

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

APPROVED MINUTES

Advisory Council
Air Quality Planning Committee Meeting
9:00 a.m., Tuesday, February 3, 2004

- 1. Call to Order – Roll Call.** 9:40 a.m. Quorum Present: Harold Brazil, Chairperson, Emily Drennen, Irvin Dawid, Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan. Absent: Pamela Chang.
- 2. Public Comment Period.** There were none.
- 3. Approval of Minutes of July 22 and September 30, 2003.** Dr. Holtzclaw requested that “Bittle” be corrected to “Brittle” in line one of paragraph two on page four of the September 30, 2003 minutes. Mr. Glueck moved approval of the September 30, 2003 minutes as amended, as well as the approval of the July 22, 2004 minutes; seconded by Mr. Shanahan; carried unanimously.
- 4. Control Measure Review.** Dan Belik, Rule Development Section Manager, stated he would review pollution control measure criteria, the legal background concerning them, the control measure suggestions received to date by the District, and the control measures in the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) and the South Coast Air Quality Management District (SCAQMD) that are being evaluated for possible inclusion in the forthcoming update to the District’s Ozone Attainment Plan.

The District’s evaluation criteria for pollution control measures include the type of pollutant controlled, amount and rate of emission reduction, technical feasibility, public acceptability, enforceability, cost effectiveness, socioeconomic impacts, environmental impacts, and determines whether or not the reductions are eligible for credit in the State Implementation Plan (SIP) process by being real, quantifiable, permanent, enforceable and surplus.

The California Clean Air Act (CCAA) requires the District either to achieve a 5% reduction in ozone precursors annually or implement “all feasible measures.” Guidance for defining the latter is derived from “Best Available Retrofit Control Technology” (BARCT) as well as the categories in the CCAA that refer to relative cost-effectiveness, technological feasibility, total pollution reduction potential, rate of reduction, public acceptability and enforceability. The District defines “feasible” as reasonable and necessary; capable of being successfully implemented within a reasonable time period, taking into account economic, environmental, legal, technological and social factors; and either approved or approvable by the California Air Resources Board (CARB).

The federal planning process is less stringent in the consideration of control measures. It requires measures based on all Reasonably Available Control Technology (RACT) but only within the context of local environmental circumstances rather than in consideration of advancing an attainment date. Pollutant transport between States is also a consideration in the federal process.

The District has evaluated 370 pollution control measures. Many were suggested by the Ozone Working Group, community members, the Advisory Council, Board of Directors and CARB, as well as a review of the rules and plans of other air districts in the state. In its preliminary findings, staff has categorized these measures as follows:

- 5 - not enforceable
- 6 - not technically feasible
- 9 - need legislation
- 14 - not cost-effective
- 17 - pose pollutant transport problems
- 29 - require further study
- 29 - require funding
- 31 - potentially viable
- 53 - already implemented
- 82 - offer only negligible emission reductions
- 95 - under the regulatory jurisdiction of other agencies

The District has already adopted many of the control measures that are under consideration in the SJVUAPCD. The SCAQMD is working to develop control strategies that are under the jurisdiction of CARB. Of the potentially viable measures, preliminary findings identify as most promising the SCAQMD measure on miscellaneous industrial coatings and solvent operations. This measure concerns facilities that annually emit greater than 25 tons of volatile organic compound (VOCs) emissions. Similarly, the SJVAPCD measure on sumps, pits and wastewater processing equipment was contained in the District's 2001 Ozone Attainment Plan as a further study measure. This will be the subject of a future Technical Assessment Document. Four potential measures in the SJVAPCD that mitigate nitrogen oxide (NOx) transport include agricultural irrigation engines, stationary gas turbines, water heaters and boilers, and steam generators, boilers and process heaters. Modeling will assess the downwind impacts of NOx reductions from these sources.

Measures requiring further study include (a) an SCAQMD NOx mitigation fee program for planes, trains and ships, the funds from which would be used to reduce emissions elsewhere; (b) an SJVAPCD indirect source mitigation program addressing traffic emission increases resulting from large developments; and (c) stationary source controls in both of these air districts on stationary internal combustion engines, livestock waste, glass melting furnaces, architectural coatings and solvents, commercial and industrial composting and commercial char broilers.

Measures requiring legislative authorization in the SCAQMD relate to off-road vehicles and equipment, an emission fee program for port-related mobile sources, and an emission fee program of \$5,000 per ton of VOC for facilities that emit more than 10 tons annually. In the SJVAPCD, such authorization would be needed for a federally mandated ozone non-attainment fee program.

Measures in the SCAQMD and SJVAPCD that are not technically feasible include further emission reductions from large VOC sources and industrial process operations which would be based on far-reaching emission reduction plans that have not yet been demonstrated to be feasible. The District could consider these as further study measures but cannot incorporate them into an attainment plan.

The District has concluded that some measures are not cost-effective, such as the SJVAPCD measures on boilers, steam generators and process heaters, as well as wineries, and the SCAQMD measure on further emission reductions from restaurant operations.

Control measures in the SCAQMD with either negligible emission reductions or which lack emission sources in the Bay Area include truck stop electrification, urban heat island mitigation and further NO_x reductions from the RECLAIM emissions trading project. Controls on chamber fumigation of agricultural products in the SJVAPCD have no counterparts in the Bay Area.

There are more steam driven oil production wells in the SJVAPCD than in the BAAQMD, and proposed controls in the SJVAPCD on low-pressure flares are not applicable to Bay Area refinery flare controls. There is only one lime kiln in the SJVAPCD and none in the Bay Area. The District has already adopted and implemented a rule for polymeric foam manufacturing, the stringency of which cannot be increased in the Bay Area. The SJVUAPC is considering a similar rule.

Many of the other measures proposed in the SCAQMD are under the regulatory jurisdiction of other agencies—in particular, CARB—and concern engine exhaust, off-road construction, weed trimmers, lawnmowers, and vehicle Inspection and Maintenance (I&M). The proposed control of fuel transfer into aircraft is pre-empted by Federal Aviation Administration regulations. Ground support equipment at airports, low sulfur diesel fuel standards, and land-based emissions at ports are under consideration by the SCAQMD but are under the regulatory jurisdiction of CARB.

In discussion, Mr. Glueck suggested staff consider a measure to reduce government employee work trips through improved transit and telecommuting options. Mr. Belik responded that mobile source emissions account for half of the total emission inventory and are becoming cleaner over time. The effort to reduce the percentage of government employees work trips would be the subject of a transportation control measure (TCM) adopted by the Metropolitan Transportation Commission (MTC), which is holding public workshops and community meetings to promote education regarding the use of carpools, trip linking and taking public transit.

Chairperson Brazil added that TCMs must conform to specific criteria to be eligible for inclusion in the Regional Transportation Plan. Work trips in excess of the number of government employee work trips would have to be reduced to significantly impact mobile source emissions. Changing land-use patterns to make transit usage more convenient provides an ideal approach to reducing vehicle usage, notwithstanding that the Bay Area as a region is already fairly well built-out.

Ms. Drennen inquired as to whether the District's cost-effectiveness criteria for pedestrian and bike facilities may impede project implementation with only marginal air pollution improvements. Jean Roggenkamp, Planning Division Director, responded that the Transportation Fund for Clean Air (TFCA) has assisted in funding bicycle facilities that are associated with commute services, with cost-effectiveness criteria focused on an incentive, rather than regulatory basis. The cost-effectiveness criterion for TFCA projects is \$90,000 per ton of emissions reduced.

Mr. Brazil inquired if District funding criteria posed obstacles to increasing the number of bicycle lockers at BART stations. Mr. Dawid noted that he recently participated in a mobile tour of bike facilities at BART stations and found major differences between them in terms of security, proximity to the station, etc. Mr. Hess responded that staff would investigate this issue.

Mr. Shanahan observed that more progress would be made by the State's air districts in reducing pollution if CARB were to adopt more stringent rules. Mr. Hess replied that CARB recently held an ozone control summit meeting with the State's air districts on pollution control measures and emission reductions. Further emission reductions from heavy-duty trucks and off-road sources could be obtained from additional regulations. Mobile source emissions can be further reduced. The District, the SCAQMD and SJVAPCD each have a seat on the CARB Board of Directors.

Gary Kendall, Technical Division Director, stated that 10% of the vehicle fleet is estimated to emit more than 50% of total vehicle emissions. This poses challenges for both vehicle I&M and scrappage programs. Over the long-term the fleet is going to become cleaner. Mr. Kurucz noted that last year this Committee made several recommendations to improve vehicle I&M and scrappage programs and later this year will receive an update on their implementation. One issue concerns how the Enhanced I&M program in the Bay Area is receiving emission reduction credits. Mr. Hess replied that CARB has added the emission reductions from the Enhanced I&M program into its Emission Factor Model (EMFAC) and it now receives federal emission reduction credit.

Ms. Drennen inquired as to how vehicle I&M and scrappage programs take low-income groups into account, and whether the District facilitates the encouragement of mode shift among low income groups in the Bay Area. Ms. Roggenkamp replied that the Bureau of Automotive Repair (BAR) sponsored a subsidy program geared toward low-income owners whose cars failed the emissions test, but the funds for that program have been cut. The District sponsors a vehicle scrappage program and surveys the program participants. The results suggest that significant emission reductions are achieved. Mr. Kurucz added that last year this Committee found that the number of Bay Area vehicle owners that received a repair waiver was approximately 200. The Committee requested the Deputy Clerk to provide copies of its minutes and reports on I&M.

Mr. Dawid inquired as to the relationship of vehicle speed to air quality. Chairperson Brazil replied that he could refer him to one of the consultants who contracts with MTC to perform this type of analysis. Mr. Dawid and Dr. Holtzclaw added that reducing a three-lane road to two lanes with a turning median tends to increase road capacity to carry cars and reduces vehicular crashes. Mr. Glueck noted that it is not only vehicle age that effects its emission levels but also its mileage. Mr. Kurucz suggested that staff develop emission estimates per category of vehicle. Mr. Shanahan requested that the staff report also compare advanced diesel fuel sports utility vehicles with gasoline powered ones by fuel economy. Mr. Hess noted that such data would prove useful for the analysis of mobile source emissions of ozone precursors and greenhouse gases.

Dr. Holtzclaw suggested that extra credit be given in the SIP for Smart Growth measures because these will reduce pollution over time. Urban heat island strategies relate symbiotically to improved livability and Smart Growth. Mr. Belik responded that quality of life improvements and socio-economic impacts concern public acceptability and the rephrasing of evaluation criteria more than emission reduction credits. From a federal perspective, emission reductions must be enforceable to receive credit, and under the State program all feasible measures must be implemented. Urban heat island measures are most effective in regions with consistently high temperatures.

Mr. Hess added that Advisory Council member Lapera is overseeing the removal of eucalyptus trees in the East Bay. These trees are high emitters of ozone precursors. The District has written to Bay Area cities and counties and requested that they plant trees that emit low levels of ozone precursors.

Mr. Kurucz inquired if further VOC emission reductions were possible, based on the SCAQMD architectural coatings rule, and further, if District the is considering control measures on consumer products. Mr. Belik replied that the SCAQMD architectural coatings rule has been amended twice, and the challenge is whether coatings with further VOC reductions could be successfully applied to all intended applications. CARB has surveyed the coatings rules in California and has obtained product reactivity data from coating manufacturers. CARB also regulates consumer products and has scheduled a round of emission reductions in 2006 followed by another in 2008-2010. No such measures are presently found in the attainment plans of the SCAQMD or SJVAPCD.

Mr. Kurucz inquired if the SCAQMD rule on small water heaters applies to residences. Mr. Belik responded that the rule concerns small industrial water heaters. However, the manufacturers have been unable to meet the emission standard, and therefore they pay fees to the SCAQMD in lieu of attaining that standard. In addition, energy conservation standards also conflict with the emission limits proposed by the SCAQMD, and the manufacturers have recently addressed the SCAQMD Board of Directors with their concerns on this issue.

Mr. Kurucz inquired if the measures under consideration on composting operations are industrial or municipal. Mr. Belik stated that these relate to industrial composting operations that develop large amounts of compost for gardening and farm use. The rule addresses controlling rooms where the compost is stored. The District will review this rule as a further study measure.

Dr. Holtzclaw inquired as to the distinctions in the reactivity of various VOC compounds as it relates to the peak formation of ozone within or downwind from the District. Mr. Belik stated that Dr. William Carter of U.C. Riverside has developed extensive data on the reactivity of VOC compounds. Mr. Hess added that the Modeling Advisory Committee would address this issue in its evaluation of the photochemical modeling analysis that is part of the update to the ozone attainment plan.

Chairperson Brazil thanked District staff for its presentation and noted that the Committee appreciated the opportunity to discuss these control measure suggestions and provide input.

5. **Committee Member Comments/Other Business.** Ms. Drennen requested that staff make a presentation, at a future meeting, about what the District does regarding pedestrian and bike issues in the region, including what funding sources can be used or are already being used, which cannot be used, and what guidelines preclude the use of such funds. It would be useful to review how an exemption might be obtained for small ticket projects that improve air quality but do not meet the \$90,000 per ton cost-effectiveness criterion. Mr. Hess noted that this presentation would be available after the staff's work on the ozone attainment plan has been completed.
6. **Time and Place of Next Meeting.** 9:30 a.m., Tuesday, April 6, 2003, 939 Ellis Street, San Francisco, CA 94109.
7. **Adjournment.** 11:22 a.m.

James N. Corazza
Deputy Clerk of the Boards