

State of California
AIR RESOURCES BOARD

Resolution 02-30

October 24, 2002

Agenda Item No.: 02-8-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "Board") to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state and, in sections 39002 and 39003 of the Health and Safety Code, has charged the Board with the responsibility of systematically addressing the serious air pollution problem caused by motor vehicles;

WHEREAS, sections 43013, 43101, and 43104 of the Health and Safety Code authorize the Board to adopt motor vehicle emission standards, in-use performance standards, and test procedures, which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, section 43018 of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction possible from motor vehicle sources to accomplish the attainment of state ambient air quality standards by the earliest practicable date;

WHEREAS, section 43806 of the Health and Safety Code directs the Board to adopt emission standards and procedures applicable to new engines used in publicly owned and privately owned public transit buses;

WHEREAS, the United States Environmental Protection Agency has promulgated emission standards and programs to reduce emissions from urban transit buses, and those standards and programs can be found in title 40 of the Code of Federal Regulations, part 86;

WHEREAS, section 43701(b) of the Health and Safety Code requires the Board to adopt regulations that require heavy-duty diesel vehicles to utilize emission control equipment and alternative fuels to reduce emissions to the greatest extent feasible;

WHEREAS, section 39667 of the Health and Safety Code directs the Board to achieve the maximum possible reduction in public exposure to toxic air contaminants by establishing emission standards for vehicular sources, including new and in-use motor vehicles and fuels;

WHEREAS, on August 27, 1998, following extensive scientific review and public hearings, and consistent with the conclusions of the Scientific Review Panel and the Office of Environmental Health Hazard Assessment, the Board formally identified particulate matter (PM) emissions from diesel-fueled engines as a toxic air contaminant and on September 28, 2000, approved a plan to reduce risk from diesel pollution by reducing harmful PM emissions from diesel engines;

WHEREAS, the Board, through the adoption of Resolution 98-49 on September 24, 1998, called on state, local, and federal agencies to join together to "clean the fleet," supported immediate and continuing efforts to replace diesel-fueled school and public urban transit buses with low-emission alternative-fuel buses, including the provision of necessary infrastructure and technical training, and directed the staff to distribute this resolution to multiple affected parties;

WHEREAS, on February 24, 2000, the Board adopted Resolution 00-2 to achieve near-term and long-term emission reductions from urban transit buses through a multifaceted fleet rule designed to reduce emissions of oxides of nitrogen (NOx) and diesel PM by mandating a lower fleet average of NOx emissions; by requiring engines to be retrofitted with devices to reduce diesel PM emissions by at least 85 percent; by requiring engine manufacturers to significantly reduce the allowable emissions from certified bus engines; by requiring that transit agencies switch to low sulfur (less than 15 parts per million) diesel fuel; and by requiring transit agencies to purchase specified percentages of zero emission buses;

WHEREAS, the Board, through Resolution 00-2, directed the Executive Officer to work with transit agencies during implementation of the regulations, including provisions of the fleet rule, and to report to the Board regularly on transit agencies' progress in implementing the regulations;

WHEREAS, on September 20, 2001, the Board adopted Resolution 01-31 directing the Executive Officer to continue development of a test procedure for the evaluation of hybrid electric bus emissions and to report back to the Board by late 2002 on progress in this effort;

WHEREAS, on March 21, 2002, the Board found that no retrofit devices had been certified for any bus engines older than model year 1994;

WHEREAS, on March 21, 2002, the Board adopted Resolution 02-16 directing the Executive Officer to make the necessary regulatory changes to the diesel PM retrofit implementation schedule to achieve as close to the same reductions in diesel PM as feasible when compared to the implementation schedule in the current regulation, but which would otherwise not be achieved because of technological limitations unless changes were made to the regulation, and to bring a proposal for the Board's consideration to allow transit agencies sufficient time to make purchasing decisions;

WHEREAS, the Board, through Resolution 02-16, directed the Executive Officer to be sensitive to the difficulties faced by smaller, rural transit agencies in meeting the requirements of the transit bus regulation;

WHEREAS, at the March 2002 meeting, the Board directed staff to analyze the impact of and need for allowing transit agencies to switch from the diesel path to the alternative fuel path;

WHEREAS, at the May 2002 meeting, the Board adopted the "Diesel Emission Control Strategy Verification Procedure, Warranty and In-Use Compliance Requirements for On-Road, Off-Road, and Stationary Diesel-Fueled Vehicles and Equipment" requiring that any device installed on urban buses to meet the diesel PM reduction requirement be verified under the procedures adopted therein;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, the Board has considered the impact of this proposed regulatory action on the economy of the state;

WHEREAS, the Board must find that no alternative considered would be more effective, or equally effective and less costly, in achieving the regulatory objectives sought than the proposed regulations;

WHEREAS, the ARB staff conducted public workshops on May 3, 2002, May 7, 2002, and June 25, 2002, as well as public outreach meetings, including a publicly-noticed conference call on August 22, 2002, in order to include the public and affected stakeholders in the process for regulatory development;

WHEREAS, a staff report and draft regulatory language were published and made available to the public for 45 days prior to this Board hearing;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340), Part 1, Division 3, Title 2 of the Government Code;

WHEREAS, based on the information in the public record, including the staff report and testimony provided at the hearing, the Board finds that:

1. The revised diesel PM reduction program is designed to ensure that every diesel fleet will have its in-use PM emissions significantly reduced by 2007 or 2009, depending on fuel path.
2. Only transit agencies in the South Coast Air Quality Management District (SCAQMD) indicated an interest in changing fuel paths, and allowing transit agencies in the SCAQMD to change from the diesel path to the alternative fuel path will have no negative impact on the benefits expected from the

- current regulation because transit agencies in the SCAQMD have been purchasing alternative-fueled buses in accordance with District rules.
3. Removing the restriction prohibiting transit agencies on the diesel path from purchasing alternative-fueled engines with NOx emissions in excess of 0.5 g/bhp-hr will encourage and facilitate alternative-fueled bus purchases by transit agencies on either fuel path for use in an alternative fuel bus.
 4. A new provision allowing transit agencies with 20 or fewer buses to request an implementation delay based on financial hardship will provide a mechanism in which the Executive Officer can hear and decide on the merits of exceptional requests for an implementation delay.
 5. Modifying the definition of “active fleet” and adding definitions for “emergency contingency vehicle” and “spare bus” will help clarify the intent and facilitate implementation of the transit bus regulation.
 6. Heavy-duty pilot ignition engines operating on natural gas and using a small quantity of diesel for ignition will be certified at or below California’s standards for alternative fuel engines and are appropriate for purchase by transit agencies.
 7. Repealing the “California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Vehicles” and replacing them with “Diesel Emission Control Strategy Verification Procedure, Warranty and In-Use Compliance Requirements for On-Road, Off-Road, and Stationary Diesel-Fueled Vehicles and Equipment” will have no impact on transit agencies and will ensure that all manufacturers follow the same procedures.
 8. The interim certification procedures for hybrid-electric vehicles in the urban bus and heavy-duty vehicle classes are designed to provide flexibility for manufacturers, reliability for transit agencies, and enforceability for the Board; allow up to two parties to apply for an Executive Order identifying the emission standard of the engine and hybrid-electric drive system for model years 2004 through 2006, and require one party certification for 2007 and later model years; and will facilitate the introduction of this promising new technology into California as well as provide staff with a period of continued evaluation of hybrid-electric drive system technology.
 9. No alternative considered would be more effective, or equally effective and less costly, in achieving the regulatory objectives sought than the proposed amendments.

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board’s regulations, the Board further finds that:

1. The adoption of the amendments will achieve 180 lbs per day of diesel PM emission reductions in 2010, which represents a slight increase (12 lbs/day) in the benefit expected under the original regulation in that timeframe; in

2005, however, the proposal will result in diesel PM emissions 15 lbs/day higher than what was expected with the original regulation;

2. The increase in emissions for 2005 is extremely small and time-limited, but could nevertheless constitute an adverse environmental impact;
3. There are no feasible mitigation measures or alternatives that would reduce the potential adverse environmental impacts, while at the same time ensuring that the long-term benefits of the program would be achieved;
4. The proposed amendments are necessary to address the lack of available technology in the timeframe anticipated for the original regulation, as well as the need to provide transit agencies additional time necessary to comply with the amendments;
5. The considerations identified above override any adverse environmental impacts that may occur from adoption of the proposal.

NOW, THEREFORE, BE IT RESOLVED, that the Board approves the amendments to sections 1956.1, 1956.2, 1956.4, 1956.8, and 2112, title 13, California Code of Regulations, and approves the incorporated "California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes", as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to adopt the amendments, with the modifications approved by the Board as set forth in Attachment A hereto and such other conforming modifications as may be appropriate, after making the modified regulatory language available for public comment for a period of 15 days; provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make further modifications as may be appropriate in light of the comments received or as necessary to ensure consistency with the modifications approved by the Board, and shall bring any proposed changes to the Board for consideration if he believes this is warranted.

I hereby certify that the above is a true and correct copy of Resolution 02-30, as adopted by the Air Resources Board.

Stacey Dorais, Clerk of the Board

Resolution 02-30

October 24, 2002

Identification of Attachment to the Resolution

Attachment A: Proposed Amendments to the Public Transit Bus Fleet Rule and Interim Certification Procedures for Hybrid-Electric Urban Transit Buses, as set forth in Appendix A to the Staff Report (released September 6, 2002).