

APPENDIX H

HAP LIST

AND INDIVIDUAL CONSTITUENTS

[Note: This table includes individual HAPs currently in EPA's National Toxic Inventory. They do not include all HAPs that are listed in the Clean Air Act as components of HAP groups or mixtures.]

HAP List And Individual Constituents

Metals	
188 HAP Name	Constituent
Antimony Compounds	Antimony
Antimony Compounds	Antimony oxide
Antimony Compounds	Antimony pentafluoride
Antimony Compounds	Antimony trichloride
Antimony Compounds	Antimony trioxide
Antimony Compounds	Antimony trisulfide
Arsenic Compounds	Arsine
Arsenic Compounds	Arsenic
Arsenic Compounds	Arsenic acid
Arsenic Compounds	Arsenic compounds (inorganic)
Arsenic Compounds	Arsenic pentoxide
Arsenic Compounds	Arsenic trioxide
Chromium Compounds	Ammonium dichromate
Chromium Compounds	Calcium chromate
Chromium Compounds	Chromic acid
Chromium Compounds	Chromic oxide
Chromium Compounds	Chromic sulfate
Chromium Compounds	Chromium
Chromium Compounds	Chromium III
Chromium Compounds	Chromium +6
Chromium Compounds	Chromium chloride
Chromium Compounds	Chromium dioxide
Chromium Compounds	Chromium hydroxide
Chromium Compounds	Chromium trioxide
Chromium Compounds	Chromium zinc oxide
Chromium Compounds	Chromyl chloride
Chromium Compounds	Chromyl fluoride
Chromium Compounds	Lithium chromate
Chromium Compounds	Potassium chromate
Chromium Compounds	Sodium chromate
Chromium Compounds	Sodium dichromate
Chromium Compounds	Strontium chromate
Chromium Compounds	Zinc chromate
Chromium Compounds	Zinc chromates
Chromium Compounds	Zinc chromite Potassium dichromate
Lead Compound	Alkylated lead
Lead Compound	Lead
Lead Compound	Lead acetate
Lead Compound	Lead arsenate
Lead Compound	Lead arsenite
Lead Compound	Lead carbonate

HAP List And Individual Constituents (Continued)

Metals (Continued)	
188 HAP Name	Constituent
Lead Compound Glycol ethers	Lead chromate
Lead Compound	Lead chromate oxide
Lead Compound	Lead compounds (inorganic)
Lead Compound	Lead compounds (other than inorganic)
Lead Compound	Lead fluoroborate
Lead Compound	Lead mono oxide
Lead Compound	Lead naphthalene
Lead Compound	Lead neodecanoate
Lead Compound	Lead nitrate
Lead Compound	Lead oxide
Lead Compound	Lead phosphate
Lead Compound	Lead stearate
Lead Compound	Lead subacetate
Lead Compound	Lead sulfate
Lead Compound	Lead titanate
Lead Compound	Lead titanate zircon
Lead Compound	Tetraethyl lead
Manganese Compounds	Manganese
Manganese Compounds	Manganese dioxide
Manganese Compounds	Manganese naphthalene
Manganese Compounds	Manganese nitrate
Manganese Compounds	Manganese sulfate
Manganese Compounds	Manganese tellurate
Manganese Compounds	Manganese tetroxide
Mercury compounds	Mercuric chloride
Mercury compounds	Mercury (organic)
Mercury compounds	Methyl mercury
Nickel compounds	Nickel
Nickel compounds	Nickel acetate
Nickel compounds	Nickel bromide
Nickel compounds	Nickel carbide
Nickel compounds	Nickel carbonate
Nickel compounds	Nickel carbonyl
Nickel compounds	Nickel chloride
Nickel compounds	Nickel hydroxide
Nickel compounds	Nickel nitrate
Nickel compounds	Nickelocene
Nickel compounds	Nickel oxide
Nickel compounds	Nickel refinery dust from the pyrometallurgical
Nickel compounds	Nickel subsulfide
Nickel compounds	Nickel sulfamate
Nickel compounds	Nickel sulfate

HAP List And Individual Constituents (Continued)

Metals (Continued)	
188 HAP Name	Constituent
Phosphorous Compounds	Phosphoric acid
Phosphorous Compounds	Phosphorothioic acid
Phosphorous Compounds	Phosphorous acid
Phosphorous Compounds	Phosphorous nitride
Phosphorous Compounds	Phosphorous salt
Phosphorous Compounds	Phosphorus
Phosphorous Compounds	Phosphorus oxychloride
Phosphorous Compounds	Phosphorus pentasulfide
Phosphorous Compounds	Phosphorus pentoxide
Phosphorous Compounds	Phosphorus trichloride
Phosphorous Compounds	Phosphorus trioxide
Phosphorous Compounds	Triorthocresyl phosphate
Phosphorous Compounds	Triphenyl phosphate
Phosphorous Compounds	Triphenyl phosphite
Phosphorous Compounds	Zinc phosphate
Selenium Compounds	Selenium
Selenium Compounds	Selenium disulfide
Selenium Compounds	Selenium oxide
Selenium Compounds	Selenium sulfide

HAP List And Individual Constituents (Continued)

Glycol Ethers	
188 HAP Name	Constituent
Glycol ethers	1,1-Dimethoxyethane
Glycol ethers	1,2-Dimethoxyethane
Glycol ethers	1-Ethoxy-2-Propanol
Glycol ethers	1-Isobutoxy-2-Propanol
Glycol ethers	2-(2,4-Hexadienyloxy)Ethanol
Glycol ethers	2-(Hexyloxy)Ethanol
Glycol ethers	2-Butoxyethyl Acetate
Glycol ethers	2-Propoxyethyl Acetate
Glycol ethers	3-Butoxy-1-Propanol
Glycol ethers	3-Ethoxy-1-Propanol
Glycol ethers	3-Methoxy-1-Propanol
Glycol ethers	Butyl Carbitol Acetate
Glycol ethers	Butyl Cellosolve
Glycol ethers	Carbitol Acetate
Glycol ethers	Cellosolve Acetate
Glycol ethers	Cellosolve Solvent
Glycol ethers	Di(Ethylene Glycol Monobutyl Ether) Phthalate
Glycol ethers	Diethylene Glycol
Glycol ethers	Diethylene Glycol Di(3-Aminopropyl) Ether
Glycol ethers	Diethylene Glycol Dibenzoate
Glycol ethers	Diethylene Glycol Diglycidyl Ether
Glycol ethers	Diethylene Glycol Dimethyl Ether
Glycol ethers	Diethylene Glycol Dinitrate
Glycol ethers	Diethylene Glycol Divinyl Ether
Glycol ethers	Diethylene Glycol Ethyl Methyl Ether
Glycol ethers	Diethylene Glycol Ethylvinyl Ether
Glycol ethers	Diethylene Glycol Mono-2-Cyanoethyl Ether
Glycol ethers	Diethylene Glycol Monobutyl Ether
Glycol ethers	Diethylene Glycol Monoisobutyl Ether
Glycol ethers	Diethylene Glycol Monomethyl Ether
Glycol ethers	Diethylene Glycol Monovinyl Ether
Glycol ethers	Diethyleneglycol-Mono-2-Methyl-Pentyl Ether
Glycol ethers	(Ethylenebis(Oxyethylenenitrilo)) Tetraacetic Acid
Glycol ethers	Ethylene Glycol Bis(2,3-Epoxy-2-Methylpropyl) Ether
Glycol ethers	Ethylene Glycol Diallyl Ether
Glycol ethers	Ethylene Glycol Diethyl Ether
Glycol ethers	Ethylene Glycol dimethyl ether
Glycol ethers	Ethylene Glycol Methyl Ether
Glycol ethers	Ethylene Glycol Monobenzyl Ether
Glycol ethers	Ethylene Glycol Monomethyl Ether
Glycol ethers	Ethylene Glycol Monomethyl Ether Acetate

HAP List And Individual Constituents (Continued)

Glycol Ethers (Continued)	
188 Name	Constituent
Glycol ethers	Ethylene Glycol Mono-sec-Butyl Ether
Glycol ethers	Ethylene Glycol Monovinyl Ether
Glycol ethers	Ethyleneglycol Mono-2-Methylpentyl Ether
Glycol ethers	Ethyleneglycol Monophenyl Ether Propionate
Glycol ethers	Ethyleneglycolmono-2,6,8-Trimethyl-4-Nonyl Ether
Glycol ethers	Glycols; Polyethylene, Mono(1,1,3,3-Tetramethylbutylphenyl) Ether
Glycol ethers	Glycols, Polyethylene, Polypropylene Monobutyl Ether (nonionic)
Glycol ethers	Isobutyl Cellosolve
Glycol ethers	Isopropyl Glycol
Glycol ethers	Methoxyethyl Oleate
Glycol ethers	Methyl Cellosolve Acetylricinoleate
Glycol ethers	Methyl Cellosolve Acrylate
Glycol ethers	Nonyl Phenyl Polyethylene Glycol Ether
Glycol ethers	p-Dioxane
Glycol ethers	Propyl Cellosolve
Glycol ethers	Propylene Glycol Monomethyl Ether
Glycol ethers	Triethylene Glycol
Glycol ethers	Glycol Ethers

HAP List And Individual Constituents (Continued)

Dioxins and Furans*	
188 HAP Name	Constituent
Dioxins and Furans	Dibenzofuran
Dioxins and Furans	Octachlorodibenzo-p-dioxin
Dioxins and Furans	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin
Dioxins and Furans	Hexachlorodibenzo-p-dioxin
Dioxins and Furans	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
Dioxins and Furans	Octachlorodibenzofuran
Dioxins and Furans	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
Dioxins and Furans	1,2,3,7,8-pentachlorodibenzo-p-dioxin
Dioxins and Furans	2,3,7,8-Tetrachlorodibenzofuran
Dioxins and Furans	1,2,3,4,7,8,9-heptachlorodibenzofuran
Dioxins and Furans	2,3,4,7,8-pentachlorodibenzofuran
Dioxins and Furans	1,2,3,7,8-pentachlorodibenzofuran
Dioxins and Furans	1,2,3,6,7,8-hexachlorodibenzofuran
Dioxins and Furans	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
Dioxins and Furans	2,3,4,6,7,8-hexachlorodibenzofuran
Dioxins and Furans	1,2,3,4,6,7,8-heptachlorodibenzofuran
Dioxins and Furans	1,2,3,4,7,8-hexachlorodibenzofuran
Dioxins and Furans	1,2,3,7,8,9-hexachlorodibenzofuran
Dioxins and Furans	Dibenzofurans(Cl)
Dioxins and Furans	Dioxins
Dioxins and Furans	Heptachlorodibenzofuran
Dioxins and Furans	Heptachlorodibenzo-p-dioxin
Dioxins and Furans	Hexachlorodibenzofuran
Dioxins and Furans	Pentachlorodibenzofuran
Dioxins and Furans	Pentachlorodibenzo-p-dioxin
Dioxins and Furans	Tetrachlorodibenzofuran
Dioxins and Furans	Tetrachlorodibenzo-p-dioxin

*Dioxins and Furans (total tetra - through octa - chlorinated dibenzo-p-dioxins and dibenzofurans) are federally designated pollutants under the New Source Performance Standard (NSPS) program.

HAP List And Individual Constituents (Continued)

188 HAP Name	PAH/POM	Constituent
Polycyclic Organic Matter		Benzo[a]pyrene
Polycyclic Organic Matter		Dibenzo[a,h]anthracene
Polycyclic Organic Matter		Benz[a]anthracene
Polycyclic Organic Matter		Acenaphthene
Polycyclic Organic Matter		Phenanthrene
Polycyclic Organic Matter		Fluorene
Polycyclic Organic Matter		1-methylnaphthalene
Polycyclic Organic Matter		2-Methylnaphthalene
Polycyclic Organic Matter		2-chloronaphthalene
Polycyclic Organic Matter		Anthracene
Polycyclic Organic Matter		Crotonaldehyde
Polycyclic Organic Matter		Pyrene
Polycyclic Organic Matter		D[a,h]pyrene
Polycyclic Organic Matter		Benzo[g,h,i,]perylene
Polycyclic Organic Matter		D[a,e]pyrene
Polycyclic Organic Matter		Benzo[e]pyrene
Polycyclic Organic Matter		Indeno[1,2,3-c,d]pyrene
Polycyclic Organic Matter		B[j]fluoranthene
Polycyclic Organic Matter		Benzo[b]fluoranthene
Polycyclic Organic Matter		Fluoranthene
Polycyclic Organic Matter		Benzo[k]fluoranthene
Polycyclic Organic Matter		Acenaphthylene
Polycyclic Organic Matter		Chrysene
Polycyclic Organic Matter		D[a,j]acridine
Polycyclic Organic Matter		16-PAH*
Polycyclic Organic Matter		1-Phenanthrene
Polycyclic Organic Matter		Acenaphthalene
Polycyclic Organic Matter		Benzo[b+k]fluoranthene
Polycyclic Organic Matter		PAH, total
Polycyclic Organic Matter		Polycyclic Organic Matter
Polycyclic Organic Matter		Extractable Organic Matter (EOM)
Polycyclic Organic Matter		7-PAH**

* 16 PAH compounds include:

Acenaphthene	Benzo(a)pyrene**	Chrysene**	Indeno(1,2,3-cd)pyrene**
Acenaphthylene	Benzo(b)fluoranthene**	Dibenz(a,h)anthracene**	Naphthalene
Anthracene	Benzo(ghi)perylene	Fluoranthene	Phenanthrene
Benz(a)anthracene**	Benzo(k)fluoranthene**	Fluorene	Pyrene

** These 7 PAHs are carcinogenic and are usually reported as the sum of 7 PAH.