

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Inter-Office Memorandum

To: Chairperson Haggerty and  
Members of the Executive Committee

From: Jean Roggenkamp  
Director of Planning and Research

Date: November 17, 2004

Re: Status Report on Bay Area Ozone Strategy

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

The District, in consultation with MTC and ABAG, is preparing the Bay Area Ozone Strategy. The Ozone Strategy will address State and national air quality planning requirements. With respect to State requirements, the Ozone Strategy will identify all feasible measures to make progress towards the State 1-hour ozone standard in the Bay Area and to address transport mitigation requirements. The Ozone Strategy will also include a redesignation request and a maintenance plan for the national 1-hour standard. The draft control measures proposed for inclusion in the Ozone Strategy have undergone public review and comment. Staff will present a status report on progress to date.

DISCUSSION

Staff conducted an extensive evaluation of potential control measures. Staff reviewed CAPCOA's work on all feasible measures, engaged in a rule comparison process with ARB and neighboring air districts, reviewed rules and programs in other regions, received input from the public at community meetings and through the Ozone Working Group as well as from District Board members and the Advisory Council. Based on these evaluations, staff identified a proposed control strategy, consisting of stationary, mobile and transportation control measures.

The draft control measures were released for public review and comment in early September, 2004. Outreach included posting on the District website, discussion with the Ozone Working Group, and discussion at seven community meetings in September and October, 2004. The community meetings allowed an opportunity to meet with stakeholders and interested members of the public to provide background on the ozone planning process, describe the draft control measures, and solicit comments and discussion. (The District's new Community Air Risk Evaluation program was also discussed at the community meetings.)

District staff also has consulted extensively with staff at downwind air districts throughout the process of evaluating and developing control measures. Coordination with neighboring districts has included: a rule comparison project with ARB and Sacramento, San Joaquin and Yolo-Solano AQMDs; participation in CAPCOA's development of a statewide all feasible measures list; in-depth analysis of control measure suggestions submitted by Sacramento Metropolitan AQMD; and convening of an all feasible measures interagency consultation meeting with downwind districts pursuant to transport mitigation regulations.

## AGENDA NO. 6

Staff is currently reviewing comments provided by stakeholders, neighboring districts and other interested parties, and this review will result in revisions to some of the proposed control measures. Staff anticipates including 38 control measures in the Ozone Strategy in order to further reduce emissions of ozone precursors, including 15 stationary source measures, 4 mobile source measures and 19 transportation control measures. The proposed control measures are summarized in the attached tables. We have also identified 21 further study measures that may be feasible, but will require further analysis to determine whether they warrant inclusion in the Ozone Strategy.

Preparation of the Ozone Strategy has included substantial public outreach. Outreach efforts have included Ozone Working Group meetings, community meetings, community training meetings, Modeling Advisory Committee meetings, the District website, and reports to District Board Committees, the Regional Agency Coordinating Committee and the Advisory Council. We will continue all of these outreach efforts through the remainder of the planning process.

Pursuant to the California Environmental Quality Act we are preparing an Environmental Impact Report to analyze potential secondary environmental impacts of the Ozone Strategy control measures. A consulting firm, Environmental Audit, is assisting with preparing the EIR. A Draft and Final EIR will be circulated for public review along with the Draft and Final Ozone Strategy.

The Ozone Strategy will also address other issues not directly related to reducing ozone levels. The document will also discuss benefits that the control measures will have on reducing emissions of fine particulate matter and global warming gases, and potential local benefits of control measures. There will be a thorough discussion of public outreach processes associated with the Ozone Strategy.

Staff anticipates releasing a Draft Ozone Strategy for public review and comment early next year. We will conduct additional outreach when the draft Strategy and Draft EIR are available, evaluate public input, and prepare a Final Ozone Strategy for Board consideration. Given this schedule, we will henceforth refer to the document as the Bay Area 2005 Ozone Strategy.

### BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jean Roggenkamp  
Director of Planning and Research

FORWARDED: \_\_\_\_\_

Prepared by: Henry Hilken

Reviewed by: Peter Hess

**BAY AREA 2005 OZONE STRATEGY - DRAFT CONTROL MEASURES**

**Draft Stationary and Area Source Control Measures**

CM #	BAAQMD Reg - Rule	Source Category	Description	Estimated ROG Reduction tons/day	Estimated NOx Reduction tons/day
<b>Industrial – Commercial Processes</b>					
SS-1	8-45	Auto Refinishing	Reduce VOC limits for some coating categories	0.7	N/A**
SS-2	8-20	Graphic Arts Operations	Reduce VOC limits for flexographic ink and clean up solvent	0.15	N/A**
SS-3		High Emitting Spray Booths	Require additional controls on spray booths that emit > 20 tons ROG/yr	0.5	N/A**
SS-4	8-50	Polyester Resin Operations	Reduce allowable monomer content for some types of polyester resins	0.3	N/A**
SS-5	8-32	Wood Coating Operations	Reduce VOC limits for some coating categories	0.68	N/A**
<b>Petroleum Products Production and Distribution</b>					
SS-6	12-11	Flares*	Reduce flaring or set emissions limits for flares	TBD***	TBD***
SS-7	8-33, 39	Gasoline Bulk Terminals and Plants	Require automatic shutoff and backpressure monitors, set more stringent leak, emission standards	0.14	N/A**
SS-8	8-44, 46	Marine Loading Operations	Control additional cargoes, set more stringent leak standards and/or control housekeeping emissions	0.7 – 1.0	N/A**
SS-9	8-5	Organic Liquid Storage	Tighten existing requirements and/or control lower vapor pressure liquids	0.27 – 0.44	N/A**
SS-10	8-28	Pressure Relief Devices	Reduce ROG emissions from PRD's	TBD***	N/A**
SS-11	8-8	Wastewater Systems	Control emissions from wastewater collection systems	2.1	N/A**
<b>Combustion Processes</b>					
SS-12	9-7	Boilers Less than 10 MM Btu	Extend existing limits to smaller boilers and/or set a more stringent standard	N/A**	0.5 – 1.0
SS-13	9-6, 7	Large Water Heaters and Small Boilers	Require new, small boilers and large water heaters to meet NOx limits	N/A**	0.39
SS-14	9-9	Stationary Gas Turbines	Implement BARCT NO <sub>x</sub> limits on existing turbines	N/A**	1.2
<b>Education Programs</b>					
SS-15		Energy Conservation	Educate government, industry and the public in energy efficient choices	unknown	unknown

\* SS-6, Flares would be adopted as an amendment to Air District Rule 12-11. The rule currently requires monitoring of refinery flare emissions, while the proposal in SS-6 is to require control of refinery flare emissions.

\*\* N/A – Except for SS-6 Flares, SS-1 through SS-11 will result in ROG emission reductions, and there are no anticipated NOx emission reductions for these measures. SS-12 through SS-14 will result in NOx emission reductions, and there are no anticipated ROG emission reductions for these measures. SS-6 may reduce both ROG and NOx emissions.

\*\*\* TBD – emissions reductions to be determined.

**Draft Mobile Source Control Measures**

Measure #	Title	Estimated ROG Reduction (tpd)	Estimated NO <sub>x</sub> Reduction (tpd)	Estimated PM Reduction (tpd)
MS-1	Diesel Equipment Idling Model Ordinance	0.13	1.96	0.08
MS-2	Green Contracting Model Ordinance	unknown	unknown	unknown
MS-3	Low-Emission Vehicle Incentives	0.03	0.6	0.01
MS-4	Vehicle Buy-Back Program	0.30	0.15	0.05
<b>Total</b>		<b>0.46</b>	<b>2.17</b>	<b>0.14</b>

**Draft Transportation Control Measures**

#	Title	Phase 1: 2006		Phase 2: 2015	
		ROG Reductions (tons/day)	NO <sub>x</sub> Reductions (tons/day)	ROG Reductions (tons/day)	NO <sub>x</sub> Reductions (tons/day)
TCM 1	Voluntary Employer Based Trip Reduction Programs	0.53	0.57	0.23	0.22
TCM 3	Improve Local and Areawide Bus Service	0.50	1.41	0.16	0.14
TCM 4	Improve Regional Rail Service	0.23	0.21	0.08	0.06
TCM 5	Improve Access to Rail and Ferries	0.17	0.15	0.06	0.05
TCM 6	Improve Interregional Rail Service	N/A*	N/A*	0.05	0.05
TCM 7	Improve Ferry Service	N/A*	N/A*	0.06	0.06
TCM 8	Carpool/Express Bus Lanes on Freeways	N/A*	N/A*	0.62	0.65
TCM 9	Improve Bicycle Access and Facilities	0.30	0.25	0.59	0.43
TCM 10	Youth Transportation	0.03	0.03	0.02	0.01
TCM 11	Install Freeway Traffic Management System	0.24-0.31	0.10-(0.31)	0.12-0.16	(0.03)-(0.25)
TCM 12	Arterial Management Measures	0.06-0.12	0.06-0.11	0.23	0.25
TCM 13	Transit Use Incentives	0.04-0.20	0.04-0.19	0.02-0.08	0.01-0.07
TCM 14	Carpool/Vanpool Services and Incentives	0.01	0.01	0.01	0.01
TCM 15	Local Land Use Planning and Development Strategies	0.09	0.14	TBD**	TBD**
TCM 16	Public Education/Intermittent Control Measures	1.65***	1.27***	TBD**	TBD**
TCM 17	Conduct Demonstration Projects	0.01-0.04	0.01-0.03	TBD**	TBD**
TCM 18	Transportation Pricing Reform	0.95	0.82	1.40	0.99
TCM 19	Improve Pedestrian Access and Facilities	0.04-0.18	0.02-0.10	0.08-0.17	0.04-0.08
TCM 20	Promote Traffic Calming	NC****	NC****	NC****	NC****

\* N/A – No new service is anticipated between 2004 and 2006 for TCM 6 and TCM 7; therefore, no additional emission reductions are expected in Phase 1. Emission reductions for TCM 8 were only calculated for 2015, reflecting full implementation of MTC’s HOV Master Plan.

\*\* TBD – Long-term effectiveness of TCM 15, TCM 16 and TCM 17 is unknown. Emission reductions are not currently estimated for Phase 2.

\*\*\* TCM 16 emissions reductions are calculated for the Spare the Air program. STA is an episodic measure, so the emission reductions are assumed to occur only on STA days.

\*\*\*\* NC – Traffic calming is an important support program for other TCMs, particularly bike/ped programs, but it is uncertain how much additional emission reductions can be attributed specifically to traffic calming projects. Therefore, no additional reductions are claimed for TCM 20.