

**APPENDIX A-2**

**"HOT SPOTS" PROGRAM**

**LIST OF SUBSTANCES**

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The California State ARB "Hot Spots" Emission Inventory Guidelines contain instructions for the preparation of toxic air contaminant emission inventories. Appendix A of those guidelines establishes a list of the substances which must be included in the inventories. The following is a list of those substances.

**Substances For Which Emissions Must Be Quantified**

Chemical Abstract Number(CAS)	Add Date <sup>a</sup>	Substance Name
75-07-0		Acetaldehyde
60-35-5		Acetamide
75-05-8	06/91	Acetonitrile
98-86-2	06/91	Acetophenone
53-96-3		2-Acetylaminofluorene [PAH-Derivative, POM]
107-02-8		Acrolein
79-06-1		Acrylamide
79-10-7	06/91	Acrylic acid
107-13-1		Acrylonitrile
107-05-1		Allyl chloride
7429-90-5	06/91	Aluminum
1344-28-1	06/91	Aluminum oxide (fibrous forms)
117-79-3		2-Aminoanthraquinone [PAH-Derivative, POM]
92-67-1		4-Aminobiphenyl [POM]
61-82-5		Amitrole
7664-41-7		Ammonia
6484-52-2	06/91	Ammonium nitrate
7783-20-2	06/91	Ammonium sulfate
62-53-3	09/90	Aniline
90-04-0		o-Anisidine
-		Anthracene [PAH, POM], (see PAH)
7440-36-0	06/91	Antimony
*	06/91	Antimony compounds ** including but not limited to:
1327-33-9	09/90	Antimony trioxide
7440-38-2		Arsenic
*	06/91	Arsenic compounds (other than inorganic) **
*		Arsenic compounds (inorganic) ** including but not limited to:
7784-42-1		Arsine
1332-21-4		Asbestos (see mineral fibers)
7440-39-3	06/91	Barium
*	06/91	Barium compounds **
-		Benz[a]anthracene [PAH, POM], (see PAH)
71-43-2		Benzene
92-87-5		Benzidine (and its salts) [POM]
*		Benzidine-based dyes [POM] including but not limited to:
1937-37-7		Direct Black 38 [PAH-Derivative, POM]
2602-46-2		Direct Blue 6 [PAH-Derivative, POM]
16071-86-6	09/89	Direct Brown 95 (technical grade) [POM]
-		Benzo[a]pyrene [PAH, POM], (see PAH)
-		Benzo[b]fluoranthene [PAH, POM], (see PAH)
271-89-6	06/91	Benzo[ghi]perylene [PAH, POM], (see PAH)
98-07-7		Benzo[ghi]perylene [PAH, POM], (see PAH)
-		Benzo[k]fluoranthene [PAH, POM], (see PAH)
-		Benzo[k]fluoranthene [PAH, POM], (see PAH)
98-88-4	06/91	Benzoyl chloride
94-36-0	06/91	Benzoyl peroxide
100-44-7		Benzyl chloride
7440-41-7		Beryllium

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Chemical Abstract Number(CAS)	Add Date <sup>a</sup>	Substance Name
*	09/89	Beryllium compounds **
92-52-4	06/91	Biphenyl [POM]
111-44-4	09/89	Bis(2-chloroethyl)ether {DCEE}
542-88-1		Bis(chloromethyl)ether
103-23-1	06/91	Bis(2-ethylhexyl) adipate
7726-95-6		Bromine
*		Bromine compounds (inorganic) ** including but not limited to:
7758-01-2		Potassium bromate
75-25-2	06/91	Bromoform
106-99-0		1,3-Butadiene
141-32-2	06/91	Butyl acrylate
71-36-3	06/91	n-Butyl alcohol
78-92-2	06/91	sec-Butyl alcohol
75-65-0	06/91	tert-Butyl alcohol
85-68-7	06/91	Butyl benzyl phthalate
7440-43-9		Cadmium
*		Cadmium compounds **
156-62-7	06/91	Calcium cyanamide
105-60-2	06/91	Caprolactam
2425-06-1	09/89	Captafol
133-06-2	09/90	Captan
63-25-2	06/91	Carbaryl [PAH-Derivative, POM]
*		Carbon black extracts
75-15-0	09/89	Carbon disulfide
56-23-5		Carbon tetrachloride
463-58-1	06/91	Carbonyl sulfide
*		Carrageenan (degraded)
120-80-9	06/91	Catechol
133-90-4	06/91	Chloramben
57-74-9	09/89	Chlordane
108171-26-2	09/89	Chlorinated paraffins (average chain length, C12; approximately 60% chlorine by weight)
7782-50-5		Chlorine
10049-04-4	06/91	Chlorine dioxide
79-11-8	06/91	Chloroacetic acid
532-27-4	06/91	2-Chloroacetophenone
106-47-8	07/96	p-Chloroaniline
*	06/91	Chlorobenzenes including but not limited to:
108-90-7		Chlorobenzene
25321-22-6	06/91	Dichlorobenzenes (mixed isomers) including:
95-50-1	06/91	1,2-Dichlorobenzene
541-73-1	06/91	1,3-Dichlorobenzene
106-46-7		p-Dichlorobenzene {1,4-Dichlorobenzene}
120-82-1	06/91	1,2,4-Trichlorobenzene
510-15-6	09/90	Chlorobenzilate {Ethyl-4,4'-dichlorobenzilate} [POM]
67-66-3		Chloroform
107-30-2		Chloromethyl methyl ether (technical grade)
*		Chlorophenols including but not limited to:
120-83-2	06/91	2,4-Dichlorophenol
87-86-5	09/90	Pentachlorophenol
58-90-2	07/96	2,3,4,6-Tetrachlorophenol
95-95-4	06/91	2,4,5-Trichlorophenol
88-06-2		2,4,6-Trichlorophenol
95-83-0		4-Chloro-o-phenylenediamine

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76-06-2		Chloropicrin
126-99-8		Chloroprene
95-69-2		p-Chloro-o-toluidine
7440-47-3	06/91	Chromium
*	06/91	Chromium compounds (other than hexavalent) **
18540-29-9		Chromium, hexavalent (and compounds) ** including but not limited to:
10294-40-3	06/91	Barium chromate
13765-19-0	06/91	Calcium chromate
1333-82-0	06/91	Chromium trioxide
7758-97-6	06/91	Lead chromate
10588-01-9	06/91	Sodium dichromate
7789-06-2	06/91	Strontium chromate
-		Chrysene [PAH, POM], (see PAH)
7440-48-4	06/91	Cobalt
*	06/91	Cobalt compounds **
*		Coke oven emissions
7440-50-8		Copper
*	09/89	Copper compounds **
*		Creosotes
120-71-8		p-Cresidine
1319-77-3		Cresols (mixtures of) {Cresylic acid} including:
108-39-4	06/91	m-Cresol
95-48-7	06/91	o-Cresol
106-44-5	06/91	p-Cresol
4170-30-3	07/96	Crotonaldehyde
98-82-8	06/91	Cumene
80-15-9	06/91	Cumene hydroperoxide
135-20-6		Cupferron
*	06/91	Cyanide compounds ** including but not limited to:
74-90-8		Hydrocyanic acid
110-82-7	06/91	Cyclohexane
108-93-0	07/96	Cyclohexanol
66-81-9		Cycloheximide
1163-19-5	06/91	Decabromodiphenyl oxide [POM]
*		Dialkylnitrosamines including but not limited to:
924-16-3		N-Nitrosodi-n-butylamine
1116-54-7		N-Nitrosodiethanolamine
55-18-5		N-Nitrosodiethylamine
62-75-9		N-Nitrosodimethylamine
1621-64-7		N-Nitrosodi-n-propylamine
10595-95-6		N-Nitrosomethylethylamine
615-05-4		2,4-Diaminoanisole
*	09/90	Diaminotoluenes (mixed isomers) including but not limited to:
95-80-7		2,4-Diaminotoluene {2,4-Toluenediamine}
334-88-3	06/91	Diazomethane
226-36-8		Dibenz[a,h]acridine [POM]
224-42-0		Dibenz[a,i]acridine [POM]
-		Dibenz[a,h]anthracene [PAH, POM], (see PAH)
194-59-2		7H-Dibenzo[c,g]carbazole [POM]
132-64-9	06/91	Dibenzofuran [POM]
-		Dibenzofurans (chlorinated) (see Polychlorinated dibenzofurans) [POM]
-		Dibenzo[a,e]pyrene [PAH, POM], (see PAH)

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Chemical Abstract Number(CAS)	Add Date <sup>a</sup>	Substance Name
-		Dibenzo[a,h]pyrene [PAH, POM], (see PAH)
-		Dibenzo[a,i]pyrene [PAH, POM], (see PAH)
-		Dibenzo[a,l]pyrene [PAH, POM], (see PAH)
96-12-8		1,2-Dibromo-3-chloropropane {DBCP}
96-13-9	07/96	2,3-Dibromo-1-propanol
84-74-2	06/91	Dibutyl phthalate
-		p-Dichlorobenzene {1,4-Dichlorobenzene} (see Chlorobenzenes)
91-94-1		3,3'-Dichlorobenzidine [POM]
72-55-9	09/89	Dichlorodiphenyldichloroethylene [DDE] [POM]
75-34-3	09/90	1,1-Dichloroethane {Ethylidene dichloride}
94-75-7	06/91	2,4-Dichlorophenoxyacetic acid {2,4-D} salts and esters
78-87-5	09/90	1,2-Dichloropropane {Propylene dichloride}
542-75-6		1,3-Dichloropropene
62-73-7	09/89	Dichlorovos {DDVP}
115-32-2	06/91	Dicofol [POM]
*	09/90	Diesel engine exhaust
*	06/91	Diesel fuel (marine)
111-42-2	06/91	Diethanolamine
117-81-7		Di(2-ethylhexyl) phthalate {DEHP}
64-67-5		Diethyl sulfate
119-90-4		3,3'-Dimethoxybenzidine [POM]
60-11-7		p-Dimethylaminoazobenzene {Methyl yellow} [POM]
121-69-7	06/91	N,N-Dimethylaniline
57-97-6	09/90	7,12-Dimethylbenz[a]anthracene [PAH]-Derivative, POM
119-93-7		3,3'-Dimethylbenzidine {o-Tolidine} [POM]
79-44-7		Dimethyl carbamoyl chloride
68-12-2	09/90	Dimethyl formamide
57-14-7		1,1-Dimethylhydrazine
131-11-3	06/91	Dimethyl phthalate
77-78-1		Dimethyl sulfate
534-52-1	06/91	4,6-Dinitro-o-cresol and salts
51-28-5	06/91	2,4-Dinitrophenol
42397-64-8	06/91	1,6-Dinitropyrene [PAH-Derivative, POM]
423976-65-9	06/91	1,8-Dinitropyrene [PAH-Derivative, POM]
25321-14-6	06/91	Dinitrotoluenes (mixed isomers) including but not limited to:
121-14-2	09/89	2,4-Dinitrotoluene
606-20-2	06/91	2,6-Dinitrotoluene
123-91-1		1,4-Dioxane
-		Dioxins (Chlorinated dibenzodioxins) (see Polychlorinated dibenzo-p-dioxins) [POM]
630-93-3		Diphenylhydantoin [POM]
122-66-7		1,2-Diphenylhydrazine {hydrazobenzene} [POM]
*		Environmental tobacco smoke
106-89-8		Epichlorohydrin
106-88-7	06/91	1,2-Epoxybutane
*	09/89	Epoxy resins
140-88-5		Ethyl acrylate
100-41-4	06/91	Ethyl benzene
75-00-3		Ethyl chloride {Chloroethane}
-		Ethyl-4,4'-dichlorobenzilate (see Chlorobenzilate)
74-85-1	06/91	Ethylene
106-93-4		Ethylene dibromide {1,2-Dibromoethane}
107-06-2		Ethylene dichloride {1,2-Dichloroethane}
107-21-1	06/91	Ethylene glycol
151-56-4	06/91	Ethyleneimine {Aziridine}

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75-21-8		Ethylene oxide
96-45-7		Ethylene thiourea
*	09/89	Fluorides and compounds including but not limited to:
7664-39-3		Hydrogen fluoride
*		Fluorocarbons (brominated)
*		Fluorocarbons (chlorinated) including but not limited to:
76-13-1		Chlorinated fluorocarbon {CFC 113}
75-45-6	07/96	Chlorodifluoromethane {HCFC 22} {Freon 22}
75-43-4	07/96	Dichlorofluoromethane {CFC 21} {Freon 21}
75-69-4	07/96	Trichlorofluoromethane {CFC 11} {Freon 11}
50-00-0		Formaldehyde
110-00-9	07/96	Furan
*	09/90	Gasoline engine exhaust including but not limited to:
*	06/91	Gasoline engine exhaust (condensates and extracts)
*		Gasoline vapors
111-30-8		Glutaraldehyde
*		Glycol ethers and their acetates including but not limited to:
111-46-6	09/90	Diethylene glycol
111-96-6	09/90	Diethylene glycol dimethyl ether
112-34-5	09/90	Diethylene glycol monobutyl ether
111-90-0	09/90	Diethylene glycol monoethyl ether
111-77-3	09/90	Diethylene glycol monomethyl ether
25265-71-8	09/90	Dipropylene glycol
34590-94-8	09/90	Dipropylene glycol monomethyl ether
629-14-1	09/90	Ethylene glycol diethyl ether
110-71-4	09/90	Ethylene glycol dimethyl ether
111-76-2	09/90	Ethylene glycol monobutyl ether
110-80-5	09/89	Ethylene glycol monoethyl ether
111-15-9	09/90	Ethylene glycol monoethyl ether acetate
109-86-4	09/89	Ethylene glycol monomethyl ether
110-49-6	09/90	Ethylene glycol monomethyl ether acetate
2807-30-9	09/90	Ethylene glycol monopropyl ether
107-98-2	09/90	Propylene glycol monomethyl ether
108-65-6	09/90	Propylene glycol monomethyl ether acetate
112-49-2	09/90	Triethylene glycol dimethyl ether
76-44-8	09/89	Heptachlor
118-74-1		Hexachlorobenzene
87-68-3	06/91	Hexachlorobutadiene
*		Hexachlorocyclohexanes including but not limited to:
58-89-9	09/90	Lindane
77-47-4		Hexachlorocyclopentadiene
67-72-1	09/90	Hexachloroethane
680-31-9		Hexamethylphosphoramide
110-54-3	06/91	Hexane
302-01-2		Hydrazine
7647-01-0		Hydrochloric acid
-		Hydrocyanic acid (see Cyanide compounds **)
7783-06-4		Hydrogen sulfide
123-31-9	06/91	Hydroquinone
-		Indeno[1,2,3,-cd]pyrene [PAH, POM] (see PAH)
13463-40-6	07/96	Iron pentacarbonyl
*		Isocyanates including but not limited to:

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Chemical Abstract Number(CAS)	Add Date <sup>a</sup>	Substance Name
82-26-0	06/91	Hexamethylene-1,6-diisocyanate
101-68-8	06/91	Methylene diphenyl diisocyanate {MDI} [POM]
624-83-9		Methyl isocyanate
-		Toluene-2,4- diisocyanate (see Toluene diisocyanates)
-		Toluene-2,6-diisocyanate (see Toluene diisocyanates)
78-59-1	06/91	Isophorone
78-79-5	07/96	Isoprene (except from vegetative sources)
67-63-0	06/91	Isopropyl alcohol
80-05-7	06/91	4,4'-Isopropylidenediphenol [POM]
7439-92-1		Lead
*		Lead compounds (inorganic) ** including but not limited to:
7446-27-7		Lead phosphate
*	06/91	Lead compounds (other than inorganic) ** including but not limited to:
301-04-2		Lead acetate
1335-32-6	09/90	Lead subacetate
108-31-6		Maleic anhydride
7439-96-5		Manganese
*	09/89	Manganese compounds **
7439-97-6		Mercury
*	09/89	Mercury compounds ** including but not limited to:
7487-94-7		Mercuric chloride
593-74-8		Methyl mercury {Dimethylmercury}
67-56-1		Methanol
72-43-5	06/91	Methoxychlor [POM]
75-55-8		2-Methylaziridine {1,2-Propyleneimine}
74-83-9		Methyl bromide {Bromomethane}
74-87-3	06/91	Methyl chloride {Chloromethane}
71-55-6		Methyl chloroform {1,1,1-Trichloroethane}
56-49-5	09/90	3-Methylcholanthrene [PAH-Derivative, POM]
3697-24-3		5-Methylchrysene [PAH-Derivative, POM]
101-14-4		4,4'-Methylene bis(2-chloroaniline) {MOCA} [POM]
75-09-2		Methylene chloride {Dichloromethane}
101-77-9		4,4'-Methylenedianiline (and its dichloride) [POM]
78-93-3	06/91	Methyl ethyl ketone {2-Butanone}
60-34-4	06/91	Methyl hydrazine
74-88-4		Methyl iodide {Iodomethane}
108-10-1	06/91	Methyl isobutyl ketone {Hexone}
75-86-5	07/96	2-Methylacetonitrile {Acetone cyanohydrin}
80-62-6		Methyl methacrylate
109-06-8	07/96	2-Methylpyridine
1634-04-4	06/91	Methyl tert-butyl ether
90-94-8		Michler's ketone [POM]
*	06/91	Mineral fibers (fine, manmade) (fine mineral fibers which are manmade 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) including but not limited to:
*	09/89	Ceramic fibers
*	09/89	Glasswool fibers
*	09/89	Rockwool fibers
*	09/89	Slagwool fibers

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*		Mineral fibers (other than manmade) including but not limited to :
1332-21-4		Asbestos
12510-42-8	06/91	Erionite
*		Talc containing asbestiform fibers
1313-27-5	06/91	Molybdenum trioxide
-		Napthalene [PAH, POM] (see PAH)
7440-02-0		Nickel
*		Nickel compounds ** including but not limited to:
373-02-4	06/91	Nickel acetate
3333-39-3	06/91	Nickel carbonate
13463-39-3		Nickel carbonyl
12054-48-7	06/91	Nickel hydroxide
1271-28-9	06/91	Nickelocene
1313-99-1	06/91	Nickel oxide
12035-72-2		Nickel subsulfide
*	09/89	Nickel refinery dust from the pyrometallurgical process
7697-37-2	06/91	Nitric acid
139-13-9		Nitrilotriacetic acid
98-95-3		Nitrobenzene
92-93-3	09/89	4-Nitrobiphenyl [POM]
7496-02-8	06/91	6-Nitrochrysene [PAH-Derivative, POM]
607-57-8	06/91	2-Nitrofluorene [PAH-Derivative, POM]
302-70-5		Nitrogen mustard N-oxide
100-02-7	06/91	4-Nitrophenol
79-46-9		2-Nitropropane
5522-43-0	06/91	1-Nitropyrene [PAH-Derivative, POM]
156-10-5		p-Nitrosodiphenylamine [POM]
59-89-2		N-Nitrosomorpholine
684-93-5		N-Nitroso-N-methylurea
100-75-4		N-Nitrosopiperidine
930-55-2		N-Nitrosopyrrolidine
*		PAHs <sup>b</sup> (Polycyclic Aromatic Hydrocarbons) [POM] including but not limited to: (see NOTES)
83-32-9	07/96	Acenaphthene
208-96-8	07/96	Acenaphthylene
120-12-7	06/91	Anthracene
56-55-3		Benz[a]anthracene
205-99-2		Benzo[b]fluoranthene
205-82-3		Benzo[j]fluoranthene
207-08-9		Benzo[k]fluoranthene
50-32-8		Benzo[a]pyrene
192-97-2	07/96	Benzo[e]pyrene
191-24-2	07/96	Benzo[g,h,i]pyrene
218-01-9	09/90	Chrysene
53-70-3		Dibenz[a,h]anthracene
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	07/96	Fluoranthene
86-73-7	07/96	Fluorene
193-39-5		Indeno[1,2,3,-cd]pyrene
91-57-6	07/96	2-Methyl naphthalene
91-20-3		Naphtalene
198-55-0	07/96	Perylene
85-01-8	07/96	Phenanthrene



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129-00-0 *	07/96 06/91	Pyrene PAH-Derivatives <sup>c</sup> (Polycyclic Aromatic Hydrocarbon derivatives) [POM] (including but not limited to those substances listed in Appendix A-2 with the bracketed designation [PAH-Derivative, POM] (see NOTES)
56-38-2	06/91	Parathion
1336-36-3		PCBs (Polychlorinated biphenyls) [POM]
82-68-8	06/91	Pentachloronitrobenzene {Quintobenzene}
79-21-0	06/91	Peracetic acid
127-18-4		Perchloroethylene {Tetrachloroethene}
108-95-2		Phenol
106-50-3	06/91	p-Phenylenediamine
90-43-7	06/91	2-Phenylphenol [POM]
75-44-5		Phosgene
7723-14-0 *		Phosphorus
	09/89	Phosphorus compounds:
7803-51-2		Phosphine
7664-38-2	09/89	Phosphoric acid
10025-87-3	09/89	Phosphorus oxychloride
10026-13-8	09/89	Phosphorus pentachloride
1314-56-3	09/89	Phosphorus pentoxide
7719-12-2	09/89	Phosphorus trichloride
126-73-8	09/89	Tributyl phosphate
78-40-0	09/89	Triethyl phosphine
512-56-1	09/89	Trimethyl phosphate
78-30-8	09/89	Triorthocresyl phosphate [POM]
115-86-6	09/89	Triphenyl phosphate [POM]
101-02-0	09/89	Triphenyl phosphite [POM]
85-44-9 *	09/89	Phthalic anhydride
		Polychlorinated dibenzo-p-dioxins {PCDDs} [POM] including but not limited to:
1746-01-6		2,3,7,8-Tetrachlorodibenzo-p-dioxin {TCDD} [POM]
40321-76-4		1,2,3,7,8-Pentachlorodibenzo-p-dioxin [POM]
39227-28-6		1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin [POM]
57653-85-7		1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin [POM]
19408-74-3		1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin [POM]
35822-46-9		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin [POM]
3268-87-9	07/96	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin [POM]
41903-57-5	07/96	Total Tetrachlorodibenzo-p-dioxin [POM]
36088-22-9	07/96	Total Pentachlorodibenzo-p-dioxin [POM]
34465-46-8	07/96	Total Hexachlorodibenzo-p-dioxin [POM]
37871-00-4	07/96	Total Heptachlorodibenzo-p-dioxin [POM]
		Polychlorinated dibenzofurans {PCDFs} [POM] including but not limited to:
51207-31-9		2,3,7,8-Tetrachlorodibenzofuran [POM]
57117-41-6		1,2,3,7,8-Pentachlorodibenzofuran [POM]
57117-31-4		2,3,4,7,8-Pentachlorodibenzofuran [POM]
70648-26-9		1,2,3,4,7,8-Hexachlorodibenzofuran [POM]
57117-44-9		1,2,3,6,7,8-Hexachlorodibenzofuran [POM]
72918-21-9		1,2,3,7,8,9-Hexachlorodibenzofuran [POM]
60851-34-5		2,3,4,6,7,8-Hexachlorodibenzofuran [POM]
67562-39-4		1,2,3,4,6,7,8-Heptachlorodibenzofuran [POM]
55673-89-7		1,2,3,4,7,8,9-Heptachlorodibenzofuran [POM]
39001-02-0	07/96	1,2,3,4,5,6,7,8-Octachlorodibenzofuran [POM]
55722-27-5	07/96	Total Tetrachlorodibenzofuran [POM]
30402-15-4	07/96	Total Pentachlorodibenzofuran [POM]

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**Substances For Which Emissions Must Be Quantified**

Chemical Abstract Number(CAS)	Add Date <sup>a</sup>	Substance Name
55684-94-1	07/96	Total Hexachlorodibenzofuran [POM]
38998-75-3	07/96	Total Heptachlorodibenzofuran [POM]
*	09/89	POM <sup>d</sup> (Polycyclic Organic Matter) (including but not limited to those substances listed in Appendix A-2 with the bracketed designation of [POM], [PAH, POM], or [PAH-Derivative, POM] (see NOTES)
1120-71-4		1,3-Propane sultone
57-57-8		beta-Propiolactone
123-38-6	06/91	Propionaldehyde
114-26-1	06/91	Propoxur {Baygon}
115-07-1		Propylene
-		1,2-Propyleneimine (see 2-Methylaziridine)
75-56-9		Propylene oxide
110-86-1	06/91	Pyridine
91-22-5	06/91	Quinoline
106-51-4	06/91	Quinone
*		Radionuclides including but not limited to:
24267-56-9	09/89	Iodine-131
*	09/89	Radon and its decay products
50-55-5		Reserpine [POM]
*	06/91	Residual (heavy) fuel oils
7782-49-2		Selenium
*		Selenium compounds ** including but not limited to:
7446-34-6	09/90	Selenium sulfide
*		Silica, crystalline
7440-22-4	06/91	Silver
*	06/91	Silver compounds **
1310-73-2		Sodium hydroxide
100-42-5		Styrene
96-09-3		Styrene oxide
7664-93-9	06/91	Sulfuric acid
100-21-0	06/91	Terephthalic acid
79-34-5	09/90	1,1,2,2-Tetrachloroethane
7440-28-0	06/91	Thallium
*	06/91	Thallium compounds **
62-55-5		Thioacetamide
62-56-6		Thiourea
7550-45-0	06/91	Titanium tetrachloride
108-88-3		Toluene
-		2,4-Toluenediamine (see 2,4-Diaminotoluene)
*	06/91	Toluene diisocyanates including but not limited to:
584-84-9		Toluene-2,4-diisocyanate
91-08-7		Toluene-2,6-diisocyanate
95-53-4		o-Toluidine
8001-35-2		Toxaphene {Polychlorinated camphenes}
-		1,1,1-Trichloroethane (see Methyl chloroform)
79-00-5	06/91	1,1,2-Trichloroethane {Vinyl trichloride}
79-01-6		Trichloroethylene
-		2,4,6-Trichlorophenol (see Chlorophenols)
96-18-4	07/96	1,2,3-Trichloropropane
121-44-8	06/91	Triethylamine
1582-09-8	06/91	Trifluralin
95-63-6	06/91	1,2,4-Trimethylbenzene
540-84-1	06/91	2,2,4-Trimethylpentane
51-79-6		Urethane {Ethyl carbamate}

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**Substances For Which Emissions Must Be Quantified**

Chemical Abstract Number(CAS)	Add Date <sup>a</sup>	Substance Name
* 108-05-4	06/91	Vanadium (fume or dust)
593-60-2	06/91	Vinyl acetate
75-01-4		Vinyl bromide
100-40-3	07/96	Vinyl chloride
75-02-5	07/96	4-Vinylcyclohexene
75-35-4		Vinyl fluoride
* *	09/89	Vinylidene chloride
108-38-3	06/91	Wood preservatives (containing arsenic and chromate)
95-47-6	06/91	Xylenes (mixed xylenes), including:
106-42-3	06/91	m-Xylene
7440-66-6	06/91	o-Xylene
* *	09/89	p-Xylene
1314-13-2		Zinc
		Zinc compounds **
		including but not limited to:
		Zinc oxide

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**APPENDIX A-2 NOTES:**

- \* single CAS number not applicable
  - \*\* metal compounds are to be reported as the metal atom equivalent in the compound, unless specific compounds are listed.
  
  - <sup>a</sup> All listed substances except those with a (6/91) add date are required to be addressed in risk assessments prepared under the third phase of the program (i.e., those facilities that were required to submit an emission inventory plan or update plan to the District by August 1, 1991). The original list was approved by the ARB Board in July 1988.
  
  - <sup>b</sup> PAH: (Polycyclic Aromatic Hydrocarbon) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The structure does not include any heteroatoms or substituent groups. The structure includes only carbon and hydrogen. PAHs are a subgroup of POM and have a boiling point of greater than or equal to 100°C.
  
  - <sup>c</sup> PAH-Derivative: (Polycyclic Aromatic Hydrocarbon Derivative) - An organic compound consisting of a fused ring structure containing at least two (2) benzene rings, and which may also contain additional fused rings not restricted exclusively to hexagonal rings. The fused ring structure does not contain heteroatoms. The structure does contain one or more substituent groups. PAH-Derivatives are a subgroup of POM and have a boiling point of greater than or equal to 100°C.
  
  - <sup>d</sup> POM: (Polycyclic Organic Matter) - Includes organic compounds with more than one benzene ring, and which have a boiling point of greater than or equal to 100°C.
- { } This designation indicates a synonym for the substance listed.

This 1999 Annual Report Appendix A-2 contains all changes and updates included in the current "Inventory Guidelines" adopted by ARB in July 1996, and posted on ARB's web site.