

APPENDIX A

TOXIC AIR CONTAMINANTS

APPENDIX A-1

**CALIFORNIA ARB
TOXIC AIR CONTAMINANT
IDENTIFICATION LIST**

Bay Area Air Quality Management District
2001 Annual Report
July 2003

TOXIC AIR CONTAMINANTS

The substances listed are designated as toxic air contaminants by the California State Air Resources Board under the California Code of Regulations Section 93001.

Toxic Air Contaminant

Acetaldehyde
Acetamide
Acetonitrile
Acetophenone
2-Acetylaminofluorene
Acrolein
Acrylamide
Acrylic acid
Acrylonitrile
Allyl chloride
4-Aminobiphenyl
Aniline
o-Anisidine
Asbestos
Benzene (including benzene from gasoline)
Benzidine
Benzotrichloride
Benzyl chloride
Biphenyl
Bis(2-ethylhexyl)phthalate (DEHP)
Bis(chloromethyl)ether
Bromoform
1,3-Butadiene
Calcium cyanamide
Captan
Carbaryl
Carbon disulfide
Carbon tetrachloride
Carbonyl sulfide
Catechol
Chloramben
Chlordane
Chlorinated dioxins and dibenzofurans
Chlorine
Chloroacetic acid
2-Chloroacetophenone
Chlorobenzene
Chlorobenzilate
Chloroform
Chloromethyl methyl ether
Chloroprene
Chromium VI
Cresols/Cresylic acid (isomers and mixtures)
o-Cresol
m-Cresol
p-Cresol

Toxic Air Contaminant

Cumene
Diazomethane
1,2-Dibromo-3-chloropropane
Dibutyl phthalate
1,4-Dichlorobenzene(p)
3,3'-Dichlorobenzidine
Dichlorodiphenyldichloroethylene (DDE)
Dichloroethyl ether (Bis(2-chloroethyl)ether)
2,4-Dichlorophenoxyacetic acid, (2,4-D)
salts and esters
1,3-Dichloropropene
Dichlorvos
Diethanolamine
Diethyl sulfate
N,N-Dimethylaniline
3,3'-Dimethoxybenzidine
Dimethyl aminoazobenzene
3,3'-Dimethylbenzidine
Dimethyl carbamoyl chloride
Dimethyl formamide
1,1-Dimethylhydrazine
Dimethyl phthalate
Dimethyl sulfate
4,6-Dinitro-o-cresol, and salts
2,4-Dinitrophenol
2,4-Dinitrotoluene
1,4-Dioxane (1,4-Diethyleneoxide)
1,2-Diphenylhydrazine
Epichlorohydrin (1-Chloro-2,3-epoxypropane)
1,2-Epoxybutane
Ethyl acrylate
Ethyl benzene
Ethyl carbamate (Urethane)
Ethyl chloride (Chloroethane)
Ethylene dibromide (Dibromoethane)
Ethylene dichloride (1,2-Dichloroethane)
Ethylene glycol
Ethyleneimine (Aziridine)
Ethylene oxide
Ethylene thiourea
Ethylidene dichloride (1,1-Dichloroethane)
Formaldehyde
Heptachlor
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene

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Hexachloroethane
Hexamethylene-1,6-diisocyanate
Hexamethylphosphoramide
Hexane
Hydrazine
Hydrochloric acid
Hydrogen fluoride (Hydrofluoric acid)
Hydroquinone
Isophorone
Lindane (all isomers)
Maleic anhydride
Methanol
Methoxychlor
Methyl bromide (Bromomethane)
Methyl chloride (Chloromethane)
Methyl chloroform (1,1,1-Trichloroethane)
Methyl ethyl ketone (2-Butanone)
Methyl hydrazine
Methyl iodide (Iodomethane)
Methyl isobutyl ketone (Hexone)
Methyl isocyanate
Methyl methacrylate
Methyl tert-butyl ether (MTBE)
4,4-Methylene bis(2-chloroaniline)
Methylene chloride (Dichloromethane)
Methylene diphenyl diisocyanate (MDI)
4,4-Methylenedianiline
Naphthalene
Nitrobenzene
4-Nitrobiphenyl
4-Nitrophenol
2-Nitropropane
N-Nitroso-N-methylurea
N-Nitrosodimethylamine
N-Nitrosomorpholine
Parathion
Particulate matter - diesel IC engine exhaust
Pentachloronitrobenzene (Quintobenzene)
Pentachlorophenol
Phenol
p-Phenylenediamine
Phosgene
Phosphine
Phosphorus
Phthalic anhydride
Polychlorinated biphenyls (Aroclors)
1,3-Propane sultone
beta-Propiolactone
Propionaldehyde
Propoxur (Baygon)

Toxic Air Contaminant

Propylene dichloride (1,2-Dichloropropane)
Propylene oxide
1,2-Propylenimine (2-Methylaziridine)
Quinoline
Quinone
Styrene
Styrene oxide
2,3,7,8-Tetrachlorodibenzo-p-dioxin
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Perchloroethylene)
Titanium tetrachloride
Toluene
2,4-Toluenediamine
2,4-Toluene diisocyanate
o-Toluidine
Toxaphene (chlorinated camphene)
1,2,4-Trichlorobenzene
1,1,2-Trichloroethane
Trichloroethylene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Triethylamine
Trifluralin
2,2,4-Trimethylpentane
Vinyl acetate
Vinyl bromide
Vinyl chloride
Vinylidene chloride (1,1-Dichloroethylene)
Xylenes (isomers and mixture)
o-Xylenes
m-Xylenes
p-Xylenes
Antimony compounds
Arsenic compounds (inorganic including arsine)
Beryllium compounds
Cadmium compounds
Chromium compounds
Cobalt compounds
Coke oven emissions
Cyanide compounds¹
Glycol ethers²
Lead compounds
Manganese compounds
Mercury compounds
Fine mineral fibers³
Nickel compounds
Polycyclic Organic Matter⁴
Radionuclides (including radon)⁵
Selenium compounds

APPENDIX A-1 NOTES

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This List of Substances was established by Titles 17 and 26 of the California Code of Regulations Section 93001.

GENERAL NOTE: For all substances listed which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

- 1** X'CN where X=H' or any other group where a formal dissociation may occur.
For example KCN or Ca(CN)₂
- 2** includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol (R(OCH₂CH₂)_n-OR' where
n = 1,2 or 3
R = alkyl or aryl groups
R' = R, H, or groups which, when removed, yield glycol ethers with the structure R(OCH₂CH)_n-OH. Polymers are excluded from the glycol category.
- 3** includes 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.
- 4** includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.
- 5** a type of atom which spontaneously undergoes radioactive decay.