State of California AIR RESOURCES BOARD

Resolution 07-41

September 27, 2007

Agenda Item No.: 07-9-4

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the State Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the State Implementation Plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts (districts) necessary to comply with the Act;

WHEREAS, section 39602 of the Health and Safety Code also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, the ARB has responsibility for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, and 41650 of the Health and Safety Code;

WHEREAS, the ARB is authorized by section 39600 of the Health and Safety Code to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the local air districts have primary responsibility for controlling air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001, 40701, 40702, and 41650 of the Health and Safety Code;

WHEREAS, the South Coast Air Basin includes Orange County and portions of the counties of Los Angeles, San Bernardino, and Riverside, as described in title 17, California Code of Regulations, section 60104;

WHEREAS, the South Coast Air Quality Management District (District) is the local air district with jurisdiction over the South Coast Air Basin and the Riverside County portion of the Salton Sea Air Basin (Coachella Valley), pursuant to sections 40410 and 40413 of the Health and Safety Code;

WHEREAS, the Southern California Association of Governments (SCAG) is the regional transportation agency for the South Coast Air Basin and Coachella Valley and has responsibility for preparing and implementing transportation control measures to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling and traffic congestion for the purpose of reducing motor vehicle emissions pursuant to sections 40460(b) and 40465 of the Health and Safety Code;

WHEREAS, section 40463(b) of the Health and Safety Code specifies that the District board must establish a carrying capacity – the maximum level of emissions which would enable the attainment and maintenance of an ambient air quality standard for a pollutant – for the South Coast Air Basin with the active participation of SCAG;

WHEREAS, in July 1997, the U.S. Environmental Protection Agency (U.S. EPA) promulgated an 8-hour NAAQS for ozone of 0.08 parts per million;

WHEREAS, in December 1997, the U.S. EPA promulgated 24-hour and annual NAAQS for fine particulate matter (PM_{2.5}) of 65 and 15 μg/m³, respectively;

WHEREAS, in April 2004, U.S. EPA finalized "Phase 1" of the 8-hour ozone NAAQS implementation rule (Phase 1 Implementation Rule), which established the classification scheme for nonattainment areas and identified continuing obligations with respect to the existing 1-hour ozone requirements;

WHEREAS, the Phase 1 Implementation Rule designated the South Coast Air Basin and the Coachella Valley as nonattainment for the 8-hour ozone NAAQS, classified SOUTH COAST AIR BASIN as a "severe-17" nonattainment area with an initial attainment date of June 15, 2021, and classified the Coachella Valley as a "serious" nonattainment area with an initial attainment date of June 15, 2013, with both designations subject to the requirements of Subpart 2 of Part D of Title I of the Act;

WHEREAS, section 181(b)(3) of the Act requires U.S. EPA to reclassify a nonattainment area to a higher classification upon receipt of a request from the state having jurisdiction;

WHEREAS, section 182(e)(5) of the Act provides that SIPs for extreme ozone nonattainment areas may rely in part upon the development of new technologies or the improvement of existing technologies;

WHEREAS, upon approval by U.S. EPA, a request by the State to reclassify South Coast Air Basin to an "extreme" nonattainment area would reset the South Coast Air Basin's attainment deadline to June 15, 2024 and allow for the use of emission reductions to be achieved from as-yet unidentified technologies in the attainment demonstration, and a request to reclassify the Coachella Valley to a "severe-15" would reset the attainment deadline for this area to June 15, 2019;

WHEREAS, in November 2005, U.S. EPA supplemented its 8-hour ozone Phase 1 Implementation Rule with a "Phase 2" rule that specifies the emission controls and planning elements that nonattainment areas must address in their SIPs;

WHEREAS, the Act requires that 8-hour ozone nonattainment areas classified moderate, or greater, demonstrate that Reasonable Further Progress (RFP) toward attainment of the 8-hour ozone NAAQS will occur, and that the SIPs for such areas include air quality and emissions data, a control strategy, a modeled attainment demonstration, rate of progress milestones, conformity emission budgets, and contingency measures;

WHEREAS, in December 2004, U.S. EPA designated the South Coast Air Basin as nonattainment of the PM_{2.5} NAAQS on the basis of violation of the annual average PM_{2.5} NAAQS;

WHEREAS, in March 2007, U.S. EPA finalized the PM_{2.5} implementation rule which established the framework and requirements that states must meet in developing annual average PM_{2.5} SIPs, set an initial attainment date of April 5, 2010, and allowed for an attainment date extension for up to five years;

WHEREAS, the Act requires that annual PM_{2.5} SIPs include air quality and emissions data, a control strategy, a modeled attainment demonstration, rate of progress milestones, conformity emission budgets, and contingency measures;

WHEREAS, on March 3, 2005, the District adopted a Carbon Monoxide Maintenance Plan that U.S. EPA approved on May 11, 2007;

WHEREAS, on November 15, 1996, the District adopted a Nitrogen Dioxide Maintenance Plan, that U.S. EPA approved on April 10, 2000;

WHEREAS, the District adopted the 2007 Air Quality Management Plan (2007 AQMP) to fulfill the planning requirements of both the federal Act and the California Clean Air Act;

WHEREAS, the 2007 AQMP includes updated air quality and emissions data; a control strategy based on State, local, and federal measures; modeled attainment demonstrations; RFP demonstrations; transportation conformity emission budgets; and contingency measures for the 8-hour ozone and annual PM_{2.5} NAAQS;

WHEREAS, the 2007 AQMP includes harmonizing revisions to the Carbon Monoxide Maintenance Plan and the Nitrogen Dioxide Maintenance Plan;

WHEREAS, using air quality modeling, the District identified 8-hour ozone NAAQS carrying capacities of 114 tons per day (tpd) of nitrogen oxides (NOx) and 420 tpd reactive organic gases (ROG);

WHEREAS, meeting the carrying capacity by 2020, in order to attain the 8-hour ozone NAAQS by the June 15, 2021, attainment date for severe-17 nonattainment areas, would require reductions of approximately 78 percent and 22 percent of NOx and ROG, respectively, from projected controlled 2020 levels;

WHEREAS, the District was unable to identify control measures with emission reductions sufficient for the South Coast Air Basin to attain the 8-hour ozone NAAQS by June 15, 2021;

WHEREAS, Section 181(b)(3) of the Act allows States to request reclassification to a higher classification for ozone nonattainment areas;

WHEREAS, using air quality modeling, the District identified annual average PM2.5 NAAQS carrying capacities of 452 tpd NOx, 472 tpd ROG, 20 tpd sulfur oxides (SOx), and 87 tpd directly emitted PM2.5;

WHEREAS, meeting the carrying capacity by 2009, in order to attain the PM2.5 NAAQS by the April 5, 2010 deadline, would require reductions of approximately 75 percent of NOx, 26 percent of ROG, 59 percent of SOx, and 11 percent of directly emitted PM2.5, from projected 2009 levels;

WHEREAS, the District was unable to identify control measures with emission reductions sufficient for the South Coast Air Basin to attain the PM2.5 annual average NAAQS by April 5, 2010;

WHEREAS, Section 188(E) of the Act allows States to request a single, five-year extension of the attainment date for particulate matter NAAAQS;

WHEREAS, ARB staff performed supplemental analyses of PM2.5 air quality monitoring data and trends, PM2.5 speciation data, and emission inventory trends, as allowed by U.S. EPA modeling guidance;

WHEREAS, the District's ozone and PM2.5 attainment demonstrations rely on adopted regulations, local SIP elements of the District's 2007 AQMP, and the proposed State Strategy as modified in Attachment B to Resolution 07-28;

WHEREAS, the proposed South Coast SIP contains all of the elements required of a PM_{2.5} attainment plan;

WHEREAS, federal law set forth in section 110(I) of the Act and Title 40, Code of Federal Regulations (CFR), section 51.102, requires that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to the U.S. EPA of any SIP revision;

WHEREAS, as required by federal law, the District made the 2007 AQMP available for public review at least 30 days prior to the hearing;

WHEREAS, following a public hearing on June 1, 2007, the Governing Board of the District voted to:

- 1. adopt the local SIP elements of the District's 2007 AQMP to fulfill the requirements of the Act for extreme 8-hour ozone and annual PM_{2.5} nonattainment areas;
- 2. request a redesignation for the SOUTH COAST AIR BASIN to 8-hour ozone extreme nonattainment;
- 3. request a redesignation for the Coachella Valley to 8-hour ozone severe-15 nonattainment; and
- 4. request a 5-year extension of the annual PM_{2.5} attainment date to April 5, 2015;

WHEREAS, the local SIP elements of the District's 2007 AQMP has been submitted to ARB as a SIP revision, along with proof of public notice publication and environmental documents in accordance with State and federal law;

WHEREAS, the updated RFP demonstration shows that the South Coast Air Basin and the Coachella Valley will meet the required progress milestones and will continue to have additional emission reductions needed to meet the contingency measure requirements for progress;

WHEREAS, the transportation conformity emission budgets included in the adopted 2007 AQMP must be updated to reflect the final control strategy, made available for public review, approved by an appropriate body, and submitted to U.S. EPA as a SIP revision:

WHEREAS, updating the transportation conformity emission budgets will not result in a need to update the RFP or attainment demonstrations;

WHEREAS, the District determined that the draft State Strategies plan published on April 26, 2007, in combination with the local control measures in the AQMP, would not meet District emission reduction for attainment of the annual PM_{2.5} NAAQS by 2014:

WHEREAS, Chapter 4 and Appendix IV-B of the 2007 AQMP, "Policy Options to Supplement CARB's Control Strategy," identifies additional mobile source control measures recommended by the District for adoption by ARB to provide the remaining emission reductions needed to meet the PM2.5 carrying capacity identified in the AQMP;

WHEREAS, after considering the proposed State Strategies plan as published on April 26, 2007 at its June 22, 2007 meeting, the Board encouraged staff to continue working the District and SCAG to identify a mutually agreeable set of control measures designed to close the attainment gap;

WHEREAS, ARB, District, and SCAG staff have developed a set of supplemental actions to provide the additional NOx reductions needed to meet the District's PM2.5 emission reduction targets;

WHEREAS, District staff has modeled the resulting control strategy and determined that it provides for attainment of the PM2.5 annual average NAAQS throughout the SOUTH COAST AIR BASIN in 2014;

WHEREAS, the State Strategy commits ARB to achieve total basin-wide emission reductions from sources mobile sources, allows ARB to achieve those reductions from measures other than the potential measures identified in the State Strategy, and allows ARB to substitute reductions of one pollutant for another using relative PM2.5 reduction values identified by the District;

WHEREAS, the 2007 AQMP's proposed control measure MOB-03, "Proposed Backstop Measures for Indirect Sources of Emissions from Ports and Port-Related Facilities," is a District commitment to adopt a backstop rule for criteria pollutant reductions from port-related sources, and would provide additional assurance that needed emission reductions will be achieved;

WHEREAS, the targets referenced in proposed control measure MOB-03 are not enforceable SIP commitments and will be further evaluated during the District's rulemaking process to adopt the proposed control measure;

WHEREAS, relative to the ozone attainment strategy for the South Coast Air Basin, the Board finds that:

- It is necessary to reduce NOx emissions by almost 90 percent and ROG emissions by over 40 percent, from 2006 levels, in order to attain the 8-hour ozone NAAQS;
- The existing emission control program, together with the District measures identified in the AQMP and the estimated benefits of the proposed State Strategy, will achieve approximately 70 percent of the NOx emission reductions, and 85 percent of the ROG emission reductions, needed from 2006 emission levels to attain the 8-hour ozone NAAQS by 2023;
- 3. A reclassification to "extreme" is appropriate for the South Coast Air Basin to allow needed additional time to attain the 8-hour ozone standard, and to allow the attainment demonstration to include anticipated emission

reductions from advancements in emission control technologies that cannot be identified at this time;

- 4. ARB, District, and SCAG staff have agreed to work together to develop a discussion paper within four months from the date of adoption of the 2007 SIP that explores potential strategies for identifying the additional reductions needed to meet the 8-hour ozone standard and future ambient air quality standards, including a consideration of new or transformative strategies such as state-of-technology zero and near-zero transportation systems, other mechanisms such as fee-based incentives, and the role and availability of public funding;
- 5. The local SIP elements of the AQMP identified contingency measures that will achieve additional emission reductions, beyond those relied on in the attainment demonstration, in the event that the South Coast Air Basin does not attain the 8-hour ozone NAAQS by 2024; and
- 6. The local SIP elements of the AQMP combined with ARB's proposed State Strategy meet all applicable ozone planning requirements established by the Act and U.S. EPA regulations;

WHEREAS, relative to the PM2.5 attainment strategy for the South Coast Air Basin, the Board finds that:

- The level of reductions needed to attain the PM2.5 annual average NAAQS in the SOUTH COAST AIR BASIN warrants the five-year extension of the attainment date, to April 5, 2015, allowed by the CAA.
- 2. The local control measures identified in the adopted 2007 AQMP, together with the State Strategy as amended by the ARB, District, and SCAG agreement, will provide the emission reductions needed to reduce emissions to the carrying capacity identified by the District for meeting the PM2.5 annual average NAAQS;
- 3. The AQMP identified contingency measures that will achieve additional emission reductions, beyond those relied on in the attainment demonstration, in the event that the South Coast Air Basin does not attain the annual average PM_{2.5} NAAQS by 2014;
- 4. The local SIP elements of the AQMP combined with ARB's proposed State Strategy meet all applicable PM2.5 planning requirements established by the Act and U.S. EPA regulations;

NOW, THEREFORE, BE IT RESOLVED, the Board hereby approves the 2007 AQMP, excluding those portions of Chapter 4 addressing District-recommended measures for adoption by ARB and references to those measures, those portions of Chapter 6 addressing California Clean Air Act requirements, and emission and risk reduction goals identified in the AQMP's proposed control measure MOB-03, "Proposed Backstop Measures for Indirect Sources of Emissions from Ports and Port-Related Facilities," as revisions to the California SIP;

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the District to determine appropriate emission levels for port-related sources during the District's development of control measure MOB-03;

BE IT FURTHER RESOLVED, that the Board hereby adopts the technical and control strategy elements for carbon monoxide and nitrogen oxide in the 2007 AQMP as revisions to the South Coast Air Basin's Carbon Monoxide Maintenance Plan and Nitrogen Dioxide Maintenance Plan portions of the California SIP;

BE IT FURTHER RESOLVED, that the Board hereby directs the Executive Officer to forward the AQMP as approved to the U.S. EPA for inclusion in the SIP to be effective, for purposes of federal law, upon approval by U.S. EPA;

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to submit to U.S. EPA the District's requests for reclassification of the South Coast Air Basin to extreme nonattainment and Coachella Valley to severe-15 nonattainment for the 8-hour ozone NAAQS, and for an extension of the PM_{2.5} attainment deadline for the South Coast Air Basin to April 5, 2015;

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the District and U.S. EPA and take appropriate action to resolve any completeness or approvability issues that may arise regarding the SIP submission;

BE IT FURTHER RESOLVED that the Board authorizes the Executive Officer to include in the SIP submittal any technical corrections, clarifications, or additions that may be necessary to secure U.S. EPA approval; and

BE IT FURTHER RESOLVED that the Board hereby certifies pursuant to 40 CFR section 51.102 that the District's 2007 AQMP was adopted after notice and public hearing as required by 40 CFR section 51.102.

and correct copy of Resolution 07-41, as
adopted by the Air Resources Board.
/s/

I hereby certify that the above is a true

Lori Andreoni. Clerk of the Board