

State of California
AIR RESOURCES BOARD

Resolution 01-9

April 26, 2001

Agenda Item No.: 01-3-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the Board) to adopt standards, rules, and regulations, and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, the Legislature enacted the California Clean Air Act of 1988 (the Act; Stats. 1988, ch. 1568) declaring that it is necessary that the State ambient air quality standards be attained by the earliest practicable date to protect the public health, particularly the health of children, older people, and those with respiratory diseases;

WHEREAS, in order to attain these standards, the Act mandates a comprehensive program of emission reduction measures and planning requirements for local and regional air pollution control and air quality management districts (districts) that must be undertaken in areas where the standards have not been attained;

WHEREAS, the Act, in section 39610(a) of the Health and Safety Code, directs the Board to identify each air basin or subregion thereof in which transported air pollutants from upwind areas outside the air basin or subregion cause or contribute to a violation of the State ambient air quality standard for ozone and to identify the district of origin based upon the preponderance of available evidence;

WHEREAS, the Act, in section 39610(b) of the Health and Safety Code, directs the Board, in cooperation with the districts, to assess the relative contribution of upwind emissions to downwind ambient ozone pollutant levels to the extent permitted by available data and to establish mitigation requirements commensurate with the level of contribution;

WHEREAS, on December 14, 1989, the Board adopted section 70500, title 17, California Code of Regulations (CCR), which identifies, consistent with the requirements of the Act, the areas affected by transported air pollutants from upwind areas and the areas of origin of the transported pollutants;

WHEREAS, on August 10, 1990, the Board approved a qualitative assessment of the relative contributions of upwind emissions to downwind ozone concentrations, and in that assessment the relative contributions for specified geographical areas were described as "overwhelming," "significant," or "inconsequential";

WHEREAS, section 70600, title 17, CCR, (adopted by the Board on August 10, 1990, and subsequently amended on March 11, 1993) establishes mitigation requirements for upwind districts within the areas of origin of transported air pollutants, consistent with the requirements of section 39610(b) of the Health and Safety Code;

WHEREAS, section 39610(d) of the Health and Safety Code requires the Board to review and update its transport analysis at least once every three years and staff has proposed an updated transport analysis based on new data and has proposed amendments to sections 70500 and 70600, title 17, CCR, consistent with this updated analysis;

WHEREAS, staff has consulted with the districts, provided opportunities for public comment, and has considered such comments before proposing regulations to the Board;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code and the Board has considered the testimony presented by interested persons and the staff.

WHEREAS, the Board finds that:

The relative contribution of upwind emissions to downwind ambient pollutant levels has been assessed to the extent permitted by available data;

The assessment reveals that the transport of upwind emissions to downwind areas inconsequentially contributes to, significantly contributes to, and in some instances is the cause of, violations of the State ozone standard in a downwind area;

An evaluation of routine meteorological, air quality, and emissions data for the period of 1996-1998 reveals that an update to the initial 1990 transport

assessment, the 1993 triennial update, and the 1996 triennial update is warranted;

Based on the staff analyses of routine data, the identification of two new transport couples are warranted: San Francisco Bay Area Air Basin to the northern Sonoma County portion of the North Coast Air Basin and San Francisco Bay Area Air Basin to San Luis Obispo in the South Central Coast Air Basin;

Based on the staff analyses, a specified change to the assessment of an existing transport couple is warranted: addition of inconsequential transport from the Broader Sacramento Area to the Upper Sacramento Valley;

Because of limitations of the data and the inherent difficulties in understanding and characterizing the mechanisms that result in ozone formation and transport, these findings are qualitative, as they were in the 1990 transport assessment, the 1993 triennial update, and the 1996 triennial update;

A qualitative assessment is consistent with the language of the Health and Safety Code sections 39610(a) and (b), which provides for assessments "to the extent permitted by available data"; and

It is appropriate to continue to characterize the impact of transported ozone or ozone precursors on downwind ambient ozone concentrations as "overwhelming," "significant," or "inconsequential."

WHEREAS, the Board further finds that:

Mitigation responsibilities should be assigned to the upwind area, San Francisco Bay Area Air Basin, based on new findings of "overwhelming" transport to northern Sonoma County;

It is appropriate that this upwind area identified as causing "overwhelming" impacts shall consider and adopt control measures sufficient to attain the ozone standard within the affected areas;

An upwind air basin or air basin subregion which is identified as causing "overwhelming" impacts in portions of a downwind air basin or air basin subregion should be responsible for attainment in only those portions of the downwind air basin or air basin subregion which are affected by overwhelming transport, and not for attainment throughout the downwind air basin subregion;

The mitigation regulation should be revisited periodically, in conjunction with the triennial review of the transport analysis, and amended, as appropriate, to reflect additional information on the contribution of transported pollutants to downwind ambient ozone concentrations and feasible means of mitigating the impacts of transported pollutants;

The implementation of required mitigation measures in identified upwind areas will have positive environmental impacts in the downwind areas and in most upwind areas; and

Pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, this regulatory action will not have any significant adverse impacts on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the staff's recommended ozone transport couples and transport assessments pursuant to sections 39610(a) and (b) of the Health and Safety Code and hereby amends the CCR, title 17, sections 70500 and 70600, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to report to the Board by July 2001, on the availability and potential air quality benefits of additional mitigation requirements that should be considered by upwind contributors to ameliorate the impact of their emissions on the downwind recipients, including but not limited to all feasible measures, new source review thresholds, Smog Check II, and a mitigation bank.

BE IF FURTHER RESOLVED, that the Board directs the Executive Officer to consider, and bring before the Board as appropriate, updates to the transport mitigation requirements set forth in title17, CCR, section 70600.

I hereby certify that the above is a true and correct copy of Resolution 01-9, as adopted by the Air Resources Board.

Marie Kavan, Clerk of the Board

Resolution 01-9

April 26, 2001

Identification of Attachments to the Board Resolution

Attachment A: Proposed amendments to the Regulation Identifying Areas which are Impacted by Transported Air Pollutants and the Regulation for Mitigating the Upwind Emissions on Downwind Ozone Concentrations: sections 70500 and 70600, title 17, CCR, as set forth in Appendix E to the Initial Statement of Reasons.

APPENDIX E

PROPOSED TEXT OF REGULATION IDENTIFYING AREAS WHICH ARE IMPACTED BY TRANSPORTED AIR POLLUTANTS

Amend Subchapter 1.5, Article 5, section 70500, Title 17, California Code of Regulations to read as follows (~~items which have been added in previous rulemaking procedures but subsequently omitted from the California Code of Regulations are in italics~~) (proposed additions are underlined and in italics, proposed deletions are struck out)⁴:

Article 5. Transported Air Pollutants

70500 Transport Identification

- (a) Purpose: This regulation identifies the areas in which transported air pollutants from upwind areas cause or contribute to a violation of the state ambient air quality standard for ozone and the areas of origin of the transported pollutants. All areas identified in the table are the air basins except as otherwise specifically described and defined.
- (b) Definitions:
 - (1) "California Coastal Waters" includes the area between the California coastline and a line starting at the California-Oregon border at the Pacific Ocean; thence to 42.0 degrees North, 125.5 degrees West; thence to 41.0 degrees North, 125.5 degrees West; thence to 40.0 degrees North, 125.5 degrees West; thence 39.0 degrees North, 125.0 degrees West; thence to 38.0 degrees North, 124.5 degrees West; thence to 37.0 degrees North, 123.5 degrees West; thence to 36.0 degrees North, 122.5 degrees West; thence to 35.0 degrees North, 121.5 degrees West; thence to 34.0 degrees North, 120.5 degrees West; thence to 33.0 degrees North, 119.5 degrees West; thence to 32.5 degrees North, 118.5 degrees West; and ending at the California-Mexican border at the Pacific Ocean.
 - (2) "Upper Sacramento Valley" includes the Colusa, Butte, Glenn, Tehama, and Shasta County Air Pollution Control Districts, and that area of the Feather River Air Quality Management District which is north of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County and continuing along the southern Yuba County border to Placer County.

- (3) "Broader Sacramento Area" includes the Sacramento Metropolitan Air Quality Management District; Yolo-Solano Air Pollution Control District; the portions of the El Dorado County Air Pollution Control District included in 1990 U.S. Census Tracts 306.01, 307, 308.01, 308.02, 308.03, 308.04, 309.01, 309.02, 310, 311, 312, 315.01, and 315.02; and the portions of the Placer County Air Pollution Control District included in 1990 U.S. Census Tracts 203, 204, 205, 206.01, 206.02, 206.03, 207.01, 207.02, 207.03, 208, 209, 210.01, 210.02, 211.01, 211.02, 212, 213.01, 213.02, 214, 215.01, 215.02, 216, 218.01, and 218.02; and that area of the Feather River Air Quality Management District which is south of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County, and continuing along the southern Yuba County border to Placer County.

(c) Transport Identification Table

OZONE IMPACTED BY TRANSPORT:	AREAS OF ORIGIN OF TRANSPORT:
1. North Central Coast	San Francisco Bay Area San Joaquin Valley
2. South Central Coast	South Coast California Coastal Waters San Joaquin Valley <u>San Francisco Bay Area</u>
3. South Coast	South Central Coast
4. San Diego	South Coast Mexico
5. Upper Sacramento Valley	Broader Sacramento Area
6. Broader Sacramento Area	San Francisco Bay Area San Joaquin Valley
7. San Joaquin Valley	San Francisco Bay Area Broader Sacramento Area
8. Great Basin Valleys	San Joaquin Valley
9. Mojave Desert	South Coast San Joaquin Valley Mexico
10. San Francisco Bay Area	Broader Sacramento Area

OZONE IMPACTED BY TRANSPORT:	AREAS OF ORIGIN OF TRANSPORT:
11. Mountain Counties	Broader Sacramento Area San Joaquin Valley San Francisco Bay Area
12. Salton Sea	South Coast Mexico
13. <u>North Coast</u>	<u>San Francisco Bay Area</u>

**Note: Authority cited: Sections 39600, 39601, 39610(a), Health and Safety Code.
Reference: Section 39610(a), Health and Safety Code.**

~~1. At the May 30, 1996 public hearing, the Air Resources Board approved amendments to sections 60104 and 60109, and added a new section 60114, Title 17, California Code of Regulations, which divided the Southeast Desert Air Basin into two new air basins: the Mojave Desert Air Basin and the Salton Sea Air Basin. These amendments have not yet been formally approved by the Office of Administrative Law. However, the transport identification regulation above has been amended to reflect the changes in the Southeast Desert Air Basin.~~

PROPOSED TEXT OF REGULATION FOR MITIGATING THE UPWIND EMISSIONS ON DOWNWIND OZONE CONCENTRATIONS

Amend Subchapter 1.5, Article 6, section 70600, Title 17, California Code of Regulations, to read as follows (proposed additions are underlined and in italics, proposed deletions are struck out)⁴:

ARTICLE 6. Transport Mitigation

70600 Emission Control Requirements

Districts within the areas of origin of transported air pollutants, as identified in section 70500(c), shall include sufficient emission control measures in their attainment plans for ozone adopted pursuant to Chapter 10 of the Health and Safety Code, Part 3, Division 26, beginning with section 40910, to mitigate the impact of pollution sources within their jurisdictions on ozone concentrations in downwind areas. At a minimum, the attainment plans for districts within the air basins or areas specified below shall conform to the following requirements:

- (a) Broader Sacramento Area (as defined in section 70500(b)(3)) shall:
 - (1) require the adoption and implementation of best available retrofit control technology, as defined in Health and Safety Code section 40406, on all existing stationary sources of ozone precursor emissions as expeditiously as practicable. At a minimum, the plan shall provide for the adoption of rules that represent best available retrofit control technology for source categories that collectively amount to 75 percent of the 1987 actual reactive hydrocarbon emissions inventory for permitted stationary sources, and 75 percent of the 1987 actual nitrogen oxides emissions inventory for permitted stationary sources, no later than January 1, 1994.
 - (2) include measures sufficient to attain the state ambient air quality standard for ozone by the earliest practicable date within the Upper Sacramento Valley and that portion of the Mountain Counties Air Basin north of the Calaveras-Tuolumne County border and south of the Sierra-Plumas County border, except as provided in Health and Safety Code section 41503(d), during air pollution episodes which the state board has determined meet the following conditions:

- (A) are likely to produce a violation of the state ozone standard in the Upper Sacramento Valley or that portion of the Mountain Counties Air Basin north of the Calaveras-Tuolumne County border and south of the Sierra-Plumas County border; and
- (B) are dominated by overwhelming pollutant transport from the Broader Sacramento Area; and
- (C) are not measurably affected by emissions of ozone precursors from sources located within the Upper Sacramento Valley or that portion of the Mountain Counties Air Basin north of the Calaveras-Tuolumne County border and south of the Sierra-Plumas County border.

(b) San Francisco Bay Area Air Basin shall:

- (1) require the adoption and implementation of best available retrofit control technology, as defined in Health and Safety Code section 40406, on all existing stationary sources of ozone precursor emissions as expeditiously as practicable. At a minimum, the plan shall provide for the adoption of rules that represent best available retrofit control technology for source categories that collectively amount to 75 percent of the 1987 actual reactive hydrocarbon emissions inventory for permitted stationary sources, and 75 percent of the 1987 actual nitrogen oxides emissions inventory for permitted stationary sources, no later than January 1, 1994.
- (2) include measures sufficient to attain the state ambient air quality standard for ozone by the earliest practicable date within the North Central Coast Air Basin, that portion of Solano County within the Broader Sacramento Area, that portion of Sonoma County within the North Coast Air Basin, and that portion of Stanislaus County west of Highway 33, except as provided in the Health and Safety Code section 41503(d), during air pollution episodes which the state board has determined meet the following conditions:
 - (A) are likely to produce a violation of the state ozone standard in the North Central Coast Air Basin, or that portion of Solano County within the Broader Sacramento Area, or that portion of Sonoma County within the North Coast Air Basin, or that portion of Stanislaus County west of Highway 33; and

- (B) are dominated by overwhelming pollutant transport from the San Francisco Bay Area Air Basin; and
- (C) are not measurably affected by emissions of ozone precursors from sources located within the North Central Coast Air Basin, or that portion of Solano County within the Broader Sacramento Area, or that portion of Sonoma County within the North Coast Air Basin, or that portion of Stanislaus County west of Highway 33.

(c) San Joaquin Valley Air Basin shall:

- (1) require the adoption and implementation of best available retrofit control technology, as defined in Health and Safety Code section 40406, on all existing stationary sources of ozone precursor emissions as expeditiously as practicable. At a minimum, the plan shall provide for the adoption of rules that represent best available retrofit control technology for source categories that collectively amount to 75 percent of the 1987 actual reactive hydrocarbon emissions inventory for permitted stationary sources, and 75 percent of the 1987 actual nitrogen oxides emissions inventory for permitted stationary sources, no later than January 1, 1994.
- (2) include measures sufficient to attain the state ambient air quality standard for ozone by the earliest practicable date within the Mojave Desert Air Basin, the Great Basin Valleys Air Basin, and that portion of the Mountain Counties Air Basin south of the Amador-El Dorado County border, except as provided in Health and Safety Code section 41503(d), during air pollution episodes which the state board has determined meet the following conditions:
 - (A) are likely to produce a violation of the state ozone standard in the Mojave Desert Air Basin, or the Great Basin Valleys Air Basin, or that portion of the Mountain Counties Air Basin south of the Amador-El Dorado County border; and
 - (B) are dominated by overwhelming pollutant transport from the San Joaquin Valley Air Basin; and
 - (C) are not measurably affected by emissions of ozone precursors from sources located within the Mojave Desert Air Basin or the Great Basin Valleys Air Basin, or that portion of the Mountain Counties Air Basin south of the Amador-El Dorado County border.

- (d) South Central Coast Air Basin south of the Santa Barbara-San Luis Obispo County border shall, for sources located in that portion of the Basin:
 - (1) require the adoption and implementation of best available retrofit control technology, as defined in Health and Safety Code section 40406, on all existing stationary sources of ozone precursor emissions as expeditiously as practicable. At a minimum, the plan shall provide for the adoption of rules that represent best available retrofit control technology for source categories that collectively amount to 75 percent of the 1987 actual reactive hydrocarbon emissions inventory for permitted stationary sources, and 75 percent of the 1987 actual nitrogen oxides emissions inventory for permitted stationary sources, no later than January 1, 1994.

- (e) South Coast Air Basin shall:
 - (1) require the adoption and implementation of best available retrofit control technology, as defined in Health and Safety Code section 40406, on all existing stationary sources of ozone precursor emissions as expeditiously as practicable. At a minimum, the plan shall provide for the adoption of rules that represent best available retrofit control technology for source categories that collectively amount to 75 percent of the 1987 actual reactive hydrocarbon emission inventory of permitted stationary sources, and 75 percent of the 1987 actual nitrogen oxides emissions inventory for permitted stationary sources, no later than January 1, 1994.

 - (2) include measures sufficient to attain the state ambient air quality standard for ozone by the earliest practicable date within the South Central Coast Air Basin south of the Santa Barbara-San Luis Obispo County border, the San Diego Air Basin, the Mojave Desert Air Basin, and the Salton Sea Air Basin, except as provided in Health and Safety Code section 41503(d), during air pollution episodes which the state board has determined meet the following conditions:
 - (A) are likely to produce a violation of the state ozone standard in the South Central Coast Air Basin south of the Santa Barbara-San Luis Obispo County border, or in the San Diego Air Basin, or in the Mojave Desert Air Basin, or in the Salton Sea Air Basin; and

 - (B) are dominated by overwhelming pollutant transport from the South Coast Air Basin; and

- (C) are not measurably affected by emissions of ozone precursors from sources located within the South Central Coast Air Basin south of the Santa Barbara-San Luis Obispo County border, or the San Diego Air Basin, or the Mojave Desert Air Basin, or the Salton Sea Air Basin.

**Note: Authority cited: Sections 39601 and 39610(b), Health and Safety Code.
Reference: Sections 39610, 40912, 40913, 40921 and 41503, Health and Safety Code.**

~~1. At the May 30, 1996 public hearing, the Air Resources Board approved amendments to sections 60104 and 60109, and added a new section 60114, Title 17, California Code of Regulations, which divided the Southeast Desert Air Basin into two new air basins: the Mojave Desert Air Basin and the Salton Sea Air Basin. These amendments have not yet been formally approved by the Office of Administrative Law. However, the transport identification regulation above has been amended to reflect the changes in the Southeast Desert Air Basin.~~