

State of California
AIR RESOURCES BOARD

Resolution No. 82-55

October 28, 1982

Agenda Item No.: 82-22-2

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

WHEREAS, Health and Safety Code Sections 39002 and 40000 provide that local and regional authorities have primary responsibility for control of air pollution from stationary sources;

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

WHEREAS, many Air Pollution Control Officers and the California Air Pollution Control Officers Association have requested guidance from the Board regarding the review of new and modified sources of toxic air contaminants;

WHEREAS, Board staff has proposed a policy for the review of new and modified sources of toxic air contaminants intended to reduce emissions and prevent endangerment of the public health and safety;

WHEREAS, public comments were solicited on the proposed policy and public workshops were held on June 18, 1982, September 1, 1982, and September 2, 1982;

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 meeting has been held and the Board has reviewed and considered comments and information presented by staff, other agencies, industry, and members of the public;

WHEREAS, the Board finds that:

Significant quantities of toxic air contaminants may be released into the ambient air from new and modified sources;

The uncontrolled emissions of toxic air contaminants from new and modified sources could result in significant public exposure and endanger the public health;

There are currently no specific criteria or procedures for routinely considering and controlling emissions of toxic air contaminants from new or modified sources;

This lack of specific criteria or procedures has resulted in a lack of uniformity in reviewing new or modified sources of potentially toxic air pollutants, inconsistent control requirements for those sources, and in many cases has resulted in little or no control of toxic air contaminants from new or modified sources;

Requiring the use of toxics best available control technology, including the specification of design, equipment, maintenance or operational standards or conditions for new and modified sources of toxic air contaminants will greatly reduce or eliminate emissions from those sources and the resulting exposure of the public to many toxic substances;

The endorsement of a state policy for reviewing new and modified sources of toxic air contaminants will:

- provide guidance to districts on criteria and procedures to be used for the review of new and modified sources of toxic air contaminants;

- expedite the development of individual district programs for the review and control of new and modified sources of toxic air contaminants;

- result in more consistent application of control requirements throughout the state for new and modified sources of toxic air contaminants;

- result in reduced emissions and reduced public exposure to toxic air contaminants; and

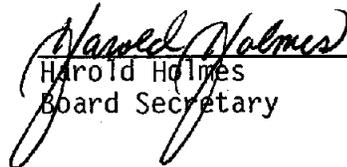
- provide increased protection of the public health;

Endorsement of the proposed policy will have a beneficial impact on air quality and on public health and safety and have no adverse environmental impacts.

NOW, THEREFORE, BE IT RESOLVED that the Board approves and endorses the proposed policy for review and control of new or modified sources of toxic air contaminants, as set forth in Attachment A, and directs the Executive Officer to transmit the policy to districts as policy guidance to assist districts in the development of individual programs for toxic air contaminants.

BE IT FURTHER RESOLVED that the Executive Officer is directed to work with the districts to encourage prompt implementation of the policy, to collect and distribute information relating to sources of toxic air contaminants and to identify methods of controlling such pollutants.

I hereby certify that the above is a true and correct copy of Resolution 82-55, as adopted by the Air Resources Board.



Harold Holmes
Board Secretary

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STATE OF CALIFORNIA
Air Resources Board

Attachment A to Resolution No. 82-55
Policy for Reviewing New or Modified Sources of
Toxic Air Contaminants

October 28, 1982

I. Purpose

The purpose of this policy is to provide a framework for the systematic review of new sources of toxic air contaminants which promotes increased protection of the public health by:

- . minimizing through the application of Toxics Best Available Control Technology (TBACT) the emissions of toxic air contaminants from new and modified sources for which there is no safe level or threshold of adverse health effects; and by
- . ensuring that the emissions from new and modified sources of toxic air contaminants for which there are threshold exposure levels below which no adverse health effect is anticipated, are at a level which ensures that the thresholds will not be reached or exceeded.

It is intended that this policy be used as guidance by local air pollution control districts for the evaluation and permitting of new and modified sources of toxic air contaminants.

II. Applicability

This policy applies to any new or modified stationary source (as defined in local district rules) within the state which will or may emit a toxic air contaminant for which no ambient air quality standard is applicable. This policy is not intended to apply to the application of pesticides regulated by the Department of Food and Agriculture.

III. Definition of Toxic Air Contaminant

For the purposes of this policy, "toxic air contaminant" means any air pollutant which has been identified by the State Board in accordance with the provisions of Subchapter 7, Title 17 California Administrative Code and which can 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. This is not intended to preclude 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.

IV. Classification of Toxic Air Contaminants

For the purposes of new source review, toxic air contaminants should be separated into two classes: Class A and Class B. Review procedures and the degree of control for new or modified sources should depend on the classification of the toxic air contaminant to be emitted.

Those toxic air contaminants for which adverse health effects have been demonstrated, and for which a safe level or a threshold of adverse health effect does not exist or has not been demonstrated, should be designated Class A. Toxic air contaminants for which adverse health effects have been demonstrated, and for which there is a demonstrable threshold exposure level below which no adverse health effects are anticipated, should be designated Class B. The threshold of adverse health effect should be considered to be the concentration and duration of exposure at which sensitive subgroups of the public may be affected.

V. Review Levels

Review levels for new and modified sources of toxic air contaminants

should be established at the emission levels which ensure that sources with the potential to cause or contribute to ambient levels in exceedance of a threshold of adverse health effect will be reviewed. For sources of Class A toxic air contaminants, the review level should be any emissions above zero. For sources of Class B toxic air contaminants, review levels should reflect the adverse health effect threshold of each Class B compound, and should ensure that sources with the potential to exceed those thresholds are reviewed.

VI. Information Requirements

As is the case with any new source, specific information may be needed about the new facility to make a decision regarding permit approval or disapproval. For sources of toxic air contaminants, information in addition to that routinely required may be needed in order to make an informed decision. The items listed below are examples of the kinds of additional information that may be necessary. Of course the size of the new source and/or toxic compound to be emitted will determine the amount of additional information needed. The list below is provided only as guidance and not meant to imply that every source should be required to supply this information.

a) the availability of alternative processes or substitute compounds of a non-toxic nature; and

b) an estimation of the existing ambient level of any Class B toxic air contaminant to be emitted; and an analysis of the stability, persistence, transformation products, dispersion potential, and other physical and chemical characteristics of those compounds;

c) the number of persons in the area impacted by the source's emissions, and projected population growth for that area;

d) any facility for sensitive subgroups located in the area impacted by the source's emissions, such as schools, hospitals, and convalescent homes; and

e) the availability of alternate sites within the district, the population and sensitive subgroups exposed at those sites, and projected population growth for those sites.

If such information cannot be provided by the applicant, it may be necessary for the district to seek other sources of such information including environmental impact reports or other public sources of information.

VII. Determination of Appropriate Controls

For all new and modified sources of toxic air contaminants subject to review, the next step of the permitting process is the determination of the appropriate level of control. This determination is to be made on a case-by-case basis, and should be based on the classification of the toxic air contaminant to be emitted, and on the particular characteristics of the source.

Class A Compounds:

Since by definition there is no safe level of Class A toxic air contaminants, the control objective should be to minimize public exposure in all cases, and to eliminate public exposure altogether whenever possible. Therefore, for these toxic air contaminants, emissions from the source shall be reduced through the use of Toxics Best Available Control Technology as defined in Subchapter 7, Title 17 California Administrative Code ("Toxics Best Available Control Technology" means reductions of emissions 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, 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). The determination of the appropriate level of control should be made on a case-by-case basis.

If there are emissions remaining after all control requirements have been applied, the source should be required to use any available offsets provided that the offsets are for the same toxic air contaminant, are at the same source, and share the same impact zone as the point of the new emissions. Investigation of alternate siting to reduce public exposure to substantial remaining emissions after control requirements have been determined could also be considered.

In those cases where all available controls have been applied and the remaining emissions of the Class A compound still, in the judgment of the permitting agency, constitute an endangerment to public health, the permit should be denied pursuant to Section 41700 of the Health and Safety Code.

Class B Compounds:

All new or modified sources of Class B toxic air contaminants should be required to utilize, at a minimum, the degree of control necessary to ensure that emissions from those sources do not result in ambient levels which reach or exceed the adverse health effect threshold for the Class B compound to be emitted. The degree of control necessary for Class B sources may vary, depending on the adverse health effect threshold of the compound in question and on the existing ambient level of that compound.

If, after all control requirements have been applied, remaining emissions will still result in the achievement or exceedance of an adverse health effect threshold, the source could be allowed to use any available offsets to reduce its emissions below the threshold - provided that the offsets are for the same Class B compound, are at the same source, and share the same impact zone as the point of the new emissions. In no case should sources of Class B toxic air contaminants be allowed to offset emissions prior to applying best available control technology.

If the proposed Class B source cannot reduce its emissions to a level which ensures that the adverse health effect threshold would not be reached or exceeded, the permit should be denied.

For new and modified sources of either Class A or Class B toxic air contaminants, districts may want to consider requiring post-construction ambient monitoring, continuous emission monitoring, or real-time reporting to gather information or to ensure protection of the public health. Monitoring requirements could vary depending on the size of the new source, and the type and quantity of toxic air contaminants emitted.

VIII. Emergency Plans

New and modified sources of toxic air contaminants with the potential to endanger public health in process upset or equipment breakdown conditions should be required to submit an emergency plan with the permit applications. In determining which sources should submit such plans, consideration should be given to:

- a) the quantity of potential accidental emissions;
- b) the potency of the toxic air contaminants in question; and
- c) the probable duration of the process upset or equipment breakdown conditions.

All emergency plans required should provide for the reduction of emissions to the maximum extent feasible during emergency conditions, including shutdown of the source unless continuous operation while under repair would result in fewer emissions, and for the notification of the appropriate responsible agencies during an emergency.

IX. Opportunity for Public Comment

The public should be provided a 30-day period to review and comment on any permit decision for a source of toxic air contaminants subject to review. When appropriate, a public hearing should also be held.

X. Interagency Coordination

State and local agencies which exercise jurisdiction over resources which may be affected by the source or which possess special expertise in the area of toxic substance control should be consulted during the permit review process for sources of toxic air contaminants. Such agencies include: the Water Resources Control Board, the Solid Waste Management Board, the Department of Health Services, local health departments, and local planning agencies. Agencies that share permitting jurisdiction over proposed sources should also be consulted prior to issuance of permits for those sources. Agencies with shared jurisdiction are: the California Energy Commission, for power plant siting; and the Department of Health Services, for facilities that handle hazardous waste.

XI. Emission Reduction Credits

All emissions trading including banking, offsetting prior to review, and netting should not be allowed in the permitting of new and modified sources of toxic air contaminants.

XII. Additional Considerations

Sources currently exempt from review: Permitting provisions that

currently exempt source categories from review, should be reviewed and revised as necessary to ensure that no sources are exempt from review which may emit toxic air contaminants and may therefore constitute an endangerment to the public health, safety or repose as prohibited by Section 41700 of the Health and Safety Code.

Variations: Section 42353 of the Health and Safety Code prohibits districts from granting variances to sources which endanger the public health or safety as protected by Section 41700. Therefore, no variances should be granted to permitted sources of toxic air contaminants which would allow those sources to exceed the permitted emission levels.

Precursors: Precursor relationships have been identified for primary pollutants that react with other pollutants to form secondary pollutants. There also are pollutants which when emitted react with other pollutants in the atmosphere to form toxic air pollutants. The precursor relationships are currently recognized in district new source siting rules for criteria pollutants. Similarly, new and modified sources that emit compounds which have been identified as precursors to toxic air contaminant should be reviewed on a case-by-case basis, and should be required to apply any controls necessary to ensure protection of the public health. The requirements imposed should not be more stringent than those recommended for the toxic air contaminant to which the precursor is related, but should be equivalent if, in the judgment of the district, that degree of control is necessary to protect the public health.

Synergistic, additive, and cumulative effects: When reviewing new and modified sources of toxic air contaminants, consideration should be given to the possibility of synergistic or additive effects with other pollutants, or to any cumulative effects that may result from the increased emissions of the toxic air contaminant in question.