State of California
AIR RESOURCES BOARD

Resolution 01-51

November 15, 2001

Agenda Item No.: 01-9-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "ARB" or "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 sections 39002 and 39003 of the Health and Safety Code charge the Board with the responsibility of air pollution control from motor vehicles;

WHEREAS, sections 43013, 43101, and 43104 of the Health and Safety Code authorizes the Board to adopt emission standards and test procedures to control air pollution caused by motor vehicles;

WHEREAS, section 43018(a) of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of state ambient air quality standards at the earliest practicable date;

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to reductions in motor vehicle exhaust and evaporative emissions, and reductions in in-use vehicular emissions through durability and performance improvements;

WHEREAS, in a 1998-1999 rulemaking, the Board adopted the "LEV II" amendments to the California Low-Emission Vehicle (LEV) regulations, which include three primary elements: (1) tiers of exhaust emission standards for increasingly more stringent categories of low-emission light- and medium-duty vehicles, (2) a mechanism requiring each manufacturer to phase-in a progressively cleaner mix of vehicles from year to year with the option of credit trading, and (3) a requirement that a specified percentage of passenger cars and lighter light-duty trucks be zero-emission vehicles (ZEVs);

WHEREAS, the LEV II regulations are contained primarily in title 13, California Code of Regulations, sections 1960.1 and 1961, which incorporates by reference the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" and the "California Non-Methane Organic Gas Test Procedures," section 1960.5, which incorporates "Guidelines for Certification of 1983 and Subsequent Model-Year Federally-Certified Light-Duty Motor Vehicles for Sale in California"; and section 1962, which incorporates the "California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes";

WHEREAS, under the LEV II regulations there are four low-emission vehicle categories to which a passenger car and light-duty truck may be certified: Low-Emission Vehicle (LEV), Ultra-Low-Emission Vehicle (ULEV), Super-Ultra-Low-Emission Vehicle (SULEV) and ZEV;

WHEREAS, the particulate matter standards for these categories of low-emission vehicles currently only apply to diesel vehicles;

WHEREAS, while the LEV II regulations establish slightly less stringent in-use standards for the first three years that a new model is introduced, there are no intermediate in-use standards for light-duty trucks engineered for heavier duty cycles that have a base payload capacity of 2,500 lbs., or for vehicles certified to the optional 150,000 mile standards;

WHEREAS, the LEV II regulations include a protocol under which the Executive Officer can establish generic reactivity adjustment factors (RAFs) for representative vehicle/fuel combinations or manufacturers can establish test group specific RAFs by applying a reactivity scale based on the maximum incremental reactivity (MIR) of individual hydrocarbon exhaust speciation profiles;

WHEREAS, the LEV II regulations allow manufacturers to demonstrate compliance with the applicable non-methane organic gas (NMOG) emission standards by applying RAFs to the NMOG exhaust mass emissions using either the current generic RAFs for Phase 2 gasoline, natural gas, liquefied petroleum gas and methanol that apply through the 2003 model year, or by generating a test group specific RAF;

WHEREAS, a natural gas or alcohol bi-fuel, flexible fuel, and dual-fuel vehicle may currently certify to two emission standards – the lower standard when operating on the alternative fuel and the next higher emission standard when operating on gasoline;

WHEREAS, the granting of "partial zero-emission vehicle" (PZEV) credits is premised on the assumption that PZEVs provide emission benefits beyond those achieved by vehicles certifying to the SULEV standard and, therefore, allowing bi-fuel, flexible fuel,

and dual-fuel PZEVs to certify to different emission standards when operating on different fuels is inconsistent with this intent;

WHEREAS, fuel-fired heaters used in ZEVs are currently only required to meet ULEV emission standards;

WHEREAS, California Health and Safety Code 43102(b) (Stats. 1981, Ch. 1185 (AB 965)) requires that the Board establish guidelines which allow manufacturers to sell in California certain federally certified light-duty motor vehicles as long as their emissions are offset by cleaner California vehicles;

WHEREAS, in conjunction with a public hearing notice dated September 28, 2001, the staff has proposed a set of amendments to the low-emission vehicle regulations and incorporated documents, as set forth in Attachments A-F hereto; these amendments include the following primary elements;

Requiring Otto-cycle (gasoline) vehicles to meet particulate matter standards;

Requiring fuel-fired heaters used in ZEVs to meet SULEV exhaust emission standards when tested at 40°F;

Requiring bi-fuel, flexible fuel or dual-fuel vehicles to certify to SULEV emission standards on both fuels in order to qualify as PZEV;

Establishing a NMOG certification factor that would allow a manufacturer to apply a factor of 1.04 to the measured non-methane hydrocarbons to determine compliance with the NMOG standards for gasoline and diesel vehicles;

Extending the applicability of generic RAFs for alternative fuels;

Revising the emission offset requirements for AB 965 vehicles;

Implementing additional in-use compliance standards; and

Revising the "California Non-Methane Organic Gas Test Procedures" to update MIR values and incorporate technical revisions;

WHEREAS, based on public comments, the staff has recommended modifications to the original proposal; the modifications would allow independent low volume manufacturers additional flexibility in meeting the fleet average NMOG requirement and eliminate the amendment regarding fuel-fired heaters used in ZEVs;

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, 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, the Board has considered the effect of the proposed amendments on the economy of the State;

WHEREAS, the Board finds that:

The amendments approved herein to the LEV II regulations are necessary and appropriate to assure that California continues to receive the cleanest light- and medium-duty vehicles available;

The staff's recommended modifications to the originally proposed LEV II amendments are appropriate to provide additional flexibility, help assure adequate lead time, and minimize cost to manufacturers;

All of the approved amendments are necessary, appropriate, and technologically feasible; and

WHEREAS, the Board further finds that:

The amendments approved herein will not have a significant adverse impact on the environment;

While the California motor vehicle emissions regulations as amended herein are different from the federal regulations administered by U.S. EPA, the California regulations approved herein are authorized by State law; and

The approved amendments will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or the elimination of existing businesses within California, or the ability of California businesses to compete with businesses in other states.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to sections 1960.1, 1960.5, 1961, and 1962, title 13, California Code of Regulations, as set forth in Attachment A hereto, the amendments to (and adoption of) the documents incorporated by those regulations as set forth in Attachments B, C, D, E and F hereto, with the modifications set forth in Attachment G hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt the modified amendments that are approved herein, after making the modified regulatory language available for public comment for a period of at least 15 days, provided that the Executive Officer shall consider such written comments regarding the modified text that may be submitted during this period, shall make modifications as may be

appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines that the regulations 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.

BE IT FURTHER RESOLVED that the Board hereby finds that separate California emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board finds that 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.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations 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.

I hereby certify that the above is a true and correct copy of Resolution 01-51, as adopted by the Air Resources Board.

Marie Kavan

Marie Kavan, Clerk of the Board

Resolution 01-51

November 15, 2001

Identification of Attachments to the Resolution

Attachment A: Proposed Regulation Order, as set forth in Appendix A of the Staff Report: Initial Statement of Reasons

Attachment B: Proposed amendments to the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," as posted on the ARB's Internet site for this rulemaking, www.arb.ca.gov/regact/levii01/levii01.htm

Attachment C: Proposed amendments to the "California Non-Methane Organic Gas Test Procedures," as posted on the ARB's Internet site for this rulemaking, www.arb.ca.gov/regact/levii01/levii01.htm

Attachment D: Proposed amendments to the "Guidelines for Certification of 1983 and Subsequent Model-Year Federally-Certified Light-Duty Motor Vehicles for Sale in California," as posted on the ARB's Internet site for this rulemaking, www.arb.ca.gov/regact/levii01/levii01.htm

Attachment E: Proposed amendments to the "California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes," as posted on the ARB's Internet site for this rulemaking, www.arb.ca.gov/regact/levii01/levii01.htm

Attachment F: Proposed new "Guidelines for Certification of 2003 and Subsequent Model-Year Federally-Certified Light-Duty Motor Vehicles for Sale in California," as posted on the ARB's Internet site for this rulemaking, www.arb.ca.gov/regact/levii01/levii01.htm

Attachment G: Staff's suggested Modifications to the Original Proposal, distributed at the hearing on November 15, 2001

State of California
Environmental Protection Agency
AIR RESOURCES BOARD

Notice of Decision and Response to Significant Environmental Issues

Item:	Low-Emission Vehicle Regulations, Including Particulate Standards for Gasoline Vehicles, More Stringent Emission Standards for Fuel-Fired Heaters, and Administrative Revisions
Approved By:	Resolution 01-51
Adopted by:	Executive Order G-02-002
Agenda Item:	01-9-2
Public Hearing Date:	November 15, 2001
Issuing Authority:	Air Resources Board
Comment:	No comments were received identifying any significant environmental issues pertaining to this item. The Staff Report identified no adverse environmental effects.
Response:	N/A
Certified:	Artavia M. Edwards, Manager Board Administration & Regulatory Coordination Unit
Date:	16 Jul 02