

AIR RESOURCES BOARD

02 Q STREET
P O BOX 2815
SACRAMENTO CA 95812



December 26, 1990

Dear Sir or Madam:

Request for Information on the Toxic Air Contaminant Program List

The purpose of this letter is to request information for use in updating the Toxic Air Contaminant Identification List of Substances. The proposed list (Attachment I) is used to assist the Air Resources Board with the selection of substances for entrance into the Toxic Air Contaminant Identification Process.

In addition to requesting information for use in updating the list, we are requesting your review and comment on proposed changes to the Toxic Air Contaminant Identification List of Substances. The specific changes that we propose to make to the list, including the basis for the change, are provided below:

Automatic Changes

Inorganic arsenic, trichloroethylene, chloroform, and vinyl chloride have been moved from Category IIA to Category I because they have been identified by the Air Resources Board as Toxic Air Contaminants (TACs). In addition, styrene has been moved from Category IIB to Category IIA because it has formally entered the identification phase of the process.

Proposed Changes to Category II

We are proposing to revise the definition of Category II to state that the substances in Category II are either under review for identification as TACs (IIA) or nominated for review for identification as TACs (IIB). The purpose of this change is to provide a clearer definition for Category II. The previous definition for Category II can be found on the February 1990 Toxic Air Contaminant Identification List (Attachment II).

SL 062399

Proposed Changes to Category III

We are also proposing to revise Category III to state that it includes substances being evaluated for entry into Category II (IIA or IIB). The definition also states that factors considered in the evaluation include carcinogenic and noncarcinogenic health effects, emissions and exposure in California. The purpose of this revision is to provide a more accurate definition of the factors that are considered prior to entry into Category II. The definition is also clearer in conveying the fact that the substances in Category III may be associated with carcinogenic and/or noncarcinogenic health effects.

For Category III we propose having two subcategories: IIIA and IIIB. Category IIIA would include Federal hazardous air pollutants as well as additional substances for which California emissions data are available. Category IIIB would only include hazardous air pollutants for which California emissions data are not available.

The purpose of including Category IIIA and IIIB is due to recent amendments to the Federal Clean Air Act. The amendments which were signed by the President in mid-November identify 189 substances as hazardous air pollutants. Because California Health and Safety Code Section 39655 states that substances identified as hazardous air pollutants shall be identified by the Air Resources Board as Toxic Air Contaminants, revisions to the list are needed.

The proposed revisions to the definition for Category III will provide the necessary framework for incorporating the hazardous air pollutants into the Toxic Air Contaminant Identification List.

Emissions Information for Revising Category III

In order to develop the draft proposed list of substances (Attachment I), staff reviewed three air toxics emissions databases: 1) Title III, Section 313 of the Superfund Amendments and Reauthorization Act (emissions year 1989); 2) the Bay Air Quality Management District's Air Toxics Inventory (October 27, 1990); and 3) the South Coast Air Quality Management District's Air Toxics Inventory (1983 and 1984 update).

Based on information in the aforementioned toxics databases, hazardous air pollutants were placed in Category IIIA (emissions in California) or Category IIIB (no California emissions data).

Currently, we are surveying local air pollution control districts to obtain information on the emission of toxic pollutants reported under the Air Toxics "Hot Spots" Information and Assessment Act of 1987. We plan to also use this information in updating the Toxic Air Contaminant Identification List.

December 26, 1990

We request that you provide any information or comments to us by January 9, 1991. Please send the information to the following address:

Richard Corey
Special Projects Section/SSD
Re: Toxic Air Contaminant Identification List
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

The information received from this request will be evaluated for use in preparing a draft report for updating the list of substances. We expect the draft report to be available in mid-February. If you are interested in obtaining a copy please fill out the attached request (Attachment III) and return to Richard Corey at the noted address.

If you have any questions regarding this request for information and comments, please call Janette Brooks, Manager of the Special Projects Section, at (916) 322-9148 or Richard Corey of her staff at (916) 327-5631.

Sincerely,

A handwritten signature in cursive script, appearing to read "Donald J. Ames for".

Peter D. Venturini, Chief
Stationary Source Division

cc: Scientific Review Panel for
Toxic Air Contaminants

Attachments

SL 062401

Attachment I

**Proposed Toxic Air Contaminant Identification List
December 1990**

I. Substances identified as Toxic Air Contaminants by the Air Resources Board, pursuant to the provisions of AB 1807.

Asbestos	Ethylene dibromide
Benzene	Ethylene dichloride
Cadmium	Ethylene oxide
Carbon tetrachloride	Inorganic arsenic
Chlorinated dioxins and dibenzofurans (15 species)	Methylene chloride
Chloroform	Trichloroethylene
Chromium VI	Vinyl chloride

II. Substances currently under review or nominated for review for identification as Toxic Air Contaminants.

A. Substances already in the review process.

Acetaldehyde	Formaldehyde
Benzo(a)pyrene	Nickel
1,3-Butadiene	Perchloroethylene
Diesel exhaust	Styrene

B. Substances nominated for review.

Acrylamide	1,4-Dioxane	Mercury
Acrylonitrile	Dimethyl sulfate	4,4'-Methylenedianiline
Beryllium	Environmental tobacco smoke	N-Nitrosomorpholine
Coke-oven emissions	Ethyl acrylate	PAHs
Dialkylnitrosamines	Hexachlorobenzene	PCBs
p-Dichlorobenzene	Hydrazine	Propylene oxide
1,1-Dimethylhydrazine	Inorganic lead	Radionuclides
Di(2-ethylhexyl)phthalate		Toluene diisocyanates
		2,4,6-Trichlorophenol

III. Substances which are being evaluated for entry into Category II (IIA or IIB). Factors considered in this evaluation include carcinogenic and noncarcinogenic health effects, emissions and exposure in California.

A. Substances known to be emitted in California (includes hazardous air pollutants identified in the Federal Clean Air Act known to be emitted in California).

Acetone	Benzoyl chloride	Chlorinated fluorocarbons
Acetonitrile	Benzyl chloride	Chlorine
Acrylamide	Biphenyl	Chlorine dioxide
Acrylic acid	Bis(2-ethylhexyl) adipate	Chloroacetic acid
Allyl chloride	Butyl acrylate	Chlorobenzenes
Aluminum	Butyl benzyl phthalate	Chromium compounds
Ammonia	Caplan	Cobalt compounds
Ammonium nitrate	Carbaryl	Copper compounds
Ammonium sulfate	Carbon disulfide	Cresols/cresylic acid (isomers and mixtures)
Antimony compounds	Carbonyl sulfide	Cumene hydroperoxide
Anthracene	Catechol	Cyanide compounds
Arsenic compounds		
Barium compounds		

Category IIIA Continued

Cyclohexane	Hydrogen sulfide	Pentachlorophenol
Cumene	Hydroquinone	Peracetic acid
2,4-D (salts and esters)	Isopropyl alcohol	Phenol
Diaminotoluene (mixed isomers)	4,4'-Isopropylidenediphenyl	2-Phenyl phenol
Dibenzofuran	Lead compounds	Phosphoric acid
Dibutylphthalate	Maleic anhydride	Phthalic anhydride
Decabromodiphenyl oxide	Manganese compounds	Propoxur
1,2-Dichloroethane	Methanol	Propene
1,3-Dichloropropene	Methyl bromide	Propylene dichloride
Dichlorvos	Methyl chloride	sec-Butyl alcohol
Diethanolamine	Methyl ethyl ketone	Silver compounds
Dimethyl phthalate	Methyl hydrazine	Sulfuric acid
Dimethyl sulfate	Methyl isobutyl ketone	Titanium tetrachloride
4,6-Dinitro-o-cresol (and salts)	Methyl methacrylate	Terephthalic acid
Epichlorohydrin	Methyl tert butyl ether	Tert-Butyl alcohol
1,2-Epoxybutane	Methylene diphenyl	Thiourea
Ethyl benzene	disocyanate	Toluene
Ethyl chloride	Molybdenum trioxide	1,2,4-Trichlorobenzene
Ethylene glycol	N-Butyl alcohol	1,1,1-Trichloroethane
Ethylene thiourea	Naphthalene	1,2,4-Trimethylbenzene
Gasoline	2-Nitropropane	Vinyl acetate
Glycol ethers	Nitric acid	Vinylidene chloride
Hexachloroethane	Nitriiotriacetic acid	Xylenes (o, m, p)
Hydrochloric acid	Parathion	Zinc compounds
Hydrogen fluoride		

B. Substances Identified as hazardous air pollutants in the Federal Clean Air Act for which California emissions information is not currently available.

Acetamide	3,3'-Dimethyl benzidine	4-Nitrophenol
Acetophenone	Dimethyl carbamoyl chloride	N-Nitroso-N-methyl urea
2-Acetylaminofluorene	Dimethyl formamide	N-Nitrodimethylamine
Acrolein	1,1-Dimethylhydrazine	N-Nitrosomorpholine
4-Aminobiphenyl	2,4-Dinitrophenol	Pentachloronitrobenzene
Aniline	2,4-Dinitrotoluene	p-Phenylenediamine
o-Anisidine	1,2-Diphenylhydrazine	Phosphine
Benzidine	Ethyl carbamate	Phosphorus
Benzotrichloride	Ethylene imine	Phosgene
Bis(2-chloroaniline)	Ethylidene dichloride	1,3-Propane sultone
Bis(chloromethyl)ether	Fine mineral fibers	Polycyclic organic matter
Bromoform	Heptachlor	beta-Propiolactone
Calcium cyanamide	Hexachlorobutadiene	Propionaldehyde
Caprolactam	Hexachlorocyclopentadiene	1,2-Propylenimine
Chloramben	Hexamethylene-1,6-disocyanate	Quinoline
Chlordane	Hexamethylphosphoramide	Quinone
2-Chloroacetophenone	Hexane	Selenium compounds
Chlorobenzilate	Isophorone	Styrene oxide
Chloromethyl methyl ether	Lindane	1,1,2,2-Tetrachloroethane
Chloroprene	Methoxychlor	2,4-Toluene diamine
DDE	Methyl iodide	o-Toluidine
Diazomethane	Methyl isocyanate	Toxaphene
1,2-Dibromo-3-chloropropane	N,N-Diethyl aniline	2,4,5-Trichlorophenol
3,3-Dichlorobenzidene	Nitrobenzene	1,1,2-Trichloroethane
Dichloroethyl ether	4-Nitrobiphenyl	Triethylamine
Diethyl sulfate		Trifluralin
3,3-Dimethoxybenzidine		2,2,4-Trimethylpentane
Dimethyl aminoazobenzene		Vinyl bromide

Attachment II

TOXIC AIR CONTAMINANT IDENTIFICATION LIST
FEBRUARY 1990

- I. Substances identified as toxic air contaminants by the Air Resources Board, pursuant to the provisions of AB 1807.
- asbestos, benzene, cadmium, carbon tetrachloride, chlorinated dioxins and dibenzofurans (15 species), chromium (VI), ethylene dibromide, ethylene dichloride, ethylene oxide, methylene chloride
- II. Substances currently under review for identification as toxic air contaminants, scheduled for review, or nominated for review but not yet scheduled. It will be necessary to develop information on exposure in California to some substances in this category before pursuing review.
- A. (Substances already in the review process.)
acetaldehyde, benzo(a)pyrene, 1,3-butadiene, chloroform, diesel exhaust, formaldehyde, inorganic arsenic, nickel, perchloroethylene, trichloroethylene, vinyl chloride
- B. (Substances not yet under review.)
acrylamide, acrylonitrile, beryllium, coke-oven emissions, dialkyl nitrosamines, p-dichlorobenzene, 1,1-dimethylhydrazine, di(2-ethylhexyl)phthalate, 1,4-dioxane, dimethyl sulfate, environmental tobacco smoke, ethyl acrylate, hexachlorobenzene, hydrazine, inorganic lead, mercury, 4,4'-methylenedianiline, N-nitrosomorpholine, PAHs, PCBs, propylene oxide, radionuclides, styrene, toluene diisocyanates, 2,4,6-trichlorophenol
- III. Compounds for which health effects information is limited or not yet sufficient to support review. Substances in this category are produced and emitted to the air in quantities which might make them of concern at such time as health effects information is strong enough to support review.
- acrolein, allyl chloride, benzyl chloride, chlorobenzene, chlorophenols, chloroprene, cresols, glycol ethers, maleic anhydride, manganese, methyl bromide, methyl chloroform, nitrobenzene, phenol, vinylidene chloride, xylenes

Attachment III

REQUEST FORM

for

Toxic Air Contaminant Identification List Update

To order a copy of the above report please supply your name and address below:

PLEASE PRINT OR TYPE CLEARLY

Name of Individual and Company

Address

City, State, Zip Code

Return this form to: Richard Corey
Special Projects Section/SSD
Re: Toxic Air Contaminant Identification List
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

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