

**Joint Meeting of  
ASSOCIATION OF BAY AREA GOVERNMENTS ADMINISTRATIVE COMMITTEE  
BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
METROPOLITAN TRANSPORTATION COMMISSION**

**MetroCenter Auditorium  
101 Eighth Street  
Oakland, California**

**STAFF REPORT  
October 17, 2001**

**MEETING DATE:** October 24, 2001 **AGENDA NO: 1 and 2**

**REPORT:** Revised Bay Area 2001 Ozone Attainment Plan and California Environmental Quality Act (CEQA) Draft Negative Declaration

**SUMMARY:** At the October 24, 2001 joint meeting of the BAAQMD Board of Directors, the MTC Commission, and the ABAG Administrative Committee, staff will present a Draft Negative Declaration and the Revised San Francisco Bay Area 2001 Ozone Attainment Plan for a public hearing and appropriate consideration for adoption by the three Regional Planning Agencies.

**RECOMMENDED ACTIONS**

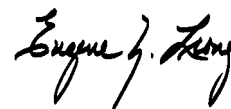
1. *Approval by the Bay Area AQMD of Draft Negative Declaration prepared for the Revised San Francisco Bay Area 2001 Ozone Attainment Plan.*
2. *Adoption by the three Regional Planning Agencies of the Revised San Francisco Bay Area 2001 Ozone Attainment Plan (September 2001).*
3. *Authorize staff to make typographical corrections and make minor technical changes in the Plan as necessary to satisfy California Air Resources Board (CARB) and U. S. Environmental Protection Agency (EPA) technical requirements, provided that the changes do not alter the policies, conclusions or control requirements in the Plan.*
4. *Authorize staff to forward these documents to the CARB with a request for expedited approval and transmittal to EPA.*



Ellen Garvey  
Executive Officer  
BAAQMD



Steve Heminger  
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The Bay Area Air Quality Management District (BAAQMD), the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are the Regional Planning Agencies for air quality planning related to attainment of national ambient air quality standards in the San Francisco Bay Area. The agencies have prepared and are considering adoption of a plan for attaining the national 1-hour standard for ground-level ozone.

On July 18, 2001, after a joint public hearing, the BAAQMD, MTC and ABAG approved a Negative Declaration for the *San Francisco Bay Area 2001 Ozone Attainment Plan (Proposed Final 2001 Plan)*, and adopted the *Proposed Final 2001 Plan*. On July 26, 2001, the California Air Resources Board held a public hearing on the *Proposed Final 2001 Plan*, but did not take final action on that plan. The ARB Board decided to continue the consideration of the *Proposed Final 2001 Plan* until after the Regional Agencies held additional public meetings for public input. The Regional Planning Agencies held six community meetings throughout the region, and revised the *Proposed Final 2001 Plan*, where appropriate, considering input received at those meetings.

The *Revised San Francisco Bay Area 2001 Ozone Attainment Plan (Revised 2001 Ozone Plan)* sets a strategy to attain the national 1-hour ozone standard by 2006. The *Revised 2001 Ozone Plan* commits to implementing new stationary, area, mobile and transportation control measures in the Bay Area, adding these control measures to the State Implementation Plan, and locking in the air quality benefits of new and continuing controls. These will improve air quality and reduce health risks for the citizens of the Bay Area and our downwind neighbors. The *Revised 2001 Ozone Plan* sets new, transportation conformity emission budgets based on new data on emission factors, motor vehicle activity, and proposed control measures. In addition to reducing ozone levels, the control strategy in the *Plan* will also reduce particulate matter and toxic air contaminants. The *Revised 2001 Ozone Plan* also includes a commitment to continue the ozone planning process to incorporate the results of the Central California Ozone Study in 2003-04.

## **Background**

The U.S. EPA has set national ambient air quality standards (NAAQS) to protect public health. One of the NAAQS is the 1-hour standard for ozone. Breathing ozone levels that exceed the standard is harmful to people, and exposure to ozone causes damage to plants and other materials. The Bay Area exceeds the national ozone standard on a few days per year on hot summer afternoons in inland valleys. Livermore, in Alameda County, has the highest ozone levels. Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) emitted by motor vehicles, industrial activities and other sources combine to form ozone in the lower atmosphere.

The federal Clean Air Act Amendments require states and regions, such as the Bay Area, to prepare attainment plans for non-attainment pollutants, such as ozone. The *Bay Area 1999 Ozone Attainment Plan (1999 Plan)* was adopted in June 1999 and transmitted from CARB to EPA in August 1999. It was prepared by the three regional agencies – Association of Bay Area Governments, Bay Area Air Quality Management District, and Metropolitan Transportation Commission, in cooperation with the California Air Resources Board. This *Revised 2001 Ozone*

*Plan* updates, amends, and strengthens the *1999 Plan* and establishes a strategy to attain the national 1-hour ozone standard by 2006.

### **Planning Requirements**

On August 28, 2001, the U.S. Environmental Protection Agency (EPA) took final action to (1) find that the Bay Area did not attain the 1-hour ozone NAAQS by November 2000; (2) approve some parts of the *1999 Plan*; and (3) disapprove other parts. The elements EPA approved are:

- Baseline (1995) Emission Inventory
- Reasonable Further Progress Demonstration
- Commitment to Achieve Additional Emission Reductions through Implementation of New Control Measures
- Contingency Measures
- Proposal to delete four TCMs (TCMs 6, 11, 12 and 16)

The elements EPA disapproved are:

- Attainment Assessment
- Transportation Emissions Budgets<sup>1</sup>
- Reasonably Available Control Measure (RACM) Demonstration

The *Revised 2001 Ozone Plan* will remedy the deficiencies in the *1999 Plan* identified by EPA and will satisfy the planning requirements that were triggered by EPA's finding of failure to attain the standard.

### **Plan Overview**

The *Revised 2001 Ozone Plan* includes a revision to the three elements of the *1999 Plan* that EPA disapproved. In addition, to address the requirements that were triggered by EPA's finding of failure to attain, the *Revised 2001 Ozone Plan* also includes a new emissions inventory, additional control measures that should lead to attainment of the standard by 2006, the attainment deadline, and contingency measures in the event the Bay Area does not attain the standard by 2006. The *Revised 2001 Ozone Plan* also includes measures for further study.

The emission inventory in the *Revised 2001 Ozone Plan* presents estimates of emissions from numerous source categories for the years 1995 and 2000 through 2006. The inventory projections reflect estimates of growth in source categories as well as the effects of regulations adopted as of December 31, 2000. In 2000, total VOC and NO<sub>x</sub> emissions in the Bay Area Air Basin were estimated to be 554 and 648 tons/day, respectively. Emissions of these ozone precursors will decline significantly in future years due to already adopted controls that have continuing or progressive emission reductions. VOC emissions are expected to decline to 445 tons/day in 2006, and NO<sub>x</sub> emissions are expected to decline to 525 tons/day in 2006. Thus, with already adopted

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<sup>1</sup>Transportation Emission budgets are used to ensure consistency of regional transportation plans and programs with air quality attainment plans.

regulations, VOC emissions are projected to decline by 20% between 2000 and 2006, and NOx emissions are projected to decline by 19% between 2000 and 2006. This is a 3.3% per year reduction in VOC emissions and a 3.2% per year reduction in NOx emissions. The proposed control measures in the *Revised 2001 Ozone Plan* will further reduce emissions.

The attainment assessment in the *Revised 2001 Ozone Plan* contains numerous analyses to assess the level of emission reductions needed to attain the national 1-hour ozone standard by 2006. Considering the results of the analyses, the regional agencies concluded that, in 2006, a regionwide VOC inventory level of 433 tons/day is expected to result in attainment of the standard, given projected NOx levels in 2006. As indicated above, adopted regulations, along with projected growth or decline in source category emissions, will result in a VOC inventory level of 445 tons/day in 2006. To achieve the attainment inventory level of 433 tons/day, the control strategy would need to achieve at least 12 tons/day of VOC emission reductions. The proposed new measures in the *Revised 2001 Ozone Plan* yield 13 tons/day in VOC emission reductions, resulting in an estimated VOC inventory of 432 tons/day in 2006, and thus achieving the attainment target that is based on the weight of the evidence of the attainment assessment.

However, U.S. EPA has indicated that it will rely on only one analysis, the most conservative analysis, to assess the emission reduction target. That analysis indicates a VOC attainment inventory estimate of 406 tons/day. Using this attainment target leaves a shortfall of 26 tons/day in VOC emission reductions (432 tons/day minus 406 tons/day). The *Revised 2001 Ozone Plan* includes a commitment by the Regional Planning Agencies and the ARB to achieve the remaining 26 tons/day in VOC reduction needed for attainment by 2006. Control measures and/or adopted regulations to achieve the shortfall will be specified in a new plan to be submitted in 2004; however, the estimate for additional VOC reductions needed may change based on findings expected in 2003 from a new ozone modeling study – the Central California Ozone Study.

The *Revised 2001 Ozone Plan* strengthens the State Implementation Plan (SIP) with 13 new control measures to be implemented in the Bay Area, and a number of already adopted mobile source control measures that will be implemented statewide (CARB's mobile source control programs are included in the baseline emission inventory projections). The control strategy includes the following measures:

*Stationary Source Measures (new measures)*

- Improved Architectural Coatings Rule
- Improved Storage of Organic Liquids Rule
- Surface Preparation and Cleanup Standards for Metal Parts Coating
- Aqueous (Water-Based) Solvents
- Petroleum Refinery Flare Monitoring
- Low-Emission Refinery Valves
- Improved Process Vessel Depressurization Rule

*Mobile Source Measures*

- Improvements to the Motor Vehicle Inspection and Maintenance Program (new measure)
- Low-Emission Vehicle II (M-2)

- California Reformulated Gasoline Regulations (Phase III)
- On-Road Heavy-Duty Diesel Engines (M-5, M-6, transit bus regulations, and school bus program)
- Heavy-Duty Off-Road Diesel Engines (M-9 and M-10)
- Gas and LPG Equipment 25 - 175 horsepower (M-11 and M-12)
- Locomotives National Emission Standards (M-14)
- Pleasure Craft Emission Standards (M-16; additional emission reductions for marine pleasure craft)
- Midterm Consumer Products (Measure CP-2)
- Aerosol Coatings (Measure CP-3)
- Portable Fuel Container Regulations
- Enhanced Vapor Recovery Regulations

*Transportation Control Measures (new measures)*

- Regional Express Bus Program
- Bicycle / Pedestrian Program
- Transportation for Livable Communities
- Expansion of Freeway Service Patrol
- Transit Access to Airports

The new measures will result in approximately 13 tons/day reduction in VOC emissions and 1 ton/day reduction in NO<sub>x</sub> emissions by 2006. The new measures, in combination with previous SIP measures, and considering expected growth in all source categories in the region, will result in a reduction of VOC emissions of 121 tons per day and a reduction in NO<sub>x</sub> emissions by 124 tons per day between 2000 and 2006.

The *Revised 2001 Ozone Plan* also includes eleven further study measures. These measures will be studied to determine whether significant additional emission reductions could be achieved and whether implementation is feasible. Because of uncertainties in the feasibility, costs, and potential emission reductions, these measures are not appropriate as Plan control measure commitments at this time, but merit further study. These measures will be evaluated through an open process including all interested stakeholders. The evaluation could lead to 1) implementation of a program or adoption of a regulation, 2) incorporation into the next Plan revision as a control measure, 3) incorporation into the next Plan revision as a further study measure to resolve remaining issues, or 4) conclusion that the measure is not viable. The further study measures in the *Revised 2001 Ozone Plan* include:

*Further Study Measures*

- Study Benefits of a Particulate Trap Retrofit Program
- Update High Occupancy Vehicle (HOV) Lane Master Plan
- Study Effects of High Speed Freeway Travel
- Parking Management Incentive Program
- Enhanced Housing Incentive / Station Access Program
- Further Smog Check Program Improvements
- Parking Cash-out Pilot Program
- Improvements to Refinery Blowdown System Controls
- Improvements to Refinery Wastewater System Controls

- Improvements to Organic Liquid Storage Tank Controls
- Improvements to Marine Tank Vessel Controls

Transportation conformity emission budgets are identified in the *Revised 2001 Ozone Plan*. The federal Clean Air Act requires that federal actions conform to air quality planning goals. (42 U.S.C. Section 7506) For the transportation sector, the on-road motor vehicle emissions projections, including emission reductions for relevant control measures, become an upper bound “budget” not to be exceeded in future years. The *Revised 2001 Ozone Plan* proposes new VOC and NO<sub>x</sub> emission budgets for use in determining conformity of future transportation plans and programs with the SIP. The proposed budgets are consistent with the on-road motor vehicle emission inventory for 2006, and reflect the emission reductions from control measures proposed in the *Revised 2001 Ozone Plan*. Once EPA has found the budgets adequate, they will be used for conformity determinations on MTC’s Regional Transportation Plan and Transportation Improvement Program.

Contingency measures are included in the *Revised 2001 Ozone Plan* in the event that existing and proposed control measures are not sufficient to achieve air quality consistent with attainment by 2006. The contingency measures identified include the CARB’s adopted mobile source controls. These are projected to result in a 25% VOC reduction and a 20% NO<sub>x</sub> reduction from 2005 through 2010.

The Regional Planning Agencies believe that this *Revised 2001 Ozone Plan*: (1) meets the planning requirements stemming from EPA’s August 28, 2001 Final Action, (2) remedies deficiencies in those elements of the *1999 Plan* that EPA disapproved, and (3) provides for expeditious attainment of the national 1-hour ozone standard for the San Francisco Bay Area.

In addition, in the *Revised 2001 Ozone Plan*, the Regional Planning Agencies commit to conduct a mid-course review in December 2003, and to revise the Ozone Attainment Plan in 2004, after results of the Central California Ozone Study become available.

### **Public Process**

The *Revised 2001 Ozone Plan* will be presented for public hearing and adoption at a joint meeting of the three regional agencies on October 24, 2001, and then submitted to the CARB for approval (CARB’s public hearing is scheduled for November 1, 2001 in Oakland) and subsequent transmittal to EPA. When approved by EPA, it will become part of California’s State Implementation Plan (SIP). The *Revised 2001 Ozone Plan* will incorporate into the SIP significant ozone precursor emission reductions designed to enable the region to attain the national 1-hour ozone standard as expeditiously as practicable, but no later than 2006, the attainment deadline.

The planning process for the *Revised 2001 Ozone Plan* includes the following steps:

- **December 18, 2000** – Regional Planning Agencies notified EPA of their intent and proposed process for revising *1999 Plan*.
- **March 30, 2001** – EPA published a notice in the *Federal Register* proposing to partially approve and partially disapprove the *1999 Plan*.

- **April 27, 2001** – Regional Planning Agencies staff held a workshop with interested parties to discuss ideas for federal transportation control measures.
- **May 11, 2001** – Regional Planning Agencies staff released *Draft 2001 Ozone Attainment Plan (Draft Plan) and CEQA Initial Study* for public review.
- **May 24, 2001** – BAAQMD staff held a community meeting in East Palo Alto, including discussion of the *Draft Plan*.
- **May 30, 2001** – Regional Planning Agencies staff held a workshop on the *Draft Plan* and *CEQA Initial Study*.
- **June 15, 2001** – Regional Planning Agencies staff released *Proposed Final Ozone Attainment Plan (Proposed Final Plan)* and the *Negative Declaration* for public review.
- **June 16, 2001** – BAAQMD staff held a community meeting in West Oakland, including discussion of the *Proposed Final Plan*.
- **July 9, 2001** – ARB and BAAQMD staff held a community meeting in Richmond regarding the *Proposed Final Plan*.
- **July 18, 2001** – The Regional Planning Agencies governing boards held a public hearing on and approved the *Negative Declaration* prepared for the *Proposed Final 2001 Ozone Attainment Plan*, and adopted the *Plan*. In approving the *Plan*, the governing boards also directed staff of the three agencies to conduct additional public meetings on the *Plan* and bring back revisions, as necessary, for the boards' consideration.
- **July 26, 2001** – The California Air Resources Board held a public hearing on the *Plan*, but delayed action on the *Plan* until after the regional agencies held additional public meetings.
- **August 23, 2001** – Regional Planning Agencies staff held a community meeting in East Palo Alto to take input on the *Plan*.
- **August 25, 2001** – Regional Planning Agencies staff held a second community meeting in Richmond to take input on the *Plan*.
- **August 27, 2001** – Regional Planning Agencies staff held a community meeting in San Francisco to take input on the *Plan*.
- **August 28, 2001** – Regional Planning Agencies staff held a community meeting in San Jose to take input on the *Plan*.
- **August 29, 2001** – Regional Planning Agencies staff held a community meeting in Livermore to take input on the *Plan*.
- **August 30, 2001** – Regional Planning Agencies staff held a community meeting in Vallejo to take input on the *Plan*.
- **September 17, 2001** – Regional Planning Agencies staff released *Revised 2001 Ozone Plan* and the Bay Area AQMD staff released the *Draft Negative Declaration* for public review and comment.
- **October 24, 2001** – The Regional Planning Agencies governing boards will hold a public hearing on and consider approval of the *Draft Negative Declaration* by BAAQMD and adoption of the *Revised 2001 Ozone Plan* by the Regional Planning Agencies.

- **November 1, 2001** – The California Air Resources Board will consider the *Revised 2001 Ozone Plan* for approval. If approved, ARB will submit the *Revised 2001 Ozone Plan* to EPA for consideration.

The six community meetings that followed the July 18, 2001 adoption of the *Plan* were facilitated by the consulting firm of Moore, Iacofano, and Goldsman (MIG). MIG prepared a summary of the community meetings and the public comments made at the meeting. A copy of the MIG report is provided in Attachment 1. Comments on the *Plan* made at the community meetings and letters received after the July 18, 2001 adoption, as well as staff responses, are summarized in Attachment 2. Comments on the *Revised 2001 Ozone Plan* and Draft Negative Declaration are due October 17, 2001. A table summarizing comments on the *Revised 2001 Ozone Plan* and *Draft Negative Declaration* and staff responses will be available as Attachment 3 at the October 24, 2001 public hearing.

The *Draft Plan*, the *Proposed Final Plan* and the *Revised 2001 Ozone Plan* and associated CEQA documentation were made available on the District's website. Interested parties were also notified of the availability of documents by mail.

### **The Revised 2001 Ozone Plan**

In response to input received at the six community meetings following adoption of the *Proposed Final 2001 Ozone Plan*, and further discussions with ARB and EPA, staff have made a number of significant changes that are reflected in the *Revised 2001 Ozone Plan*. The changes include:

- Acknowledgement of EPA's Final Action on August 28, 2001 (published in the September 20, 2001 *Federal Register* – 66 FR 48340) to approve in part and disapprove in part the *1999 Ozone Attainment Plan*
- Addition of five measures to the "Further Study" category, and commitment to review all further study measures through an open process:
  - Parking Cash Out Pilot Program
  - Improvements to Refinery Blowdown System Controls
  - Improvements to Refinery Wastewater System Controls
  - Improvements to Organic Liquid Storage Tank Controls
  - Improvements to Marine Tank Vessel Controls
- Correction of estimates of emissions for the following source categories: (refinery) flares and blowdown systems, and oil refineries external combustion
- Revision of the estimate of VOC reductions needed for attainment (as shown in the isopleth diagrams), and a commitment by the Regional Planning Agencies with ARB to achieve the necessary emission reductions by 2006 (current estimate under worst-case conditions is 26 tons/day of VOC emission reductions) based upon the findings of the Central California Ozone Study (CCOS).
- Commitment to review the results of the CCOS modeling in a public, consultative process, to determine need for additional emissions reductions to achieve attainment by 2006. This analysis may revise the estimate of the additional emission reductions needed for attainment to be higher or lower than 26 tons/day.



- Commitment to prepare a revision to the *2001 Ozone Plan* by April 15, 2004, incorporating new inventory data and emissions modeling and control measures, as necessary to demonstrate attainment by 2006.
- Commitment to ensure that all buses used for the new Regional Express Bus Service meet all applicable CARB standards and are equipped with particulate matter traps or filters.
- Commitment that MTC will only fund bicycle, pedestrian and Transportation for Livable Communities projects proposed under TCMs B and C that are either exempt from CEQA, have no significant adverse environmental impacts, or have adequately mitigated any significant adverse environmental impacts.
- Expansion of the reasonably available control measure analysis to include input received at the six additional community meetings, as well as written comments received after the Regional Planning Agencies' July 18, 2001 public hearing

At the October 24, 2001 public hearing, staff may make recommendations for additional changes to the *Revised 2001 Ozone Plan* in response to comment letters, which are due by October 17, 2001.

### **California Environmental Quality Act**

To comply with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), BAAQMD staff, acting as the CEQA Lead Agency, prepared a *Draft Negative Declaration* for the *Revised 2001 Ozone Plan*. Based on a thorough Initial Study, staff determined that the new control measures proposed in the *Revised 2001 Ozone Plan* would not result in significant adverse environmental effects. Furthermore, District staff determined that the Bay Area's environmental setting with respect to air quality has not changed significantly since 1991, and that with respect to the regulatory setting, the *Revised 2001 Ozone Plan* represents a continuation of ongoing efforts to reduce emissions of ozone precursors from stationary, area and mobile sources. The *Draft Negative Declaration* was prepared pursuant to Public Resources Code Section 21080(c) and CEQA Guidelines Sections 15070 et seq.

The *Draft Negative Declaration* for the *Revised 2001 Ozone Plan* was circulated for public comment and was posted on the District's website. Notices of the *Draft Negative Declaration's* availability were also sent to numerous interested parties. Based on the analysis in the *Draft Negative Declaration*, there is no substantial evidence, in light of the whole record before the District (lead agency) that the *Revised San Francisco Bay Area 2001 Ozone Attainment Plan* will result in significant adverse environmental impacts.

### **Next Steps**

The next steps in implementing the *Revised 2001 Ozone Plan* and developing new air quality plans for national ambient air quality standards include the following actions. All of these actions will be taken in an open, consultative process with interested stakeholders.

- Continue the rule development process for several control measures in the *Revised 2001 Ozone Plan* that are already underway.

- Initiate the rule development process for the other control measures in the *Revised 2001 Ozone Plan*
- Implement the transportation control measures in the *Revised 2001 Ozone Plan*
- Initiate the evaluation of the further study measures in the *Revised 2001 Ozone Plan* (or continue this effort for those studies that are already underway)
- Continue working with ARB and other air districts on the Central California Ozone Study (CCOS)
- Use the results of the CCOS to determine the emission reduction shortfall, if any, for the national 1-hour ozone standard
- Prepare a new Plan for the national 1-hour ozone standard
- Prepare a plan for the national 8-hour ozone standard once the implementation schedule and guidance has been promulgated by US EPA (if the Bay Area is designated as a non-attainment area)
- Prepare a plan for the national PM<sub>2.5</sub> standard once the implementation schedule and guidance has been promulgated by US EPA (if the Bay Area is designated as a non-attainment area)
- Prepare appropriate CEQA documentation for future plans and control measures.

### **Recommendation**

Staff recommends that the Regional Planning Agencies take the following actions:

- (1) Approval by Bay Area AQMD of the *Draft Negative Declaration* (BAAQMD is CEQA Lead Agency; MTC and ABAG are CEQA Responsible Agencies);
- (2) Adopt the *Revised San Francisco Bay Area 2001 Ozone Attainment Plan*;
- (3) Authorize staff to make typographical corrections and to make minor technical changes in the *Revised 2001 Ozone Plan* as necessary to satisfy CARB and EPA requirements, provided that the changes do not alter the policies, conclusions or control requirements in the *Revised 2001 Ozone Plan*, and
- (4) Authorize staff to forward these documents to the CARB with a request for expedited approval and transmittal to EPA.

EG:JR:DM

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