-3-fluorobenzonitrile		0.1	annual					
65402-65-5	4-hydroxytetramethyl piperadine free radical (4-oh-tempo)		4	annual					
4652-27-1	4-methoxy-3-buten-2-one		0.1	annual					
100-06-1	4-methoxyacetophenone		0.1	annual					
622-97-9	4-methylstyrene		2	annual					
100-02-7	4-nitrophenol		0.7	annual					
4994-16-5	4-phenylcyclohexene		33	annual					
100-40-3	4-vinylcyclohexene		4	8 hr					
129879-84-1	5-amino-1,2,4-triazole-3-sulfonyl chloride		7	annual					
97658-80-5	5-bp-bisamine		10	annual					
26172-55-4	5-chloro-2-methyl-4-isothiazolin-3-one		0.1	annual					
3697-24-3	5-methylchrysene	5							annual
27619-97-2	6:2 fluorotelomer sulfonic acid		1	annual					
57-97-6	7,12-dimethylbenz(a)anthracene	5							
91-44-1	7-diethylamino-4-methyl coumarin		16	annual					
83-32-9	acenaphthene		210	annual					
208-96-8	acenaphthylene		35	annual					
75-07-0	acetaldehyde		9	annual			0.5	5	annual
64-19-7	acetic acid		1200	1 hr					

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67-64-1	acetone		5900	8 hr					
75-05-8	acetonitrile		200	annual					
98-86-2	acetophenone		490	8 hr					
75-36-5	acetyl chloride		0.1	annual					
107-02-8	acrolein	13	0.16	annual	5	1 hr			
79-06-1	acrylamide		6	24 hr			0.005	0.05	annual
79-10-7	acrylic acid		1	annual					
107-13-1	acrylonitrile		2	annual			0.01	0.1	annual
814-68-6	acryloyl chloride		0.3	annual					
44992-01-0	acryloyloxyethyltrimethyl ammonium chloride		0.1	annual					
	<i>None</i> ad acid		17	annual					
1330-86-5	adipate plasticizer		0.1	annual					
124-04-9	adipic acid		50	8 hr					
75782-86-4	alcohols c12-13		31	annual					
69013-18-9	alcohols c8-18 ethoxylated propoxylated		0.1	annual					
309-00-2	aldrin						0.0002	0.002	annual
3779-63-3	aliphatic polyisocyanate-1		0.1	annual					
68515-40-2	alkyl benzyl phthalate		0.1	annual					
107-18-6	allyl alcohol		18	annual					
300-57-2	allyl benzene		5	annual					
107-05-1	allyl chloride		1	annual	31	8 hr			
106-92-3	allyl glycidyl ether						0.1	1	annual
532-27-4	alpha chloroacetophenone		0.03	annual					
9000-90-2	alpha-amylase	4	0.02	1 hr					
552-45-4	alpha-chloro-ortho-xylene		0.1	annual					
319-84-6	alpha-hexachlorocyclohexane						0.0006	0.006	annual
98-83-9	alpha-methyl styrene		230	annual					
68037-76-3	alphamethylstyrene(dodecyl)polysiloxane		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
109-06-8	alpha-picoline		24	annual					
10482-56-1	alpha-terpineol		0.1	annual					
7446-70-0	aluminum chloride		0.1	annual					
24304-00-5	aluminum nitride		0.03	annual					
60304-36-1	aluminum potassium fluoride		0.2	annual					
140-31-8	aminoethylpiperazine		0.1	annual					
6419-19-8	aminotrimethylene phosphonic acid		0.1	annual					
7664-41-7	ammonia	39	350	1 hr					
7722-76-1	ammonium dihydrogen phosphate		0.1	annual					
16919-31-6	ammonium hexafluorozirconate		0.1	annual					
1336-21-6	ammonium hydroxide	39	720	1 hr					
12054-85-2	ammonium molybdate		5	8 hr					
61790-53-2	amorphous silica - diatomaceous earth	28	60	8 hr					
60676-86-0	amorphous silica - fused silica	28	60	8 hr					
112926-00-8	amorphous silica - precipitated silica and silica gel	28	60	8 hr					
112945-52-5	amorphous silica - pyrogenic or fumed silica	28	60	8 hr					
69012-64-2	amorphous silica - silica fume	28	60	8 hr					
	<i>None</i> amyl acetate (mixture)		1100	annual					
71-41-0	amyl alcohol		120	annual					
110-58-7	amylamine		1	annual					
513-35-9	amylene		106	annual					
63-05-8	androstenedione		17	annual					
63937-30-4	anhydro-dimethylamino hexose reductone		0.6	annual					
62-53-3	aniline		1	annual	76	8 hr	0.6	6	annual
120-12-7	anthracene		1000	annual					
7440-36-0	antimony		0.2	annual					
28300-74-5	antimony potassium tartrate		5	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
10025-91-9	antimony trichloride		5	8 hr					
1309-64-4	antimony trioxide		0.2	annual					
1345-04-6	antimony trisulfide		0.2	annual					
68477-31-6	aromatic petroleum derivative solvent		13	annual					
7440-38-2	arsenic						0.0002	0.002	annual
7784-42-1	arsine		0.05	annual					
1332-21-4	asbestos	16					0.000022	0.00022	annual
8052-42-4	asphalt fumes	5							annual
136816-75-6	atevirdane mesylate		16	annual					
	<i>None</i> atlox 848		0.1	annual					
103-33-3	azobenzene						0.03	0.3	annual
9001-92-7	bacillus subtilis neutral protease	4	0.02	1 hr					
7440-39-3	barium and soluble barium compounds	35	5	8 hr					
13701-59-2	barium metaborate monohydrate		0.1	annual					
7727-43-7	barium sulfate		50	8 hr					
25973-55-1	bdtp		5.3	annual					
56-55-3	benz(a)anthracene	5							annual
100-52-7	benzaldehyde						0.4	4	annual
71-43-2	benzene		30	annual	30	24 hr	0.1	1	annual
91-01-0	benzhydrol		16	annual					
92-87-5	benzidine						0.00002	0.0002	annual
50-32-8	benzo(a)pyrene	5	0.002	24 hr			0.001	0.01	annual
205-99-2	Benzo(b)fluoranthene	5							annual
191-24-2	benzo(g,h,i)perylene		13	annual					
205-82-3	benzo(j)fluoranthene	5							annual
207-08-9	Benzo(k)fluoranthene	5							annual
694-87-1	benzocyclobutene		220	annual					
65-85-0	benzoic acid	26							

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
119-53-9	benzoin		32	annual					
119-61-9	benzophenone		100	annual			0.2	2	annual
95-16-9	benzothiazole		1	annual					
100-51-6	benzyl alcohol		5000	annual					
100-44-7	benzyl chloride						0.02	0.2	annual
103-83-3	benzyl dimethylamine		30	annual					
100-46-9	benzylamine		0.1	annual					
100-85-6	benzyltrimethylammonium hydroxide		0.1	annual					
7440-41-7	beryllium		0.02	24 hr			0.0004	0.004	annual
64-04-0	beta phenylethylamine		0.1	annual					
126-99-8	beta-chloroprene		20	annual			0.002	0.02	annual
981-34-0	betamethasone 11		17	annual					
<i>None</i>	biosam tp-1.5	4	0.02	1 hr					
92-52-4	biphenyl		13	8 hr			0.43	4.3	annual
3033-62-3	bis (2-dimethylaminoethyl) ether		0.3	annual					
108-60-1	bis(2-chloroisopropyl)ether		140	annual					
102054-10-4	bis(2-methoxy-1-methylethy		6	annual					
6864-37-5	bis(4-amino-3-methylcyclohexyl)methane		2	annual					
542-88-1	bis(chloromethyl)ether						0.000016	0.00016	annual
13528-93-3	bis(me2clsilyl)ethane		0.1	annual					
41556-26-7	bis(pentamethylpiperdiny)sebacate		0.1	annual					
111-44-4	bis-2-chloroethylether						0.003	0.03	annual
60966-36-1	bisnoralcohol		17	annual					
25068-38-6	bisphenol a/epichlorohydrin resin	26							
25085-99-8	bisphenol epoxy resin		0.1	annual					
2467-02-9	bisphenol f		0.1	annual					
10097-09-3	bis-urea accelerator		0.1	annual					
10043-35-3	boric acid	40	460	1 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
1303-86-2	boron oxide		520	1 hr					
7637-07-2	boron trifluoride		0.7	24 hr					
68515-44-6	branched and linear diheptyl phthalate ester		0.1	annual					
111381-89-6	branched and linear heptyl nonyl phthalate ester		0.1	annual					
7726-95-6	bromine		7	8 hr					
108-86-1	bromobenzene		60	annual					
75-27-4	bromodichloromethane						0.06	0.6	annual
75-25-2	bromoform						0.9	9	annual
56741-95-8	bropirimine		15	annual					
69102-90-5	butadiene homopolymer		0.1	annual					
106-97-8	butane	22	23800	8 hr					
25882-44-4	Butanedioic acid, sulfo-, 1-ester with N-(2-hydroxyethyl)		0.1	annual					
4435-53-4	butoxyl		14	annual					
141-32-2	butyl acrylate		100	8 hr					
85-68-7	butyl benzyl phthalate		700	annual					
592-84-7	butyl formate		0.1	annual					
143-29-3	butylcarbitol formal		0.1	annual					
102-79-4	butyldiethanolamine		14	annual					
123-72-8	butyraldehyde		7	annual					
107-92-6	butyric acid		10	annual					
6408-78-2	C.I. acid blue 25		0.1	annual					
108419-35-8	c11-14 branched alkyl acetates		300	annual					
78330-21-9	c11-c14 isoalcohols, c14 rich, ethoxylated alcohol		8	annual					
70914-20-4	c6-8 branched alcohols		13	annual					
7440-43-9	cadmium						0.0006	0.006	annual

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
<i>None</i>	calcium chloride		0.1	annual					
7789-82-4	calcium molybdate		5	8 hr					
79-92-5	camphene		80	annual					
105-60-2	caprolactam		10	8 hr					
86-74-8	carbazole						0.4	4	annual
1333-86-4	carbon black		30	8 hr					
75-15-0	carbon disulfide		700	annual					
56-23-5	carbon tetrachloride		480	annual			0.17	1.7	annual
353-50-4	carbonyl fluoride		54	8 hr					
463-58-1	carbonyl sulfide		9	annual					
9004-32-4	carboxymethyl cellulose		300	annual					
13466-78-9	carene, delta	18	1120	8 hr					
8001-79-4	castor oil		50	8 hr					
103980-44-5	ceftiofur hydrochloride		166	annual					
7440-45-1	cerium		6	annual					
1306-38-3	cerium oxide		0.9	annual					
123-03-5	cetylpyridinium chloride		1.8	annual					
6004-24-6	cetylpyridinium chloride monohydrate		1.8	annual					
57-74-9	chlordane (technical)		0.7	annual			0.01	0.1	annual
12789-03-6	chlordane (technical)		0.7	annual			0.01	0.1	annual
63449-39-8	chlorinated paraffins						0.03	0.3	annual
7782-50-5	chlorine	13	0.3	annual	500	8 hr			
10049-04-4	chlorine dioxide		0.2	24 hr					
302-22-7	chlormadinone acetate		0.1	annual					
79-11-8	chloroacetic acid		20	8 hr					
108-90-7	chlorobenzene		50	annual	4400	8 hr			
74-97-5	chlorobromomethane		10600	8 hr					
57-15-8	chlorobutanol		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
124-48-1	chlorodibromomethane		70	annual			0.042	0.42	annual
75-45-6	chlorodifluoromethane		50000	annual					
668-45-1	chlorofluorobenzonitrile		0.1	annual					
67-66-3	chloroform						0.4	4	annual
2921-88-2	chlorpyrifos		1	annual	1	8 hr			
7440-47-3	chromium	17							
1308-14-1	chromium (+3) hydroxide		0.5	annual					
1308-38-9	chromium 3 oxide		0.5	annual					
18540-29-9	chromium, hexavalent - mist		0.008	annual			0.000083	0.00083	annual
18540-29-9	chromium, hexavalent - particulate		0.1	annual			0.000083	0.00083	annual
16065-83-1	Chromium, trivalent		5	8 hr					
218-01-9	chrysene	5							annual
18300-89-5	cinnamate		0.1	annual					
156-59-2	cis-1,2-dichloroethylene		18	annual					
627-20-3	cis-2-pentene		0.1	annual					
64741-62-4	clarified oils (petroleum), catalytic cracked		12	annual					
24729-96-2	clindamycin phosphate		6	annual					
1702-17-6	clopyralid		500	annual					
136-52-7	cobalt 2-ethylhexanoate	42	0.2	8 hr			0.00013	0.0013	annual
7440-48-4	cobalt and cobalt compounds that release cobalt ions	42	0.2	8 hr			0.00013	0.0013	annual
27253-31-2	cobalt neodecanoate		1.4	8 hr					
61789-52-4	cobalt tallate		6	annual					
61788-93-0	coco alkyldimethyl amines		0.1	annual					
8007-45-2	coke oven emissions						0.001	0.01	annual
8050-09-7	colophony		1	1 hr					
7440-50-8	copper		2	8 hr					
1317-38-0	Copper oxide								



## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
147-14-8	copper phthalocyanine		21	annual					
7758-99-8	copper sulfate pentahydrate		10	8 hr					
7758-98-7	copper sulfate, anhydrous		10	8 hr					
68132-02-5	coumarone indene resin		0.1	annual					
1319-77-3	cresol (mixed isomers)	30	100	8 hr					
64265-57-2	crosslinker cx100		10	annual					
4170-30-3	crotonaldehyde		9	1 hr					
98-82-8	cumene		400	annual			0.1	1	annual
80-15-9	cumene hydroperoxide		6	annual					
142-71-2	cupric acetate		2	8 hr					
57-12-5	cyanide	13	0.8	annual	50	1 hr			
461-58-5	cyanoguanidine		0.1	annual					
2370-88-9	cyclic methylhydrogensiloxane, d4		0.1	annual					
6166-86-5	cyclic methylhydrogensiloxane, d5		0.1	annual					
2374-14-3	cyclic methyltrifluoropropylsiloxane, d3		0.6	annual					
110-82-7	cyclohexane		6000	24 hr					
108-94-1	cyclohexanone		800	8 hr					
12262-58-7	cyclohexanone peroxide		0.1	annual					
110-83-8	cyclohexene		10000	8 hr					
110-83-8	cyclohexene		10000	8 hr					
6975-71-9	cyclohexenylacetonitrile		3.5	annual					
3399-73-3	cyclohexenylethylamine		0.1	annual					
1122-82-3	cyclohexyl isothiocyanate		0.1	annual					
827-52-1	cyclohexylbenzene		0.1	annual					
287-92-3	cyclopentane		17200	8 hr					
142-29-0	cyclopentene		5	annual					
2406-33-9	cyclopentylchlorosilane		0.1	annual					
14579-03-4	cyclopentyltrichlorosilane		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
147-94-4	cytarabine		0.1	annual					
72-54-8	DDD (TDE)	12					0.01	0.1	annual
72-55-9	DDE, p,p'-	12					0.01	0.1	annual
50-29-3	ddt	12					0.01	0.1	annual
1163-19-5	decabromodiphenyl oxide		25	24 hr			5	50	annual
91-17-8	decahydronaphthalene						0.03	0.3	annual
541-02-6	decamethylcyclopentasiloxane		200	annual					
141-62-8	decamethyltetrasiloxane		0.1	annual					
8020-83-5	deodorized kerosene	1	24	annual					
64742-65-0	dewaxed heavy paraffinic mineral oil	11	50	8 hr					
6700-34-1	dextromethorphan hydrochloride		0.4	annual					
103-23-1	di (2-ethylhexyl) adipate						3	30	annual
123-42-2	diacetone alcohol		2375	8 hr					
131-17-9	diallyl phthalate						0.1	1	annual
7783-28-0	diammonium hydrogen phosphate		0.1	annual					
2050-92-2	diamylamine		9	annual					
95481-62-2	dibasic ester	27	1	annual					
53-70-3	dibenz(a,h)anthracene	5							annual
192-65-4	dibenzo(a,e)pyrene	5							annual
189-64-0	dibenzo(a,h)pyrene	5							annual
189-55-9	dibenzo(a,i)pyrene	5							annual
191-30-0	dibenzo(a,l)pyrene	5							annual
132-64-9	dibenzofuran		40	annual					
96-12-8	dibromochloropropane		0.2	24 hr			0.0001	0.001	annual
142-96-1	dibutyl ether		33	annual					
107-66-4	dibutyl phosphate		50	8 hr					
84-74-2	dibutyl phthalate		50	8 hr					
77-58-7	dibutyl tin dilaurate		5	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
111-92-2	dibutylamine		23	annual					
79-43-6	Dichloroacetic acid		0.5	annual			0.07	0.7	annual
91-94-1	dichlorobenzidine						0.002	0.02	annual
75-71-8	dichlorodifluoromethane		330	annual	49500	8 hr			
4109-96-0	dichlorosilane	36	28	annual	2900	1 hr			
76-14-2	dichlorotetrafluoroethane		69000	8 hr					
62-73-7	dichlorvos	3	0.5	annual					
80-43-3	dicumyl peroxide		0.1	annual					
77-73-6	dicyclopentadiene		1	annual					
139147-73-2	dicyclopentylidichlorosilane		0.1	annual					
60-57-1	dieldrin						0.0002	0.002	annual
68334-30-5	diesel fuel		70	annual					
111-42-2	diethanolamine		5	24 hr					
105-58-8	diethyl carbonate		5000	24 hr					
117-81-7	diethyl hexyl phthalate		70	annual			0.61	6.1	annual
84-66-2	diethyl phthalate		2800	annual					
64-67-5	diethyl sulfate		1	annual					
109-89-7	diethylamine		150	8 hr					
25340-17-4	diethylbenzene mixture		6	annual					
111-46-6	diethylene glycol		1600	annual					
1559-36-0	diethylene glycol mono-2-ethylhexyl ether		22	annual					
112-34-5	diethylene glycol monobutyl ether		1	annual					
124-17-4	diethylene glycol monobutyl ether acetate		1	annual					
111-90-0	diethylene glycol monoethyl ether		1750	annual					
112-15-2	diethylene glycol monoethyl ether acetate	10	18	annual					
111-77-3	diethylene glycol monomethyl ether		190	24 hr					
104-68-7	diethylene glycol monophenyl ether		7	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
111-40-0	diethylene triamine		42	8 hr					
68610-11-7	diethylenetriamine reaction product with bisphenol a		0.1	annual					
105-53-3	diethylmalonate		50	annual					
2238-07-5	diglycidyl ether		0.5	8 hr					
25036-25-3	diglycidyl ether of bisphenol a		0.1	annual					
26142-30-3	diglycidyl ether of polyglycol		0.1	annual					
108-83-8	diisobutyl ketone		1500	8 hr					
107-39-1	diisobutylene		0.1	annual					
26761-40-0	diisodecyl ester phthalate		30	annual					
29733-18-4	diisodecyl glutarate		0.1	annual					
71888-89-6	diisoheptyl phthalate		100	24 hr					
28553-12-0	diisononyl phthalate		75	annual					
110-97-4	diisopropanolamine		4	annual					
108-20-3	diisopropyl ether		360	24 hr					
108-18-9	diisopropylamine		200	8 hr					
96-80-0	diisopropylaminoethanol		4	annual					
68390-56-7	diketene hydrogenated fatty acids		0.1	annual					
624-92-0	dimethyl disulfide		16	annual	1200	24 hr			
127-19-5	dimethyl acetamide		100	annual					
627-93-0	dimethyl adipate	27							
616-38-6	dimethyl carbonate		300	annual					
106-79-6	dimethyl decanedioate		0.1	annual					
115-10-6	dimethyl ether		740	annual	1900	24 hr			
1119-40-0	dimethyl glutarate	27							
756-79-6	dimethyl methyl phosphonate		700	annual					
106-65-0	dimethyl succinate	27							
77-78-1	dimethyl sulfate		0.5	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
25988-97-0	dimethylamine-epichlorohydrin polymer		0.1	annual					
108-16-7	dimethylamino-2-propanol		4	annual					
121-69-7	dimethylaniline						0.085	0.85	annual
1066-35-9	dimethylchlorosilane	36	52	annual	5400	1 hr			
28729-52-4	dimethylcyclopentane		0.1	annual					
75-78-5	dimethyldichlorosilane		1	annual	3700	1 hr			
1112-39-6	dimethyldimethoxysilane		90	annual					
2627-97-6	dimethyldiphenydivinylsiloxane		0.1	annual					
108-01-0	dimethylethanolamine		5.2	annual	220	8 hr			
996-35-0	dimethylisopropylamine		200	annual					
51200-87-4	dimethyloxazolidine		1	annual					
131-11-3	dimethylphthalate		50	8 hr					
1111-74-6	dimethylsilane		30	annual					
75-18-3	dimethylsulfide		7	annual					
67-68-5	dimethylsulfoxide		20	annual					
513-37-1	dimethylvinyl chloride						0.008	0.08	annual
1719-58-0	dimethylvinylchlorosilane		0.1	annual					
534-52-1	dinitro-o-cresol		2	8 hr					
117-84-0	di-n-octyl phthalate		470	annual					
88-85-7	dinoseb		4	annual					
142-84-7	di-n-propylamine		1.5	annual					
838-85-7	diphenyl phosphoric acid		0.1	annual					
144-79-6	diphenylmethylchlorosilane		0.1	annual					
778-25-6	diphenylmethylsilanol		6	annual					
101-84-8	diphenyloxide		70	8 hr					
123-19-3	dipropyl ketone		250	annual					
111109-77-4	dipropylene glycol dimethyl ether		59	annual					
34590-94-8	dipropylene glycol methyl ether		720	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
88917-22-0	dipropylene glycol methyl ether acetate		930	annual					
29911-28-2	dipropylene glycol monobutyl ether		800	24 hr					
29911-27-1	dipropylene glycol monopropyl ether		180	annual					
51730-94-0	dipropylene glycol phenyl ether		0.1	annual					
4444-67-1	di-sec-butylamine		417	annual					
1590-87-0	disilane		0.1	annual					
13597-73-4	disiloxane		0.1	annual					
7558-79-4	disodium hydrogen phosphate		10	annual					
123312-54-9	distearyldimethylammonium bisulfate		0.1	annual					
3843-16-1	distearyldimethylammonium methosulfate		0.1	annual					
64741-89-5	distillates (petroleum) solvent-refined light paraffinic	11	50	8 hr					
64742-30-9	distillates (petroleum), chemically neutralized middle	1	2	annual					
68410-00-4	distillates (petroleum), crude oil		19	annual					
64741-81-7	distillates (petroleum), heavy thermal cracked		15	annual					
64741-82-8	distillates (petroleum), light thermal cracked	24	93	annual					
64741-59-9	distillates, (petroleum), light catalytic cracked	24	93	annual					
68783-24-4	di-tallow alkylamines		0.1	annual					
330-54-1	diuron		7	annual					
98-84-0	dl-alpha phenylethylamine		3	annual					
5989-27-5	d-limonene		6250	annual					
540-97-6	dodecamethylcyclohexasiloxane		400	annual					
63148-57-2	Dow Corning Fluid 1107		30	annual					
35884-42-5	dowanol dpnb		0.1	annual					
170557-43-4	dowanol tmh-deg borate ester		32	annual					
145-73-3	endothall								
106-89-8	epichlorohydrin		1	annual			0.8	8	annual

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
	<i>None</i> epoxy resin solution		6	annual					
50-28-2	estradiol		0.1	annual					
313-06-4	estradiol cypionate		0.1	annual					
141-43-5	ethanolamine		80	8 hr					
61791-28-4	ethoxy, tallow alcohol		0.1	annual					
68439-49-6	ethoxylated c16-18 alcohols		4	annual					
61791-12-6	ethoxylated castor oil	26		annual					
7085-85-0	ethyl 2-cyanoacrylate		10	8 hr					
141-78-6	ethyl acetate		3200	annual					
141-97-9	ethyl acetoacetate		46	annual					
140-88-5	ethyl acrylate		120	annual	200	8 hr			
64-17-5	ethyl alcohol		19000	1 hr					
541-85-5	ethyl amyl ketone		220	annual					
75-00-3	ethyl chloride		10000	24 hr					
105-39-5	ethyl chloroacetate		0.1	annual					
105-56-6	ethyl cyanoacetate		0.1	annual					
60-29-7	ethyl ether		12000	8 hr					
109-94-4	ethyl formate		3000	8 hr					
97-64-3	ethyl lactate		20	annual					
75-08-1	ethyl mercaptan		13	1 hr					
78-10-4	ethyl silicate		850	8 hr					
637-92-3	ethyl tertiary butyl ether		9000	annual					
25550-14-5	ethyl toluene -mixture		0.1	annual					
109-92-2	ethyl vinyl ether		20	annual					
763-69-9	ethyl-3-ethoxypropionate		134	annual					
29823-21-0	ethyl-8-bromooctanoate		0.1	annual					
107-00-6	ethylacetylene		0.1	annual					
75-04-7	ethylamine		92	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
100-41-4	ethylbenzene		1000	24 hr			0.4	4	annual
68987-42-8	ethylenated benzene residues		6	annual					
74-85-1	ethylene		6240	annual					
142-59-6	ethylene bithiocarbamate disodium		1	annual					
96-49-1	ethylene carbonate		30	annual					
107-15-3	ethylene diamine		0.03	annual					
107-21-1	ethylene glycol		4700	1 hr					
112-48-1	ethylene glycol dibutyl ether		10	annual					
110-71-4	ethylene glycol dimethyl ether		24	24 hr					
1559-35-9	ethylene glycol mono-2-ethylhexyl ether		37	annual					
112-07-2	ethylene glycol monobutyl ether acetate	10	2200	annual					
111-15-9	ethylene glycol monoethyl ether acetate		290	24 hr					
112-25-4	ethylene glycol monohexyl ether		8	annual					
110-49-6	ethylene glycol monomethyl ether acetate		31	24 hr					
122-99-6	ethylene glycol monophenyl ether		8	annual					
2807-30-9	ethylene glycol monopropyl ether		30	annual					
75-21-8	ethylene oxide						0.0002	0.002	annual
96-45-7	ethylene thiourea		0.28	annual			0.01	0.1	annual
64-02-8	ethylenediamine tetra-acetic acid, tetrasodium salt		0.1	annual					
9004-58-4	ethylhydroxyethyl cellulose	26							
68037-77-4	ethylmethylsiloxane, 2-phenylpropylmethylsiloxane copolymer		0.1	annual					
78-07-9	ethyltriethoxysilane		44	annual					
5314-55-6	ethyltrimethoxysilane		3	annual					
7525-62-4	ethylvinyl benzene		0.1	annual					
64742-06-9	extracts (petroleum), middle distillate solvent		2	annual					
108419-34-7	exxate 1000		17	annual					



## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
108419-33-6	exxate 900		17	annual					
68459-31-4	fatty acids c9-11 branched glycidyl esters polymer		0.1	annual					
136797-56-3	FC-247								
24510-87-0	flumethasone 5		0.1	annual					
2476-74-6	flumethasone 6		0.1	annual					
98967-40-9	flumetsulam		26	annual					
206-44-0	fluoranthene		140	annual					
86-73-7	fluorene		140	annual					
69991-67-9	fomblin perfluoropolyether		0.1	annual					
50-00-0	formaldehyde		30	24 hr			0.08	0.8	annual
75-12-7	formamide		600	annual			0.2	2	annual
64-18-6	formic acid		2	annual					
110-00-9	furan		4	annual			0.0002	0.002	annual
98-01-1	furfural						0.06	0.6	annual
98-00-0	furfuryl alcohol		5	annual			0.09	0.9	annual
96-48-0	gamma-butyrolactone		280	24 hr					
8006-61-9	gasoline						2	20	annual
1310-53-8	germanium dioxide		7	annual					
7782-65-2	germanium tetrahydride		6	8 hr					
111-30-8	glutaraldehyde	13	0.08	annual	2	1 hr			
56-81-5	glycerol		100	8 hr					
106-91-2	glycidyl methacrylate	13	0.8	annual	16	24 hr			
93-14-1	guaifenesin		5	annual					
64741-65-7	heavy alkylate naphtha	1	3500	8 hr					
64742-94-5	heavy aromatic solvent naphtha	1	70	annual					
64741-68-0	heavy catalytic reformed naphtha		70	annual					
68551-17-7	heavy naphtha	1	3500	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
76-44-8	heptachlor						0.0008	0.008	annual
	<i>None</i> heptamethyl-1-vinyl-1,7-dichlorotetrasilazane		0.1	annual					
1873-88-7	heptamethyltrisiloxane		0.1	annual					
142-82-5	heptane		3500	8 hr					
118-74-1	hexachlorobenzene		0.35	24 hr			0.0022	0.022	annual
87-68-3	hexachlorobutadiene						0.05	0.5	annual
77-47-4	hexachlorocyclopentadiene		0.2	annual					
13465-77-5	hexachlorodisilane		0.1	annual					
67-72-1	hexachloroethane	13	30	annual	1600	8 hr	0.1	1	annual
12021-95-3	hexafluorozirconium acid		0.1	annual					
1009-93-4	hexamethylcyclotrisilazane		0.1	annual					
541-05-9	hexamethylcyclotrisiloxane		50	annual					
999-97-3	hexamethyldisilazane		206	annual					
107-46-0	hexamethyldisiloxane		240	annual					
822-06-0	hexamethylene diisocyanate		0.2	annual	0.3	8 hr			
100-97-0	hexamethylenetetramine		100	annual					
66-25-1	hexanaldehyde		2	annual					
69696-98-6	hexane 1,6-bis(tributyl ammonium bromi		0.1	annual					
144669-03-4	hexenylsiloxane		16	annual					
144669-04-5	hexenylsiloxanes		16	annual					
107-41-5	hexylene glycol		1210	1 hr					
431-89-0	hfc-227ea	13	130000	annual	5560000	1 hr			
68410-97-9	high benzene naphtha hydrotreated c6-c8 fraction		30	annual	30	24 hr	0.1	1	annual
68037-88-7	high molecular weight sili		0.1	annual					
63148-62-9	high molecular wt. silicon		2	annual					
68037-58-1	high molecular wt. silicon		0.1	annual					
68083-19-2	high molecular wt. silicon		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
68918-22-9	high molecular wt. silicon		0.1	annual					
69430-24-6	high molecular wt. silicon		30	annual					
70131-67-8	high molecular wt. silicon		0.1	annual					
302-01-2	hydrazine						0.0002	0.002	annual
10034-93-2	hydrazine sulfate						0.0008	0.008	annual
68956-56-9	hydrocarbons, terpene processing by-products		0.1	annual					
50-03-3	hydrocortisone acetate		15	annual					
64742-81-0	hydrodesulfurized kerosene		4	annual					
64742-80-9	hydrodesulfurized middle distillate		2	annual					
10035-10-6	hydrogen bromide		70	1 hr					
7647-01-0	hydrogen chloride	13	20	annual	2100	1 hr			
7664-39-3	hydrogen fluoride	13	14	annual	240	1 hr			
7722-84-1	hydrogen peroxide		14	8 hr					
7783-06-4	hydrogen sulfide		10	annual	100	24 hr			
123-31-9	hydroquinone		140	annual			0.058	0.58	annual
64742-48-9	hydrotreated heavy napht	1	3500	8 hr					
64742-52-5	hydrotreated heavy naphthenic distillate	11	50	8 hr					
64742-54-7	hydrotreated heavy paraffinic mineral oil	11	50	8 hr					
64742-47-8	hydrotreated light distillate		24	annual					
64742-49-0	hydrotreated light naphtha	1	3500	8 hr					
64742-53-6	hydrotreated light naphthenic distillate	11	50	8 hr					
64742-55-8	hydrotreated light paraffinic distillate	11	50	8 hr					
64742-46-7	hydrotreated middle distillate	11	50	8 hr					
79-14-1	hydroxyacetic acid/ glycolic acid		4	annual					
818-61-1	hydroxyethyl acrylate		1	annual					
34375-28-5	hydroxymethylamino ethanol		0.1	annual					
10096-91-0	hydroxyphenylbenzotriazole		0.1	annual					
25584-83-2	hydroxypropyl acrylate		28	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
9016-45-9	igepal co-630		18	annual					
193-39-5	Indeno(1,2,3-cd)pyrene	5							
7553-56-2	iodine		1	8 hr					
15321-61-6	iron oxalate		0.1	annual					
123-92-2	isoamyl acetate		2700	8 hr	5300	1 hr			
123-51-3	isoamyl alcohol		360	8 hr					
5888-33-5	iso-bornyl acrylate		14	annual					
75-28-5	isobutane	22	23800	8 hr					
110-19-0	isobutyl acetate	15	2400	8 hr					
78-83-1	isobutyl alcohol		1500	8 hr					
97-85-8	isobutyl isobutyrate		300	annual					
97-86-9	isobutyl methacrylate		600	annual					
115-11-7	isobutylene		110000	annual					
18395-30-7	isobutyltrimethoxysilane		200	annual					
78-84-2	isobutyraldehyde		160	annual					
79-31-2	isobutyric acid		0.9	annual					
338-98-7	isoflupredone acetate		0.01	annual					
26952-21-6	isooctanol		2700	8 hr					
90622-57-4	isopar h		128	annual					
78-59-1	isophorone		280	1 hr			3.7	37	annual
4098-71-9	isophorone diisocyanate		0.45	8 hr					
53880-05-0	isophorone diisocyanate polymer		0.1	annual					
78-79-5	isoprene						0.02	0.2	annual
108-21-4	isopropyl acetate		4200	8 hr					
67-63-0	isopropyl alcohol		220	annual					
75-31-0	isopropylamine		120	8 hr					
121-93-7	isopropyldiethanolamine		0.1	annual					
109-56-8	isopropylethanolamine		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
590-86-3	isovaleraldehyde		800	annual					
1332-58-7	kaolin		20	8 hr					
50-21-5	lactic acid		7	annual					
2627-86-3	L-alpha-phenylethylamine		0.1	annual					
39464-66-9	lauryl alcohol, phosphated		20	annual					
64741-66-8	light alkylate naphtha		138	annual					
64742-95-6	light aromatic solvent naphtha (petroleum)	1	100	annual					
859-18-7	lincomycin hydrochloride		75	annual					
141-63-9	linear dimethylsiloxanes,MD3M(&higher)		0.1	annual					
68083-20-5	linear methylvinylsiloxane ppolymer hydroxyl endblock		0.1	annual					
67762-41-8	linear primary alcohol		0.1	annual					
7439-93-2	lithium		35	24 hr					
21324-40-3	lithium hexafluorophosphate		0.1	annual					
1310-66-3	lithium hydroxide		0.25	8 hr					
1345-05-7	lithopone		0.1	annual					
66071-86-1	LV 837/821		0.1	annual					
7439-95-4	magnesium	38	100	8 hr					
546-93-0	magnesium carbonate		50	8 hr					
7786-30-3	magnesium chloride		5	annual					
1309-42-8	magnesium hydroxide	38	100	8 hr					
10377-60-3	magnesium nitrate	38							
1309-48-4	magnesium oxide	38	100	8 hr					
557-04-0	magnesium stearate		100	8 hr					
110-16-7	maleic acid		0.1	annual					
108-31-6	maleic anhydride		0.1	8 hr					
6915-15-7	malic acid		5	annual					
591-27-5	m-aminophenol		390	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
15956-58-8	manganese 2-ethylhexanoate	29							
7439-96-5	manganese and manganese compounds	29	0.3	annual					
10034-96-5	manganese sulfate monohydrate	29							
26544-20-7	mcpa 2-ehe (2-methyl-4-chlorophenoxyacetic acid 2-ethylhexyl ester)		90	annual					
644-62-2	meclofenamic acid		0.1	annual					
108-78-1	melamine						1.5	15	annual
2919-66-6	melengesterol acetate		2	annual					
7439-97-6	mercury and mercury compounds	7	0.3	annual	1	24 hr			
141-79-7	mesityl oxide		400	8 hr					
79-41-4	methacrylic acid		30	annual					
75-75-2	methane sulfonic acid		1.4	annual					
3144-09-0	methanesulfonamide		44	annual					
67-56-1	methanol		20000	24 hr	28000	1 hr			
79-20-9	methyl acetate		6100	8 hr					
74-99-7	methyl acetylene		16500	8 hr					
96-33-3	methyl acrylate		70	annual					
108-11-2	methyl amyl alcohol		1000	8 hr					
93-58-3	methyl benzoate		4	annual					
74-83-9	methyl bromide		5	annual					
115-19-5	methyl butynol		6.5	annual					
74-87-3	methyl chloride	21	90	annual					
71-55-6	methyl chloroform		6000	24 hr					
17639-93-9	methyl chloropropionate		6	annual					
78-93-3	methyl ethyl ketone		5000	24 hr					
1338-23-4	methyl ethyl ketone peroxide		15	1 hr					
107-31-3	methyl formate		1250	8 hr					
60-34-4	methyl hydrazine		0.03	annual			0.0087	0.087	annual

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
74-88-4	methyl iodide		120	8 hr					
110-12-3	methyl isoamy ketone		2300	8 hr					
108-10-1	methyl isobutyl ketone		820	8 hr					
624-83-9	methyl isocyanate		1	annual					
74-93-1	methyl mercaptan		10	1 hr					
80-62-6	methyl methacrylate		700	annual					
1184-85-6	methyl methane sulfonamide		0.1	annual					
110-43-0	methyl n-amyl ketone		2330	8 hr					
591-78-6	methyl n-butyl ketone		30	annual					
9003-11-6	methyl oxirane (pluronic p103)		0.1	annual					
82919-37-7	methyl pentamethyl-4-piperidinyl ester of decanedioic acid		0.1	annual					
53-36-1	methyl predisolone acetate		43	annual					
107-87-9	methyl propyl ketone		5300	8 hr					
124-63-0	methyl sulfonyl chloride		2	annual					
1634-04-4	methyl t-butyl ether		3000	annual					
74-89-5	methylamine		64	8 hr					
593-51-1	methylamine hydrochloride		140	8 hr					
108-87-2	methylcyclohexane		16000	8 hr					
96-37-7	methylcyclopentane		700	24 hr					
75-54-7	methyldichlorosilane		4	annual					
105-59-9	methyldiethanolamine		6	annual					
16881-77-9	methyldimethoxysilane		92	annual					
75-09-2	methylene chloride	13	2000	annual	14000	1 hr	60	600	annual
101-68-8	methylene diphenyl diisocyanate		0.6	annual					
96-29-7	methylethylketoxime						2.5	25	annual
992-94-9	methylsilane		30	24 hr					
4253-34-3	methyltriacetoxysilane		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
75-79-6	methyltrichlorosilane		109	annual					
2031-67-6	methyltriethoxysilane		23	annual					
50791-87-2	methylvinylbis(N-methylace		4	annual					
124-70-9	methylvinylidichlorosilane		6	annual					
16753-62-1	methylvinyl dimethoxysilane		100	annual					
8012-95-1	mineral oil	11	50	8 hr					
64475-85-0	mineral spirits	1	3500	8 hr					
1330-20-7	mixed xylenes	2	390	annual					
7439-98-7	molybdenum		30	8 hr					
18868-43-4	molybdenum dioxide		30	8 hr					
1317-33-5	molybdenum disulfide		30	8 hr					
1313-27-5	molybdenum trioxide		5	8 hr			0.12	1.2	annual
46438-39-5	monobutyl monophenyl phosphoric acid		0.1	annual					
1623-15-0	monobutyl phosphoric acid		15	annual					
95-49-8	monochlorotoluene		70	annual					
78-96-6	monoisopropanolamine		15	annual					
701-64-4	monophenyl phosphoric acid		3	annual					
28729-54-6	m-propyl toluene		0.1	annual					
620-23-5	m-tolualdehyde	20	440	annual					
98-17-9	m-trifluoromethylphenol		0.08	annual					
108-38-3	m-xylene	2	390	annual					
126803-73-4	n-(2,6-dichloro-3-methylphenyl)-5,7-dimethoxy(1,2,4)triazolo...		0.1	annual					
113171-12-3	n-(2,6-difluorophenyl)-5-amino-1h-1,2,4-triazole-3-sulfonamide		0.1	annual					
98967-55-6	n-(2,6-difluorophenyl)-7-methyl-1h-1,2,4-triazolo(1,5a)pyrimidine-2-su		0.1	annual					
1760-24-3	n-(3-(trimethoxysilyl)propyl)-ethylenediamine		8	annual					
104-78-9	n,n-diethyl-1,3-propanediamine		140	annual					



## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
606-46-2	n,n-diethyl-o-toluine		0.1	annual					
613-48-9	n,n-diethyl-p-toludine		0.1	annual					
124-28-7	N,N-dimethyl octadecylamine		0.1	annual					
80-73-9	n,n'-dimethylethyleneurea		0.1	annual					
68-12-2	N,N-dimethylformamide		30	annual					
99-97-8	n,n-dimethyl-p-toluidine		28	annual					
110-30-5	n,n'-ethylene bis-octadecanamide		0.1	annual					
628-63-7	n-amyl acetate		1100	annual					
8030-30-6	naphtha	1	4000	8 hr					
64742-82-1	naphtha (petroleum) hydrodesulfurized heavy		14	annual					
64741-55-5	naphtha (petroleum), light catalytic cracked	25	5600	annual					
64741-41-9	naphtha heavy straight run	1	3500	8 hr					
68955-35-1	naphtha, catalytic reformed		350	annual					
64741-64-6	naphtha, full range alkylate	1	3500	8 hr					
64741-42-0	naphtha, full range straight run		18	annual					
64741-54-4	naphtha, heavy catalytic cracked		115	annual					
64741-83-9	naphtha, heavy thermal cracked	25	5600	24 hr					
64741-63-5	naphtha, light catalytic reformed		100	annual					
91-20-3	naphthalene		3	annual	520	8 hr	0.08	0.8	annual
71-36-3	n-butanol		350	annual					
63716-40-5	n-butoxy propanol (mixed isomers)	23	77	annual					
123-86-4	n-butyl acetate	15	2400	8 hr					
109-69-3	n-butyl chloride		1500	annual					
2426-08-6	n-butyl glycidyl ether		300	1 hr	160	8 hr			
97-88-1	n-butyl methacrylate		569	annual					
590-01-2	n-butyl propionate		102	annual					
104-51-8	n-butylbenzene		30	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
	<i>None</i> n-butylglucamine		6.4	annual					
	<i>None</i> n-chloro-2,6-difluorobenzamide		0.1	annual					
112-55-0	n-dodecyl mercaptan		8	8 hr					
126-30-7	neopentyl glycol		0.1	annual					
17557-23-2	neopentyl glycol diglycidyl ether		0.1	annual					
112-06-1	n-heptyl acetate		16	annual					
110-54-3	n-hexane		700	annual					
7440-02-0	nickel						0.006	0.06	annual
1313-99-1	Nickel Oxide						0.006	0.06	annual
12035-72-2	nickel subsulfide						0.0021	0.021	annual
7786-81-4	Nickel Sulfate						0.006	0.06	annual
21348-59-4	niobium oxalate		0.1	annual					
1313-96-8	niobium oxide		0.1	annual					
7697-37-2	nitric acid		50	8 hr					
15245-12-2	nitric acid, ammonium calcium salt		0.1	annual					
98-95-3	nitrobenzene		9	annual			0.025	0.25	annual
79-24-3	nitroethane		60	annual					
7783-54-2	nitrogen trifluoride		290	8 hr					
75-52-5	nitromethane		70	annual			0.1	1	annual
107-68-6	n-methyl taurine		17	annual					
626-67-5	n-methylpiperidine		8	annual					
872-50-4	N-methylpyrrolidone		5600	24 hr					
836-30-6	n-nitrodiphenylamine		1	annual					
1116-54-7	n-nitrosodiethanolamine						0.0012	0.012	annual
62-75-9	n-nitrosodimethylamine						0.00007	0.0007	annual
621-64-7	n-nitroso-di-n-propylamine						0.0005	0.005	annual
684-93-5	n-nitroso-n-methylurea						0.000001	0.00001	annual
111-84-2	n-nonane		550	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
25154-52-3	nonyl phenol (mixed isomers)		30	24 hr					
64771-72-8	norpar 12		0.1	annual					
303-81-1	novobiocin		40	annual					
624-54-4	n-pentyl propionate		21	annual					
109-60-4	n-propyl acetate		8350	8 hr					
71-23-8	n-propyl alcohol		2500	8 hr					
16369-21-4	n-propylethanolamine		28	annual					
103-99-1	N-stearoyl-4-aminophenol		0.1	annual					
88-12-0	n-vinylpyrrolidinone						0.04	0.4	annual
68309-52-4	Nylen 5		0.1	annual					
134-29-2	o-ansidine hydrochloride						0.04	0.4	annual
88-65-3	o-bromobenzoic acid		0.1	annual					
118-91-2	o-chlorobenzoic acid		0.1	annual					
95-48-7	o-cresol	30	100	8 hr					
124-26-5	octadecanamide		0.1	annual					
627-83-8	octadecanoic acid, 1,2-ethanediyl ester		0.1	annual					
27668-52-6	octadecyldimethyl (3-(trimethoxysilyl)propyl) ammonium chloride		170	annual					
556-67-2	octamethylcyclotetrasiloxane		75	annual					
107-51-7	octamethyltrisiloxane		0.1	annual					
124-07-2	octanoic acid		33	annual					
108419-32-5	octyl acetate		78	annual					
26530-20-1	octylisothiazolone		2	annual					
68990-79-4	oils, vegetable, mixed with animal oil methylesters, polymerized, oxidized		0.1	annual					
112-80-1	oleic acid		242	annual					
93-83-4	oleoyl diethanolamine		3	annual					
8014-95-7	oleum	9,13	1	annual	120	1 hr			

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
90-43-7	o-phenylphenol						1.1	11	annual
95-53-4	o-toluidine						0.07	0.7	annual
19666-30-9	oxadiazon						0.05	0.5	annual
144-62-7	oxalic acid		10	8 hr					
9063-06-3	oxirane, methyl-, polymer with oxirane, monomethyl ether		0.1	annual					
90438-79-2	oxo-heptyl acetate		41	annual					
88230-35-7	oxo-hexyl acetate		81	annual					
95-47-6	o-xylene	2	390	annual					
95-38-5	oyel hydroxyethylimidazoline		2	annual					
7440-05-3	palladium		0.1	annual					
8002-74-2	paraffin wax fume		20	8 hr					
68410-99-1	paroil 45						0.03	0.3	annual
98-56-6	p-chlorobenzotrifluoride		70	annual					
106-44-5	p-cresol	30	100	8 hr					
82-68-8	pentachloronitrobenzene		11	annual					
87-86-5	pentachlorophenol		20	annual			0.009	0.09	annual
363-72-4	pentafluorobenzene		10	annual					
109-66-0	pentane		17700	8 hr					
70693-62-8	Pentapotassium bis(peroxymonosulphate) bis(sulphate)		35	8 hr					
19430-93-4	perfluorobutylethylene		340	annual					
38436-16-7	perfluorobutylethylmethyldichlorosilane		0.1	annual					
382-21-8	perfluoroisobutylene		0.8	1 hr					
1763-23-1	perfluorooctane sulfonic acid (pfos)	37	0.07	24 hr					
335-67-1	perfluorooctanoic acid (pfoa)	37	0.07	24 hr					
93-59-4	peroxybenzoic acid		0.1	annual					
622-96-8	p-ethyl toluene		350	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
64741-79-3	petroleum coke	26							
64742-14-9	petroleum distillates, acid treated		24	annual					
1194-02-1	p-fluorobenzonitrile		0.5	annual					
85-01-8	phenanthrene		0.1	annual					
10551-21-0	phenethyl alpha picolinium bromide		0.1	annual					
108-95-2	phenol		190	8 hr					
55818-57-0	phenol, 4,4-(1-methylethylidene)bis, polymer with (chloromethyl)oxiran		0.1	annual					
122-79-2	phenyl acetate		0.1	annual					
122-60-1	phenyl glycidyl ether						0.1	1	annual
617-94-7	phenyl isopropanol (2-phenyl-2-propanol)		4	annual					
120-07-0	phenyldiethanolamine		3	annual					
98-13-5	phenyltrichlorosilane		0.1	annual					
2996-92-1	phenyltrimethoxysilane		60	annual					
57-41-0	phenytoin						0.07	0.7	annual
75-44-5	phosgene		0.3	annual					
7803-51-2	phosphine		0.3	annual					
7664-38-2	phosphoric acid		10	annual					
7723-14-0	phosphorus	32	20	24 hr					
85-44-9	phthalic anhydride		20	annual					
1328-53-6	phthalocyanine pigment green		0.1	annual					
26952-20-5	picloram, isooctyl ester		0.1	annual					
80-56-8	pinene, alpha	18	1120	8 hr					
127-91-3	pinene, beta	18	1120	8 hr					
2981-10-4	piperdinocyclohexene		2	annual					
110-89-4	piperidine		140	annual					
61477-94-9	pirmenol hydrochloride		3	annual					
99-87-6	p-isopropyltoluene		10	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
3282-30-2	pivaloyl chloride		8	annual					
7440-06-4	platinum soluble salt		0.02	8 hr					
4221-98-1	p-mentha-1,5-diene		0.1	annual					
9016-87-9	polmeric methylene diphenyl diisocyanate		0.6	annual					
26780-96-1	poly(1,2-dihydro-2,2,4-trimethylquinoline)		35	24 hr					
31726-34-8	poly(oxy-1,2-ethanediyl),alpha-hexyl-omega-hydroxy		0.1	annual					
9003-13-8	polyalkylene glycol monobutyl ether/ butoxypolypropylene glycol		160	annual					
68003-28-1	polyamide		0.1	annual					
1336-36-3	polychlorinated biphenyls	8					0.01	0.1	annual
26062-79-3	polydimethyl diallyl ammonium chloride		1000	annual					
25322-68-3	polyethylene glycol		8	annual					
9004-74-4	polyethylene glycol methyl ether		13	annual					
27274-31-3	polyethylene glycol monoallyl ether		6	annual					
37251-67-5	polyethylene polypropylene glycol		0.1	annual					
35176-78-4	polyethylene terephthalate (uncoated)		0.1	annual					
68410-23-1	polyethylenepolyamine reaction products with c18-unsat. fatty acids		0.1	annual					
69029-39-6	polyglycol 26-2		0.1	annual					
24938-91-8	polyglycol 59-13		8	annual					
9002-92-0	polyoxyethylene lauryl ether		12	annual					
25322-69-4	polypropylene glycol		49	annual					
63148-65-2	polyvinyl butyral		0.1	annual					
9002-86-2	polyvinyl chloride		5	annual					
9003-39-8	polyvinyl pyrrolidone		4	annual					
9003-22-9	polyvinylchloride/polyvinylacetate	26							
24937-79-9	polyvinylidene fluoride		0.1	annual					
9011-17-0	polyvinylidene fluoride		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
7789-23-3	potassium fluoride		76	8 hr					
1310-58-3	potassium hydroxide		20	1 hr					
7758-05-6	potassium iodate		1	annual					
12136-45-7	potassium oxide		0.1	annual					
7722-64-7	potassium permanganate	29	0.6	8 hr					
12037-29-5	praseodymium oxide		0.1	annual					
57-83-0	progesterone		0.1	annual					
3986-89-8	progesterone 4		0.1	annual					
98516-30-4	propanol, 1(or 2) ethoxy, acetate isoparaffinic petroleum hydrocarbon		0.1	annual					
123-38-6	propionaldehyde		8	annual					
79-09-4	propionic acid		300	8 hr					
106-94-5	propyl bromide		32	24 hr			1.1	11	annual
106-36-5	propyl propionate		84	annual					
107-10-8	propylamine		112	annual					
103-65-1	propylbenzene		20	annual					
115-07-1	propylene		8600	8 hr					
108-32-7	propylene carbonate		700	annual					
78-87-5	propylene dichloride		4	annual			0.2	2	annual
19089-47-5	propylene glycol monoethyl ether (alpha)		23	annual					
1569-02-4	propylene glycol monoethyl ether (beta)		240	annual					
52125-53-8	propylene glycol monoethyl ether (mixture)		23	annual					
107-98-2	propylene glycol monomethyl ether		3700	1 hr					
1320-67-8	propylene glycol monomethyl ether		2000	annual					
108-65-6	propylene glycol monomethyl ether acetate		5400	1 hr					
41593-38-8	propylene glycol monophenyl ether		0.1	annual					
5131-66-8	propylene glycol n-butyl ether (alpha isomer)	23	77	annual					
15821-83-7	propylene glycol n-butyl ether (beta isomer)	23	77	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
770-35-4	propylene glycol phenyl ether		8	annual					
57018-52-7	propylene glycol tert-butyl ether						0.7	7	annual
29387-86-8	propylene glycol, n-butyl ether (mixed isomers)	23	77	annual					
75-56-9	propylene oxide		30	annual			0.3	3	annual
1067-25-0	propyltrimethoxysilane		1000	annual					
104-87-0	p-tolualdehyde	20	440	annual					
104-15-4	p-toluenesulfonic acid	9 13	1.8	annual	210	1 hr			
6192-52-5	p-toluenesulfonic acid monohydrate	9 13	1.9	annual	230	1 hr			
106-49-0	p-toluidine		2	annual			0.03	0.3	annual
106-42-3	p-xylene	2	390	annual					
129-00-0	pyrene		100	annual					
110-86-1	pyridine		3.5	annual					
84632-65-5	pyrrolo[3,4-c]pyrrole-1,4-dione,3,6-bis(4-chlorophenyl)-2,5-dihydro		0.1	annual					
1047-16-1	quinacridone pigment		0.1	annual					
82586-54-7	quinapril step 8		2	annual					
91-22-5	quinoline						0.001	0.01	annual
106-51-4	quinone		4.4	8 hr					
64742-62-7	residual oils (petroleum) solvent-dewaxed	11	50	8 hr					
64741-56-6	residues, (petroleum), vacuum		16	annual					
108-46-3	resorcinol	26							
1314-28-9	rhenium oxide		0.1	annual					
90-02-8	salicylaldehyde		30	annual					
106917-31-1	sanduvor 3068 liquid		52	annual					
3081-01-4	santoflex 14		0.1	annual					
105-46-4	sec-butyl acetate	15	2400	8 hr					
78-92-2	sec-butyl alcohol		3000	8 hr					
13952-84-6	sec-butylamine		5	annual					



## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
135-98-8	sec-butylbenzene		6	annual					
13410-01-0	selenic acid	34	2	8 hr					
7783-00-8	selenious acid	34	2	8 hr					
7782-49-2	selenium and inorganic selenium compounds	34	2	8 hr					
7446-08-4	selenium dioxide	34	2	8 hr					
7488-56-4	selenium disulfide	34	2	8 hr					
7446-34-6	selenium sulfide		2	8 hr					
14464-46-1	silica cristobalite	31	3	annual					
14808-60-7	silica quartz	31	3	annual					
15468-32-3	silica tridymite	31	3	annual					
1317-95-9	silica tripoli	31	3	annual					
10026-04-7	silicon tetrachloride		1100	annual					
7783-61-1	silicon tetrafluoride		0.2	annual					
7803-62-5	silicon tetrahydride		30	annual					
67762-90-7	siloxanes and silicones(silica filled polydimethylsiloxane)		0.1	annual					
7440-22-4	silver - soluble		0.1	8 hr					
1302-42-7	sodium aluminate	43							
15096-52-3	sodium aluminum fluoride		270	8 hr					
7631-90-5	sodium bisulfite		50	8 hr					
7647-15-6	sodium bromide		140	annual					
128-04-1	sodium dimethyl dithiocarbamate		0.1	annual					
7681-49-4	sodium fluoride	41	60	8 hr					
13007-85-7	sodium glucoheptonate		0.1	annual					
31138-65-5	sodium glucoheptonate		0.1	annual					
1310-73-2	sodium hydroxide		8	1 hr					
7681-52-9	sodium hypochlorite		16	8 hr					
10039-56-2	sodium hypophosphite monohydrate		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
7681-82-5	sodium iodide		0.1	annual					
14960-06-6	sodium lauriminodipropionate		0.1	annual					
124-41-4	sodium methylate		0.1	annual					
7631-95-0	sodium molybdate		5	8 hr					
12401-86-4	sodium monoxide		0.1	annual					
7632-00-0	sodium nitrite		10	annual					
7632-04-4	sodium perborate	40	610	1 hr					
68608-26-4	sodium petroleum sulfonate		0.1	annual					
10102-18-8	sodium selenite	34	2	8 hr					
16893-85-9	sodium silicofluoride		250	8 hr					
67701-11-5	sodium soap 900602		6	annual					
67701-10-4	sodium soap 903923		6	annual					
7757-83-7	sodium sulfite		0.028	annual					
1300-72-7	sodium xylenesulfonate	26							
109265-71-6	Solsperse 12000		0.1	annual					
86753-78-8	Solsperse 5000		0.1	annual					
68458-91-3	Solvar & LV 820		0.1	annual					
8005-02-5	solvent black		0.1	annual					
64742-96-7	solvent naphtha (petroleum) heavy aliphatic		24	annual					
64742-89-8	solvent naphtha light aliphatic	1	3500	8 hr					
64742-88-7	solvent naphtha medium aliphatic	1	3500	8 hr					
64741-88-4	solvent refined heavy paraffinic distillate	11	50	8 hr					
67784-80-9	soybean oil, methyl esters		16	annual					
68071-85-2	Spengel F34		0.1	annual					
30705-14-7	SR 1153		0.1	annual					
1912-83-0	stannous octoate		3	8 hr					
57-11-4	stearic acid		100	8 hr					
7803-52-3	stibine		5	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
8052-41-3	stoddard solvent	1	3500	8 hr					
64741-44-2	straight run middle distillate		36	annual					
7440-24-6	strontium	26							
100-42-5	styrene		1000	annual			2	20	annual
9003-55-8	styrene-butadiene polymer		0.1	annual					
505-48-6	suberic acid		17	annual					
9014-01-1	subtilisin	4	0.02	1 hr					
110-61-2	succinonitrile		0.8	annual					
5329-14-6	sulfamic acid		5	annual					
7704-34-9	sulfur (elemental)	26							
7446-11-9	sulfur trioxide	9,13	1	annual	120	1 hr			
7664-93-9	sulfuric acid	9,13	1	annual	120	1 hr			
68516-16-5	sulfuric acid c6-10 alkyl esters		0.1	annual					
64741-86-2	sweetened middle distillate	1	2	annual					
14807-96-6	talc						0.8	8	annual
61790-33-8	tallow alkylamines		0.1	annual					
75-65-0	t-butanol		1890	annual					
107-71-1	t-butyl peroxyacetate		0.06	annual					
75-64-9	t-butylamine		60	annual					
4620-70-6	t-butylaminoethanol		5	annual					
98-29-3	t-butylcatechol		9	annual					
2160-93-2	t-butyl-diethanolamine		9	annual					
3006-82-4	t-butylperoxy-2-ethylhexanoate		0.1	annual					
9036-19-5	t-det c08		0.1	annual					
9014-92-0	t-det dd-14		0.1	annual					
68131-40-8	tergitol 15-s-3		290	annual					
540-88-5	tert-butyl acetate	15	2400	8 hr					
98-06-6	tert-butylbenzene		10	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
1333-13-7	tert-butyl-m-cresol		0.1	annual					
994-05-8	tertiary amyl methyl ether		62	24 hr					
2157-45-1	tetra-2-methoxyethoxy-silane		0.1	annual					
136-47-0	tetracaine hydrochloride		0.3	annual					
20536-16-7	tetrachlorodisilane		0.1	annual					
127-18-4	tetrachloroethylene	13	40	annual	1400	24 hr	4	40	annual
10469-09-7	tetrachloropicolinic acid		21	annual					
116-14-3	tetrafluoroethylene						0.4	4	annual
109-99-9	tetrahydrofuran		8000	annual					
97-99-4	tetrahydrofuryl methanol		52	annual					
9014-85-1	tetramethyl decyndiol		0.1	annual					
632-22-4	tetramethyl urea	13	0.8	annual	230	24 hr			
22407-51-8	tetramethylchlorovinyldisiloxane		0.1	annual					
3277-26-7	tetramethyldihydrogendisiloxane		120	annual					
7691-02-3	tetramethyldivinyldisila		30	annual					
2627-95-4	tetramethyldivinyldisiloxane		38	annual					
75-76-3	tetramethylsilane		1300	annual					
509-14-8	tetranitromethane		0.4	8 hr			0.000066	0.00066	annual
3982-82-9	tetraphenyldimethyl-2-dimethyltrisiloxane		0.1	annual					
3390-61-2	tetraphenyldimethyl-2-phenylmethyltrisiloxane		0.1	annual					
807-28-3	tetraphenyldimethyldisiloxane		0.1	annual					
6904-66-1	tetraphenylhexamethyltetrasiloxane		0.1	annual					
25265-77-4	texanol		55	annual					
7440-28-0	thallium and thallium compounds		0.1	annual	0.2	8 hr			
64485-82-1	thiazole ester		17	annual					
137-26-8	thiram		18	annual					
7440-31-5	tin		20	8 hr					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
7440-32-6	Titanium		24	8 hr					
13463-67-7	titanium dioxide		24	8 hr					
1643-19-2	t-n-butyl ammonium bromide		0.1	annual					
1156-19-0	tolazamide		17	annual					
108-88-3	toluene		5000	24 hr					
26471-62-5	toluene diisocyanate	13	0.07	annual	0.4	8 hr			
29385-43-1	tolyltriazole		2.1	annual					
8001-35-2	toxaphene						0.003	0.03	annual
156-60-5	trans-1-2-dichloroethylene		200	annual					
102-76-1	triacetin		20	annual					
28961-43-5	triacrylate ester		0.1	annual					
621-77-2	triamylamine		0.1	annual					
126-73-8	tributyl phosphate		22	8 hr					
102-82-9	tributylamine		7	annual					
<i>None</i>	trichloroethylene		0.1	annual					
79-01-6	trichloroethylene		2	24 hr			0.2	2	annual
75-69-4	trichlorofluoromethane		130	annual	56200	1 hr			
10025-78-2	trichlorosilane		8	annual					
68526-86-3	tridecanol		2	annual					
102-71-6	triethanolamine		50	8 hr					
24801-88-5	triethoxy(3-isocyanatopropyl)silane		0.08	annual					
77-93-0	triethyl citrate		290	annual					
121-44-8	triethylamine		7	annual	21	8 hr			
<i>None</i>	triethylammonium suleptanate		17	annual					
143-22-6	triethylene glycol butyl ether		18	annual					
1559-37-1	triethylene glycol mono-2-ethyhexyl ether		0.1	annual					
112-50-5	triethylene glycol monoethyl ether		100	annual					
112-24-3	triethylene tetramine		8	annual	3700	24 hr			

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
280-57-9	triethylenediamine		6	annual					
76-05-1	trifluoroacetic acid		8	annual					
358-67-8	trifluoropropylmethyl dimethoxysilane		100	annual					
130014-38-9	trifluoropropylsilsesquioxane, dimethylhydrogensilyoxy-terminated		0.1	annual					
592-09-6	trifluoropropyltrichlorosilane		0.1	annual					
126-71-6	triisobutyl phosphate		22	8 hr					
122-20-3	triisopropanolamine (tipa)		19	annual					
121-43-7	trimethoxyborine	40	770	1 hr					
1185-55-3	trimethoxymethylsilane		80	annual					
3236-53-1	trimethyl hexamethylenediamine		0.1	annual					
75-50-3	trimethylamine		120	8 hr					
25551-13-7	trimethylbenzenes (mixed isomers)	14	185	annual	1200	8 hr			
75-77-4	trimethylchlorosilane		6	annual					
1445-45-0	trimethyl-o-acetate		24	annual					
3290-92-4	trimethylolpropane trimethacrylate		20	annual					
149-73-5	trimethylorthoformate		800	annual					
993-07-7	trimethylsilane		340	annual					
1066-40-6	trimethylsilanol		65	annual					
102-69-2	tripropylamine		0.2	annual					
42978-66-5	tripropylene glycol diacrylate		22	annual					
25498-49-1	tripropylene glycol methyl ether		20	annual					
20324-33-8	tripropylene glycol methyl ether, dowanol 62b		10	annual					
55934-93-5	tripropylene glycol n-butyl ether		346	annual					
126-72-7	tris(2,3-dibromopropyl) phosphate						0.002	0.02	annual
9002-93-1	triton x100		0.15	annual					
88851-61-0	trospsectomycin sulfate		0.1	annual					
51811-38-2	tryfac 5556		0.1	annual					

## List of Screening Levels (ITSL, IRSL & SRSL) in Alphabetical Order

CAS No.	Chemical	Note	1° ITSL (µg/m³)	ITSL Avg Time	2° ITSL (µg/m³)	ITSL Avg Time	IRSL (µg/m³)	SRSL (µg/m³)	IRSL Avg Time
12070-12-1	tungsten carbide	6	50	8 hr					
8006-64-2	turpentine	18	1120	8 hr					
110-62-3	valeraldehyde		1760	8 hr					
3153-26-2	vanadium oxide bis (2,4-pentanedionate)		0.1	annual					
1314-62-1	vanadium pentoxide		0.5	1 hr					
108-05-4	vinyl acetate		200	annual					
593-60-2	vinyl bromide	3	30	annual					
75-01-4	vinyl chloride		100	annual			0.11	1.1	annual
5906-75-2	vinyl dimethylsilanol		0.1	annual					
25013-15-4	vinyl toluene		5	annual					
30030-25-2	vinylbenzylchloride		2	annual					
872-36-6	vinylene carbonate		0.1	annual					
75-35-4	vinylidene chloride (1,1-dichloroethylene)		200	annual					
75-38-7	vinylidene fluoride		30	annual					
5507-44-8	vinylmethyldiethoxysilane		0.1	annual					
75-94-5	vinyltrichlorosilane		7	annual					
2768-02-7	vinyltrimethoxysilane		10	annual					
8032-32-4	VM & P naphtha	1	3500	8 hr					
8042-47-5	white mineral oil	11	50	8 hr					
9005-70-3	witconol al 69-66		0.1	annual					
8002-09-3	yarmor pine oil		10	annual					
7440-65-5	yttrium		10	8 hr					
1314-13-2	zinc oxide		20	8 hr					
557-05-1	zinc stearate		50	8 hr					

## Screening Level Footnotes

- 1 The combined ambient impact of all petroleum hydrocarbon materials with Note #1 cannot exceed the ITSL of 3500  $\mu\text{g}/\text{m}^3$  (8-hour average). If a chemical with this footnote has an ITSL other than 3,500  $\mu\text{g}/\text{m}^3$ , the ambient impact for that chemical also cannot exceed the chemical specific ITSL.
- 2 The combined ambient impact of all forms of xylene with Note #2 cannot exceed the initial threshold screening level (ITSL) of 390  $\mu\text{g}/\text{m}^3$  (annual average).
- 3 These chemicals are very likely to meet the R 336.1103(c) definition of a carcinogen. The Air Quality Division has not evaluated the data to develop an IRSL/SRSL.
- 4 The combined ambient impact of all subtilisins cannot exceed the ITSL of 0.02  $\mu\text{g}/\text{m}^3$  (1-hour average).
- 5 The polycyclic aromatic hydrocarbons (PAHs) with this footnote are carcinogenic and have relative potency factors (RPFs) to that of benzo(a)pyrene(CAS # 50-32-8). Air emission mixtures of carcinogenic PAHs, including asphalt fumes, should be evaluated additively using these RPFs and the benzo(a)pyrene IRSL and SRSL.
- 6 The ITSL applies to pure tungsten carbide only. The ITSL for cemented tungsten carbide having a Co content >2%, based on the ITSL for cobalt, is 0.2  $\mu\text{g}/\text{m}^3$  based on an 8 hour averaging time. The IRSL for cemented tungsten carbide having a Co content <2% and a Ni content >0.3%, based on the IRSL for nickel, is 0.0042  $\mu\text{g}/\text{m}^3$ , based on an annual averaging time.
- 7 Besides the assessment of mercury ambient air impacts in comparison to the ITSLs, larger individual sources of mercury emissions undergoing permit review (e.g., greater than 5 to 10 lbs/yr) may be evaluated on a case-by-case basis to address concerns for deposition and bioaccumulation, taking into account site-specific factors such as the presence of nearby recreational fisheries and realistic exposure scenarios.
- 8 Alternate screening levels may be determined on a case-by-case basis depending on the source of PCB emissions and which PCB isomers are being emitted following EPA's guidance as described in IRIS.
- 9 The combined ambient impacts of sulfuric acid, sulfur trioxide and oleum cannot exceed the ITSLs.
- 10 The combined ambient impact of these glycol ethers must be evaluated together so that their hazard index does not exceed a value of one.
- 11 The combined ambient impact of all petroleum hydrocarbon materials with Note #11 cannot exceed the ITSL of 50  $\mu\text{g}/\text{m}^3$  (8-hour average). If a chemical with this footnote has an ITSL other than 50  $\mu\text{g}/\text{m}^3$ , the ambient impact for that chemical also cannot exceed the chemical specific ITSL.
- 12 The combined ambient impact of DDT, p,p'-DDE and DDD that have Note #12 cannot exceed the IRSL of 0.01  $\mu\text{g}/\text{m}^3$  (annual average) or SRSL of 0.1  $\mu\text{g}/\text{m}^3$  (annual average).
- 13 This chemical has two ITSLs with different averaging times. Ambient air impacts cannot exceed either ITSL. Both ITSLs also apply for determinations of permit to install exemptions under R336.1290 (Rule 290).
- 14 The combined ambient impacts for the isomers of trimethylbenzene, or any mixture thereof, cannot exceed the screening level(s).
- 15 The combined impact of t-butyl acetate and t-butanol must be evaluated together so that the hazard index does not exceed a value of one.
- 16 The asbestos IRSL and SRSL are based on a conservative conversion from the EPA-IRIS unit risk factor and one-in-one million cancer risk estimate of 4 E-6 fibers/mL (or 4 fibers/ $\text{m}^3$ ), to the units of  $\mu\text{g}/\text{m}^3$ . Less restrictive screening levels may be derived on a case-by-case basis depending on the fiber density, as discussed in the EPA-IRIS database.



## Screening Level Footnotes

- 17 See specific trivalent and hexavalent chromium compounds.
- 18 The combined ambient impact of turpentine and monoterpenes (a-pinene, b-pinene, and d-carene) listed with Note #18 cannot exceed the ITSL of 1120  $\mu\text{g}/\text{m}^3$  (8 hr. averaging time).
- 19 If the 4,6-dimethyl-2-heptanone is present as a component of commercial or technical grade diisobutyl ketone or DIBK (CAS # 108-83-8), then the ITSL of 0.1  $\mu\text{g}/\text{m}^3$  for 4,6-dimethyl-2-heptanone does not apply. In this case, the combined impacts of the 4,6-dimethyl-2-heptanone, and DIBK cannot exceed the screening level for DIBK of 1500  $\mu\text{g}/\text{m}^3$  (8-hour average).
- 20 The combined ambient impact of meta-tolualdehyde (CAS No. 620-23-5) and para-tolualdehyde (CAS No. 104-87-0) cannot exceed the ITSL of 440  $\mu\text{g}/\text{m}^3$  with annual averaging time.
- 21 This chemical is very likely to meet the R336.1103(c) definition of a carcinogen. The Air Quality Division has evaluated the data and determined it to be inadequate for IRSL/SRSL development. However, the ITSL provides adequate protection against potential cancer effects.
- 22 The combined ambient impact of butane (CAS # 106-97-8) and isobutane (CAS # 75-28-5) should be evaluated together so that the combined impact does not exceed a hazard index value of one.
- 23 The combined ambient impact of all propylene glycol n-butyl ethers (CAS nos. 5131-66-8, 15821-83-7, 29387-86-8, and 63716-40-5) cannot exceed the ITSL of 77  $\mu\text{g}/\text{m}^3$  (annual average).
- 24 The combined ambient impact of all chemicals with footnote #24 cannot exceed the ITSL of 93  $\mu\text{g}/\text{m}^3$  (annual average).
- 25 The combined ambient impact of all chemicals with footnote #25 cannot exceed the ITSL of 5600  $\mu\text{g}/\text{m}^3$  (annual average).
- 26 This toxic air contaminant (TAC) is reasonably anticipated to exist as a particle in the ambient air. A toxicological review has determined that, in lieu of setting a screening level, the primary NAAQS for particulate matter (PM<sub>2.5</sub>, PM<sub>10</sub>) are reasonable and appropriate health protective levels for the particulate. The combined ambient impact of all particulate TAC emissions from the process must be below the applicable PM primary NAAQS (PM<sub>2.5</sub>, PM<sub>10</sub>). The PM primary NAAQS for particulate matter may be used in permit to install exemption determinations for this TAC under Rule 290(2)(a)(iii) or Rule 291.
- 27 The combined ambient impact of dimethyl adipate (CAS# 627-93-0), dimethyl glutarate (CAS# 1119-40-0), and dimethyl succinate (CAS# 106-65-0), and the mixture of dimethyl adipate, dimethyl glutarate, and dimethyl succinate collectively known as dibasic ester (CAS# 95481-62-2) cannot exceed the ITSL of 1  $\mu\text{g}/\text{m}^3$  with annual averaging time.
- 28 The combined ambient impact of all amorphous silica compounds with the CAS nos. 60676-86-0, 61790-53-2, 69012-64-2, 112945-52-5, and 112926-00-8 cannot exceed the ITSL of 60  $\mu\text{g}/\text{m}^3$  (8-hour averaging time).
- 29 The ITSL for manganese is 0.3  $\mu\text{g}/\text{m}^3$  with an annual averaging time. This ITSL is most appropriately applied to PM<sub>10</sub>-Mn or PM<sub>2.5</sub>-Mn data rather than TSP-Mn data. This ITSL applies to "manganese and manganese compounds," therefore emissions of multiple forms of manganese must be accounted for additively to ensure that the combined ambient air impact does not exceed the manganese ITSL. This ITSL applies to ambient air impacts of the manganese atom, therefore the emissions and modeled impacts of various manganese compounds may be molecular weight-adjusted to the equivalent emission rate and ambient air impact of the manganese alone. Please note that potassium permanganate (CAS# 7722-64-7) also has a short-term ITSL = 0.6  $\mu\text{g}/\text{m}^3$  (8 hour averaging time).
- 30 The ITSL for mixed cresols (CAS# 1319-77-3) also applies to o-cresol (CAS# 95-48-7), p-cresol (CAS# 106-44-5), and m-cresol (CAS# 108-39-4).

## Screening Level Footnotes

- 31 Most processes that emit crystalline silica are exempt from the screening level requirement of Rule 225(1). Only sources of crystalline silica that are not exempt from the definition of a toxic air contaminant (see Rule 120(f)(XV)) need to comply with the ITSL.
- 32 The Chemical Abstract Service number (CAS#) has been changed to 12185-10-3. Since the original number 7723-14-0, is still used by many organizations, it is listed as the primary CAS#.
- 33 With regards to the health-based screening levels for tetrachlorodibenzo(p) dioxin (CAS# 1746-01-6), Rule 336.1225(6)(a) states that all polychlorinated dibenzodioxins and dibenzofurans shall be considered as one toxic air contaminant, expressed as an equivalent concentration of 2,3,7,8-tetrachlorodibenzo(p)dioxin based on the relative potency of the isomers emitted from the emission unit or units. The current toxic equivalency factors (TEFs) for use are those recommended by the World Health Organization (WHO, 2005), as provided in: Van den Berg, M. et al. 2006. The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 93(2): 223-241.
- 34 The combined ambient impact of all selenium and inorganic selenium compounds with the CAS# 7446-08-4, 7446-34-6, 7488-56-4, 7783-00-8, 10102-18-8, and 13410-01-0 cannot exceed 2 ug/m<sup>3</sup> (8-hour averaging time).
- 35 The combined ambient impact of all barium and soluble barium compounds with the CAS# 543-80-6, 1304-28-5, 10022-31-8, 10361-37-2, 10553-31-8, 13477-00-4, 13718-50-8, 17194-00-2, and 2110--95-5 cannot exceed 5 ug/m<sup>3</sup> (8-hour averaging time).
- 36 The combined ambient impact of these chlorosilanes must be evaluated together so that their hazard index (HI) does not exceed a value of one (1).
- 37 If perfluorooctanoic sulfonic acid [PFOS] (CAS No. 1763-23-1) and perfluorooctanoic acid [PFOA] (CAS No. 335-67-1) are co-emitted, then the proposed emission rates should be evaluated together such that the impacts of PFOS and PFOA combined shall be less than or equal to 0.07 ug/m<sup>3</sup> with a 24-hour averaging time, for Rule 225 acceptability evaluations.
- 38 The combined ambient impact of magnesium (CAS No. 7439-95-4) and magnesium compounds, magnesium hydroxide, magnesium oxide, and magnesium nitrate (CAS Nos. 1309-42-8, 1309-48-4, and 10377-60-3, respectively), cannot exceed the ITSL of 100 ug/m<sup>3</sup> (8-hour average).
- 39 The combined ambient impact of ammonia (CAS no. 7664-41-7) and ammonium hydroxide (CAS no. 1336-21-6) must be evaluated together so that their hazard index does not exceed the value of one (1).
- 40 The combined ambient impact of trimethyl borate (CAS # 121-43-7), boron oxide (CAS# 1303-86-2), sodium perborate (CAS# 7632-04-4), and boric acid (CAS# 10043-35-3) should be evaluated so that the combined impact does not exceed a hazard index value of one.
- 41 The combined ambient impact of sodium fluoride (CAS# 7681-49-4), potassium fluoride (CAS# 7789-23-3), sodium aluminum fluoride (CAS# 15096-52-3), and sodium silicofluoride (CAS# 16893-85-9) should be evaluated so that the combined impact does not exceed a hazard index value of one.
- 42 The combined ambient impact of cobalt and cobalt compounds that release cobalt ions with the CAS# 71-48-7, 136-52-7, 513-79-1, 814-89-1, 1002-88-6, 1307-96-6, 1308-06-1, 1317-42-6, 1560-69-6, 7440-48-4, 7646-79-9, 10026-24-1, 10141-05-6, 21041-93-0, and 61789-51-3 cannot exceed the ITSL of 0.2 ug/m<sup>3</sup> (8-hour averaging time) and the IRSL of 0.00013 ug Co/m<sup>3</sup> or SRSL of 0.0013 ug Co/m<sup>3</sup> (annual averaging time).
- 43 The default screening level for this chemical has been rescinded because it may not be health protective. This chemical will be evaluated on a case by case basis until chemical specific toxicity information is available to derive a screening level.