Appendix D

List of Toxic Air Contaminants in California

HISTORY

1. Amendment filed 1-2-76; effective thirtieth day thereafter (Register 76, No. 1).
2. Amendment filed 3-11-76; effective thirtieth day thereafter (Register 76, No. 11).
3. Amendment of NOTE filed 10-18-82; effective thirtieth day thereafter (Register 82, No. 43).
4. Amendment filed 8-30-84; effective thirtieth day thereafter (Register 84, No. 35).
5. Repealer and former section 92520 and renumbering and amendment of former section 92540 to section 92520 filed 5-1-91; operative 5-31-91 (Register 91, No. 24).

§ 92530. Certified Abrasives.

(a) The ARB shall certify abrasives which comply with the performance standards set forth in subdivision (b) below. Any person who desires certification of an abrasive shall furnish to the ARB an adequate test sample, together with fees to defray the cost of testing. Each certification of an abrasive shall include the ARB's determination of the original cut-point for fineness of the abrasive. The ARB shall maintain an up-to-date list of certified abrasives. Certification shall not be effective for more than two years. Abrasive materials which are certified on the effective date of this section shall remain certified until September 1, 1992.

(b) Performance Standards.

(1) (A) Before blasting the abrasive shall not contain more than one percent by weight material passing a #70 U.S. Standard sieve when tested in accordance with "Method of Test for Abrasive Media Evaluation," Test Method No. California 371-A, dated May 15, 1975.

(B) If the abrasive does not meet the requirements of subdivision (b)(1)(A), the person who desires certification of the abrasive may as an alternative demonstrate within the State of California to the satisfaction of the ARB that the abrasive meets a 20 percent opacity emission limit when tested in accordance with the "Visible Emission Evaluation Test Method for Selected Abrasives listed in Permissible Dry Outdoor Blasting," as adopted by the ARB on April 1, 1991, and incorporated herein by reference. The person who desires certification of the abrasive shall be solely responsible for conducting the demonstration.

(2) After blasting, the abrasive shall not contain morn than 1.8 percent by weight material 5 microns or smaller when tested in accordance with "Method of Test for Abrasive Media Evaluation," Test Method No. California 371-A, dated May 15, 1975.

(c) A used certified abrasive shall not be considered certified for reuse unless the abrasive conforms to its original cut-point for fineness.

(d) A blend of certified abrasives shall be considered certified for purposes of section 92530(a), unless found not to meet the requirements of section 92530(b) pursuant to testing initiated by the ARB.

(e) All manufacturers and suppliers of certified abrasives shall legibly and permanently label the invoice, bill of lading and abrasive packaging or container with each of the following:

(1) The manufacturer's name or identification trade name;

(2) The grade, weight proportion of components in abrasive blends, brand name of the abrasive or brand names and grades of components of abrasive blends; and

(3) The statement "ARB certified for permissible dry outdoor blasting."

(4) This subsection shall become effective six months after April 1, 1991.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904 and 41905, Health and Safety Code.

HISTORY

1. New section filed 8-30-84; effective thirtieth day thereafter (Register 84, No. 35).
2. Repealer and new section filed 5-1-91; operative 5-31-91 (Register 91, No. 24).
3. Editorial correction of subsection (d) (Register 2003, No. 16).

§ 92540. Stucco and Concrete.

NOTE: Authority cited: Sections 39600 and 39601, Health and Safety Code. Reference: Sections 41900, 41902, 41904 and 41905, Health and Safety Code.

HISTORY

1. New section filed 8-30-84; effective thirtieth day thereafter (Register 84, No. 35).
2. Renumbering and amendment of former section 92540 to section 92520 filed 5-1-91; operative 5-31-91 (Register 91, No. 24).

Subchapter 7. Toxic Air Contaminants

§ 93000. Substances Identified As Toxic Air Contaminants.

Each substance identified in this section has been determined by the State Board to be a toxic air contaminant as defined in Health and Safety Code section 39655. If the State Board has found there to be a threshold exposure level below which no significant adverse health effects are anticipated from exposure to the identified substance, that level is specified as the threshold determination. If the Board has found there to be no threshold exposure level below which no significant adverse health effects are anticipated from exposure to the identified substance, a determination of "no threshold" is specified. If the Board has found that there is not sufficient available scientific evidence to support the identification of a threshold exposure level, the "Threshold" column specifies "None identified."

Substance	*Threshold Determination*
Benzene (C_6H_6)	None identified
Ethylene Dibromide ($BrCH_2CH_2Br$; 1,2-dibromoethane)	None identified
Ethylene Dichloride ($ClCH_2CH_2Cl$; 1,2-dichloroethane)	None identified
Hexavalent chromium (Cr (VI))	None identified
Asbestos [asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), tremolite, actinolite, and anthophyllite]	None identified
Dibenzo-p-dioxins and Dibenzofurans chlorinated in the 2,3,7 and 8 positions and containing 4,5,6 or 7 chlorine atoms	None identified
Cadmium (metallic cadmium and cadmium compounds)	None identified
Carbon Tetrachloride (CCl_4; tetrachloromethane)	None identified
Ethylene Oxide (1,2-epoxyethane)	None identified
Methylene Chloride (CH_2Cl_2; Dichloromethane)	None identified
Trichloroethylene (CCl_2CHCl; Trichloroethene)	None identified
Chloroform ($CHCl_3$)	None identified
Vinyl chloride (C_2H_3Cl; Chloroethylene)	None identified
Inorganic Arsenic	None identified
Nickel (metallic nickel and inorganic nickel compounds)	None identified
Perchloroethylene (C_2Cl_4; Tetrachloroethylene)	None identified
Formaldehyde (HCHO)	None identified
1,3-Butadiene (C_4H_6)	None identified
Inorganic Lead	None identified
Particulate Emissions from Diesel-Fueled Engines	None identified

NOTE: Authority cited: Sections 39600, 39601 and 39662, Health and Safety Code. Reference: Sections 39650, 39660, 39661 and 39662, Health and Safety Code.

HISTORY

1. New section filed 9-23-85; effective thirtieth day thereafter (Register 85, No. 39). For history of former subchapter 7, see Registers 84, No. 10; 83, No. 2; 81, No. 48; 77, No. 12; and 74, No. 47.
2. Amendment filed 1-14-86; effective thirtieth day thereafter (Register 86, No. 3).
3. Amendment filed 2-10-86; effective thirtieth day thereafter (Register 86, No. 7).
4. Amendment filed 10-9-86; effective thirtieth day thereafter (Register 86, No. 43).
5. Amendment filed 11-25-86; effective thirtieth day thereafter (Register 86, No. 48).
6. Amendment filed 2-23-87; effective thirtieth day thereafter (Register 87, No. 9).
7. Amendment filed 10-8-87; operative 11-7-87 (Register 87, No. 43).
8. Amendment filed 3-15-88; operative 4-14-88 (Register 88, No. 13).
9. Amendment filed 7-22-88; operative 8-21-88 (Register 88, No. 31).
10. Amendment adding Methylene Chloride filed 6-7-90; operative 7-7-90 (Register 90, No. 30).
11. Amendment adding Trichloroethylene filed 2-27-91; operative 3-29-91 (Register 91, No. 13).
12. Amendment adding Vinyl chloride filed 5-10-91; operative 6-9-91 (Register 91, No. 25).
13. Editorial correction, including removal of Inorganic arsenic (Register 91, No. 25).
14. Amendment adding Chloroform filed 5-10-91; operative 6-9-91 (Register 91, No. 25).
15. Amendment adding Inorganic Arsenic filed 6-6-91; operative 7-6-91 (Register 91, No. 26).
16. Change without regulatory effect amending Trichloroethylene and adding Nickel filed 7-14-92 pursuant to section 100, title 1, California Code of Regulations (Register 92, No. 29).
17. Amendment adding Perchloroethylene filed 10-2-92; operative 11-1-92 (Register 92, No. 40).
18. Amendment adding Formaldehyde filed 3-2-93; operative 4-1-93 (Register 93, No. 10).
19. Amendment adding 1,3-Butadiene filed 4-14-93; operative 5-14-93 (Register 93, No. 16).
20. Editorial correction (Register 98, No. 16).
21. Amendment adding inorganic lead filed 4-14-98; operative 5-14-98 (Register 98, No. 16).
22. Amendment adding "Particulate Emissions from Diesel-Fueled Engines" filed 7-21-99; operative 8-20-99 (Register 99, No. 30).

§ 93001. Hazardous Air Pollutants Identified as Toxic Air Contaminants.

Each substance listed in this section has been identified as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal Clean Air Act (42 U.S.C. Section 7412(b)) and has been designated by the State Board to be a toxic air contaminant pursuant to Health and Safety Code Section 39657.

Substance

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
Caprolactam
Captan
Carbaryl
Carbon disulfide
Carbon tetrachloride
Carbonyl sulfide
Catechol
Chloramben
Chlordane
Chlorine
Chloroacetic acid
2-Chloroacetophenone
Chlorobenzene
Chlorobenzilate
Chloroform
Chloromethyl methyl ether
Chloroprene
Cresols/Cresylic acid (isomers and mixture)
o-Cresol
m-Cresol
p-Cresol
Cumene
2,4-D, salts and esters
DDE
Diazomethane
Dibenzofurans
1,2-Dibromo-3-chloropropane
Dibutylphthalate
1,4-Dichlorobenzene (p)
3,3-Dichlorobenzidene
Dichloroethyl ether (Bis (2-chloroethyl) ether)
1,3-Dichloropropene
Dichlorvos
Diethanolamine
N,N-Diethyl aniline (N,N-Dimethylaniline)
Diethyl sulfate
3,3-Dimethoxybenzidine
Dimethyl aminoazobenzene
3,3-Dimethyl benzidine
Dimethyl carbamoyl chloride
Dimethyl formamide
1,1-Dimethyl hydrazine
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
Ethylene imine (Aziridine)
Ethylene oxide
Ethylene thiourea
Ethylidene dichloride (1,1-Dichloroethane)
Formaldehyde
Heptachlor
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
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
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
Pentachloronitrobenzene (Quintobenzene)
Pentachlorophenol
Phenol
p-Phenylenediamine
Phosgene
Phosphine
Phosphorus
Phthalic anhydride
Polychlorinated biphenyls (Aroclors)
1,3-Propane sultone
beta-Propiolactone
Propionaldehyde
Propoxur (Baygon)
Prophylene 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-Toluene diamine
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 Compounds[1]
Glycol ethers[2]
Lead Compounds
Manganese Compounds
Mercury Compounds
Fine mineral fibers[3]
Nickel Compounds
Polycyclic Organic Matter[4]
Radionuclides (including radon)[5]
Selenium Compounds

NOTE: For all listing above 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^1CN where $X=HN^1$ 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 $(R(OCH_2CH_2)_n-OR^1$ where
n = 1,2 or 3
R = alkyl or aryl groups
R^1 = R, H, or groups which, when removed, yield glycol ethers with the structure: $R(OCH_2CH)_n-OH$. 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.

NOTE: Authority cited: Sections 39657, 39600, 39601 and 39662, Health and Safety Code. Reference: Sections 39650, 39655, 39656, 39657, 39658, 39659, 39660, 39661 and 39662, Health and Safety Code.

HISTORY

1. New section filed 3-9-94; operative 4-8-94. Submitted to OAL for printing only (Register 94, No. 10).

Subchapter 7.5. Airborne Toxic Control Measures

§ 93100. Nonvehicular Airborne Toxic Control Measures.

The nonvehicular airborne toxic control measures contained in this subchapter have been adopted by the state board and shall be implemented by adoption of regulations by local air pollution control and air quality management districts pursuant to Health and Safety Code Section 39666.

NOTE: Authority cited: Sections 39600, 39601, 39650 and 39666, Health and Safety Code. Reference: Sections 39650 and 39666, Health and Safety Code.

HISTORY

1. New section filed 6-16-88; operative 7-16-88 (Register 88, No. 26).

§ 93101. Benzene Airborne Toxic Control Measure—Retail Service Stations.

(a) Definitions. For the purposes of this section, the following definitions shall apply:

(1) "ARB-certified vapor recovery system" means a vapor recovery system which has been certified by the state board pursuant to Section 41954 of the Health and Safety Code.

(2) "Excavation" means exposure to view by digging.

(3) "Gasoline" means any organic liquid (including petroleum distillates and methanol) having a Reid vapor pressure of four pounds or greater and used as a motor vehicle fuel or any fuel which is commonly or commercially known or sold as gasoline.

(4) "Motor vehicle" has the same meaning as defined in Section 415 of the Vehicle Code.

(5) "Owner or operator" means an owner or operator of a retail service station.

(6) "Phase I vapor recovery system" means a gasoline vapor recovery system which recovers vapors during the transfer of gasoline from delivery tanks into stationary storage tanks.

(7) "Phase II vapor recovery system" means a gasoline vapor recovery system which recovers vapors during the fueling of motor vehicles from stationary storage tanks.

(8) "Retail service station" means any new or existing motor vehicle fueling service station subject to payment of California sales tax on gasoline sales.

(9) "Existing retail service station" means any retail service station operating, constructed, or under construction as of the date of district adoption of regulations implementing this control measure.

(10) "New retail service station" means any retail service station which is not constructed or under construction as of the date of district adoption of regulations implementing this control measure.