

State of California
Air Resources Board

Resolution 82-52

October 28, 1982

Agenda Item No.: 82-22-1

WHEREAS, Health and Safety Code Sections 39500 and 39605 provide that the Air Resources Board (the "Board") shall coordinate, encourage, and review the efforts of all levels of government as they affect air quality and authorize the Board to provide assistance to local air pollution control districts;

WHEREAS, Health and Safety Code Sections 39607 and 39701 require the Board to inventory sources of air pollution within the state to determine the kinds and quantities of air pollutants, monitor such air pollutants, and to coordinate and collect research data on all aspects of air pollution, including the effects of air pollution on human health, the control of nonvehicular emissions, and the consequences of alternative solutions to specific air pollution problems;

WHEREAS, Health and Safety Code Sections 39600 and 39601 require the Board to adopt rules and regulations and do such acts as may be necessary for the proper execution of the Board's powers and duties;

WHEREAS, Health and Safety Code Sections 39002 and 40000 provide that the primary responsibility to control emissions from nonvehicular sources rests with local air pollution control districts and the responsibility to control air pollution from vehicular sources rests with the Board;

WHEREAS, Health and Safety Code Section 39002 gives the Board the duty to ensure that local and regional authorities meet the responsibilities given to them by Division 26 of the Health and Safety Code or any other provision of law;

WHEREAS, Health and Safety Code Section 41700 prohibits the discharge of quantities of air contaminants which endanger the public health or safety or which cause injury to the public;

WHEREAS, several Air Pollution Control Officers have requested the Board to prepare a list of toxic air contaminants;

WHEREAS, the staff has proposed regulations which describe an approach to controlling emissions of toxic air contaminants so that they will not endanger the public health or safety;

WHEREAS, the California Environmental Quality Act and Board regulations require that action not be taken as proposed if feasible mitigation measures or alternatives exist which would substantially reduce any significant adverse environmental effects of the proposed action;

WHEREAS, a duly noticed public hearing has been held, and the Board has reviewed and considered voluminous evidence presented at this hearing by its staff, other public agencies, industry, and members of the public, including scientists; and

WHEREAS, the Board finds that:

The public health, safety, and welfare are endangered by the emission into the ambient air of substances which are determined to be carcinogenic, or otherwise toxic to human beings;

Persons residing in California are exposed to a multiplicity of air contaminants from numerous sources which act cumulatively to produce adverse effects, and this phenomenon should be taken into account when controlling individual sources of toxic air contaminants;

Ambient air monitoring in urban areas, staff investigations, and data provided by districts and others indicate that large quantities of toxic air contaminants are being emitted from a wide variety of sources in California, and these emissions result in significant ambient concentrations of potentially toxic air contaminants;

While all such exposure to potentially toxic air contaminants cannot be eliminated in the foreseeable future, Section 41700 of the Health and Safety Code requires that emissions of toxic air contaminants be controlled to levels which prevent significant harm to the public health;

A program to control toxic air contaminants through the adoption of ambient air quality standards is not appropriate in all cases;

Certain substances which may be determined to be toxic air contaminants may be emitted from a wide variety of sources and may best be subject to regulation through the adoption of ambient air quality standards;

The control of toxic air contaminants is best achieved by controlling new and existing sources of such contaminants;

A statewide program is necessary and desirable in order to provide technical and scientific assistance to local air pollution control districts, to achieve the earliest practicable control of toxic air contaminants, to promote the development and use of advanced control technology and alternative processes and materials, to identify the toxic air contaminants of concern and prioritize their control, to minimize inconsistencies in protecting the public health in various areas of the state, and to minimize the economic advantage to any area which could result from inconsistent local regulation;

Identification of individual toxic air contaminants must be based upon the best scientific evidence currently available, and that evidence should be gathered from the public, the scientific community and other state and local agencies;

While absolute and undisputed scientific evidence is not available to determine the exact nature and extent of the risk from toxic air contaminants, sufficient evidence of potential risk has been presented to begin action to prevent endangerment of the public health and safety from public exposure to such contaminants;

Technologically feasible and cost-effective means are available to reduce emissions of toxic air contaminants; and

Adoption of the proposed regulations will have a beneficial impact on air quality and on public health and safety and will result in no adverse environmental impacts.

NOW, THEREFORE, BE IT RESOLVED that the Board approves proposed Subchapter 7, for incorporation into Chapter 1, Part III of Title 17, California Administrative Code, commencing with Section 93000, as set forth in Attachment A and directs the Executive Officer to adopt the proposed regulations no sooner than November 23, 1982, after making them available to the public for review for at least 15 days and accepting written comment until 5:00 p.m. November 16, 1982, provided that the Executive Officer shall consider such written comments as may be submitted during this period, and is delegated the authority to make nonsubstantive changes to the regulations or to present the regulations to the Board for further consideration if he determines that this is warranted in light of the written comments received.

BE IT FURTHER RESOLVED that in determining which substances to propose for consideration as toxic air contaminants, the Executive Officer is directed to give priority to those substances which pose the greatest danger to the public health.

BE IT FURTHER RESOLVED that the Board may in the future consider the adoption of ambient air quality standards for substances which are or may be toxic air contaminants.

BE IT FURTHER RESOLVED that the Executive Officer is directed to monitor emissions associated with the application of pesticides which may be toxic air contaminants, to work in close cooperation with the Department of Food and Agriculture to ensure that these emissions do not endanger public health, and to propose amendments to these regulations in regard to pesticide application if such amendments are warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to notify all local air pollution control districts, other affected state and local agencies, and the Environmental Protection Agency/local district/ARB Technical Review Group of the Board's action; to work with all affected agencies and industry to assure timely implementation of the regulations; and to collect and distribute information relating to specific air pollutants which are or may be toxic and to sources of such pollutants.

BE IT FURTHER RESOLVED that the Board directs the staff to develop and bring to the Board for consideration a proposal to establish the scientific review committee provided for in Section 93001 of the regulations. In developing this proposal the staff shall consider:

The number of scientists on the committee.

The term of appointment of committee members.

The qualifications of committee members including the appropriate disciplines which should be represented.

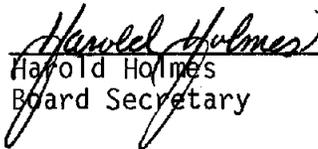
The selection of members including the possibility of nominations from professional or academic associations.

The appropriateness of utilizing any committee which might be established by the Department of Health Services and which is capable of evaluating potential toxic air contaminants.

The duration and steps involved in the public hearing process and the role of the science advisory committee in that process.

Prior to making its recommendation to the Board, the staff shall consult with other state agencies and interested members of the public, including scientists and industry representatives.

I hereby certify that the above is a true and correct copy of Resolution 82-52, as adopted by the Air Resources Board.


Harold Holmes
Board Secretary

Attachment A to Resolution 82-52

Set forth below is the text of proposed regulations approved by the Air Resources Board October 28, 1982. A copy of the regulations originally proposed by staff and contained in the September 10, 1982 staff report is attached for the purpose of identifying the changes to the original proposal.

SUBCHAPTER 7. TOXIC AIR CONTAMINANTS

The following addition to Title 17 of the California Administrative Code is proposed:

93000. Applicability. (a) This subchapter shall apply to all sources within the state of emissions of toxic air contaminants. Implementation of the control requirements contained in this subchapter shall be the primary responsibility of local and regional air pollution control districts for nonvehicular sources and of the state board for vehicular sources.

(b) This subchapter shall not apply to the application of pesticides subject to regulation by the Director of Food and Agriculture.

NOTE: This section is similar to the same section as contained in the original staff proposal. Part of the content of the original proposal has been modified and restated as a new subsection (b).

93001. Procedure for Identification of Toxic Air Contaminants. (a) "Toxic air contaminant" for the purpose of this subchapter means an air pollutant which has been determined by the state board in accordance with the procedures and criteria set forth in this subchapter to cause or contribute to air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious or incapacitating illness.

(b) The state board shall appoint a scientific advisory committee which shall advise the board on the nature and magnitude of adverse health effects associated with substances proposed for designation as toxic air contaminants. In developing its recommendations, the committee shall consider all relevant scientific information. The committee shall submit its evaluation to the state board within 60 days of receiving a request for a recommendation from the board or the Executive Officer.

(c) The state board shall not determine that a substance is a toxic air contaminant without first holding a public hearing pursuant to the provisions of Government Code Sections 11340 et seq. At the public hearing, the board shall consider the evaluation of the scientific advisory committee made pursuant to subsection (b). The state board shall also consult with the Department of Health Services and other state agencies with jurisdiction or expertise and consider such information as they may provide. As provided in Government Code Section 11346.8, the state board shall consider all relevant matter presented to it in determining whether a substance is a toxic air contaminant.

(d) Any toxic air contaminant identified by the state board in accordance with the procedures set forth in this section shall be listed in Section 93005.

NOTE: The definitional language contained in Section 93001 is substantially identical to that found in Section 93002(a) of the original staff proposal.

93002. Criteria for Identification of Certain Air Contaminants. (a) For purposes of this subchapter, it shall be presumed that a substance is a toxic air contaminant if it meets one or more of the following criteria:

(1) a substance which has been shown, via one or more human epidemiological studies, to result in an increased incidence of cancer in humans; or

(2) a substance which has produced a positive carcinogenic response in well-conducted animal bioassays in two or more animal species, or in one species if the positive result of the bioassay has been replicated in subsequent testing in the same species; or

(3) a substance which has produced a positive carcinogenic response in a well-conducted animal bioassay in one animal species and for which there is supportive evidence that the substance produces positive results in short-term tests which measure effects on genetic material (DNA) of cultured cells, or effects on the DNA in cells of living animals.

This presumption shall be applied by both the scientific advisory committee established pursuant to Section 93001(b) and by the state board and may be overcome only by clear and convincing evidence that the substance does not present a carcinogenic risk to humans exposed to it via the ambient air.

(b) For purposes of subsection (a), "positive carcinogenic response in a well-conducted animal bioassay" means that the study method employed revealed a statistically significant increase in tumor frequency or decrease in time to tumor in the exposed group over the unexposed or control group, using a procedure which conforms reasonably with procedures recommended by the National Cancer Institute, or the International Agency for Research on Cancer.

(c) When considering whether a substance is a toxic air contaminant on the basis of the criteria contained in subsection (a), the state board shall assess the risk of harm to the public likely to result from anticipated exposure to the substance. In the case of such substances, the scientific advisory committee established pursuant to Section 93001(b) shall also include a risk assessment as part of its evaluation for the state board.

(d) For any substance which the state board determines is a toxic air contaminant, it shall also determine whether there is a threshold exposure level below which no adverse health effects are anticipated. Where the state board determines that there is such a level, it shall specify that level in the provisions of this subchapter identifying the substance as a toxic air contaminant.

NOTE: The criteria found in Section 93002(a) are the same as those set forth in Section 93002(b) of the original staff proposal. Section 93002(b) is substantially identical to Section 93002(d) of the original staff proposal.

93003. Control of Emissions of Toxic Air Contaminants. (a) In order to prevent the emission of toxic air contaminants from endangering the public health and safety within the meaning of Health and Safety Code Section 41700, the following minimum conditions must be met:

(1) For toxic air contaminants for which the state board has determined there is a threshold exposure below which no adverse health effects are anticipated, emissions from the source shall be controlled sufficiently, including a reasonable margin of safety, so that the source will not result in or contribute to ambient levels at or in excess of the threshold exposure.

(2) For toxic air contaminants for which there is no demonstrable safe level or threshold level of adverse health effects, emissions from the source shall be reduced through the use of Toxics Best Available Control Technology (T-BACT).

(b) For purposes of this section, "Toxics Best Available Control Technology" means reductions of emissions to the lowest amount possible through the application of Best Available Control Technology (BACT) as defined in air pollution control district rules and regulations, with the additional consideration for toxic air contaminants of the use of operational and maintenance conditions and limitations, closed system engineering, and the use of materials that are not toxic air contaminants, taking into account the potency of the toxic compound and its persistence in the atmosphere.

NOTE: Section 93003(a)(1) is identical in substance to Section 93001(a) of the original staff proposal.

93004. Other Requirements. (a) Nothing in this subchapter shall relieve the air pollution control districts or the state board, as the case may be, from imposing on any source of toxic air contaminants additional or more stringent requirements or permit conditions than are set forth herein which are necessary to assure that emissions will not cause or contribute to an endangerment of the comfort, repose, health, and safety of the public or to economically significant animals or plants, or to comply with any provision of applicable law.

(b) Nothing contained in this subchapter shall preclude the Air Resources Board or local districts from taking action to ensure compliance with all applicable provisions of law and regulations with respect to any air pollutant which has not been listed or is under consideration for listing as a toxic air contaminant.

NOTE: Section 93004(a) is substantially identical to Section 93001 of the original staff proposal. Section 93004(b) is in part similar to the provisions of Section 93003 of the original staff proposal.

93005. Toxic Air Contaminants. The following substances have been identified by the state board as toxic air contaminants pursuant to this subchapter:

[To be amended to list toxic air contaminants in accordance with the provisions of Section 93001(d).]

IV. PROPOSED REGULATIONS

A. TEXT OF PROPOSED REGULATION - SUBCHAPTER 7. TOXIC AIR CONTAMINANTS

The following addition to Title 17 of the California Administrative Code is proposed:

93000. Applicability. This subchapter shall apply to all sources of emissions of toxic air contaminants, for which no ambient air quality standard is applicable, within the state. This subchapter shall not apply to the application of pesticides conducted during the growing or harvesting of crops or processing of crops prior to shipment from the property on which the crops are grown. Implementation of these requirements shall be the primary responsibility of local and regional air pollution control districts for nonvehicular sources and of the Air Resources Board for vehicular sources.

93001. Minimum Conditions. In order to prevent the emission of toxic air contaminants from endangering the public health and safety within the meaning of Health and Safety Code Section 41700, the following minimum conditions must be met:

(a) For toxic air contaminants for which there is a threshold exposure below which no adverse health effects are anticipated, emissions from the source shall be controlled sufficiently, including a reasonable margin of safety, so that the source will not result in or contribute to ambient levels in excess of the threshold exposure.

(b) For toxic air contaminants for which there is no demonstrable safe level or threshold level of adverse health effects, including but not limited to carcinogens, emissions from the source shall be reduced to the maximum extent practicable.

(c) Nothing in this section shall relieve the air pollution control districts or the Air Resources Board, as the case may be, from imposing on any source of toxic air contaminants additional or more stringent requirements or permit conditions than are set forth herein which are necessary to assure that emissions will not cause or contribute to an endangerment of the comfort, repose, health, and safety of the public or to economically significant animals or plants.

93002. Definitions. (a) "Toxic air contaminant" for the purpose of this subchapter means any air pollutant which, in the judgment of the Air Resources Board or an air pollution control district, causes or contributes to air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious or incapacitating illness. Substances that are carcinogenic and which are present in the ambient air are toxic air contaminants.

(b) "Carcinogenic substance" for purposes of this subchapter means any substance which meets one or more of the following criteria:

(1) a substance which has been shown, via one or more human epidemiological studies, to result in an increased incidence of cancer in humans; or

(2) a substance which has produced a positive carcinogenic response in well-conducted animal bioassays in two or more animal species, or in one species if the positive result of the bioassay has been replicated in subsequent testing in the same species; or

(3) a substance which has produced a positive carcinogenic response in a well-conducted animal bioassay in one animal species and for which there is supportive evidence that the substance produces positive results in short-term tests which measure effects on genetic material (DNA) of cultural cells, or effects on the DNA in cells of living animals.

(c) "Maximum extent practicable" for purposes of this subchapter means reductions of emissions to the lowest amount possible through the use of feasible control technology, imposition of operational and maintenance conditions and limitations, and the use of less harmful alternatives and materials.

(d) "Positive carcinogenic response in a well-conducted animal bioassay" for the purposes of this subchapter means that the study method employed revealed a statistically significant increase in cancer or decrease in time to tumor in the exposed group over the unexposed or control group, using a procedure which conforms reasonably with procedures recommended by the National Cancer Institute, or the International Agency for Research on Cancer.

93003. Compliance with other Requirements. Compliance with the requirements of this subchapter shall not excuse compliance with all applicable provisions of state law or district rules, regulations, and permit conditions.

State of California
AIR RESOURCES BOARD

Executive Order G-166

WHEREAS, a committee of the Air Resources Board (the "Board") conducted a public hearing on November 10 and 11, 1982, and the Board conducted a public hearing on December 1, 1982, to consider the amendment and adoption of regulations regarding lead in gasoline;

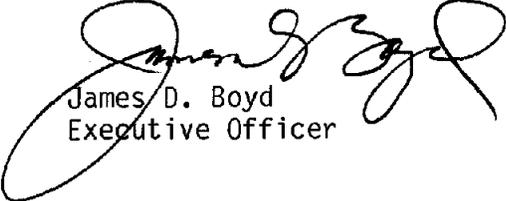
WHEREAS, on December 2, 1982, the Board adopted Resolution 82-64, in which the Board approved amendments to Title 13, California Administrative Code, Section 2253 and adoption of Title 13, California Administrative Code, Section 2253.2, and directed the Executive Officer to adopt the regulations, with such technical changes as he may deem necessary, after assuring that the regulations have been available to the public for at least 15 days;

WHEREAS, the approved regulations have been made available to the public for a period exceeding 15 days, with the changes to the originally proposed text clearly indicated.

NOW, THEREFORE, IT IS HEREBY ORDERED that the recitals and findings contained in Resolution 82-64 are incorporated herein.

IT IS FURTHER ORDERED that Title 13, California Administrative Code, Section 2253 is amended and Title 13, California Administrative Code, Section 2253.2 is adopted, as set forth in Attachment A.

Executed this 31st day of December, 1982 at Sacramento, California.


James D. Boyd
Executive Officer

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Adopting Subchapter 7 to Chapter 1,
Part III of Title 17, California Administrative Code, Commencing with
Section 93000, Regarding the Application of Health and Safety Code
Section 41700 to the Emission of Toxic Air Contaminants

Agenda Item No.: 82-22-1

Public Hearing Date: October 28, 1982

Response Date: November 16, 1982

Issuing Authority: Air Resources Board

Comment: No comments were received identifying any significant environmental
issues pertaining to this item. The staff report identified no
adverse environmental effects.

Response: N/A

CERTIFIED:

Cathy J. French
Acting Board Secretary

Date: December 1, 1982

Memorandum

To : Gordon Van Vleck
Secretary
Resources Agency

Date : January 7, 1983

Subject: Filing of Notice of
Decisions of the Air
Resources Board

From : Air Resources Board

Pursuant to Title 17, Section 60007 (b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.


Harold Holmes
Board Secretary

attachments

~~Resolution 82-64/Executive Order~~
Resolution 82-64/Executive Order