State of California
AIR RESOURCES BOARD

Resolution 00-2

February 24, 2000

Agenda Item No.: 00-1-2

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 vehicular 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, 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 emissions from diesel-fueled engines as a toxic air contaminant;

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, 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, 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 ARB staff conducted public workshops on October 18, 1999, and on October 20, 1999, as well as numerous public outreach meetings, in order to include affected stakeholders in the public 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 written and oral testimony, the Board finds that:

1. Diesel urban transit buses, on a per bus basis, contribute relatively high emissions of oxides of nitrogen (NOx) and particulate matter and operate in the most heavily congested urban areas where air quality is critical and direct exposure to diesel particulates occurs for large numbers of people.

2. Diesel urban transit buses are ideally suited for improved controls to reduce emissions because: 1) they are centrally-fueled, with known, fixed routes, which allows for a low-emission, alternative fuel to be used more efficiently, 2) the entire cost of a new bus is not borne by local transit agencies as the purchase price of a new urban transit bus, including a low-emission, alternative-fuel bus, is heavily subsidized by the federal government, and 3) cost-effective emission reductions can be immediately achieved as low-emission, alternative-fuel engine technology is already available.

3. Public transportation provides important societal benefits by providing access to work and education, reducing traffic congestion, and meeting the mobility needs of the public, including the elderly and disabled.

4. Significant improvements in heavy-duty vehicle technology and the availability of cleaner alternative and conventional fuels allow the ARB and California's transit agencies to be partners in achieving new air quality benefits from public transportation.

5. It is necessary and appropriate to encourage transit agencies to voluntarily replace diesel-fueled urban transit buses with low-emission, alternative-fuel urban transit buses as a clean air strategy to meet health-based air quality standards for ozone and particulate matter, and as a way to reduce public exposure to toxic diesel particulate emissions.

6. It is necessary and appropriate that, based on expected advances in engine technology and new aftertreatment technologies, the proposed regulation establish more stringent emission standards for engines used in urban transit buses, applicable to heavy-duty engine manufacturers, beginning with the 2004 model year and again in the 2007 model year, in order to reduce emissions and public exposure to toxic air contaminants.

7. It is necessary and appropriate that the proposed regulation provide transit agencies the maximum flexibility commensurate with reducing emissions of criteria and toxic pollutants in determining their optimal fleet mix by allowing such agencies to choose between two compliance paths, either the diesel path or the alternative-fuel path.

8. It is necessary and appropriate that the proposed urban transit bus fleet rule use a combination of strategies to reduce emissions from both new urban buses and in-use urban buses in order to ensure low-emission public transportation in California in the most cost-effective manner feasible.

9. It is necessary and appropriate in order to reduce emissions, based on currently available engine and aftertreatment technologies and expected advancements in these technologies, that the proposed urban transit bus fleet rule include: 1) an in-use NOx fleet average requirement to encourage the retirement of 1987 and earlier model year diesel urban buses; 2) retrofit requirements to reduce public exposure to toxic diesel particulate emissions; 3) a low-sulfur diesel fuel requirement; 4) more stringent emission standards affecting new urban transit bus purchases beginning with the 2004 model year and again in the 2007 model year; 5) a zero-emission bus demonstration project, beginning in 2003, for large transit agencies on the diesel path; and 6) zero-emission bus purchase requirements for large transit agencies on both the diesel and alternative-fuel paths.

10. It is appropriate to provide for alternative strategies for achieving greater emission reductions than those to be achieved by the 2004 emissions standards for diesel and dual-fuel bus engines, and that prior to approval of the first exemption for a transit agency on the diesel path from the requirements of section 1956.2(c)(4) of title 13, California Code of Regulations, the Executive Officer shall bring the application to the Board for consideration.

11. The regulation adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

12. Separate California emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

13. The California emission standards and test procedures as adopted herein will not cause the California requirements to be inconsistent with section 202(a) of the Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

WHEREAS, the Board finds that the adoption of the regulation approved herein will not have a significant adverse environmental impact and that the regulation is projected to have a positive air quality impact; and

WHEREAS, the Board further finds that no alternative considered by the Board would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons.

NOW, THEREFORE, BE IT RESOLVED that the Board approves new sections 1956.1, 1956.2, 1956.3, and 1956.4 in title 13, California Code of Regulations, and approves amendments to section 1956.8 and to the heavy-duty test procedures incorporated by reference in section 1956.8, 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 present the regulation to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with transit agencies during implementation of the regulations, including the provisions of the fleet rule, and to report back to the Board regularly on transit agencies' progress in implementing the regulations.

BE IT FURTHER RESOLVED that the Board hereby directs the Executive Officer to encourage transportation planning agencies to provide more funding for transit agencies to fund the retrofit costs, infrastructure costs, and the portion of new bus purchase costs not covered by federal funds or incentive funds.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with transit agencies to identify potential sources of funding for the capital costs and infrastructure for future lower-emission bus technology.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to report back to the Board no later than January 2006 on the status of zero emission bus technology and the feasibility of implementing the zero-emission bus purchase requirement.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to report back to the Board on implementation of emission reduction strategies as an alternative to compliance with the 2004 standards, and the demonstration of advanced aftertreatment systems.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to evaluate the viability of test procedures to determine in-use emission compliance of urban transit buses.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to develop a test procedure for the evaluation of hybrid electric bus emissions and to report back to the Board by mid-2001.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with school districts, the Department of Education, engine manufacturers and bus manufacturers, the environmental community, and the public to further evaluate the potential health risk to school children exposed to particulate matter from diesel-fueled school buses, and also directs staff to report back to the Board on possible measures to reduce that exposure.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulation to the Environmental Protection Agency with a request for a waiver or confirmation that the regulations are within the scope of an existing waiver of federal preemption pursuant to section 209(b) of the Clean Air Act, as appropriate.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work closely with the United States Environmental Protection Agency (U.S. EPA) in their development of a new national diesel fuel specification. It is this Board's intent that there be a national low sulfur diesel fuel standard in order to minimize price and supply disruptions in California. The Executive Officer shall revisit the low sulfur diesel fuel purchase requirement in this regulation as quickly as possible after the U.S. EPA adopts a new fuel specification. The Executive Officer shall return to the Board with a recommendation on whether harmonization with federal diesel fuel sulfur requirement is appropriate.

I hereby certify that the above is a true and correct copy of Resolution 00-2, as adopted by the Air Resources Board

Pat Hutchens

Pat Hutchens, Clerk of the Board

RECEIVED BY
Office of the Secretary
DEC 08 2000
RESOURCES AGENCY OF CALIFORNIA