

TITLE 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO REGULATIONS FOR THE STATE AMBIENT AIR QUALITY STANDARD FOR OZONE

The Air Resources Board (the Board or ARB) will conduct a public hearing at the time and place noted below to consider adoption of amendments to regulations for the state ambient air quality standard for ozone.

DATE: April 28, 2005

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Auditorium
9530 Telstar Avenue
El Monte, CA 91731

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., April 28, 2005, and may continue at 8:30 a.m., April 29, 2005. This item may not be considered until April 29, 2005. Please consult the agenda for the meeting, which will be available at least 10 days before April 28, 2005, to determine the day on which this item will be considered.

If you have a disability-related accommodation need, please go to <http://www.arb.ca.gov/html/ada/ada.htm> for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, please contact the Bilingual Coordinator at (916) 324-5049. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed amendments to Title 17, California Code of Regulations (CCR), sections 70100, 70100.1, and 70200. Incorporated by reference: Air Monitoring Quality Assurance Manual, Volume IV: Monitoring Methods for the State Ambient Air Quality Standards.

Background: Section 39606(a)(2) of the Health and Safety Code requires the ARB to adopt ambient air quality standards in consideration of the public health, safety, and welfare, including but not limited to health, illness, irritation to the senses, aesthetic value, visibility interference and the effects of air pollution on the economy. Ambient air quality standards, as defined in section 39014 of the Health and Safety Code, reflect the

relationship between the composition and intensity of air pollution to undesirable effects, and essentially define clean air. Ambient standards relating to health effects, including the ozone standard, are to be based upon the recommendations of the Office of Environmental Health Hazard Assessment (OEHHA). Existing section 70100 of 17 CCR consists of definitions pertaining to ambient air quality standards; existing section 70100.1 references California approved methods, samplers, and instruments for measuring and determining compliance with the standards; and existing section 70200 sets forth the table of standards. The proposed amendments would modify the parts of those sections pertaining to ozone.

Section 39606(d) of the Health and Safety Code (Children's Environmental Health Protection Act (SB25, Escutia; Stats 1999 ch. 731, sec. 53)) required the ARB, in consultation with the OEHHA, to review all California health-based ambient air quality standards to determine if they are adequate to protect public health, including infants and children. At its December 7, 2000 meeting, the Board approved a report, "Adequacy of California Ambient Air Quality Standards: Children's Environmental Health Protection Act" (Adequacy Report), prepared by ARB and OEHHA staffs, which concluded that health effects may occur in infants and children and other potentially susceptible subgroups exposed to several criteria air pollutants at or near levels corresponding to the current standards. "Criteria air pollutants" are defined as air pollutants for which acceptable levels of exposure can be determined and for which ambient air quality standards have been set. The Adequacy Report identified the standard for ozone as having a high priority for further detailed review and possible revision. The current ambient air quality standard for ozone is 0.09 ppm, averaged over 1 hour.

In response to the Adequacy Report's findings and the Board's direction, ARB and OEHHA staffs began an exhaustive review and evaluation of the scientific literature regarding the impacts of ozone air pollution on public health. The body of evidence reviewed demonstrated significant associations between health effects and ozone. The health effects from exposure to 0.12 parts per million (ppm) ozone for one hour, and to 0.08 ppm ozone for 6.6 hours, can be significant and include lung function decrements and symptoms of respiratory irritation such as cough, wheeze, and pain upon deep inspiration, as well as airway hyper-reactivity and inflammation. Furthermore, animal toxicological studies have shown that chronic ozone exposure can induce tissue changes throughout the respiratory tract. Epidemiological studies have shown positive associations between ozone levels and decreased lung function, increased respiratory symptoms, hospitalization for cardiopulmonary causes, emergency room visits for asthma, and premature death. Welfare effects include yield loss in important crops and predicted economic loss to growers and consumers, and also injury and damage to forest trees.

Section 39606(d)(2) of the Health and Safety Code requires that ambient air quality standards be "established at levels that adequately protect the health of the public, including infants and children, with an adequate margin of safety." The staffs' review of the literature determined that there are compelling reasons to be concerned about

significant adverse health effects associated with ozone exposure, that the 1-hour standard alone is not sufficiently protective, and that a multi-hour standard is also needed. Further, aligning the State's ozone measurement methods with federal methods would allow the same ozone measurement data to be acceptable to both state and federal air quality agencies.

A draft Staff Report containing staff's preliminary findings was released to the public on June 21, 2004, titled "Review of California Ambient Air Quality Standard for Ozone". The draft Staff Report, including staff recommendations for establishing a new 8-hour-average standard for ozone, underwent scientific peer review by the Air Quality Advisory Committee (AQAC), an external peer review committee established in accordance with section 57004 of the Health and Safety Code and appointed by the President of the University of California. The AQAC held a public meeting on January 11 and 12, 2005, discussed their review of the draft Staff Report and the draft recommendations, and provided comments for improving the draft Staff Report to the ARB staff. Final AQAC findings were sent on February 24, 2005. The Staff Report was revised in response to comments received from the AQAC and the public. The final Staff Report (Initial Statement of Reasons for the proposed regulatory action), which will be released on March 11, 2005, includes the following staff proposal for revising the state ambient air quality standard for ozone.

Staff Proposal: Based on a review of the scientific evidence on ozone health effects and the recommendations of the OEHHA, ARB staff proposes the following revisions be made to the California ambient air quality standard for ozone:

1. Ozone will continue to be the pollutant addressed by the standard.
2. Ozone 1-hour-average standard – retain the current 1-hour-average standard for ozone at **0.09 ppm, not to be exceeded**.
3. Ozone 8-hour-average standard – establish a new 8-hour-average standard for ozone at **0.070 ppm, not to be exceeded**. Three decimal places are included in order to ensure that the standard will provide an adequate margin of safety.
4. Monitoring Methods – retain the current monitoring method for ozone, which uses the ultraviolet (UV) photometry method, for determining compliance with the state ambient air quality standard for ozone. Incorporate by reference all federally approved UV methods for ozone as California approved methods, samplers, and instruments. This will result in no change in air monitoring practices, but will align state monitoring requirements with federal requirements.

Proposed Changes to Title 17, California Code of Regulations (CCR): To effectuate the above recommendations, ARB staff proposes that the following revisions be made to sections 70100, 70100.1, and 70200.

1. Amend section 70100 (Definitions) by deleting subsection (g) "Oxidant" as not relevant, and by re-alphabetizing the following subsections accordingly.

2. Amend section 70100.1 (Methods, Samplers, and Instruments for Measuring Pollutants) by adding a new subsection (c), "Ozone Methods"; and by incorporating "California Approved Samplers" by reference for PM10, PM2.5, and ozone.
3. Amend section 70200 (Table of Standards) by adding provisions for an 8-hour ozone standard, by updating the description of the relevant effects of exposure, and by specifying the use of "California Approved Samplers".

Once the ARB adopts ambient air quality standards that specify a level for clean air, a second phase of regulatory activity will occur as the ARB and the air pollution control and air quality management districts (Districts) develop, propose, and adopt emission standards and other control measures that will apply to specific source categories of ozone precursors. The adoption of control measures designed to attain the ambient standards is a separate process conducted in accordance with the public notice and comment rulemaking procedures set forth in the Health and Safety Code and other laws. The ARB is not proposing any control requirements at this hearing.

COMPARABLE FEDERAL REGULATIONS

Sections 108 and 109 of the federal Clean Air Act (42 USC section 7401 *et seq.*) govern the establishment, review, and revision of national ambient air quality Standards (NAAQS). Pursuant to these provisions, the federal Environmental Protection Agency (US EPA) promulgated two ambient standards for ozone. For an 8-hour exposure period, the standard is 0.08 ppm; to attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm. For a 1-hour exposure period, the NAAQS is 0.12 ppm; the NAAQS is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1. However, the US EPA has revoked the 1-hour NAAQS, to be effective June 15, 2005.

Federal methods for measuring ambient concentrations of specified air pollutants have been designated as "reference methods" or "equivalent methods" in accordance with Title 40, Part 53, of the Code of Federal Regulations (40 CFR Part 53), and may be found at the EPA website: <<http://epa.gov/ttn/amtic/files/ambient/criteria/ref804.pdf>>. Staff recommends the adoption of these methods for ozone as the monitoring methods and samplers for California.

Section 39606(d)(2) of the Health and Safety Code specifies that "standards shall be established at levels that adequately protect the health of the public, including infants and children, with an adequate margin of safety." Because federal standards were not established in consideration of this specification, separate state standards may be needed.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The Board staff has prepared a four-volume Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: Review of the California Ambient Air Quality Standard for Ozone. Volume I contains the executive summary, an overview, the staff recommendations, and Appendix A, which sets forth the full text of the proposed regulatory language, in underline and strikethrough format to allow for comparison with the existing regulations. Volume II contains non-health topics, such as chemistry, background levels, emission of precursors, monitoring methods, exposure, and welfare effects of ozone air pollution. These topics provide a context for the health review, which is in Volume III. Volume IV contains the remaining appendices. Copies of Volume I or the complete ISOR may be accessed on the ARB's web site listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990 at least 45 days prior to the scheduled hearing April 28, 2005.

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the ARB's web site listed below.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Mr. Richard Bode, Chief, Health and Exposure Assessment Branch, (916) 323-8413, or Dr. Linda Smith, Manager, Health and Ecosystems Assessment Section, (916) 327-8225.

Further, the agency representative and designated back-up contact persons to whom nonsubstantive inquiries concerning the proposed administrative action may be directed are Artavia Edwards, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-6070, or Alexa Malik, Regulations Coordinator, (916) 322-4011. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at www.arb.ca.gov/regact/ozone05/ozone05.htm

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, or other nondiscretionary savings to state or local agencies.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. The ARB is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will not affect small businesses because ambient air quality standards simply define clean air (see sections 39606 and 39014 of the Health and Safety Code). Once ambient standards are adopted by the ARB, local air pollution control or air quality management districts and the Board develop rules and regulations to control air emissions from numerous source categories in order to attain the health-based ambient air quality standards. A number of different emission standards and control measures are possible, and each will have its own economic or fiscal impact. These impacts must be evaluated when each control measure is proposed. Any economic or fiscal impacts associated with the imposition of future measures will be considered by the adopting regulatory agency in a public forum when specific measures are proposed.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the board or that has otherwise been identified and brought to the attention of the board would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received no later than 12:00 noon, April 27, 2005, and addressed to the following:

Postal mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 I Street, 23rd Floor
Sacramento, CA 95814

Electronic mail is to be sent to: ozone05@listserv.arb.ca.gov and received at the ARB no later than 12:00 noon, April 27, 2005.

Facsimile transmissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at the ARB no later than 12:00 noon April 27, 2005.

The Board requests but does not require that 30 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under that authority granted in Health and Safety Code, sections 39600, 39601, and 39606. This action is proposed to interpret, implement, and make specific Health and Safety Code sections 39014, 39602, 39606, 39701, and 39703(f); and *Western Oil and Gas Association v. Air Resources Board* (1984) 37 Cal.3d 502.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action; in such event the full regulatory text, with the modifications

clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

/s/

Catherine Witherspoon
Executive Officer

Date: March 1, 2005