

List of Toxic Air Contaminants in Proposed Noncancer Hazard Index Rules

November 2019

Background Information and Numbers

The Oregon Department of Environmental Quality is proposing science- and policy-based rules for Section 7 of Senate Bill (SB) 1541. The proposed rules have been informed by the discussions of a technical advisory committee (appointed by the Environmental Quality Commission and convened by DEQ on October 23 and December 4, 2018) as well as by the comments of a rules advisory committee (met on July 10, 2019).

SB 1541 requires DEQ to identify toxic air contaminants to be regulated at a Hazard Index (HI) other than HI5 that are expected to have (a) developmental human health effects associated with prenatal or postnatal exposure or (b) other severe human health effects (Section 7(1)(a) and (b)). In consultation with the technical advisory committee and the rules advisory committee, DEQ has identified **156** of these chemicals for EQC consideration under Section 7 of SB 1541.

- Toxic air contaminants or classes of toxic air contaminants regulated under the Cleaner Air Oregon program: **259**
- Toxic air contaminants with non-cancer toxicity reference values: **182**
- Toxic air contaminants out of 182 that meet criteria for having developmental or other severe health effects: **156**

Toxic Air Contaminants Expected to Have Developmental or Other Severe Health Effects

Of the 182 chemicals with noncancer toxicity reference values, DEQ has determined that 156 of them are expected to have developmental or other severe human health effects associated with prenatal or postnatal exposure. Here is a list of those 156 toxic air contaminants:

- 1,1,1,2-Tetrafluoroethane
- 1,1,1-Trichloroethane (Methyl chloroform)
- 1,1-Dimethylhydrazine
- 1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
- 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
- 1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
- 1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
- 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
- 1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
- 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
- 1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
- 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
- 1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
- 1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
- 1,2,3-Trimethylbenzene
- 1,2,4-Trimethylbenzene
- 1,2-Dibromo-3-chloropropane (DBCP)
- 1,2-Dichloropropane (Propylene dichloride)
- 1,3,5-Trimethylbenzene
- 1,3-Butadiene
- 1,3-Dichloropropene
- 1,4-Dioxane
- 1-Bromopropane (n-propyl bromide)
- 1-Chloro-1,1-difluoroethane
- 2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
- 2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
- 2,3,7,8-Tetrachlorodibenzofuran (TcDF)
- 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
- 2-Butanone (Methyl ethyl ketone)
- 2-Nitropropane
- Acetaldehyde
- Acetone
- Acetonitrile

- Acrylamide
- Acrylic acid
- Acrylonitrile
- Allyl chloride
- Ammonia
- Antimony and compounds
- Arsenic and compounds
- Arsine
- Benzene
- Benzo[a]pyrene
- Benzyl chloride
- Beryllium and compounds
- Bis(2-chloroethyl) ether (BCEE)
- Bromomethane (Methyl bromide)
- Cadmium and compounds
- Caprolactam
- Carbon disulfide
- Carbon tetrachloride
- Carbonyl sulfide
- Chlordane
- Chlorine
- Chlorine dioxide
- Chlorobenzene
- Chlorodifluoromethane (Freon 22)
- Chloroethane (Ethyl chloride)
- Chloroform
- Chloromethane (Methyl chloride)
- Chloropicrin
- Chloroprene
- Chromium VI, chromate and dichromate particulate
- Chromium VI, chromic acid aerosol mist
- Cobalt and compounds
- Copper and compounds
- Cresols (mixture), including m-cresol, o-cresol, p-cresol
- Cyanide, Hydrogen
- Cyclohexane
- Diazinon
- Dichloromethane (Methylene chloride)
- Diethanolamine
- Diethylene glycol monobutyl ether
- Dimethyl formamide
- Disulfoton
- Epichlorohydrin
- Ethyl acrylate
- Ethyl benzene
- Ethylene dibromide (EDB, 1,2-Dibromoethane)
- Ethylene dichloride (EDC, 1,2-Dichloroethane)
- Ethylene glycol
- Ethylene glycol monobutyl ether
- Ethylene glycol monoethyl ether
- Ethylene glycol monoethyl ether acetate
- Ethylene glycol monomethyl ether
- Ethylene glycol monomethyl ether acetate
- Ethylene oxide
- Fluorides
- Fluorine gas
- Formaldehyde
- Hexachlorocyclopentadiene
- Hexachloroethane
- Hexane
- Hydrazine
- Hydrochloric acid
- Hydrogen fluoride
- Hydrogen sulfide
- Isophorone
- Isopropyl alcohol
- Isopropylbenzene (Cumene)
- Lead and compounds
- Manganese and compounds
- Mercury and compounds
- Methanol
- Methyl isobutyl ketone (MIBK, Hexone)
- Methyl isocyanate
- Methyl tert-butyl ether
- Methylene diphenyl diisocyanate (MDI)
- Naphthalene
- Nickel compounds, insoluble
- Nickel compounds, soluble
- Nitrobenzene
- Octachlorodibenzofuran (OCDF)
- Octachlorodibenzo-p-dioxin (OCDD)
- Parathion
- PCB 105 [2,3,3',4,4'-pentachlorobiphenyl]
- PCB 114 [2,3,4,4',5-pentachlorobiphenyl]
- PCB 118 [2,3',4,4',5-pentachlorobiphenyl]
- PCB 123 [2,3',4,4',5'-pentachlorobiphenyl]
- PCB 126 [3,3',4,4',5-pentachlorobiphenyl]
- PCB 156 [2,3,3',4,4',5-hexachlorobiphenyl]
- PCB 157 [2,3,3',4,4',5'-hexachlorobiphenyl]
- PCB 167 [2,3',4,4',5,5'-hexachlorobiphenyl]
- PCB 169 [3,3',4,4',5,5'-hexachlorobiphenyl]
- PCB 189 [2,3,3',4,4',5,5'-heptachlorobiphenyl]
- PCB 77 [3,3',4,4'-tetrachlorobiphenyl]
- PCB 81 [3,4,4',5-tetrachlorobiphenyl]
- p-Dichlorobenzene (1,4-Dichlorobenzene)
- Phenol
- Phosgene
- Phosphine
- Phosphoric acid
- Phosphorus, white
- Phthalic anhydride
- Polybrominated diphenyl ethers (PBDEs)
- Propylene glycol monomethyl ether
- Propylene oxide
- sec-Butyl alcohol
- Selenide, hydrogen

- Selenium and compounds
- Sodium hydroxide
- Styrene
- Sulfur Mustard
- Tetrachloroethene (Perchloroethylene)
- Titanium tetrachloride
- Toluene
- Toluene diisocyanates (2,4- and 2,6-)
- trans-1,2-dichloroethene
- Trichloroethene (TCE, Trichloroethylene)
- Triethylamine
- Vanadium (fume or dust)
- Vanadium pentoxide
- Vinyl acetate
- Vinyl chloride
- Vinylidene chloride
- Xylene (mixture), including m-xylene, o-xylene, p-xylene

Toxic Air Contaminants Not Expected to Have Developmental or Other Severe Health Effects

Of the 182 chemicals with noncancer toxicity reference values, DEQ has determined that 26 of them are not expected to have developmental or other severe human health effects. Here is a list of those 26 chemicals:

- Acrolein
- Aluminum and compounds
- Aniline
- Bis(chloromethyl) ether
- 2-Chloroacetophenone
- Dichlorovos (DDVP)
- Diesel Particulate Matter
- Diethylene glycol monoethyl ether
- 1,1-Difluoroethane
- 1,2-Epoxybutane
- Glutaraldehyde
- Hexamethylene-1,6-diisocyanate
- Maleic anhydride
- 4,4'-Methylenedianiline (and its dichloride)
- Methyl methacrylate
- Nitric acid
- Oleum (fuming sulfuric acid)
- Propionaldehyde
- Propylene
- Propylene glycol dinitrate
- Refractory Ceramic Fibers
- Silica, crystalline (respirable)
- Sulfur trioxide
- Sulfuric acid
- 1,2,3-Trichloropropane
- Vinyl bromide

For more background information on the Cleaner Air Oregon HI rulemaking process visit:

<https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rcaohi2019.aspx>