OAR 340-245-8010 Table 1

Risk Action Levels and De Minimis Levels

OAR 340-245-8010 Table 1
Risk Action Levels and De Minimis Levels†

Applicability	Type	Excess Cancer Risk per Million	Noncancer Hazard Index
Toxic Emissions Unit	TEU De Minimis Level	0.1	0.1
Source	Source De Minimis Level	0.5	0.5
New Source	Source Risk Action Level	10	1
	DEQ Director Consultation Risk Action Level	>10	>1
	Permit Denial Risk Action Level	50	3
Existing Source	Source Risk Action Level	25	1 or ANRAL* up to 10 whichever is higher
	Accelerated Schedule Risk Action Level	50	3 or ANRAL*+3 whichever is higher
	DEQ Director Consultation Risk Action Level	>100	>10 or >(ANRAL*+5) whichever is higher
	Permit Denial Risk Action Level	500	30**
Area	Area Multi-Source Risk Action Level	75	3 or ANRAL* up to 10 whichever is higher

Footnotes for OAR 340-245-8010 Table 1:

†Facility risk that is equal to or less than the values in the table is considered compliant with the Risk Action Level.

* Alternate Noncancer Risk Action Levels (ANRAL) reflect the fact that there is variability around the severity of health effects and magnitude of uncertainty reflected in noncancer Risk-Based Concentrations for different air toxics. Facilities may propose an ANRAL within the defined range for DEQ to consider on a case-by-case basis. DEQ will evaluate each case according to criteria outlined in OAR 340-245-0100. ANRALs will not be considered for air toxics with toxicity reference values based on effects on development or irreversible health effects or toxicity reference values with very little scientific uncertainty (i.e., those based on small uncertainty factors).

**For some air toxics with severe, acute or irreversible effects, it may be inappropriate to reach this permit denial level for noncancer health endpoints. The DEQ Director must consider air toxic-specific concerns with exceeding noncancer Risk Action Levels prior to allowing an Alternate Noncancer Risk Action Level for any permit above default Risk Action Levels.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-8020 Table 2

Air Toxics Reporting List

OAR 340-245-8020 Table 2
Air Toxics Reporting List

CAS#	Chemical Name
75-07-0	Acetaldehyde
60-35-5	Acetamide
67-64-1	Acetone
75-05-8	Acetonitrile
98-86-2	Acetophenone
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
50-76-0	Actinomycin D
1596-84-5	Alar
309-00-2	Aldrin
107-05-1	Allyl chloride
7429-90-5	Aluminum
1344-28-1	Aluminum oxide (fibrous forms)
39156-41-7	2,4-Diaminoanisole Sulfate
97-56-3	*ortho*-Aminoazotoluene
101-80-4	4,4'-Diaminodiphenyl Ether
6109-97-3	3-Amino-9-ethylcarbazole hydrochloride
68006-83-7	2-Amino-3-methyl-9H-pyrido[2,3-b]indole
82-28-0	1-Amino-2-methylanthraquinone
76180-96-6	2-Amino-3-methylimidazo-[4,5-f]quinoline
712-68-5	2-Amino-5-(5-Nitro-2-Furyl)-1,3,4-Thiadiazol
26148-68-5	A-alpha-C (2-Amino-9H-pyrido[2,3-b]indole)
92-67-1	4-Aminobiphenyl
61-82-5	Amitrole
7664-41-7	Ammonia
7803-63-6	Ammonium bisulfate
6484-52-2	Ammonium nitrate
7783-20-2	Ammonium sulfate
62-53-3	Aniline
90-04-0	*o*-Anisidine

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Air Toxics Reporting List

CAS#	Chemical Name
134-29-2	*o*-Anisidine Hydrochloride
7440-36-0	Antimony
1309-64-4	Antimony trioxide
140-57-8	Aramite
7440-38-2	Arsenic
7784-42-1	Arsine
1332-21-4	Asbestos
492-80-8	Auramine
115-02-6	Azaserine
446-86-6	Azathioprine
52-24-4	*Tris*-(1-Aziridinyl)phosphine sulfide
103-33-3	Azobenzene
7440-39-3	Barium
71-43-2	Benzene
92-87-5	Benzidine (and its salts)
271-89-6	Benzofuran
98-07-7	Benzoic trichloride (Benzotrichloride)
98-88-4	Benzoyl chloride
94-36-0	Benzoyl peroxide
100-44-7	Benzyl chloride
1694-09-3	Benzyl Violet 4B
7440-41-7	Beryllium
1304-56-9	Beryllium Oxide
13510-49-1	Beryllium Sulfate
92-52-4	Biphenyl
111-44-4	*Bis*(2-chloroethyl) ether (DCEE)
542-88-1	*Bis*(chloromethyl) ether
103-23-1	*Bis*(2-ethylhexyl) adipate
117-81-7	*Bis*(2-ethylhexyl) phthalate (DEHP)
7726-95-6	Bromine
7789-30-2	Bromine pentafluoride
75-27-4	Bromodichloromethane
75-25-2	Bromoform
74-83-9	Bromomethane (Methyl bromide)
106-94-5	1-Bromopropane (*n*-propyl bromide)

OAR 340-245-8020 Table 2
Air Toxics Reporting List

CAS#	Chemical Name
126-72-7	*Tris*(2,3-dibromopropyl)phosphate
106-99-0	1,3-Butadiene
78-93-3	2-Butanone (Methyl ethyl ketone)
540-88-5	*t*-Butyl acetate
141-32-2	Butyl acrylate
71-36-3	*n*-Butyl alcohol
78-92-2	*sec*-Butyl alcohol
75-65-0	*tert*-Butyl alcohol
85-68-7	Butyl benzyl phthalate
25013-16-5	Butylated hydroxyanisole
3068-88-0	*beta*-Butyrolactone
7440-43-9	Cadmium
156-62-7	Calcium cyanamide
105-60-2	Caprolactam
2425-06-1	Captafol
133-06-2	Captan
	Carbon black extracts
75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
463-58-1	Carbonyl sulfide
9000-07-1	Carrageenan (degraded)
120-80-9	Catechol
	Ceramic fibers
133-90-4	Chloramben
305-03-3	Chlorambucil
57-74-9	Chlordane
143-50-0	Chlordecone
115-28-6	Chlorendic Acid
76-13-1	Chlorinated fluorocarbon (1,1,2-Trichloro-1,2,2-trifluoroethane, CFC-113)
108171-26-2	Chlorinated paraffins
7782-50-5	Chlorine
10049-04-4	Chlorine dioxide
79-11-8	Chloroacetic acid
532-27-4	2-Chloroacetophenone
85535-84-8	Chloroalkanes C10-13 (Chlorinated paraffins)

OAR 340-245-8020 Table 2
Air Toxics Reporting List

CAS#	Chemical Name
106-47-8	*p*-Chloroaniline
108-90-7	Chlorobenzene
510-15-6	Chlorobenzilate (Ethyl-4,4'-dichlorobenzilate)
75-68-3	1-Chloro-1,1-difluoroethane
75-45-6	Chlorodifluoromethane (Freon 22)
75-00-3	Chloroethane (Ethyl chloride)
67-66-3	Chloroform
74-87-3	Chloromethane (Methyl chloride)
107-30-2	Chloromethyl methyl ether (technical grade)
563-47-3	3-Chloro-2-methyl-1-propene
95-57-8	2-Chlorophenol
120-83-2	2,4-Dichlorophenol
58-90-2	2,3,4,6-Tetrachlorophenol
95-83-0	4-Chloro-*o*-phenylenediamine
76-06-2	Chloropicrin
126-99-8	Chloroprene
1897-45-6	Chlorothalonil
95-69-2	*p*-Chloro-*o*-toluidine
54749-90-5	Chlorozotocin
7738-94-5	Chromic(VI) Acid
18540-29-9	Chromium VI, chromate and dichromate particulate
18540-29-9	Chromium VI, chromic acid aerosol mist
569-61-9	C.I. Basic Red 9 Monohydrochloride
87-29-6	Cinnamyl Anthranilate
7440-48-4	Cobalt
	Coke Oven Emissions
7440-50-8	Copper
	Creosotes
120-71-8	*p*-Cresidine
1319-77-3	Cresols (mixture), including *m*-cresol, *o*-cresol, *p*-cresol
108-39-4	*m*-Cresol
95-48-7	*o*-Cresol
106-44-5	*p*-Cresol
4170-30-3	Crotonaldehyde
80-15-9	Cumene hydroperoxide

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Air Toxics Reporting List

CAS#	Chemical Name
135-20-6	Cupferron
74-90-8	Cyanide, Hydrogen
110-82-7	Cyclohexane
108-93-0	Cyclohexanol
66-81-9	Cycloheximide
50-18-0	Cyclophosphamide (anhydrous)
6055-19-2	Cyclophosphamide (Hydrated)
5160-02-1	D & C Red No. 9
4342-03-4	Dacarbazine
117-10-2	Dantron
53-19-0	DDD, 2,4'-
72-54-8	DDD, 4,4'-
3547-04-4	DDE (1-chloro-4-[1-(4-chlorophenyl)ethyl]benzene)
3424-82-6	DDE, 2,4'-
72-55-9	DDE, 4,4'-
789-02-6	DDT, 2,4'-
50-29-3	DDT, 4,4'-
615-05-4	2,4-Diaminoanisole
95-80-7	2,4-Diaminotoluene (2,4-Toluene diamine)
334-88-3	Diazomethane
333-41-5	Diazinon
132-64-9	Dibenzofuran
124-48-1	Dibromochloromethane
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)
96-13-9	2,3-Dibromo-1-propanol
84-74-2	Dibutyl phthalate
95-50-1	1,2-Dichlorobenzene
541-73-1	1,3-Dichlorobenzene
106-46-7	*p*-Dichlorobenzene (1,4-Dichlorobenzene)
91-94-1	3,3'-Dichlorobenzidine
75-71-8	Dichlorodifluoromethane (Freon 12)
75-43-4	Dichlorofluoromethane (Freon 21)
75-34-3	1,1-Dichloroethane (Ethylidene dichloride)
156-60-5	*trans*-1,2-Dichloroethene
75-09-2	Dichloromethane (Methylene chloride)

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Air Toxics Reporting List

CAS#	Chemical Name
94-75-7	Dichlorophenoxyacetic acid, salts and esters (2,4-D)
78-87-5	1,2-Dichloropropane (Propylene dichloride)
542-75-6	1,3-Dichloropropene
62-73-7	Dichlorovos (DDVP)
115-32-2	Dicofol
84-61-7	Di-cyclohexyl phthalate (DCHP)
60-57-1	Dieldrin
	Diesel Particulate Matter
111-42-2	Diethanolamine
111-46-6	Diethylene glycol
111-96-6	Diethylene glycol dimethyl ether
112-34-5	Diethylene glycol monobutyl ether
111-90-0	Diethylene glycol monoethyl ether
111-77-3	Diethylene glycol monomethyl ether
627-44-1	Diethyl mercury
84-66-2	Diethylphthalate
64-67-5	Diethyl sulfate
134-62-3	Diethyltoluamide, *N*,*N*- (DEET)
75-37-6	1,1-Difluoroethane
101-90-6	Diglycidyl Resorcinol Ether
94-58-6	Dihydrosafrole
119-90-4	3,3'-Dimethoxybenzidine
60-11-7	4-Dimethylaminoazobenzene
121-69-7	*N*,*N*-Dimethylaniline
119-93-7	3,3'-Dimethylbenzidine (*o*-Tolidine)
79-44-7	Dimethyl carbamoyl chloride
68-12-2	Dimethyl formamide
57-14-7	1,1-Dimethylhydrazine
131-11-3	Dimethyl phthalate
77-78-1	Dimethyl sulfate
513-37-1	Dimethylvinylchloride
534-52-1	4,6-Dinitro-o-cresol (and salts)
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
606-20-2	2,6-Dinitrotoluene

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Air Toxics Reporting List

CAS#	Chemical Name
123-91-1	1,4-Dioxane
630-93-3	Diphenylhydantoin
122-66-7	1,2-Diphenylhydrazine (Hydrazobenzene)
25265-71-8	Dipropylene glycol
34590-94-8	Dipropylene glycol monomethyl ether
1937-37-7	Direct Black 38
2602-46-2	Direct Blue 6
16071-86-6	Direct Brown 95 (technical grade)
2475-45-8	Disperse Blue 1
298-04-4	Disulfoton
106-89-8	Epichlorohydrin
106-88-7	1,2-Epoxybutane
	Epoxy resins
12510-42-8	Erionite
140-88-5	Ethyl acrylate
100-41-4	Ethyl benzene
74-85-1	Ethylene
106-93-4	Ethylene dibromide (EDB, 1,2-Dibromoethane)
107-06-2	Ethylene dichloride (EDC, 1,2-Dichloroethane)
107-21-1	Ethylene glycol
629-14-1	Ethylene glycol diethyl ether
110-71-4	Ethylene glycol dimethyl ether
111-76-2	Ethylene glycol monobutyl ether
110-80-5	Ethylene glycol monoethyl ether
111-15-9	Ethylene glycol monoethyl ether acetate
109-86-4	Ethylene glycol monomethyl ether
110-49-6	Ethylene glycol monomethyl ether acetate
2807-30-9	Ethylene glycol monopropyl ether
151-56-4	Ethyleneimine (Aziridine)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
10028-22-5	Ferric Sulfate
	Fluorides
7782-41-4	Fluorine gas
50-00-0	Formaldehyde

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Air Toxics Reporting List

CAS#	Chemical Name
110-00-9	Furan
60568-05-0	Furmecyclox
3688-53-7	Furylfuramide
	Glasswool fibers
111-30-8	Glutaraldehyde
67730-11-4	Glu-P-1
67730-10-3	Glu-P-2
16568-02-8	Gyromitrin
2784-94-3	HC Blue 1
76-44-8	Heptachlor
1024-57-3	Heptachlor epoxide
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
608-73-1	Hexachlorocyclohexanes (mixture) including but not limited to:
319-84-6	*alpha*-Hexachlorocyclohexane
319-85-7	*beta*-Hexachlorocyclohexane
58-89-9	*gamma*-Hexachlorocyclohexane (Lindane)
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane
680-31-9	Hexamethylphosphoramide
822-06-0	Hexamethylene-1,6-diisocyanate
110-54-3	Hexane
302-01-2	Hydrazine
10034-93-2	Hydrazine Sulfate
7647-01-0	Hydrochloric acid
10035-10-6	Hydrogen bromide
7664-39-3	Hydrogen fluoride
7783-06-4	Hydrogen sulfide
123-31-9	Hydroquinone
24267-56-9	Iodine-131
13463-40-6	Iron pentacarbonyl
78-59-1	Isophorone
78-79-5	Isoprene, except from vegetative emission sources
67-63-0	Isopropyl alcohol
98-82-8	Isopropylbenzene (Cumene)

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Air Toxics Reporting List

CAS#	Chemical Name
80-05-7	4,4'-Isopropylidenediphenol
303-34-4	Lasiocarpine
7439-92-1	Lead
18454-12-1	Lead Chromate Oxide
108-31-6	Maleic anhydride
7439-96-5	Manganese
148-82-3	Melphalan
3223-07-2	Melphalan HCl
7439-97-6	Mercury
593-74-8	Methyl mercury (Dimethylmercury)
67-56-1	Methanol
72-43-5	Methoxychlor
55738-54-0	*Trans*-2[(dimethylamino)-methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole
101-14-4	4,4'-Methylene *bis*(2-chloroaniline) (MOCA)
101-77-9	4,4'-Methylenedianiline (and its dichloride)
13552-44-8	4,4-Methylenedianiline Dihydrochloride
838-88-0	4,4-Methylene *bis*(2-Methylaniline)
101-61-1	4,4'-Methylene *bis*(*n*,*n*'-dimethyl)aniline
101-68-8	Methylene diphenyl diisocyanate (MDI)
60-34-4	Methyl hydrazine
540-73-8	1,2-Dimethylhydrazine
74-88-4	Methyl iodide (Iodomethane)
108-10-1	Methyl isobutyl ketone (MIBK, Hexone)
624-83-9	Methyl isocyanate
75-86-5	2-Methyllactonitrile (Acetone cyanohydrin)
80-62-6	Methyl methacrylate
66-27-3	Methyl Methanesulfonate
129-15-7	2-Methyl-1-nitroanthraquinone
70-25-7	*n*-Methyl-*n*-nitro-*n*-nitrosoguanidine
832-69-9	Methylphenanthrene, 1-
2381-21-7	Methylpyrene, 1-
109-06-8	2-Methylpyridine
1634-04-4	Methyl *tert*-butyl ether
56-04-2	Methylthiouracil

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Air Toxics Reporting List

CAS#	Chemical Name
90-94-8	Michler's ketone
	Mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
	Mineral fibers (fine mineral fibers which are man-made, and are airborne particles of a respirable size greater than 5 microns in length, less than or equal to 3.5 microns in diameter, with a length to diameter ratio of 3:1)
2385-85-5	Mirex
50-07-7	Mitomycin C
1313-27-5	Molybdenum trioxide
315-22-0	Monocrotaline
91-59-8	2-Naphthylamine
91-20-3	Naphthalene
7440-02-0	Nickel
	Nickel compounds, insoluble
7440-02-0	Nickel metal
1313-99-1	Nickel oxide
12035-72-2	Nickel subsulfide
11113-75-0	Nickel sulfide
	Nickel compounds, soluble
373-02-4	Nickel acetate
3333-67-3	Nickel carbonate
12607-70-4	Nickel carbonate hydroxide
13463-39-3	Nickel carbonyl
7718-54-9	Nickel chloride
12054-48-7	Nickel hydroxide
7786-81-4	Nickel sulfate
10101-97-0	Nickel sulfate hexahydrate
13478-00-7	Nickel nitrate hexahydrate
1271-28-9	Nickelocene
3570-75-0	Nifurthiazole
7697-37-2	Nitric acid
139-13-9	Nitrilotriacetic acid
18662-53-8	Nitrilotriacetic acid, trisodium salt monohydrate
99-59-2	5-Nitro-*o*-Anisidine
98-95-3	Nitrobenzene

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Air Toxics Reporting List

CAS#	Chemical Name
92-93-3	4-Nitrobiphenyl
1836-75-5	Nitrofen
59-87-0	Nitrofurazone
555-84-0	1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinone
531-82-8	*N*-[4-(5-nitro-2-furyl)-2-thiazolyl]-acetamide
302-70-5	Nitrogen mustard N-oxide
100-02-7	4-Nitrophenol
79-46-9	2-Nitropropane
924-16-3	*N*-Nitrosodi-*n*-butylamine
1116-54-7	*N*-Nitrosodiethanolamine
55-18-5	*N*-Nitrosodiethylamine
62-75-9	*N*-Nitrosodimethylamine
86-30-6	*N*-Nitrosodiphenylamine
156-10-5	*p*-Nitrosodiphenylamine
621-64-7	*N*-Nitrosodi-*n*-propylamine
10595-95-6	*N*-Nitrosomethylethylamine
759-73-9	*N*-Nitroso-*N*-ethylurea
615-53-2	*N*-Nitroso-*N*-Methylurethane
684-93-5	*N*-Nitroso-*N*-methylurea
59-89-2	*N*-Nitrosomorpholine
16543-55-8	*N*-Nitrosonornicotine
100-75-4	*N*-Nitrosopiperidine
930-55-2	*N*-Nitrosopyrrolidine
39765-80-5	Trans-Nonachlor
104-40-5	Nonyphenol, 4- (& ethoxylates)
8014-95-7	Oleum
56-38-2	Parathion
87-86-5	Pentachlorophenol
32534-81-9	Pentabromodiphenyl Ether
82-68-8	Pentachloronitrobenzene (Quintobenzene)
79-21-0	Peracetic acid
	Perfluorinated compounds (PFCs)
335-67-1	Perfluorooctanoic acid (PFOA)
1763-23-1	Perfluorooctanesulfonic acid (PFOS)
62-44-2	Phenacetin

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Air Toxics Reporting List

CAS#	Chemical Name
94-78-0	Phenazopyridine
136-40-3	Phenazopyridine hydrochloride
3546-10-9	Phenesterin
50-06-6	Phenobarbital
108-95-2	Phenol
59-96-1	Phenoxybenzamine
63-92-3	Phenoxybenzamine hydrochloride
106-50-3	*p*-Phenylenediamine
132-27-4	*o*-Phenylphenate, Sodium
90-43-7	2-Phenylphenol
75-44-5	Phosgene
7803-51-2	Phosphine
7664-38-2	Phosphoric acid
7723-14-0	Phosphorus
10025-87-3	Phosphorus oxychloride
10026-13-8	Phosphorus pentachloride
1314-56-3	Phosphorus pentoxide
7719-12-2	Phosphorus trichloride
	Phthalates
85-44-9	Phthalic anhydride
	Polybrominated diphenyl ethers (PBDEs)
5436-43-1	BDE-47 (2,2',4,4'-Tetrabromodiphenyl ether)
60348-60-9	BDE -99 (2,2’,4,4’,5-Pentabromodiphenyl ether)
189084-64-8	BDE -100 (2,2’,4,4’,6-Pentabromodiphenyl ether)
17026-54-3	BDE -138 (2,2’,3,4,4’,5’-Hexabromodiphenyl ether)
68631-49-2	BDE -153 (2,2',4,4',5,5'-hexabromodiphenyl ether)
17026-58-4	BDE -154 (2,2’,4,4’,5,6’-Hexabromodiphenyl ether)
68928-80-3	BDE -185 (2,2',3,4,4',5',6-Heptabromodiphenyl ether)
1163-19-5	BDE -209 (Decabromodiphenyl ether)
1336-36-3	Polychlorinated biphenyls (PCBs)
	Polychlorinated biphenyls (PCBs) TEQ
34883-43-7	PCB-8 (2,4'-Dichlorobiphenyl)
37680-65-2	PCB 18 (2,2',5-Trichlorobiphenyl)
7012-37-5	PCB-28 (2,4,4'-Trichlorobiphenyl)
41464-39-5	PCB-44 (2,2',3,5'-Tetrachlorobiphenyl)

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Air Toxics Reporting List

CAS#	Chemical Name
35693-99-3	PCB-52 (2,2',5,5'-Tetrachlorobiphenyl)
32598-10-0	PCB-66 (2,3',4,4'-Tetrachlorobiphenyl)
32598-13-3	PCB 77 (3,3',4,4'-Tetrachlorobiphenyl)
70362-50-4	PCB 81 (3,4,4',5-Tetrachlorobiphenyl)
37680-73-2	PCB-101 (2,2',4,5,5'-Pentachlorobiphenyl)
32598-14-4	PCB 105 (2,3,3',4,4'-Pentachlorobiphenyl)
74472-37-0	PCB 114 (2,3,4,4',5-Pentachlorobiphenyl)
31508-00-6	PCB 118 (2,3',4,4',5-Pentachlorobiphenyl)
65510-44-3	PCB 123 (2,3',4,4',5'-Pentachlorobiphenyl)
57465-28-8	PCB 126 (3,3',4,4',5-Pentachlorobiphenyl)
38380-07-3	PCB-128 (2,2',3,3',4,4'-Hexachlorobiphenyl)
35065-28-2	PCB-138 (2,2',3,4,4',5'-Hexachlorobiphenyl)
35065-27-1	PCB-153 (2,2',4,4',5,5'-Hexachlorobiphenyl)
38380-08-4	PCB 156 (2,3,3',4,4',5-Hexachlorobiphenyl)
69782-90-7	PCB 157 (2,3,3',4,4',5'-Hexachlorobiphenyl)
52663-72-6	PCB 167 (2,3',4,4',5,5'-Hexachlorobiphenyl)
32774-16-6	PCB 169 (3,3',4,4',5,5'-Hexachlorobiphenyl)
35065-30-6	PCB-170 (2,2',3,3',4,4',5-Heptachlorobiphenyl)
35065-29-3	PCB-180 (2,2',3,4,4',5,5'-Heptachlorobiphenyl)
52663-68-0	PCB-187 (2,2',3,4',5,5',6-Heptachlorobiphenyl)
39635-31-9	PCB 189 (2,3,3',4,4',5,5'-Heptachlorobiphenyl)
52663-78-2	PCB-195 (2,2',3,3',4,4',5,6-Octachlorobiphenyl)
40186-72-9	PCB-206 (2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl)
2051-24-3	PCB-209 (Decachlorobiphenyl)
	Polychlorinated dibenzo-*p*-dioxins (PCDDs) & dibenzofurans (PCDFs)
1746-01-6	2,3,7,8-Tetrachlorodibenzo-*p*-dioxin (TCDD)
40321-76-4	1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin (PeCDD)
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin (HxCDD)
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin (HxCDD)
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin (HxCDD)
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin (HpCDD)
3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-*p*-dioxin (OCDD)
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran (TcDF)
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)

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CAS#	Chemical Name
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
39001-02-0	Octachlorodibenzofuran (OCDF)
41903-57-5	Total Tetrachlorodibenzo-*p*-dioxin
36088-22-9	Total Pentachlorodibenzo-*p*-dioxin
34465-46-8	Total Hexachlorodibenzo-*p*-dioxin
37871-00-4	Total Heptachlorodibenzo-*p*-dioxin
55722-27-5	Total Tetrachlorodibenzofuran
30402-15-4	Total Pentachlorodibenzofuran
55684-94-1	Total Hexachlorodibenzofuran
38998-75-3	Total Heptachlorodibenzofuran
	Polycyclic aromatic hydrocarbons (PAHs)
83-32-9	Acenaphthene
208-96-8	Acenaphthylene
120-12-7	Anthracene
191-26-4	Anthanthrene
56-55-3	Benz[a]anthracene
50-32-8	Benzo[a]pyrene
205-99-2	Benzo[b]fluoranthene
205-12-9	Benzo[c]fluorene
192-97-2	Benzo[e]pyrene
191-24-2	Benzo[g,h,i]perylene
205-82-3	Benzo[j]fluoranthene
207-08-9	Benzo[k]fluoranthene
86-74-8	Carbazole
218-01-9	Chrysene
27208-37-3	Cyclopenta[c,d]pyrene
226-36-8	Dibenz[a,h]acridine
224-42-0	Dibenz[a,j]acridine
194-59-2	7H-Dibenzo[c,g]carbazole
53-70-3	Dibenz[a,h]anthracene

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CAS#	Chemical Name
5385-75-1	Dibenzo[a,e]fluoranthene
192-65-4	Dibenzo[a,e]pyrene
189-64-0	Dibenzo[a,h]pyrene
189-55-9	Dibenzo[a,i]pyrene
191-30-0	Dibenzo[a,l]pyrene
206-44-0	Fluoranthene
86-73-7	Fluorene
193-39-5	Indeno[1,2,3-cd]pyrene
91-57-6	2-Methyl naphthalene
198-55-0	Perylene
85-01-8	Phenanthrene
129-00-0	Pyrene
	Polycyclic aromatic hydrocarbon derivatives
53-96-3	2-Acetylaminofluorene
117-79-3	2-Aminoanthraquinone
63-25-2	Carbaryl
57-97-6	7,12-Dimethylbenz[a]anthracene
42397-64-8	1,6-Dinitropyrene
42397-65-9	1,8-Dinitropyrene
56-49-5	3-Methylcholanthrene
3697-24-3	5-Methylchrysene
602-87-9	5-Nitroacenaphthene
7496-02-8	6-Nitrochrysene
607-57-8	2-Nitrofluorene
5522-43-0	1-Nitropyrene
57835-92-4	4-Nitropyrene
3564-09-8	Ponceau 3R
3761-53-3	Ponceau MX
7758-01-2	Potassium bromate
671-16-9	Procarbazine
366-70-1	Procarbazine Hydrochloride
1120-71-4	1,3-Propane sultone
57-57-8	*beta*-Propiolactone
123-38-6	Propionaldehyde
114-26-1	Propoxur (Baygon)

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CAS#	Chemical Name
115-07-1	Propylene
6423-43-4	Propylene glycol dinitrate
107-98-2	Propylene glycol monomethyl ether
108-65-6	Propylene glycol monomethyl ether acetate
75-56-9	Propylene oxide
75-55-8	1,2-Propyleneimine (2-Methylaziridine)
51-52-5	Propylthiouracil
110-86-1	Pyridine
91-22-5	Quinoline
106-51-4	Quinone
	Radon and its decay products
	Refractory Ceramic Fibers
50-55-5	Reserpine
	Rockwool
94-59-7	Safrole
7783-07-5	Selenide, hydrogen
7782-49-2	Selenium
7446-34-6	Selenium sulfide
7631-86-9	Silica, crystalline (respirable)
7440-22-4	Silver
	Slagwool
1310-73-2	Sodium hydroxide
10048-13-2	Sterigmatocystin
18883-66-4	Streptozotocin
100-42-5	Styrene
96-09-3	Styrene oxide
95-06-7	Sulfallate
7664-93-9	Sulfuric acid
505-60-2	Sulfur Mustard
7446-71-9	Sulfur trioxide
	Talc containing asbestiform fibers
100-21-0	Terephthalic acid
40088-47-9	Tetrabromodiphenyl Ether
630-20-6	1,1,1,2-Tetrachloroethane
79-34-5	1,1,2,2-Tetrachloroethane

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CAS#	Chemical Name
127-18-4	Tetrachloroethene (Perchloroethylene)
811-97-2	1,1,1,2-Tetrafluoroethane
7440-28-0	Thallium
62-55-5	Thioacetamide
139-65-1	4,4-Thiodianiline
62-56-6	Thiourea
7550-45-0	Titanium tetrachloride
108-88-3	Toluene
26471-62-5	Toluene diisocyanates (2,4- and 2,6-)
584-84-9	Toluene-2,4-diisocyanate
91-08-7	Toluene-2,6-diisocyanate
95-53-4	*o*-Toluidine
636-21-5	*o*-Toluidine Hydrochloride
8001-35-2	Toxaphene (Polychlorinated camphenes)
126-73-8	Tributyl phosphate
120-82-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)
79-00-5	1,1,2-Trichloroethane (Vinyl trichloride)
79-01-6	Trichloroethene (TCE, Trichloroethylene)
75-69-4	Trichlorofluoromethane (Freon 11)
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
96-18-4	1,2,3-Trichloropropane
78-40-0	Triethyl phosphine
121-44-8	Triethylamine
112-49-2	Triethylene glycol dimethyl ether
512-56-1	Trimethyl phosphate
78-30-8	Triorthocresyl phosphate
115-86-6	Triphenyl phosphate
101-02-0	Triphenyl phosphite
1582-09-8	Trifluralin
526-73-8	1,2,3-Trimethylbenzene
95-63-6	1,2,4-Trimethylbenzene
108-67-8	1,3,5-Trimethylbenzene
540-84-1	2,2,4-Trimethylpentane

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CAS#	Chemical Name
62450-06-0	Tryptophan-P-1
62450-07-1	Tryptophan-P-2
51-79-6	Urethane (Ethyl carbamate)
7440-62-2	Vanadium (fume or dust)
1314-62-1	Vanadium pentoxide
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide
75-01-4	Vinyl chloride
100-40-3	4-Vinylcyclohexene
75-02-5	Vinyl fluoride
75-35-4	Vinylidene chloride
1330-20-7	Xylene (mixture), including *m*-xylene, *o*-xylene, *p*-xylene
108-38-3	*m*-Xylene
95-47-6	*o*-Xylene
106-42-3	*p*-Xylene
7440-66-6	Zinc
1314-13-2	Zinc oxide

NOTE: CAS# = Chemical Abstracts Service Number

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

OAR 340-245-8030 Table 3

Toxicity Reference Values

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
75-07-0	Acetaldehyde		0.45	A1	9.0	I	470	O
60-35-5	Acetamide		0.050	O				
67-64-1	Acetone				31,000	T	62,000	S
75-05-8	Acetonitrile				60	I		
107-02-8	Acrolein				0.35	A2	6.9	T
79-06-1	Acrylamide		0.0100	I	6.0	I		
79-10-7	Acrylic acid				1.0	I	6,000	O
107-13-1	Acrylonitrile		0.010	A1	2.0	I	220	T
309-00-2	Aldrin		0.00020	I				
107-05-1	Allyl chloride		0.17	O	1.0	I		
7429-90-5	Aluminum				5.0	P		
7664-41-7	Ammonia				500	A2	1,200	T
62-53-3	Aniline		0.63	O	1.0	I		
1309-64-4	Antimony trioxide				0.20	I		
140-57-8	Aramite		0.14	I				
7440-38-2	Arsenic		0.00020	A1	0.015	O	0.20	S
7784-42-1	Arsine				0.050	I	0.20	O
1332-21-4	Asbestos	k	4.3E-06	I				
103-33-3	Azobenzene		0.032	I				
71-43-2	Benzene	j	0.13	A1	30	I	30	I
92-87-5	Benzidine (and its salts)		0.000015	I				

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
100-44-7	Benzyl chloride		0.020	O	1.0	P	240	O
7440-41-7	Beryllium		0.00040	A1	0.020	I	0.020	S
111-44-4	*Bis*(2-chloroethyl) ether (DCEE)		0.0030	I			120	Tint
542-88-1	*Bis*(chloromethyl) ether		0.000016	I			1.4	Tint
117-81-7	*Bis*(2-ethylhexyl) phthalate (DEHP)		0.42	O				
75-25-2	Bromoform		0.91	I				
74-83-9	Bromomethane (Methyl bromide)				5.0	A1	190	T
106-94-5	1-Bromopropane (*n*-propyl bromide)		0.50	A2	100	T	5,000	T
106-99-0	1,3-Butadiene		0.030	A1	2.0	I	660	O
78-93-3	2-Butanone (Methyl ethyl ketone)				5,000	I	5,000	S
78-92-2	*sec*-Butyl alcohol				30,000	P		
7440-43-9	Cadmium		0.00060	A2	0.010	T	0.030	S
105-60-2	Caprolactam				2.2	O	50	O
75-15-0	Carbon disulfide				800	A1	6,200	O
56-23-5	Carbon tetrachloride		0.20	A2	100	I	1,900	O
463-58-1	Carbonyl sulfide				100	P	660	O
57-74-9	Chlordane	j	0.0100	I	0.70	I	0.70	I
108171-26-2	Chlorinated paraffins	n	0.040	O				
7782-50-5	Chlorine				0.10	A2	170	T
10049-04-4	Chlorine dioxide				0.20	I	2.8	Tint
532-27-4	2-Chloroacetophenone				0.030	I		
108-90-7	Chlorobenzene				50	P		
75-68-3	1-Chloro-1,1-difluoroethane				50,000	I		

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Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
75-45-6	Chlorodifluoromethane (Freon 22)				50,000	I		
75-00-3	Chloroethane (Ethyl chloride)				10,000	I	40,000	T
67-66-3	Chloroform		0.043	I	300	A2	490	T
74-87-3	Chloromethane (Methyl chloride)				90	A1	1,000	T
95-83-0	4-Chloro-*o*-phenylenediamine		0.22	O				
76-06-2	Chloropicrin				0.40	O	29	O
126-99-8	Chloroprene		0.0033	I	20	I		
95-69-2	*p*-Chloro-*o*-toluidine		0.013	O				
18540-29-9	Chromium VI, chromate and dichromate particulate	d, h	0.000080	A2	0.10	I	0.30	S
18540-29-9	Chromium VI, chromic acid aerosol mist	d, h	0.000080	A2	0.0050	T	0.0050	S
7440-48-4	Cobalt		0.00011	P	0.10	A2		
	Coke Oven Emissions		0.0016	I				
7440-50-8	Copper						100	O
120-71-8	*p*-Cresidine		0.023	O				
1319-77-3	Cresols (mixture), including *m*-cresol, *o*-cresol, *p*-cresol				600	O		
135-20-6	Cupferron		0.016	O				
74-90-8	Cyanide, Hydrogen				0.80	A2	340	O
110-82-7	Cyclohexane				6,000	I		
	DDT	e	0.010	I				
615-05-4	2,4-Diaminoanisole		0.15	O				
95-80-7	2,4-Diaminotoluene (2,4-Toluene diamine)		0.00091	O				
333-41-5	Diazinon						10	Tint
96-12-8	1,2-Dibromo-3-chloropropane		0.00017	P	0.20	I	1.9	Tint

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
	(DBCP)							
106-46-7	*p*-Dichlorobenzene (1,4-Dichlorobenzene)		0.090	A1	800	I	12,000	T
91-94-1	3,3'-Dichlorobenzidine		0.0029	O				
75-34-3	1,1-Dichloroethane (Ethylidene dichloride)		0.63	O				
156-60-5	*trans*-1,2-Dichloroethene						790	T
75-09-2	Dichloromethane (Methylene chloride)		100	A2	600	I	2,100	T
78-87-5	1,2-Dichloropropane (Propylene dichloride)				4.0	I	230	T
542-75-6	1,3-Dichloropropene		0.25	A1	32	T	36	Tint
62-73-7	Dichlorovos (DDVP)				0.50	I	18	T
60-57-1	Dieldrin		0.00022	I				
	Diesel Particulate Matter		0.10	A2	5.0	O		
111-42-2	Diethanolamine				0.20	P		
112-34-5	Diethylene glycol monobutyl ether				0.10	P		
111-90-0	Diethylene glycol monoethyl ether				0.30	P		
75-37-6	1,1-Difluoroethane				40,000	I		
60-11-7	4-Dimethylaminoazobenzene		0.00077	O				
68-12-2	Dimethyl formamide				30	I		
57-14-7	1,1-Dimethylhydrazine						0.49	Tint
121-14-2	2,4-Dinitrotoluene		0.011	O				
123-91-1	1,4-Dioxane		0.20	I	30	I	7,200	T
122-66-7	1,2-Diphenylhydrazine (Hydrazobenzene)		0.0045	I				
1937-37-7	Direct Black 38		7.1E-06	O				

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Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
2602-46-2	Direct Blue 6		7.1E-06	O				
16071-86-6	Direct Brown 95 (technical grade)		7.1E-06	O				
298-04-4	Disulfoton						6.0	T
106-89-8	Epichlorohydrin		0.83	I	1.0	I	1,300	O
106-88-7	1,2-Epoxybutane				20	I		
140-88-5	Ethyl acrylate				8.0	P		
100-41-4	Ethyl benzene		0.40	A1	1,000	I	22,000	T
106-93-4	Ethylene dibromide (EDB, 1,2-Dibromoethane)		0.0020	A1	9.0	I		
107-06-2	Ethylene dichloride (EDC, 1,2-Dichloroethane)		0.040	A1	7.0	P		
107-21-1	Ethylene glycol				400	O	2,000	T
111-76-2	Ethylene glycol monobutyl ether				1,600	I	29,000	T
110-80-5	Ethylene glycol monoethyl ether				200	I	370	O
111-15-9	Ethylene glycol monoethyl ether acetate				60	P	140	O
109-86-4	Ethylene glycol monomethyl ether				20	I	93	O
110-49-6	Ethylene glycol monomethyl ether acetate				1.0	P		
75-21-8	Ethylene oxide		0.00030	A2	30	O	160	Tint
96-45-7	Ethylene thiourea		0.077	O				
	Fluorides				13	A2	240	O
7782-41-4	Fluorine gas						16	T
50-00-0	Formaldehyde		0.077	I	0.20	A2	49	T
111-30-8	Glutaraldehyde				0.080	O	4.1	T

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
76-44-8	Heptachlor		0.00077	I				
1024-57-3	Heptachlor epoxide		0.00038	I				
118-74-1	Hexachlorobenzene		0.0022	I				
87-68-3	Hexachlorobutadiene		0.045	I				
608-73-1	Hexachlorocyclohexanes (mixture) including but not limited to:		0.0020	I				
319-84-6	*alpha*-Hexachlorocyclohexane		0.00056	I				
319-85-7	*beta*-Hexachlorocyclohexane		0.0019	I				
58-89-9	*gamma*-Hexachlorocyclohexane (Lindane)		0.0032	O				
77-47-4	Hexachlorocyclopentadiene				0.20	I	110	Tint
67-72-1	Hexachloroethane				30	I	58,000	T
822-06-0	Hexamethylene-1,6-diisocyanate				0.010	I	0.21	Tint
110-54-3	Hexane				700	A2		
302-01-2	Hydrazine		0.00020	I	0.030	P	5.2	Tint
7647-01-0	Hydrochloric acid				20	A1	2,100	O
7664-39-3	Hydrogen fluoride				13	A2	16	T
7783-06-4	Hydrogen sulfide				2.0	A2	98	S
78-59-1	Isophorone				2,000	O		
67-63-0	Isopropyl alcohol				200	P	3,200	O
98-82-8	Isopropylbenzene (Cumene)				400	I		
7439-92-1	Lead		0.083	O	0.15	A2	0.15	S
108-31-6	Maleic anhydride				0.70	O		
7439-96-5	Manganese				0.090	A2	0.30	S

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Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
7439-97-6	Mercury				0.30	A2	0.60	O
67-56-1	Methanol				4,000	A2	28,000	O
101-14-4	4,4'-Methylene *bis*(2-chloroaniline) (MOCA)		0.0023	O				
101-77-9	4,4'-Methylenedianiline (and its dichloride)		0.0022	O	20	O		
101-68-8	Methylene diphenyl diisocyanate (MDI)				0.60	I	12	O
108-10-1	Methyl isobutyl ketone (MIBK, Hexone)				3,000	I		
624-83-9	Methyl isocyanate				1.0	O		
80-62-6	Methyl methacrylate				700	I		
1634-04-4	Methyl *tert*-butyl ether		3.8	O	3,000	I	7,200	T
90-94-8	Michler's ketone		0.0040	O				
91-20-3	Naphthalene		0.030	A1	3.0	I	200	S
	Nickel compounds, insoluble	f	0.0040	A2	0.014	O	0.20	O
	Nickel compounds, soluble	f	0.0038	O	0.010	A2	0.20	O
7697-37-2	Nitric acid						86	O
98-95-3	Nitrobenzene		0.025	I	9.0	I		
79-46-9	2-Nitropropane				20	I		
924-16-3	*N*-Nitrosodi-*n*-butylamine		0.00063	I				
55-18-5	*N*-Nitrosodiethylamine		0.000023	I				
62-75-9	*N*-Nitrosodimethylamine		0.000071	I				
86-30-6	*N*-Nitrosodiphenylamine		0.38	O				
156-10-5	*p*-Nitrosodiphenylamine		0.16	O				
621-64-7	*N*-Nitrosodi-*n*-propylamine		0.00050	O				
10595-95-6	*N*-Nitrosomethylethylamine		0.00016	O				
59-89-2	*N*-Nitrosomorpholine		0.00053	O				

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
100-75-4	*N*-Nitrosopiperidine		0.00037	O				
930-55-2	*N*-Nitrosopyrrolidine		0.0016	I				
8014-95-7	Oleum						120	O
56-38-2	Parathion						0.020	Tint
87-86-5	Pentachlorophenol		0.20	O				
108-95-2	Phenol				200	O	5,800	O
75-44-5	Phosgene				0.30	A2	4.0	O
7803-51-2	Phosphine				0.80	A2		
7664-38-2	Phosphoric acid				10	A1		
7723-14-0	Phosphorus				9.0	A2	20	T
85-44-9	Phthalic anhydride				20	O		
	Polybrominated diphenyl ethers (PBDEs)	g					6.0	Tint
1336-36-3	Polychlorinated biphenyls (PCBs)		0.010	A1				
	Polychlorinated biphenyls (PCBs) TEQ	h	3.0E-08	A1	4.0E-05	O		
32598-13-3	PCB 77 (3,3',4,4'-tetrachlorobiphenyl)	h	0.00030	A3	0.40	O		
70362-50-4	PCB 81 (3,4,4',5-tetrachlorobiphenyl)	h	0.00010	A3	0.13	O		
32598-14-4	PCB 105 (2,3,3',4,4'-pentachlorobiphenyl)	h	0.00100	A3	1.3	O		
74472-37-0	PCB 114 (2,3,4,4',5-pentachlorobiphenyl)	h	0.00100	A3	1.3	O		
31508-00-6	PCB 118 (2,3',4,4',5-pentachlorobiphenyl)	h	0.00100	A3	1.3	O		
65510-44-3	PCB 123 (2,3',4,4',5'-pentachlorobiphenyl)	h	0.00100	A3	1.3	O		
57465-28-8	PCB 126 (3,3',4,4',5-	h	3.0E-07	A3	0.00040	O		

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
	pentachlorobiphenyl)							
38380-08-4	PCB 156 (2,3,3',4,4',5-hexachlorobiphenyl)	h	0.00100	A3	1.3	O		
69782-90-7	PCB 157 (2,3,3',4,4',5'-hexachlorobiphenyl)	h	0.00100	A3	1.3	O		
52663-72-6	PCB 167 (2,3',4,4',5,5'-hexachlorobiphenyl)	h	0.00100	A3	1.3	O		
32774-16-6	PCB 169 (3,3',4,4',5,5'-hexachlorobiphenyl)	h	1.0E-06	A3	0.0013	O		
39635-31-9	PCB 189 (2,3,3',4,4',5,5'-heptachlorobiphenyl)	h	0.00100	A3	1.3	O		
	Polychlorinated dibenzo-*p*-dioxins (PCDDs) & dibenzofurans (PCDFs) TEQ	h	3.0E-08	A1	4.0E-05	O		
1746-01-6	2,3,7,8-Tetrachlorodibenzo-*p*-dioxin (TCDD)	c	3.0E-08	A3	4.0E-05	O		
40321-76-4	1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin (PeCDD)	h	3.0E-08	A3	4.0E-05	O		
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin (HxCDD)	h	3.0E-07	A3	0.00040	O		
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin (HxCDD)	h	3.0E-07	A3	0.00040	O		
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin (HxCDD)	h	3.0E-07	A3	0.00040	O		
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin (HpCDD)	h	3.0E-06	A3	0.0040	O		
3268-87-9	Octachlorodibenzo-*p*-dioxin (OCDD)	h	0.00010	A3	0.13	O		

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	h	3.0E-07	A3	0.00040	O		
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	h	1.0E-06	A3	0.0013	O		
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	h	1.0E-07	A3	0.00013	O		
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	h	3.0E-07	A3	0.00040	O		
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	h	3.0E-07	A3	0.00040	O		
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	h	3.0E-07	A3	0.00040	O		
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	h	3.0E-07	A3	0.00040	O		
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	h	3.0E-06	A3	0.0040	O		
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	h	3.0E-06	A3	0.0040	O		
39001-02-0	Octachlorodibenzofuran (OCDF)	h	0.00010	A3	0.13	O		
	Polycyclic aromatic hydrocarbons (PAHs)		0.0020	A2				
56-55-3	Benz[a]anthracene	i	0.010	A3				
50-32-8	Benzo[a]pyrene	m	0.0020	A2	0.0020	I	0.0020	I
205-99-2	Benzo[b]fluoranthene	i	0.0025	A3				

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
205-82-3	Benzo[j]fluoranthene	i	0.0067	A3				
207-08-9	Benzo[k]fluoranthene	i	0.067	A3				
218-01-9	Chrysene	i	0.020	A3				
226-36-8	Dibenz[a,h]acridine	i	0.0091	O				
224-42-0	Dibenz[a,j]acridine	i	0.0091	O				
194-59-2	7H-Dibenzo[c,g]carbazole	i	0.00091	O				
53-70-3	Dibenz[a,h]anthracene	i	0.00020	A3				
192-65-4	Dibenzo[a,e]pyrene	i	0.0050	A3				
189-64-0	Dibenzo[a,h]pyrene	i	0.0022	A3				
189-55-9	Dibenzo[a,i]pyrene	i	0.0033	A3				
191-30-0	Dibenzo[a,l]pyrene	i	0.000067	A3				
193-39-5	Indeno[1,2,3-cd]pyrene	i	0.029	A3				
3697-24-3	5-Methylchrysene	i	0.0020	A2				
7496-02-8	6-Nitrochrysene		0.00020	A2				
7758-01-2	Potassium bromate		0.0071	O				
1120-71-4	1,3-Propane sultone		0.0014	O				
123-38-6	Propionaldehyde				8.0	I		
115-07-1	Propylene				3,000	O		
6423-43-4	Propylene glycol dinitrate				0.27	T	20	T
107-98-2	Propylene glycol monomethyl ether				2,000	I		
75-56-9	Propylene oxide		0.27	I	30	I	3,100	O
	Refractory Ceramic Fibers	k			0.030	T		
7783-07-5	Selenide, hydrogen						5.0	O
7782-49-2	Selenium	j			20	O	20	O
7446-34-6	Selenium sulfide				20	O		
7631-86-9	Silica, crystalline (respirable)				3.0	O		

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m³)	Notes	(µg/m³)	Notes	(µg/m³)	Notes
1310-73-2	Sodium hydroxide						8.0	O
100-42-5	Styrene				1,000	A2	21,000	S
7664-93-9	Sulfuric acid				1.0	O	120	O
505-60-2	Sulfur Mustard						0.70	T
7446-71-9	Sulfur trioxide				1.0	O	120	O
630-20-6	1,1,1,2-Tetrachloroethane		0.14	I				
79-34-5	1,1,2,2-Tetrachloroethane		0.017	O				
127-18-4	Tetrachloroethene (Perchloroethylene)		4.0	A2	40	I	41	T
811-97-2	1,1,1,2-Tetrafluoroethane				80,000	I		
62-55-5	Thioacetamide		0.00059	O				
7550-45-0	Titanium tetrachloride				0.10	T	10	Tint
108-88-3	Toluene				5,000	A2	7,500	T
26471-62-5	Toluene diisocyanates (2,4- and 2,6-)	j	0.091	O	0.020	A2	0.071	T
8001-35-2	Toxaphene (Polychlorinated camphenes)		0.0031	I				
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)				5,000	A2	11,000	T
79-00-5	1,1,2-Trichloroethane (Vinyl trichloride)		0.063	I				
79-01-6	Trichloroethene (TCE, Trichloroethylene)		0.20	A2	2.0	I	2.1	Tint
88-06-2	2,4,6-Trichlorophenol		0.32	I				
96-18-4	1,2,3-Trichloropropane				0.30	I	1.8	T
121-44-8	Triethylamine				7.0	I	2,800	O
526-73-8	1,2,3-Trimethylbenzene				60	I		
95-63-6	1,2,4-Trimethylbenzene				60	I		
108-67-8	1,3,5-Trimethylbenzene				60	I		

OAR 340-245-8030 Table 3
Toxicity Reference Values

			Toxicity Reference Values (TRVs)					
			Chronic Cancer		Chronic Noncancer		Acute Noncancer	
CAS#	Chemical	Notes	(µg/m^3)	Notes	(µg/m^3)	Notes	(µg/m^3)	Notes
51-79-6	Urethane (Ethyl carbamate)		0.0034	O				
7440-62-2	Vanadium (fume or dust)				0.10	T	0.80	T
1314-62-1	Vanadium pentoxide		0.00012	P	0.0070	P	30	O
108-05-4	Vinyl acetate	j			200	I	200	I
593-60-2	Vinyl bromide				3.0	I		
75-01-4	Vinyl chloride	o	0.10	A1	100	I	1,300	T
75-35-4	Vinylidene chloride	j			200	I	200	I
1330-20-7	Xylene (mixture), including *m*-xylene, *o*-xylene, *p*-xylene				200	A2	8,700	T

Notes:

a TRV based on a 1 in 1 million excess cancer risk.
TRV = 1x10^{-6} / IUR, where IUR = chemical-specific inhalation unit risk value [(µg/m^3)$^{-1}$].

b TRV based on chronic reference concentration, RfC (µg/m^3).

c TRV based on acute or subchronic reference concentration, RfC (µg/m^3).

d The TRVs presented for chromium are applicable to hexavalent chromium.

e DDT TRVs apply to the sum of DDT, DDE, and DDD compounds.

f As recommended by the ATSAC in 2015, the two categories of nickel compounds contain the following specific nickel compounds:
Soluble nickel compounds are considered to be emitted mainly in aerosol form, to be less potent carcinogens than insoluble nickel compounds, and include nickel acetate, nickel chloride, nickel carbonate, nickel hydroxide, nickelocene, nickel sulfate, nickel sulfate hexahydrate, nickel nitrate hexahydrate, nickel carbonate hydroxide.
Insoluble nickel compounds are considered to be emitted mainly in particulate form, to be more potent carcinogens than soluble nickel compounds, and to include nickel subsulfide, nickel oxide, nickel sulfide, nickel metal.

g TRVs apply to octabrominated diphenyl ethers (CAS# 32536-52-0) and pentabrominated diphenyl ethers (CAS# 32534-81-9), including BDE-99.

h TRV for chronic cancer calculated by applying toxicity reference factor to 2,3,7,8-TCDD TRV.

i TRV for chronic cancer calculated by applying toxicity reference factor to benzo[a]pyrene TRV.

j If the short-term toxicity reference value is lower than the chronic noncancer toxicity reference value, the chronic noncancer toxicity reference value was used for the short-term toxicity reference value because chronic noncancer toxicity reference values are generally more reliable.

k TRVs for asbestos and refractory ceramic fibers are in units of fibers/cm^3.

m Because benzo[a]pyrene can cause developmental effects, the chronic noncancer TRV is also used as the acute noncancer TRV.

n Chlorinated paraffins of average chain length of C12, approximately 60% chlorine by weight.

Legend:

A1 = ATSAC, DEQ Air Toxics Science Advisory Committee, first review period, 2008-2010

A2 = ATSAC, DEQ Air Toxics Science Advisory Committee, second review period, 2014-2017

A3 = ATSAC, 2017. TRV for cancer calculated by applying toxic equivalency factor to benzo[a]pyrene TRV.

CAS# = Chemical Abstracts Service number

I = IRIS, EPA integrated risk information system

O = OEHHA, California Environmental Protection Agency, Office of Environmental Health Hazard Assessment

P = PPRTV, EPA preliminary peer reviewed toxicity value

S = SGC, DEQ short-term guideline concentration

T = ATSDR, U.S. Agency for Toxic Substances and Disease Registry

TEQ = toxicity equivalents, relative to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin.

Tint = ATSDR, intermediate minimal risk level

TRV = toxicity reference value

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

OAR 340-245-8040 Table 4

Adjustment Factors for Risk-Based Concentrations

OAR 340-245-8040 Table 4

Adjustment Factors for Risk-Based Concentrations[a,b]

Multipathway, Early-Life, and Non-Resident Adjustment Factors

	Chronic Cancer				Chronic Noncancer	
	Early-Life[d]		Multipathway[c]		Multipathway[c]	
Toxic Air Contaminant	Resident ELAFr	Non-Resident ELAFnr	Resident MPAFrc	Non-Resident MPAFnrc	Resident MPAFrnc	Non-Resident MPAFnrnc
Acrylamide	1.7	4.2				
Arsenic			9.7	4.5	88	28
Benzidine (and its salts)	1.7	4.2				
Benzo[a]pyrene	1.7	4.2	23	6.6		
Bis-(2-ethylhexyl)phthalate (DEHP)			5.2	1		
Cadmium			1	1	2.0	1.2
Chromium VI[g]	1.7	4.2	1.6	1	2.4	1
Coke Oven Emissions	1.7	4.2				
1,2-Dibromo-3-chloropropane (DBCP)	1.7	4.2				
Dichloromethane (methylene chloride)	1.7	4.2				
Ethylene oxide	1.7	4.2				
Fluorides					5.7	2.9
Hexachlorocyclohexanes (mixture)			5.4	1.3	1	1
alpha-Hexachlorocyclohexane			5.4	1.3	1	1
beta-Hexachlorocyclohexane			5.4	1.3	1	1
gamma-Hexachlorocyclohexane			5.4	1.3	1	1
Hydrogen fluoride					6.1	3.0
Lead			11	5.8		
Mercury					3.9	2.1
4,4'-Methylene dianiline			7.2	2.5	1	1

OAR 340-245-8040 Table 4
Adjustment Factors for Risk-Based Concentrations[a,b]
Multipathway, Early-Life, and Non-Resident Adjustment Factors

	Chronic Cancer				Chronic Noncancer	
	Early-Life[d]		Multipathway[c]		Multipathway[c]	
Toxic Air Contaminant	Resident ELAFr	Non-Resident ELAFnr	Resident MPAFrc	Non-Resident MPAFnrc	Resident MPAFrnc	Non-Resident MPAFnrnc
(and its dichloride)						
Naphthalene			1	1	1	1
N-Nitrosodiethylamine	1.7	4.2				
N-Nitrosodimethylamine	1.7	4.2				
Polychlorinated biphenyls (PCBs)			19	13	240	11
Polychlorinated biphenyls (PCBs) TEQ[h]			26[h]	7.6[h]	310[h]	6.7[h]
Polychlorinated dibenzo-*p*-dioxins (PCDDs) & Polychlorinated dibenzofurans (PCDFs) TEQ[h]			26[h]	7.6[h]	310[h]	6.7[h]
Polycyclic aromatic hydrocarbons (PAHs)	1.7	4.2	23	6.6		
Selenium					200	24
Selenium sulfide					200	24
Trichloroethene (TCE)	1.2[e]	1.8[e]				
Urethane (ethyl carbamate)	1.7	4.2				
Vinyl chloride	2[f]	26[f]				

Notes:

a Application of adjustments factors in calculating RBCs:
Resident RBC cancer = TRVc / ELAFr / MPAFrc
Resident RBC noncancer = TRVnc / MPAFrnc
Non-resident RBC child cancer = TRVc x childNRAFc / ELAFnr / MPAFnrc
Non-resident RBC child noncancer = TRVnc x childNRAFnc / MPAFnrnc
Worker RBC cancer = TRVc x workerNRAFc / MPAFnrc
Worker RBC noncancer = TRVnc x workerNRAFnc / MPAFnrnc
TRVc = Toxicity reference value, cancer
TRVnc = Toxicity reference value, noncancer

b Additional adjustment factors:
childNRAFnc = Non-residential adjustment factor, noncancer, child = 4.2.
workerNRAFnc = Non-residential adjustment factor, noncancer, worker = 4.2.
Chronic RBCs are based on continual exposure to residents for 70 years. The adjustment for non-resident exposure is:
(24 hours/day / 8 hours/day) x (7 days/week / 5 days/week) = 4.2
childNRAFc = Non-residential adjustment factor, child, cancer = 25

For carcinogenic effects to children, the non-residential exposure duration assumption is 12 years (infant through elementary school), resulting in a childNRAFc value of:
(70 years / 12 years) x (7 days/week / 5 days/week) x (24 hours/day / 8 hours/day) = 25
workerNRAFc = Non-residential adjustment factor, adult worker, cancer = 12
The adjustment for non-resident worker exposure working for 25 years is:
(70 years / 25 years) x (7 days/week / 5 days/week) x (24 hours/day / 8 hours/day) = 12

c MPAF = multipathway adjustment factor. Sources of multipathway adjustment factors:
South Coast Air Quality Management District, Permit Application Package "M", March 2016, Table 8-1.
South Coast Air Quality Management District, Facility Prioritization Procedures for AB 2588 Program, Nov. 2016, Table 3.
Chemicals for which there are MPAFs are considered persistent, bioaccumulative and toxic substances.

d ELAF = early-life adjustment factor. ELAFs apply to toxic air contaminants determined by EPA to be carcinogens acting by a mutagenic mode of action. The standard ELAF approach is to use age-dependent adjustment factors (ADAFs) of 10 for infants up to 2 years old, and 3 for children aged 2 to 16, unless EPA determines that a chemical-specific approach is appropriate. For applicable chemicals, ELAFs are incorporated in the derivation of residential and nonresident child RBCs.

e Early-life adjustment factor for TCE developed by applying ADAFs to one of three toxic endpoints for TCE.

f Early-life adjustment factor for vinyl chloride developed by assuming exposure during early-life doubles the lifetime cancer risk without early-life exposure. These ELAF values apply to the IUR of 4.4×10^{-6} $(\mu g/m^3)^{-1}$ [TRV = 0.2 $\mu g/m^3$], not the adult/child IUR of 8.8×10^{-6} $(\mu g/m^3)^{-1}$ used to calculate the TRV of 0.1 $\mu g/m^3$.

g Adjustment factors for chromium VI apply to both chromate and dichromate particulates, and chromic acid aerosol mist.

h TEQ = toxicity equivalent (relative to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin)

i Multipathway adjustment factors are for PCDDs.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-8050 Table 5

Risk-Based Concentrations

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
75-07-0	Acetaldehyde		0.45	9.0	11	38	5.4	38	470
60-35-5	Acetamide		0.050		1.3		0.60		
67-64-1	Acetone			31,000		130,000		130,000	62,000
75-05-8	Acetonitrile			60		250		250	
107-02-8	Acrolein			0.35		1.5		1.5	6.9
79-06-1	Acrylamide	g	0.0060	6.0	0.060	25	0.12	25	
79-10-7	Acrylic acid			1.0		4.2		4.2	6,000
107-13-1	Acrylonitrile		0.010	2.0	0.25	8.4	0.12	8.4	220
309-00-2	Aldrin		0.00020		0.0051		0.0024		
107-05-1	Allyl chloride		0.17	1.0	4.2	4.2	2.0	4.2	
7429-90-5	Aluminum			5.0		21		21	
7664-41-7	Ammonia			500		2,100		2,100	1,200
62-53-3	Aniline		0.63	1.0	16	4.2	7.5	4.2	
1309-64-4	Antimony trioxide			0.20		0.84		0.84	
140-57-8	Aramite		0.14		3.5		1.7		
7440-38-2	Arsenic	c	0.000021	0.00017	0.0011	0.0023	0.00053	0.0023	0.20
7784-42-1	Arsine			0.050		0.21		0.21	0.20
1332-21-4	Asbestos	i	4.3E-06		0.00011		5.2E-05		
103-33-3	Azobenzene		0.032		0.81		0.39		
71-43-2	Benzene		0.13	30	3.3	130	1.6	130	30
92-87-5	Benzidine (and its salts)	g	9.0E-6		0.000090		0.00018		
100-44-7	Benzyl chloride		0.020	1.0	0.51	4.2	0.24	4.2	240
7440-41-7	Beryllium		0.00040	0.020	0.010	0.084	0.0048	0.084	0.020
111-44-4	*Bis*(2-chloroethyl) ether (DCEE)		0.0030		0.076		0.036		120

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
542-88-1	*Bis*(chloromethyl) ether		0.000016		0.00040		0.00019		1.4
117-81-7	*Bis*(2-ethylhexyl) phthalate (DEHP)	c	0.080		10		5.0		
75-25-2	Bromoform		0.91		23		11		
74-83-9	Bromomethane (Methyl bromide)			5.0		21		21	190
106-94-5	1-Bromopropane (*n*-propyl bromide)		0.50	100	13	420	6.0	420	5,000
106-99-0	1,3-Butadiene		0.030	2.0	0.75	8.4	0.36	8.4	660
78-93-3	2-Butanone (Methyl ethyl ketone)			5,000		21,000		21,000	5,000
78-92-2	*sec*-Butyl alcohol			30,000		130,000		130,000	
7440-43-9	Cadmium	c	0.00060	0.0050	0.015	0.035	0.0072	0.035	0.030
105-60-2	Caprolactam			2.2		9.2		9.2	50
75-15-0	Carbon disulfide			800		3,400		3,400	6,200
56-23-5	Carbon tetrachloride		0.20	100	5.0	420	2.4	420	1,900
463-58-1	Carbonyl sulfide			100		420		420	660
57-74-9	Chlordane		0.0100	0.70	0.25	2.9	0.12	2.9	0.70
108171-26-2	Chlorinated paraffins	j	0.040		1.00		0.48		
7782-50-5	Chlorine			0.10		0.42		0.42	170
10049-04-4	Chlorine dioxide			0.20		0.84		0.84	2.8
532-27-4	2-Chloroacetophenone			0.030		0.13		0.13	
108-90-7	Chlorobenzene			50		210		210	
75-68-3	1-Chloro-1,1-difluoroethane			50,000		210,000		210,000	
75-45-6	Chlorodifluoromethane (Freon 22)			50,000		210,000		210,000	
75-00-3	Chloroethane (Ethyl chloride)			10,000		42,000		42,000	40,000
67-66-3	Chloroform		0.043	300	1.1	1,300	0.52	1,300	490
74-87-3	Chloromethane (Methyl chloride)			90		380		380	1,000

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
95-83-0	4-Chloro-*o*-phenylenediamine		0.22		5.4		2.6		
76-06-2	Chloropicrin			0.40		1.7		1.7	29
126-99-8	Chloroprene		0.0033	20	0.083	84	0.040	84	
95-69-2	*p*-Chloro-*o*-toluidine		0.013		0.32		0.16		
18540-29-9	Chromium VI, chromate and dichromate particulate	c, d	0.000030	0.042	0.00048	0.42	0.00096	0.42	0.30
18540-29-9	Chromium VI, chromic acid aerosol mist	c, d	0.000030	0.0021	0.00048	0.021	0.00096	0.021	0.0050
7440-48-4	Cobalt		0.00011	0.10	0.0028	0.42	0.0013	0.42	
	Coke Oven Emissions	g	0.00097		0.0097		0.019		
7440-50-8	Copper								100
120-71-8	*p*-Cresidine		0.023		0.58		0.28		
1319-77-3	Cresols (mixture), including *m*-cresol, *o*-cresol, *p*-cresol			600		2,500		2,500	
135-20-6	Cupferron		0.016		0.40		0.19		
74-90-8	Cyanide, Hydrogen			0.80		3.4		3.4	340
110-82-7	Cyclohexane			6,000		25,000		25,000	
	DDT	e	0.010		0.26		0.12		
615-05-4	2,4-Diaminoanisole		0.15		3.8		1.8		
95-80-7	2,4-Diaminotoluene (2,4-Toluene diamine)		0.00091		0.023		0.011		
333-41-5	Diazinon								10
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	g	0.00010	0.20	0.0010	0.84	0.0020	0.84	1.9
106-46-7	p-Dichlorobenzene (1,4-Dichlorobenzene)		0.090	800	2.3	3,400	1.1	3,400	12,000
91-94-1	3,3'-Dichlorobenzidine		0.0029		0.074		0.035		
75-34-3	1,1-Dichloroethane (Ethylidene dichloride)		0.63		16		7.5		
156-60-5	*trans*-1,2-dichloroethene								790

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
75-09-2	Dichloromethane (Methylene chloride)		60	600	600	2,500	1,200	2,500	2,100
78-87-5	1,2-Dichloropropane (Propylene dichloride)			4.0		17		17	230
542-75-6	1,3-Dichloropropene		0.25	32	6.3	130	3.0	130	36
62-73-7	Dichlorovos (DDVP)			0.50		2.1		2.1	18
60-57-1	Dieldrin		0.00022		0.0054		0.0026		
	Diesel Particulate Matter		0.10	5.0	2.5	21	1.2	21	
111-42-2	Diethanolamine			0.20		0.84		0.84	
112-34-5	Diethylene glycol monobutyl ether			0.10		0.42		0.42	
111-90-0	Diethylene glycol monoethyl ether			0.30		1.3		1.3	
75-37-6	1,1-Difluoroethane			40,000		170,000		170,000	
60-11-7	4-Dimethylaminoazobenzene		0.00077		0.019		0.0092		
68-12-2	Dimethyl formamide			30		130		130	
57-14-7	1,1-Dimethylhydrazine								0.49
121-14-2	2,4-Dinitrotoluene		0.011		0.28		0.13		
123-91-1	1,4-Dioxane		0.20	30	5.0	130	2.4	130	7,200
122-66-7	1,2-Diphenylhydrazine (Hydrazobenzene)		0.0045		0.11		0.055		
1937-37-7	Direct Black 38		7.1E-06		0.00018		8.6E-05		
2602-46-2	Direct Blue 6		7.1E-06		0.00018		8.6E-05		
16071-86-6	Direct Brown 95 (technical grade)		7.1E-06		0.00018		8.6E-05		
298-04-4	Disulfoton								6.0
106-89-8	Epichlorohydrin		0.83	1.0	21	4.2	10	4.2	1,300
106-88-7	1,2-Epoxybutane			20		84		84	
140-88-5	Ethyl acrylate			8.0		34		34	
100-41-4	Ethyl benzene		0.40	1,000	10	4,200	4.8	4,200	22,000
106-93-4	Ethylene dibromide (EDB,		0.0020	9.0	0.050	38	0.024	38	

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
	1,2-Dibromoethane)								
107-06-2	Ethylene dichloride (EDC, 1,2-Dichloroethane)		0.040	7.0	1.0	29	0.48	29	
107-21-1	Ethylene glycol			400		1,700		1,700	2,000
111-76-2	Ethylene glycol monobutyl ether			1,600		6,700		6,700	29,000
110-80-5	Ethylene glycol monoethyl ether			200		840		840	370
111-15-9	Ethylene glycol monoethyl ether acetate			60		250		250	140
109-86-4	Ethylene glycol monomethyl ether			20		84		84	93
110-49-6	Ethylene glycol monomethyl ether acetate			1.0		4.2		4.2	
75-21-8	Ethylene oxide	g	0.00018	30	0.0018	130	0.0036	130	160
96-45-7	Ethylene thiourea		0.077		1.9		0.92		
	Fluorides	c		2.3		19		19	240
7782-41-4	Fluorine gas								16
50-00-0	Formaldehyde		0.077	0.20	1.9	0.84	0.92	0.84	49
111-30-8	Glutaraldehyde			0.080		0.34		0.34	4.1
76-44-8	Heptachlor		0.00077		0.019		0.0092		
1024-57-3	Heptachlor epoxide		0.00038		0.0096		0.0046		
118-74-1	Hexachlorobenzene		0.0022		0.054		0.026		
87-68-3	Hexachlorobutadiene		0.045		1.1		0.55		
608-73-1	Hexachlorocyclohexanes (mixture) including but not limited to:	c	0.00036		0.038		0.018		
319-84-6	*alpha*-Hexachlorocyclohexane	c	0.00010		0.011		0.0051		
319-85-7	*beta*-Hexachlorocyclohexane	c	0.00035		0.036		0.017		
58-89-9	*gamma*-Hexachlorocyclohexane (Lindane)	c	0.00060		0.062		0.030		

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
77-47-4	Hexachlorocyclopentadiene			0.20		0.84		0.84	110
67-72-1	Hexachloroethane			30		130		130	58,000
822-06-0	Hexamethylene-1,6-diisocyanate			0.010		0.042		0.042	0.21
110-54-3	Hexane			700		2,900		2,900	
302-01-2	Hydrazine		0.00020	0.030	0.0051	0.13	0.0024	0.13	5.2
7647-01-0	Hydrochloric acid			20		84		84	2,100
7664-39-3	Hydrogen fluoride	c		2.3		20		20	16
7783-06-4	Hydrogen sulfide			2.0		8.4		8.4	98
78-59-1	Isophorone			2,000		8,400		8,400	
67-63-0	Isopropyl alcohol			200		840		840	3,200
98-82-8	Isopropylbenzene (Cumene)			400		1,700		1,700	
7439-92-1	Lead	c	0.0076	0.15	0.36	0.63	0.17	0.63	0.15
108-31-6	Maleic anhydride			0.70		2.9		2.9	
7439-96-5	Manganese			0.090		0.38		0.38	0.30
7439-97-6	Mercury	c		0.077		0.60		0.60	0.60
67-56-1	Methanol			4,000		17,000		17,000	28,000
101-14-4	4,4'-Methylene *bis*(2-chloroaniline) (MOCA)		0.0023		0.058		0.028		
101-77-9	4,4'-Methylenedianiline (and its dichloride)		0.00030	20	0.022	84	0.010	84	
101-68-8	Methylene diphenyl diisocyanate (MDI)			0.60		2.5		2.5	12
108-10-1	Methyl isobutyl ketone (MIBK, Hexone)			3,000		13,000		13,000	
624-83-9	Methyl isocyanate			1.0		4.2		4.2	
80-62-6	Methyl methacrylate			700		2,900		2,900	
1634-04-4	Methyl *tert*-butyl ether		3.8	3,000	96	13,000	46	13,000	7,200
90-94-8	Michler's ketone		0.0040		0.10		0.048		
91-20-3	Naphthalene	c	0.030	3.0	0.75	13	0.36	13	200

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
	Nickel compounds, insoluble	f	0.0040	0.014	0.10	0.059	0.048	0.059	0.20
	Nickel compounds, soluble	f	0.0038	0.010	0.096	0.042	0.046	0.042	0.20
7697-37-2	Nitric acid								86
98-95-3	Nitrobenzene		0.025	9.0	0.63	38	0.30	38	
79-46-9	2-Nitropropane			20		84		84	
924-16-3	*N*-Nitrosodi-*n*-butylamine		0.00063		0.016		0.0075		
55-18-5	*N*-Nitrosodiethylamine	g	0.000014		0.00014		0.00028		
62-75-9	*N*-Nitrosodimethylamine	g	0.000043		0.00043		0.00086		
86-30-6	*N*-Nitrosodiphenylamine		0.38		9.6		4.6		
156-10-5	*p*-Nitrosodiphenylamine		0.16		4.0		1.9		
621-64-7	*N*-Nitrosodi-*n*-propylamine		0.00050		0.013		0.0060		
10595-95-6	*N*-Nitrosomethylethylamine		0.00016		0.0040		0.0019		
59-89-2	*N*-Nitrosomorpholine		0.00053		0.013		0.0063		
100-75-4	*N*-Nitrosopiperidine		0.00037		0.0093		0.0044		
930-55-2	*N*-Nitrosopyrrolidine		0.0016		0.041		0.020		
8014-95-7	Oleum								120
56-38-2	Parathion								0.020
87-86-5	Pentachlorophenol		0.20		4.9		2.4		
108-95-2	Phenol			200		840		840	5,800
75-44-5	Phosgene			0.30		1.3		1.3	4.0
7803-51-2	Phosphine			0.80		3.4		3.4	
7664-38-2	Phosphoric acid			10		42		42	
7723-14-0	Phosphorus			9.0		38		38	20
85-44-9	Phthalic anhydride			20		84		84	
	Polybrominated diphenyl ethers (PBDEs)	h							6.0
1336-36-3	Polychlorinated biphenyls (PCBs)	c	0.00053		0.019		0.0092		
	Polychlorinated biphenyls (PCBs) TEQ	c	1.2E-09	1.3E-07	9.9E-08	2.5E-05	4.7E-08	2.5E-05	

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
32598-13-3	PCB 77 (3,3',4,4'-tetrachlorobiphenyl)	c	0.000012	0.0013	0.00099	0.25	0.00047	0.25	
70362-50-4	PCB 81 (3,4,4',5-tetrachlorobiphenyl)	c	3.8E-06	0.00042	0.00033	0.081	0.00016	0.081	
32598-14-4	PCB 105 (2,3,3',4,4'-pentachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
74472-37-0	PCB 114 (2,3,4,4',5-pentachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
31508-00-6	PCB 118 (2,3',4,4',5-pentachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
65510-44-3	PCB 123 (2,3',4,4',5'-pentachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
57465-28-8	PCB 126 (3,3',4,4',5-pentachlorobiphenyl)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
38380-08-4	PCB 156 (2,3,3',4,4',5-hexachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
69782-90-7	PCB 157 (2,3,3',4,4',5'-hexachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
52663-72-6	PCB 167 (2,3',4,4',5,5'-hexachlorobiphenyl)	c	0.000038	0.0042	0.0033	0.81	0.0016	0.81	
32774-16-6	PCB 169 (3,3',4,4',5,5'-hexachlorobiphenyl)	c	3.8E-08	4.2E-06	3.3E-06	0.00081	1.6E-06	0.00081	
39635-31-9	PCB 189 (2,3,3',4,4',5,5'-heptachlorobiphenyl)	c	0.00100	1.3	0.025	5.5	0.012	5.5	
	Polychlorinated dibenzo-*p*-dioxins (PCDDs) & dibenzofurans (PCDFs) TEQ	c	1.2E-09	1.3E-07	9.9E-08	2.5E-05	4.7E-08	2.5E-05	
1746-01-6	2,3,7,8-Tetrachlorodibenzo-*p*-dioxin (TCDD)	c	1.2E-09	1.3E-07	9.9E-08	2.5E-05	4.7E-08	2.5E-05	
40321-76-4	1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin (PeCDD)	c	1.2E-09	1.3E-07	9.9E-08	2.5E-05	4.7E-08	2.5E-05	
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-*p*-	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
	dioxin (HxCDD)								
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin (HxCDD)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin (HxCDD)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin (HpCDD)	c	1.2E-07	0.000013	9.9E-06	0.0025	4.7E-06	0.0025	
3268-87-9	Octachlorodibenzo-*p*-dioxin (OCDD)	c	3.8E-06	0.00042	0.00033	0.081	0.00016	0.081	
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran (TcDF)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	c	3.8E-08	4.2E-06	3.3E-06	0.00081	1.6E-06	0.00081	
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	c	3.8E-09	4.2E-07	3.3E-07	8.1E-05	1.6E-07	8.1E-05	
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	c	1.2E-08	1.3E-06	9.9E-07	0.00025	4.7E-07	0.00025	
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	c	1.2E-07	0.000013	9.9E-06	0.0025	4.7E-06	0.0025	
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	c	1.2E-07	0.000013	9.9E-06	0.0025	4.7E-06	0.0025	

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
39001-02-0	Octachlorodibenzofuran (OCDF)	c	3.8E-06	0.00042	0.00033	0.081	0.00016	0.081	
	Polycyclic aromatic hydrocarbons (PAHs)	c, g	0.000052		0.0018		0.0036		
56-55-3	Benz[a]anthracene	c, g	0.00026		0.0091		0.018		
50-32-8	Benzo[a]pyrene	c, g	0.000052	0.0020	0.0018	0.0084	0.0036	0.0084	0.0020
205-99-2	Benzo[b]fluoranthene	c, g	0.000066		0.0023		0.0045		
205-82-3	Benzo[j]fluoranthene	c, g	0.00017		0.0061		0.012		
207-08-9	Benzo[k]fluoranthene	c, g	0.0017		0.061		0.12		
218-01-9	Chrysene	c, g	0.00052		0.018		0.036		
226-36-8	Dibenz[a,h]acridine	c, g	0.0091		0.23		0.11		
224-42-0	Dibenz[a,j]acridine	c, g	0.0091		0.23		0.11		
194-59-2	7H-Dibenzo[c,g]carbazole	c, g	0.00091		0.023		0.011		
53-70-3	Dibenz[a,h]anthracene	c, g	5.2E-06		0.00018		0.00036		
192-65-4	Dibenzo[a,e]pyrene	c, g	0.00013		0.0045		0.0091		
189-64-0	Dibenzo[a,h]pyrene	c, g	0.000058		0.0020		0.0040		
189-55-9	Dibenzo[a,i]pyrene	c, g	0.000087		0.0030		0.0061		
191-30-0	Dibenzo[a,l]pyrene	c, g	1.7E-06		0.000061		0.00012		
193-39-5	Indeno[1,2,3-cd]pyrene	c, g	0.00075		0.026		0.052		
3697-24-3	5-Methylchrysene	c, g	0.000052		0.0018		0.0036		
7496-02-8	6-Nitrochrysene		5.2E-06		0.00018		0.00036		
7758-01-2	Potassium bromate		0.0071		0.18		0.086		
1120-71-4	1,3-Propane sultone		0.0014		0.036		0.017		
123-38-6	Propionaldehyde			8.0		34		34	
115-07-1	Propylene			3,000		13,000		13,000	
6423-43-4	Propylene glycol dinitrate			0.27		1.1		1.1	20
107-98-2	Propylene glycol monomethyl ether			2,000		8,400		8,400	
75-56-9	Propylene oxide		0.27	30	6.8	130	3.2	130	3,100
	Refractory Ceramic Fibers	k		0.030		0.13		0.13	

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
7783-07-5	Selenide, hydrogen								5.0
7782-49-2	Selenium	c		0.10		3.5		3.5	20
7446-34-6	Selenium sulfide	c		0.10		3.5		3.5	
7631-86-9	Silica, crystalline (respirable)			3.0		13		13	
1310-73-2	Sodium hydroxide								8.0
100-42-5	Styrene			1,000		4,200		4,200	21,000
7664-93-9	Sulfuric acid			1.0		4.2		4.2	120
505-60-2	Sulfur Mustard								0.70
7446-71-9	Sulfur trioxide			1.0		4.2		4.2	120
630-20-6	1,1,1,2-Tetrachloroethane		0.14		3.4		1.6		
79-34-5	1,1,2,2-Tetrachloroethane		0.017		0.43		0.21		
127-18-4	Tetrachloroethene (Perchloroethylene)		4.0	40	100	170	48	170	41
811-97-2	1,1,1,2-Tetrafluoroethane			80,000		340,000		340,000	
62-55-5	Thioacetamide		0.00059		0.015		0.0071		
7550-45-0	Titanium tetrachloride			0.10		0.42		0.42	10
108-88-3	Toluene			5,000		21,000		21,000	7,500
26471-62-5	Toluene diisocyanates (2,4- and 2,6-)		0.091	0.020	2.3	0.084	1.1	0.084	0.071
8001-35-2	Toxaphene (Polychlorinated camphenes)		0.0031		0.078		0.038		
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)			5,000		21,000		21,000	11,000
79-00-5	1,1,2-Trichloroethane (Vinyl trichloride)		0.063		1.6		0.75		
79-01-6	Trichloroethene (TCE, Trichloroethylene)	g	0.17	2.0	1.2	8.4	2.4	8.4	2.1
88-06-2	2,4,6-Trichlorophenol		0.32		8.1		3.9		
96-18-4	1,2,3-Trichloropropane			0.30		1.3		1.3	1.8
121-44-8	Triethylamine			7.0		29		29	2,800

OAR 340-245-8050 Table 5
Risk-Based Concentrations

			Residential Chronic		Non-Residential Chronic				Acute
			Cancer RBC	Non-cancer RBC	Child Cancer RBC	Child Non-cancer RBC	Worker Cancer RBC	Worker Non-cancer RBC	Non-cancer RBC
CAS#	Chemical	Notes	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)
526-73-8	1,2,3-Trimethylbenzene			60		250		250	
95-63-6	1,2,4-Trimethylbenzene			60		250		250	
108-67-8	1,3,5-Trimethylbenzene			60		250		250	
51-79-6	Urethane (Ethyl carbamate)	g	0.0021		0.021		0.041		
7440-62-2	Vanadium (fume or dust)			0.10		0.42		0.42	0.80
1314-62-1	Vanadium pentoxide		0.00012	0.0070	0.0030	0.029	0.0014	0.029	30
108-05-4	Vinyl acetate			200		840		840	200
593-60-2	Vinyl bromide			3.0		13		13	
75-01-4	Vinyl chloride	g, k	0.10	100	0.19	420	2.4	420	1,300
75-35-4	Vinylidene chloride			200		840		840	200
1330-20-7	Xylene (mixture), including *m*-xylene, *o*-xylene, *p*-xylene			200		840		840	8,700

Notes:

a RBCs calculated using the following formulas:
Residential RBC for cancer effects = residRBCc (µg/m^3) = TRVc / ELAFr / MPAFrc
Residential RBC for noncancer effects = residRBCnc (µg/m^3) = TRVnc / MPAFrnc
Nonresidential child RBC for cancer effects = nrchildRBCc (µg/m^3) =
TRVc x childNRAFc / ELAFnr / MPAFnrc
Nonresidential child RBC for noncancer effects = nrchildRBCnc (µg/m^3) =
TRVnc x childNRAFnc / MPAFnrnc
Nonresidential worker RBC for cancer effects = workerRBCc (µg/m^3) =
TRVc x workerNRAFc / MPAFnrc
Nonresidential worker RBC for noncancer effects = workerRBCnc (µg/m^3) =
TRVnc x workerNRAFnc / MPAFnrnc
Acute RBC (µg/m^3) = TRVa
From OAR 340-245-8030 Table 3:
TRVc = Toxicity reference value, cancer (µg/m^3)
TRVnc = Toxicity reference value, noncancer (µg/m^3)
TRVa = Toxicity reference value, acute (µg/m^3)
From OAR 340-245-8040 Table 4:
ELAFr = early-life adjustment factor, residential (unitless)
ELAFnr = early-life adjustment factor, nonresidential (unitless)
MPAFrc = multipathway adjustment factor, resident cancer (unitless)
MPAFrnc = multipathway adjustment factor, resident noncancer (unitless)
MPAFnrc = multipathway adjustment factor, nonresident cancer (unitless)
MPAFnrnc = multipathway adjustment factor, nonresident noncancer (unitless)

childNRAFc = Nonresident adjustment factor, child cancer (25) (unitless) = (24 hours/day / 8 hours/day) x (7 days/week / 5 days/week) x (70 years / 12 years)
childNRAFnc = Nonresident adjustment factor, child noncancer (4.2) (unitless) = (24 hours/day / 8 hours/day) x (7 days/week / 5 days/week)
workerNRAFc = Nonresident adjustment factor, worker cancer (12) (unitless) = (24 hours/day / 8 hours/day) x (7 days/week / 5 days/week) x (70 years / 25 years)
workerNRAFnc = Nonresident adjustment factor, worker noncancer (4.2) (unitless) = (24 hours/day / 8 hours/day) x (7 days/week / 5 days/week)

b CAS# = Chemical Abstracts Service number

c Chronic RBCs include factors for multipathway risk. Multipathway adjustment factors are provided in OAR 340-245-8040 Table 4.

d The RBCs presented for chromium are applicable to hexavalent chromium. In the absence of data indicating otherwise, assume that any total chromium (i.e., unspeciated) that is measured or modeled is entirely in the hexavalent form. Determine, based on information about the source of emissions, whether hexavalent chromium is emitted in aerosol or particulate form, and apply the corresponding RBC. Because there are no RBCs for trivalent chromium, a source determined to be emitting only trivalent chromium cannot be shown to pose an unacceptable risk, so the risk in this case will be considered acceptable.

e DDT RBCs apply to the sum of DDT, DDE, and DDD compounds.

f As recommended by the ATSAC in 2015, the two categories of nickel compounds contain the following specific nickel compounds:
Soluble nickel compounds are considered to be emitted mainly in aerosol form, to be less potent carcinogens than insoluble nickel compounds, and include nickel acetate, nickel chloride, nickel carbonate, nickel hydroxide, nickelocene, nickel sulfate, nickel sulfate hexahydrate, nickel nitrate hexahydrate, nickel carbonate hydroxide.
Insoluble nickel compounds are considered to be emitted mainly in particulate form, to be more potent carcinogens than soluble nickel compounds, and to include nickel subsulfide, nickel oxide, nickel sulfide, nickel metal.

g RBCs adjusted to protect early-life exposure to infants and children because chemical is carcinogenic by a mutagenic mode of action. See OAR 340-245-8040 Table 4.

h RBCs apply to octabrominated diphenyl ethers (CAS# 32536-52-0) and pentabrominated diphenyl ethers (CAS# 32534-81-9), including BDE-99.

i RBCs for asbestos and refractory ceramic fibers are in units of fibers/cm^3.

j Chlorinated paraffins of average chain length of C12, approximately 60% chlorine by weight.

k DEQ followed the ATSAC recommendation to develop a vinyl chloride TRV that already includes early-life exposure. For the RBC calculations, DEQ applied the adjustment factors from OAR 340-245-8040 Table 4 to a TRV of 0.2 µg/m3, not the adult/child TRV of 0.1 µg/m3.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

OAR 340-245-8060 Table 6
Level 1 Risk Assessment Tool
Dispersion Factors

Table 6A: Dispersion Factors for Annual Exposure (µg/m^3 / pounds/year)

Stack	Exposure Location Distance (meters)												
Ht (m)	50	60	70	80	90	100	110	120	130	140	150	160	170
5	0.0033	0.0026	0.0021	0.0017	0.0014	0.0012	0.0010	0.00088	0.00076	0.00066	0.00058	0.00051	0.00046
10	0.0014	0.0012	0.0011	0.00094	0.00084	0.00075	0.00068	0.00062	0.00057	0.00052	0.00048	0.00044	0.00041
15	0.00075	0.00061	0.00054	0.00049	0.00044	0.00040	0.00037	0.00034	0.00031	0.00029	0.00027	0.00025	0.00024
20	0.00072	0.00054	0.00035	0.00031	0.00028	0.00026	0.00023	0.00022	0.00020	0.00019	0.00017	0.00016	0.00015
25	0.00050	0.00041	0.00035	0.00025	0.00019	0.00018	0.00016	0.00015	0.00014	0.00013	0.00012	0.00012	0.00011
30	0.00037	0.00030	0.00026	0.00023	0.00019	0.00013	0.00012	0.00011	0.00010	0.000096	0.000090	0.000085	0.000080
35	0.00030	0.00023	0.00019	0.00017	0.00015	0.00013	0.00011	0.000081	0.000075	0.000071	0.000068	0.000064	0.000061
40	0.00023	0.00019	0.00015	0.00013	0.00012	0.00011	0.000096	0.000081	0.000064	0.000054	0.000051	0.000049	0.000047
45	0.00018	0.00016	0.00013	0.00011	0.000095	0.000085	0.000078	0.000072	0.000063	0.000053	0.000042	0.000038	0.000037
50	0.00014	0.00013	0.00011	0.000090	0.000077	0.000068	0.000062	0.000057	0.000053	0.000048	0.000042	0.000035	0.000029

Stack	Exposure Location Distance (meters)												
Ht (m)	180	190	200	250	300	350	400	450	500	600	700	800	1000
5	0.00041	0.00037	0.00034	0.00023	0.00017	0.00013	0.00010	0.000084	0.000071	0.000052	0.000040	0.000032	0.000022
10	0.00038	0.00035	0.00033	0.00023	0.00017	0.00013	0.000098	0.000078	0.000064	0.000047	0.000036	0.000029	0.000021
15	0.00023	0.00021	0.00020	0.00016	0.00013	0.00010	0.000083	0.000069	0.000057	0.000041	0.000032	0.000025	0.000018
20	0.00014	0.00014	0.00013	0.00010	0.000086	0.000073	0.000062	0.000053	0.000046	0.000035	0.000027	0.000021	0.000015
25	0.00010	0.000096	0.000091	0.000072	0.000059	0.000051	0.000044	0.000039	0.000034	0.000027	0.000022	0.000018	0.000013
30	0.000075	0.000071	0.000068	0.000053	0.000044	0.000037	0.000032	0.000028	0.000025	0.000021	0.000017	0.000014	0.000010
35	0.000058	0.000055	0.000052	0.000042	0.000034	0.000029	0.000025	0.000022	0.000019	0.000016	0.000014	0.000011	0.000008
40	0.000045	0.000043	0.000041	0.000033	0.000028	0.000023	0.000020	0.000018	0.000016	0.000013	0.000011	0.000009	0.000007
45	0.000036	0.000034	0.000033	0.000027	0.000023	0.000019	0.000017	0.000015	0.000013	0.000011	0.000009	0.000008	0.000006
50	0.000027	0.000026	0.000026	0.000022	0.000019	0.000016	0.000014	0.000012	0.000011	0.000009	0.000007	0.000006	0.000005

Table 6B: Dispersion Factors for 24 hour Exposure (µg/m^3 / pounds/day)

Stack	Exposure Location Distance (meters)												
Ht (m)	50	60	70	80	90	100	110	120	130	140	150	160	170
5	8.3	7.1	6.1	5.2	4.4	3.8	3.2	2.7	2.4	2.1	1.8	1.6	1.4
10	3.8	3.4	3.1	2.8	2.6	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5
15	1.8	1.6	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.00	0.95	0.91	0.87
20	1.6	1.3	0.91	0.86	0.82	0.77	0.73	0.69	0.65	0.62	0.59	0.56	0.54
25	0.97	0.93	0.85	0.64	0.52	0.50	0.48	0.46	0.44	0.42	0.40	0.38	0.36
30	0.62	0.59	0.57	0.55	0.49	0.34	0.32	0.31	0.30	0.29	0.28	0.27	0.26
35	0.42	0.41	0.39	0.38	0.37	0.34	0.29	0.22	0.21	0.21	0.20	0.20	0.19
40	0.30	0.29	0.28	0.28	0.27	0.26	0.25	0.22	0.17	0.15	0.15	0.15	0.14
45	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.17	0.16	0.12	0.11	0.11
50	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.12	0.10	0.082

Stack	Exposure Location Distance (meters)												
Ht (m)	180	190	200	250	300	350	400	450	500	600	700	800	1000
5	1.3	1.2	1.1	0.72	0.55	0.44	0.36	0.30	0.26	0.20	0.16	0.13	0.092
10	1.4	1.3	1.3	0.91	0.67	0.50	0.38	0.30	0.25	0.18	0.14	0.12	0.088
15	0.83	0.80	0.77	0.64	0.53	0.43	0.36	0.30	0.25	0.18	0.13	0.10	0.075
20	0.52	0.49	0.48	0.40	0.35	0.31	0.27	0.23	0.20	0.16	0.12	0.096	0.064
25	0.35	0.34	0.32	0.27	0.23	0.21	0.19	0.17	0.15	0.12	0.100	0.082	0.057
30	0.25	0.24	0.23	0.19	0.17	0.15	0.13	0.12	0.11	0.095	0.078	0.066	0.048
35	0.18	0.18	0.17	0.15	0.13	0.11	0.099	0.090	0.083	0.072	0.062	0.053	0.040
40	0.14	0.14	0.13	0.11	0.10	0.088	0.078	0.070	0.064	0.056	0.049	0.044	0.033
45	0.11	0.11	0.10	0.092	0.081	0.072	0.065	0.058	0.053	0.045	0.040	0.036	0.028
50	0.081	0.080	0.079	0.072	0.065	0.059	0.053	0.048	0.044	0.037	0.032	0.029	0.024

Use of dispersion factors in a Level 1 screening risk assessment:

For each Toxics Emissions Unit, select the appropriate stack height and distance to nearest exposure locations approved by DEQ. For each exposure location, find the corresponding annual dispersion factor in Table 6A. For each air toxic, multiply the annual air toxic emission rate (in pounds/year) by the dispersion factor. Divide the product by the RBC for all the air toxics for the appropriate exposure location in OAR 340-245-8050 Table 5. Add up the resulting ratios for all Toxic Emissions Units for each exposure location. Compare the results with the Risk Action Levels in OAR 340-245-8010 Table 1. Repeat the process for daily emission rates (in pounds/day) using Table 6B at the acute exposure location.

For a stack height between the values shown in the table, either use the next lowest stack height, or interpolate the dispersion factor. For an exposure location distance between the values shown in the table, either use the next lowest distance, or interpolate the dispersion factor. In the absence of a known stack height and exposure location distance, use as a default, the annual dispersion factor (0.0033 µg/m3 / pounds/year) and daily dispersion factor (8.3 µg/m3 / pounds/day) for a stack height of 5 meters and an exposure location distance of 50 meters.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155