State of California
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking,
Including Summary of Comments and Agency Responses

PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE DESIGNATION CRITERIA AND AMENDMENTS TO THE AREA DESIGNATIONS FOR STATE AMBIENT AIR QUALITY STANDARDS

Public Hearing Date: September 24, 1998
Agenda Item No.: 98-10-2

I. GENERAL

The Staff Report (Initial Statement of Reasons for Rulemaking) entitled "Proposed Amendments to the Designation Criteria and Amendments to the Area Designations for State Ambient Air Quality Standards and Proposed Maps of the Area Designations for the State and National Ambient Air Quality Standards," released on August 7, 1998, is incorporated by reference herein.

Following a public hearing on September 24, 1998, the Air Resources Board (the Board), by Resolution 98-47, approved amendments to the designation criteria and amendments to the designation of areas in California as nonattainment, attainment, or unclassified for State ambient air quality standards (State standards). The amended regulations are contained in sections 60201, 60202, 60205, 70300, 70301, 70302, 70303, 70303.1, 70303.5, 70304, 70305, and 70306 of title 17, California Code of Regulations (CCR) and Appendices 1, 2, and 3 to sections 70300 through 70306 of title 17, CCR.

The amendments to the designation criteria regulations (CCR, Title 17, sections 70300 through 70306 and Appendices 1 through 4, thereof) that the Board approved reflect several minor, nonsubstantive changes that were added after the release of the Staff Report. These modifications affect section 70303.5, the requirements for ozone nonattainment-transitional. There are two general modifications to subsection (a) of the requirements. The first one restates the requirements in the present tense rather than the future tense and restates one of the requirements more concretely. These changes make the requirements more straightforward and therefore, easier to understand. The second modification is a grammatical change that corrects the placement of "and" in the list of requirements 1 through 5 of subsection (a).

As part of the approved amendments to the designation criteria, Appendix 2 of the regulations specifies a document incorporated by reference. This document, entitled "Procedure for Computing the Values Used in Identifying Extreme Concentration Events," (August 1998) describes the statistical computations used in evaluating extreme concentration events. Under the designation criteria regulations, measured concentrations that are higher than the calculated extreme concentration value are excluded from the designation process. The document is incorporated by reference because it is lengthy and would be cumbersome to include within the text of the regulations. A copy of the referenced document was included as part of the Staff Report. In addition, the document is available from the Air Quality Data Branch of the Planning and Technical Support Division by calling (916) 323-8482.

Similar to the designation criteria regulations, the amendments to the area designations for State standards that the Board approved on September 24, 1998, also were modified from those proposed in the Staff Report. The modifications to the area designation regulations were made in response to air quality data collected during 1998 and to comments received after the Staff Report was published. The modifications to the area designation regulations added after the release of the Staff Report are summarized below.

- Instead of being redesignated as nonattainment-transitional, the following districts will retain the designation of nonattainment for ozone:
  - Monterey Bay Unified Air Pollution Control District.
  - Placer County Air Pollution Control District (Mountain Counties Air Basin portion).
  - San Luis Obispo County Air Pollution Control District.
  - Tehama County Air Pollution Control District.
  - Yolo-Solano Air Quality Management District.

Rationale: The approved amendments to section 70303.5 of the designation criteria provide for a review of air quality data monitored during the current year in determining whether an area qualifies as nonattainment-transitional for ozone. If data for the current year show more than three exceedances at any monitoring location in the area, the area retains its nonattainment designation. At the time the Staff Report was released, monitoring data for the areas listed above did not show more than three exceedances of the state ozone standard. However, these areas had experienced more than three exceedances by the date of the public hearing. As a result, the areas did not qualify for designation as nonattainment-transitional for ozone.

- Instead of being redesignated as nonattainment as originally proposed, San Diego County will retain the designation of attainment for sulfates.

Rationale: During 1995 through 1997, there was one measured exceedance of the state sulfate standard in the San Diego Air Basin. At the time the Staff Report was published, the staff had identified no justification for excluding the value as a highly irregular or infrequent event. The measured exceedance was below the Expected Peak Day Concentration (EPDC) and could not be excluded as an extreme concentration. There was no evidence to suggest that the exceedance was affected by an exceptional event. However, after further investigation, the staff determined that the data for 1995 through 1997 were not sufficiently complete to calculate a valid EPDC. Therefore, the exceedance was evaluated as affected by an unusual concentration event. Since the exceedance was likely caused by transport of sulfur dioxide emissions from a power plant in the Rosarito area of Mexico, and this plant is expected to be converted from fuel oil to natural gas in the next several years, exceedances are not expected to recur. The staff also determined that the impact of the sulfate exceedance was limited to the local area and the data are not complete enough to support a nonattainment designation at this time. As a result, the Board approved excluding the exceedance as affected by an unusual concentration event, thereby retaining San Diego Air Basin's attainment designation for sulfates.

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district the costs of which are reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

The Board has determined that this regulatory action will not have a significant adverse economic impact on business.

In addition, the Board has determined that there will be no, or an insignificant, potential cost impact, as defined in Government Code section 11346.53(e), on private persons or businesses directly affected resulting from this regulatory action.

The Board has further determined that no alternative considered by the agency would be more effective in carrying out the purposes for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

II. SUMMARY OF COMMENTS AND AGENCY RESPONSES

During the 45-day comment period for the Initial Statement of Reasons for Rulemaking, one comment was received from R. J. Sommerville, Air Pollution Control Officer of the San Diego County Air Pollution Control District (San Diego APCD) regarding the sulfate designation for the San Diego Air Basin. San Diego APCD commented that the air basin should not be redesignated as nonattainment for sulfates based on one measured exceedance in eighteen years and that the exceedance should be excluded as an exceptional event or an unusual concentration event based on the infrequency of occurrence and because the likely cause of the exceedance was emissions from a power plant in Mexico that was currently burning high sulfur fuel but planning to switch to low sulfur fuel in the next few years. San Diego APCD also commented that concentrations above the threshold health effects level but below the state standard should not be used to determine attainment.

The ARB reconsidered the proposal to redesignate San Diego Air Basin as nonattainment for sulfate in light of the district's comments. In response to the San Diego APCD's comment that the exceedance should be excluded as an unusual concentration event, the ARB agrees. In accordance with Appendix 2 of the designation criteria regulations, the staff considered all relevant information and determined that the impact of the exceedance is limited to the local area, is not expected to recur, and the data do not support a nonattainment designation. Therefore, the ARB determined that the sole exceedance may be excluded as an unusual concentration event, and this determination is reflected in the modified proposal. In response to San Diego APCD's comment regarding consideration of sulfate levels above the threshold health effects level but below the state standard, staff notes that consideration of such sulfate concentrations is appropriate because such consideration is specified in Appendix 2 of the designation criteria regulations as an element in determining an unusual concentration event, i.e. concentrations that may have potential public health and welfare impacts.

No comments were received at the public hearing on September 24, 1998.

After the Board approved the modified amendments at the public hearing, the staff sent out a Notice of Public Availability of Modified Text (the "15-Day Notice") to allow public comment on the modified amendments for a period of 15 days. During this 15-day comment period, one comment was received from R. L. Reynolds, Air Pollution Control Officer of the Lake County Air Quality Management District (Lake County AQMD). Lake County AQMD commented that recent statistical methodologies result in a relaxation of the state standards by allowing exclusion of statistically invalidated data and that, when data are so excluded, they are no longer used to assess potentially controllable sources of emissions. Lake County AQMD also commented that data should be first evaluated as exceptional events at a district's request, even if the data are below state standards, and that exceptional event data should be removed from data used to determine attainment status. Because these comments do not pertain to the changes proposed in the notice of availability of modified text subject to public comment during the 15-

day period, responses are not required to be included in the final statement of reasons. Nevertheless, the ARB offers the following explanation.

The statistical procedures used to determine an extreme concentration event have been specifically developed for the purpose of calculating recurrence rate values for determining attainment, are reliable methods, and do not result in a relaxation of the state standards. The procedures use a statistical model to estimate air pollutant concentrations with infrequent recurrence rates and to determine Expected Peak Day Concentration (EPDC) values. As specified in Appendix 2 of the designation criteria regulations and in accordance with H&SC section 39607(e), exceedances above the EPDC are excluded as highly irregular or infrequent events for purposes of establishing attainment status. Appendix 2 provides for district identification of questionable data in the first step for identifying data possibly affected by a highly irregular or infrequent event and also provides for subsequent ARB consultation with districts in the identification, which may include assessment of potentially controllable sources of emissions. Air quality data are first evaluated to determine which values are to be excluded as extreme concentration events because this is the most efficient method of evaluation. Data that qualify as data for record, even if they are identified as affected by an exceptional event, are included in calculating the EPDC because the analytical procedures used are designed to compensate for any anomalies in measured concentrations.