State of California AIR RESOURCES BOARD

Summary of Board Meeting October 25, 2001

Monterey Bay Unified Air Pollution Control District Board Room, 3rd Floor 24580 Silver Cloud Court Monterey, California 93940

MEMBERS PRESENT: Hons. Alan C. Lloyd, Ph.D., Chairman

Joseph C. Calhoun, P.E.

Doreen D'Adamo Mark DeSaulnier C. Hugh Friedman

William F. Friedman, M.D. Matthew R. McKinnon Barbara Riordan

AGENDA ITEM

01-8-1 Public Hearing to Consider the Amendments Adopting More Stringent Emission Standards for 2007 and Subsequent Model Year New Heavy-Duty Diesel Engines

SUMMARY OF AGENDA ITEM:

Heavy-duty diesel engines (HDDE) are significant contributors of oxides of nitrogen (NOx) and particulate matter (PM) emissions. Diesel PM, in particular, is a concern because of its association with potential adverse health effects. However, despite these concerns, HDDEs have significantly lagged behind with respect to the use of aftertreatment-based emission control systems compared to gasoline-fueled automobiles and light-duty trucks. Consequently, in January of 2001, the United States Environmental Protection Agency (U.S. EPA) adopted a rule to reduce emission standards for 2007 and subsequent model year heavy-duty engines, including both spark-ignited (e.g., gasoline-fueled) and compression-ignited (e.g., diesel-fueled) engines. These emission standards represent a 90% reduction of NOx emissions, 72% reduction of non-methane hydrocarbon (NMHC) emissions, and 90% reduction of PM emissions compared to previously adopted 2004 model year emission standards. In addition to the more stringent emission standards, the U.S. EPA adopted minor changes to previously adopted supplemental test procedures. This U.S. EPA 2007 Final Rule breaks new ground by setting emission standards that require aftertreatment-based technologies.

Staff proposed that the Board adopt nearly identical emission standards, test procedures, and other requirements contained in the U.S. EPA's 2007 Final Rule. In addition to the emission standards and test procedures, other requirements included the elimination of the exemption that allows turbocharger-equipped engines to vent crankcase emissions to the ambient air. The proposal ensures that the requirements for 2007 and subsequent model year HDDEs are identical to those adopted by the U.S. EPA in January 2001.

The expected reductions of NOx emissions are 49 tons per day, reactive organic gas emissions are 2 tons per day, and PM emissions are 3 tons per day in 2010 statewide, from California and out-of-state registered medium-duty and heavy-duty vehicles. Harmonizing the existing ARB medium-duty carbon monoxide (CO) emission standard with the U.S. EPA's 2007 and subsequent model year HDDE emission standard, however, will result in a slight increase in statewide CO emissions by 0.1 tons per day in 2010. The cost effectiveness of the proposed reduced emission standards ranges from \$0.29 to \$0.63 per pound of NOx and NMHC emissions reduced and from \$3.03 to \$6.65 per pound of PM emissions reduced. These costs compare favorably to other California mobile source and motor vehicle fuels regulations adopted over the past decade, ranging from \$0.17 to \$2.55 per pound of ozone precursors (NOx and NMHC) reduced and approximately \$17.90 per pound of PM reduced.

ORAL TESTIMONY:

Jed Mandel Engine Manufacturers Association

John Duerr Detroit Diesel Corporation

Bob Jorgensen Cummins, Inc.

Richard Burton Monterey-Salinas Transit District

Louis Browning Arthur D. Little, Inc., representing California

Electric Transportation Coalition

Paul Wuebben South Coast Air Quality Management District

FORMAL BOARD ACTION:

The Board approved Resolution No. 01-38 by a unanimous vote.

RESPONSIBLE DIVISION: MSCD

STAFF REPORT: Yes (101 pages)

01-8-2 Public Meeting to Consider Innovative Clean Air Technology Grants

SUMMARY OF AGENDA ITEM:

The staff recommended grants for eight new projects:

AC Propulsion -- Development and Evaluation of a Plug-in HEV with Vehicle to Grid Power Flow

Conserval Systems, Inc. -- Reduction of Air Pollution in California Using Solar Crop Drying

Gas Technology Institute -- The GTI High Performance Radiant Tube System

Gregg Industries, Inc. -- Innovative Integrated Systems Approach to Nonincineration Destruction of Benzene, VOCs, and Odors from Metal Casting Operations

IonEdge Corporation -- Elimination of Airborne Emissions from Electrolytic and Electroless Plating Operations in California

Rypos, Inc. -- A Plan to Retrofit Three Diesel Generators with Rypos/Bekaert System

SMUD -- Demonstration of Electric School Bus with Zebra Battery and Integrated Fast Charge

UC Davis-ITS -- Hydrogen Bus Technology Validation Program

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

The Board adopted Resolution Nos. 01-39 through 01-46 by a unanimous vote.

RESPONSIBLE DIVISION: RD

STAFF REPORT: None

01-8-3 Public Hearing to Consider Amendments to the Air Toxics "Hot Spots" Fee Regulation for Fiscal Year 2001-2002

SUMMARY OF AGENDA ITEM:

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (the Act) requires the ARB to adopt a fee regulation to recover the costs incurred by the State to implement and administer the Air Toxics "Hot Spots" Program. The Air Toxics "Hot Spots" Fee Regulation for Fiscal Year 2001-2002 (Fee Regulation) recovers the State's Program costs by allocating portions of the State costs among the air pollution control and air quality management districts (districts). The Fee Regulation requires each district to collect fees from facilities subject to the requirements of the Act in order to recover the State's and district's program costs and to provide to the ARB the district's share of the State's program costs. The Fee Regulation sets forth fee schedules, containing per facility fees, for five districts that requested the ARB, by April 1, 2001, to include them in the Fee Regulation. The remaining 30 districts must adopt their own fee schedules.

For fiscal year 2001-2002, the staff used the same method for allocating the State's cost among districts as was used for fiscal year 2000-2001. That method allocates State costs to the air districts based on the health risk of facilities in the districts as determined by risk assessment results or prioritization scores. The staff proposed using the same fee amounts per fee category as last year for the current fiscal year.

In addition to approving changes for the current fiscal year, the Board also approved the conversion of the annual update and collection of fees to an administrative process. This means the Board would no longer be required to annually adopt amendments to the fee regulation in future fiscal years. The Board approved the current formula in subsequent fiscal years to calculate fees for facilities in the "Hot Spots" Program. Since there would no longer be a provision in place to adopt fees to recover district costs for districts, the Board also set a maximum fee districts that do not have a locally adopted fee regulation would be able to charge a facility to recover their district costs. This does not preclude districts from adopting their own locally adopted fee regulation.

The staff presented modifications to the proposal that have been made since the Staff Report was released. These modifications were made due to further clarification of data submitted by the local air districts. The Board adopted the staff's modified proposal. As a result, the Fee Regulation will recover \$945,082 in State costs to implement the Program in fiscal year 2001-2002.

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

The Board approved Resolution No. 01-47 by a unanimous vote.

RESPONSIBLE DIVISION: PTSD

STAFF REPORT: Yes (130 pages)

01-8-4 Public Hearing to Consider Adoption and Amendment to the Vapor Recovery Certificate and Test Procedure Regulations

SUMMARY OF AGENDA ITEM:

The Air Resources Board (ARB or Board) is required by law to adopt vapor recovery certification and test procedures used to certify systems that are designed to control gasoline vapor emissions associated with gasoline marketing operations, including storage and transfer operations. No vapor recovery systems can be offered for sale, sold, or installed unless they are certified by the ARB. Districts are required to use test procedures adopted or approved by the ARB for compliance determinations of in-use vapor recovery systems. In 1975 the ARB adopted the first set of vapor recovery certification and test procedures. In 2000, the Board approved the Enhanced Vapor Recovery (EVR) regulations to achieve additional emission reduction and in response to problems found with in-use vapor recovery systems.

The proposal will do the following:

- 1. Add new definitions and clarify existing definitions (D-200).
- 2. Add new performance specifications for Phase I components, such as adaptor cam and grove standards and adaptor static torque limit (CP-201).
- Clarify certain requirements, such as the method of calculating average daily pressures, number of refueling for liquid retention testing, and equations for calculating the allowable leak rate (CP-201).
- Provide a methodology to differentiate the leak rate between the spill containment box drain valve and the overfill protection device (TP-201.1D).
- 5. Expand the applicability of the dynamic backpressure test to include assist systems (TP-201.4).
- 6. Simplify the compliance procedure for determining liquid removal rates of balance vapor recovery systems (TP-201.6C).
- 7. Develop new certification and compliance procedure to measure the static torque and 360 degree rotation of product and vapor adaptors used during cargo tank delivery (TP-201.1B).
- 8. Develop new certification and compliance procedure for measuring the leak rate of the drain valve of the spill containment box when the drop tube is installed below such a box (TP-201.1C).

ORAL TESTIMONY:

Rosa Salcedo CAPCOA Vapor Recovery Committee

FORMAL BOARD ACTION:

The Board approved Resolution No. 01-48 by a unanimous vote.

RESPONSIBLE DIVISION: MLD

STAFF REPORT: Yes (19 pages + appendices)

01-8-5 Public Meeting to Consider a Review of Air Quality Legislation for 2001

SUMMARY OF AGENDA ITEM:

ARB Legislative Director presented a review of air quality legislation from the 2001 legislative year. The presentation included a review of the First and Second Extraordinary Sessions, which were triggered by the state's energy crisis. The review focused on bills that most directly affected the ARB relating to increased generation capacity, i.e. new powerplant approval and emission control retrofit of existing powerplants. The presentation also included a discussion of significant threats to air quality that developed during the energy crisis, particularly proposals to lift restrictions on the use of diesel back-up generators. Another significant theme of the session which was presented included budget augmentations for air quality programs that (1) reduce emissions from diesel engines. (2) mitigate emissions from peaker power plants, (3) encourage alternatives to open-field burning of rice straw and (4) invest in ZEV technology. The presentation also included legislation that requires ARB to incorporate environmental justice in future programs for ZEVs and diesel emission reductions. Final items included confirmation and interim hearings.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: CO, Office of Legislative Affairs

STAFF REPORT: No