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 ASSESSMENT OF THE IMPACTS OF TRANSPORTED POLLUTANTS ON OZONE CONCENTRATIONS IN CALIFORNIA

Public Hearing Date: April 26, 2001
Agenda Item No.: 01-3-3

I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking ("staff report"), entitled "Assessment of the Impacts of Transported Pollutants on Ozone Concentrations in California," released March 9, 2001, is incorporated by reference herein.

Following a public hearing on April 26, 2001, the Air Resources Board (Board), by Resolution 01-9, adopted amendments to the assessment of the impacts of transported pollutants on ozone concentrations in California. The amended regulations are contained in section 70500 and section 70600 of title 17 California Code of Regulations (CCR). The amended regulation the Board adopted is identical to that initially proposed by the staff and made available in the staff report released on March 9, 2001, except for a few grammatical, nonsubstantive changes.

The amendment adopted by the Board included the identification of two new transport couples that included the San Francisco Bay Area Air Basin to the North Coast Air Basin and the San Francisco Bay Area Air Basin to the South Central Coast Air Basin. ARB staff along with staff of the affected districts participated in the analysis of air quality, meteorological, and emissions inventory data to identify these two new transport couples. The analysis consisted of reviewing the extent of surface ozone exceedances prior to and on the day that violates the state ozone standard within the downwind and adjacent air basins. In addition, surface and aloft wind patterns and other meteorological data were reviewed for these days. These data provided an indication of the probable origin of air pollutants impacting the downwind air basin. Finally, ozone precursor emission inventories in the upwind and downwind air basins were compared to assess the degree to which the upwind air basin contributed to the downwind violation.

The Board added two additional findings to the resolution to indicate that while no changes to the mitigation requirements found in section 70600 were immediately

necessary, the Board was committed to enhancing the requirements for upwind districts to mitigate their air pollution impacts on downwind districts. The Board directed the staff to report back to the Board at its July meeting on their evaluation of four concepts, among others that the staff might generate:

(1) requiring upwind transport districts to adopt all feasible measures to mitigate air pollution impacts downwind;
(2) implementing improved Smog Check in the San Francisco Bay Area;
(3) making new source review thresholds equal in cases where the downwind area has a more severe classification than the upwind area; and
(4) establishing a mitigation fee bank to fund emission reduction measures in downwind districts.

After discussing transport mitigation options at the July 26, 2001 ARB hearing, the Board directed staff to return early in 2002 with proposed amendments to the transport mitigation regulation incorporating the first three concepts listed above. In addition, the Board directed the staff to include the mitigation fee bank as an item for consideration during the public review process. However, soon thereafter, at the July 26 and November 1, 2001 Board hearings on the Bay Area 2001 Ozone Plan, the Board directed ARB staff to initiate discussions among the various San Francisco Bay Area, San Joaquin Valley, and Sacramento region stakeholders to pursue additional options, including enhanced smog check, that would mitigate transported air pollutants.

The first of several meetings to discuss the potential measures for mitigating the impacts of San Francisco Bay Area air pollution on the San Joaquin Valley and Sacramento region occurred in January 2002. As a result of the Board's direction for a discussion format, the early 2002 time frame to present transport mitigation regulations to the Board is not possible. The innovative discussion format and resultant transport mitigation approaches developed in this format will help form the basis for developing a statewide transport mitigation strategy.

The Board determined that the estimated private sector cost impacts of this regulatory action cannot be determined at this time. Potential additional control measures required as a result of these proposed amendments cannot be identified until the districts update their plans for attaining state ambient air quality standards. The Board has determined that this regulatory action will not have a direct impact on housing costs. In addition, the Board has determined that this regulatory action will have no fiscal impact on local and state government. Moreover, the Board has determined that this regulatory action will have no fiscal impact on federal funding of state programs.

The Board has further determined that no alternative was presented or considered which would be more effective in carrying out the purpose for which the regulatory action was proposed, or which would be as effective and less burdensome to affected private persons, than the adopted regulations.

II. SUMMARY OF COMMENTS

The ARB received two written comment letters during the 45-day comment period, and oral testimony was provided by one individual at the public hearing on April 26, 2001. One comment letter was in support of the identification regulation amendments and favored the use of "exceedance" rather than "violation" days for the transport assessments. An "exceedance" is defined as any ozone concentration that is greater than the ambient air quality standard for ozone; a "violation" is defined as an exceedance that is not a highly irregular or infrequent event. Both comment letters supported the need for more transport mitigation regulations in upwind districts. Oral testimony was in support of the amendments to the regulations. Set forth below is a summary of all individuals that provided written comments during the 45-day comment period and/or oral testimony at the public hearing on April 26, 2001.

A. Oral Testimony at the April Hearing

One person, Bob Carr, Air Pollution Control Officer of the San Luis Obispo County Air Pollution Control District, presented oral testimony at the hearing on April 26, 2001. Mr. Carr initially described his district experience with ozone transport when he worked for Riverside County, and then with the San Luis Obispo County APCD. The San Luis Obispo County APCD participated closely with the transport assessment, and established two new air monitoring sites to support the Central California Ozone Study field exercise in 2000. The district continues to operate these new air monitoring sites to assess ozone transport and the exposure of ozone to county residents. The San Luis Obispo County APCD was in agreement with ARB staff's transport assessment findings. The ARB appreciates the district's involvement with the ozone transport assessment and Central California Ozone Study field exercise. In addition, the ARB appreciates Mr. Carr's comments on the ozone transport issues.

Comment 1: We agreed with the ARB staff recommendation. We feel that based on the information that we received there is a link from the Bay Area to San Luis Obispo County and from the San Joaquin Valley. (Carr)

Agency Response: This is in agreement with ARB staff's transport findings.

Comment 2: If the upwind issues regarding ozone are not addressed, San Luis Obispo County will be designated federal nonattainment. We would encourage the ARB to be proactive in making sure that adequate measures are implemented, so that San Luis Obispo County can avoid becoming federal nonattainment. (Carr)

Agency Response: The ARB is concerned about the widespread transport impact of upwind ozone precursor emissions on downwind districts. To address this problem in central and northern California, the ARB has joined with districts

and other stakeholders to fund the multimillion dollar Central California Ozone Study. The emissions, air quality, and meteorological data collected during this study will be used to identify the upwind emission reductions necessary for mitigating their downwind impact.

Moreover, the ARB has recognized the need for additional upwind mitigation requirements for upwind districts that are significant sources of ozone precursor emissions that cause or contribute to downwind exceedances of the ambient air quality standards. After discussing transport mitigation options at the July 26, 2001 ARB hearing, the Board directed staff to return early in 2002 with proposed amendments to the transport mitigation regulation including 1) requiring upwind transport districts to adopt all feasible measures to mitigate air pollution impacts downwind; 2) implementing improved Smog Check in the San Francisco Bay Area; and 3) making new source review thresholds equal in cases where the downwind area has a more severe classification than the upwind area. In addition, the Board directed the staff to include the mitigation fee bank as an item for consideration during the public review process.

Soon thereafter, at the July 26 and November 1, 2001 Board hearings on the Bay Area 2001 Ozone Plan, the Board directed ARB staff to initiate discussions among the various San Francisco Bay Area, San Joaquin Valley, and Sacramento region stakeholders to pursue options, including enhanced smog check that would mitigate transported air pollutants. The first of several meetings to discuss the potential measures for mitigating the impacts of San Francisco Bay Area air pollution on the San Joaquin Valley and Sacramento region occurred in January 2002. As a result of the Board's direction for a discussion format, the early 2002 time frame to present transport mitigation regulations to the Board was not possible. The innovative discussion format and resultant transport mitigation approaches developed in this format will help form the basis for developing a statewide transport mitigation strategy.

Comment 3: Mr. Carr was not sure that the mitigation bank would work in all areas. San Luis Obispo County has a limited number of sources. Additional money may not be able to achieve what is needed to be able to get the emission reductions that would bring San Luis Obispo County within attainment. (Carr)

Agency Response: As discussed in the Agency Response to Comment #2 above, the ARB is evaluating a potential statewide transport mitigation strategy that could include a mitigation bank. Mr. Carr's concerns will be addressed as part of that strategy evaluation.

B. 45-day Comment Submittals

The ARB received two written comment letters during the 45-day comment period beginning March 9, 2001. Norm Covell, Air Pollution Control Officer of the Sacramento Metropolitan Air Quality Management District, and Marc Chytilo,

from the Law Office of Marc Chytilo, submitted written comments. The written comments are described below, along with ARB's response.

Comment Summary

One comment was in support of the amendments to the regulations. Though the Law Office of Marc Chytilo supported the San Francisco Bay Area couples identification, they want ARB staff to use “exceedance” rather than “violation” days for the transport assessments. Sacramento Metropolitan Air Quality Management District recommended that Broader Sacramento Area be included in the transport assessment. Both written commenters supported the need for more transport mitigation regulations in upwind districts.

Comment 1: This update should reconsider the district's previous requests for additional mitigation measures on Bay Area sources. (Covell)

Agency Response: As discussed in the Agency Response to Oral Comment #2 above, the ARB is evaluating a potential statewide transport mitigation strategy.

Comment 2: This update should reconsider the district's previous requests for improvements in ARB's transport assessments. The current Central California Ozone Study is designed to provide additional data to assess transport impacts and plan effective control strategies. However, the results of this work will not occur in time to help the Sacramento region meet our 2005 federal ozone attainment deadline. (Covell)

Agency Response: Work on improving ARB’s transport assessments for the central and northern California region is either underway or will be done, as data from the Central California Ozone Study (CCOS) becomes available this year. The district’s contributions to CCOS have been essential to this comprehensive ozone study.

The ARB recognizes that the CCOS data and modeling results are needed soon to support the development of the next round of SIPs within the CCOS domain. In order to respond to the need for the CCOS data and modeling results, the ARB has committed to accelerate completion of critical interim data and modeling results.

Comment 3: Mr. Chytilo’s clients support the identification of the San Francisco Bay Area-North Coast and San Francisco Bay Area-South Central Coast couples. (Chytilo)

Agency Response: This is in agreement with ARB staff transport findings.

Comment 4: Mr. Chytilo’s clients question the logical integrity and practical effect of use of the “expected peak day concentration” (EPDC) threshold in

transport assessment. They claim the ARB's current transport assessment methodology arbitrarily ignores ozone concentrations above the EPDC as "extreme concentrations" that are "beyond reasonable regulatory control", and that this supplants the public health priority of air pollution control planning and the scientific basis of attainment and transport contribution classification by inserting notions of feasibility into the classification of regions and the duties of upwind districts to mitigate impacts on downwind districts. Mr. Chytilo states that this is neither appropriate nor permitted under the California Clean Air Act, which does not sanction consideration of reasonability of regulatory controls in the designation of attainment/nonattainment areas nor in the transport mitigation process. (See Health and Safety Code sections 39607, 39608, and 39000, none of which reference consideration of regulatory feasibility in area classification; section 39610, which focuses exclusively upon identification of couples and mitigation with no reference or authority whatsoever for ARB's arbitrary "reasonableness" criteria; and section 40912, determining that upwind districts' plans "shall provide for attainment and maintenance of the state and federal standards in both the upwind and downwind district", clearly preventing consideration of "regulatory reasonableness" in assessing transport). (Chytilo)

Agency Response: After extensive discussions by ARB staff and by the Board at public hearings, the EPDC was developed as an indicator to statistically identify data values not expected to occur more than once per year at an air monitoring station. Very high ozone values can be the result of the buildup of ozone precursor emissions in the presence of sunlight and a very strong high pressure system. These strong high pressure systems cause stagnant wind, low mixing heights, and high temperatures that are conducive to high ozone concentrations during the summer and early fall months. Adopted in 1992 by the ARB, the indicator has been an effective statistical tool in identifying pollutant concentrations that are beyond reasonable regulatory control.

State law and ARB regulations require that “violations” and not “exceedances” are used for designation purposes. In addition, current regulations implementing section 39607(e) dictate that the EPDC should be a factor in determining the threshold for a violation value. Section 39607(e) requires attainment criteria that address infrequent events. ARB regulations state that concentrations less frequent than once per year can be excluded from attainment planning without compromising public health. Sound science, rather than regulatory reasonableness, was the foundation for the EPDC. The United States Environmental Protection Agency uses a similar approach in setting the national ambient air quality standards. Moreover, the EPDC does ensure that planning requirements are not excessive.

Comment 5: The Legislature has directed that assessments " be based upon a preponderance of the available evidence." H&SC section 39610(a). Use of the EPDC eliminates an important portion of the available, relevant evidence, in contravention of the statute. (Chytilo)

Agency Response: The EPDC was developed as an indicator to statistically identify data values not expected to occur more than once per year at an air monitoring station. Adopted in 1992 by the ARB, the indicator has been an effective statistical tool in identifying pollutant concentrations that are beyond reasonable regulatory control. State law dictates that "violations" and not "exceedances" are used for designation purposes. In addition, current regulations implementing section 39607(e) dictate that the EPDC should be a factor in determining the threshold for a violation value. Section 39607(e) requires attainment criteria that address infrequent events. Regulations state that concentrations less frequent than once per year can be excluded from attainment planning without compromising public health. Sound science rather than regulatory reasonableness was the foundation for the EPDC.

Moreover, the EPDC does ensure that planning requirements are not excessive. The use of the EPDC potentially reduces the number of exceedance days to evaluate for transport. However, application of the EPDC in our work is not likely to discard essential information regarding the appropriate transport classification. For each transport couple, enough days were examined to support the assessment of transport as overwhelming, significant, or inconsequential. Consideration of additional days is unlikely to alter these assessments. Therefore, the analyses conducted in support of the transport assessment are credible and sufficient. Nevertheless, the staff will consider examining all exceedance days for future transport assessments without regard to the EPDC value.

Comment 6: CARB must reevaluate all transport couples by considering all exceedance data. (Chytilo)

Agency Response: The use of the EPDC potentially reduces the number of exceedance days to evaluate for transport. However, application of the EPDC in our work is not likely to discard essential information regarding the appropriate transport classification. Therefore, the analyses conducted in support of the transport assessment are credible and sufficient. Nevertheless, the staff will consider examining all exceedance days for future transport assessments without regard to the EPDC value.

Comment 7: Although the ARB has identified a number of new transport couples, has adopted regulations that increased the severity of several existing couples, has recognized the significance of intrastate transport on attainment in virtually every non-attainment area in the state, the ARB has not added a single new mitigation requirement in the past decade to comply with the statutory mandate. The ARB should propose enhanced upwind district mitigation requirements commensurate with the levels and effects of transported air pollution upon downwind districts. (Chytilo)

Agency Response: As discussed in the Agency Response to Oral Comment #2 above, the ARB has recognized the need for upwind mitigation equity in cases of upwind districts that are significant sources of ozone precursor emissions to downwind ambient air quality standard violations and is taking appropriate action to develop a statewide transport mitigation strategy.

III. COMMENTS SUBMITTED BY THE OFFICE OF SMALL BUSINESS ADVOCATE AND THE TRADE AND COMMERCE AGENCY

No comments were submitted by the Office of Small Business Advocate or the Trade and Commerce Agency.