

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER:

- I. ADOPTION OF NEW OPTIONAL RETROFIT EMISSION STANDARDS FOR HEAVY-DUTY ENGINES AND VEHICLES
- II. AMENDMENTS TO THE CALIFORNIA CERTIFICATION AND INSTALLATION PROCEDURES FOR ALTERNATIVE FUEL RETROFIT SYSTEMS FOR MOTOR VEHICLES CERTIFIED FOR 1994 AND SUBSEQUENT MODEL YEARS
- III. AMENDMENTS TO THE CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR SYSTEMS DESIGNED TO CONVERT MOTOR VEHICLES CERTIFIED FOR 1993 AND EARLIER MODEL YEARS TO USE LIQUEFIED PETROLEUM GAS OR NATURAL GAS FUELS
- IV. AMENDMENTS TO THE CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR SYSTEMS DESIGNED TO CONVERT MOTOR VEHICLES CERTIFIED FOR 1993 AND EARLIER MODEL YEARS TO USE ALCOHOL OR ALCOHOL/GASOLINE FUELS
- V. AMENDMENTS TO PROCEDURES FOR APPROVAL OF SYSTEMS DESIGNED TO CONVERT MOTOR VEHICLES TO USE FUELS OTHER THAN THE ORIGINAL CERTIFICATION FUEL

The Air Resources Board (the "Board" or "ARB") will conduct a public hearing at the time and place noted below to consider the adoption of optional retrofit emission standards for heavy-duty engines and vehicles. The Board will also consider amendments to the existing California Certification and Installation Procedures for Alternative Fuel Retrofit Systems for Motor Vehicles Certified for 1994 and Subsequent Model Years, amendments to the California Exhaust Emission Standards and Test Procedures for Systems Designed to Convert Motor Vehicles Certified for 1993 and Earlier Model Years to Use Liquefied Petroleum Gas or Natural Gas Fuels, amendments to the California Exhaust Emission Standards and Test Procedures for Systems Designed to Convert Motor Vehicles Certified for 1993 and Earlier Model Years to Use Alcohol or Alcohol/Gasoline Fuels, and amendments to Procedures for Approval of Systems Designed to Convert Motor Vehicles to Use Fuels other than the Original Certification Fuel.

DATE: July 27, 1995

TIME: 9:30 a.m.

PLACE: Air Resources Board
Board Hearing Room, Lower Level
2020 L Street
Sacramento, California, 95814

This item will be considered at a two-day meeting of the Board, which will commence at 9:30 a.m., July 27, 1995, and will

continue at 8:30 a.m., July 28, 1995. This item may not be considered until July 28, 1995. Please consult the agenda for the meeting, which will be available at least 10 days before July 27, 1995, to determine the day on which this item will be considered.

INFORMATIVE DIGEST OF PROPOSED ACTION

Proposed Actions and Sections Affected:

I. The proposed adoption of new optional retrofit emission standards for heavy-duty engines and vehicles -- new Section 1956.9, Title 13, California Code of Regulations (CCR).

Health and Safety Code sections 43701 (b) and (c) provide that the ARB shall require control equipment and adopt emission standards and procedures to qualify equipment used to reduce emissions from existing heavy-duty diesel motor vehicles.

The proposed optional retrofit emission standards would establish emission standards that could be met through retrofitting existing heavy-duty engines. These standards would form the basis for determining emission reduction credits ("credits") that could be earned through retrofitting existing engines. These credits would be used in mobile source emission reduction credit programs developed by the air pollution control districts and air quality management districts.

The proposed retrofit emission standards are optional emission standards for heavy-duty engines that have been retrofitted for credit. Operators of certain heavy-duty vehicles may find it attractive, because of circumstances such as the availability of an alternative fuel terminal or the type of service that the vehicles are engaged in, to retrofit their vehicles to obtain mobile source emission reduction credits.

The optional emission standards for heavy-duty diesel engines would apply to the following pollutants: a) total hydrocarbons (THC), or non-methane hydrocarbons (NMHC) if the engine were originally certified to the optional NMHC standard; b) carbon monoxide (CO); c) oxides of nitrogen (NOx); and d) particulate matter (PM). The optional emission standards for heavy-duty gasoline engines would be the same as for heavy-duty diesel engines for all pollutants except PM. Emissions of PM from gasoline engines are very small, and are not considered eligible for emission reduction credit.

The amount of emission reduction credit that could be generated from heavy-duty vehicle retrofits would be equal to the difference between the pre-conversion certification level (the "ceiling standard"), and the post-conversion certification level (the "credit standard"). The ceiling standard for determining

the emission reduction would generally be the emission certification standard applicable to that model year engine when new. The optional emission standards also include many levels of credit standards to which the engine can be certified after conversion. The first level credit standard is based on 75 percent of the ceiling standard, and other credit standards are set at fixed increments (depending on the pollutant) below the first level.

For some specific pollutants and model years, heavy-duty engines had no original engine certification level. In other cases, the original certification level would not be appropriate for a ceiling standard because it was either a) negligible, or b) much higher than actual emissions. The proposed changes would define the needed ceiling standards. Ceiling standards are proposed for the following cases:

1. THC (or NMHC as applicable) and CO emissions from heavy-duty diesel engines;
2. PM from pre-1987 model year heavy-duty diesels; formaldehyde emissions; and
3. hydrocarbon (HC) and NOx emissions for engines originally certified to a combined HC plus NOx standard.

II. AMENDMENTS TO THE CALIFORNIA CERTIFICATION AND INSTALLATION PROCEDURES FOR ALTERNATIVE FUEL RETROFIT SYSTEMS FOR MOTOR VEHICLES CERTIFIED FOR 1994 AND SUBSEQUENT MODEL YEARS

Health and Safety Code section 43004 provides that the exhaust emission standards applicable to gasoline-powered motor vehicles shall also apply to gasoline- or diesel-powered vehicles converted to use fuels other than the fuel for which the vehicles were certified. Health and Safety Code section 43006 authorizes the Board to certify these alternative fuel systems if they meet the standards specified in section 43004. In addition, Health and Safety Code section 43018(a) 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 the state standards at the earliest practicable date. Section 43018(c) provides that in carrying out 43018(a), the Board is to adopt standards and regulations that will result in the most cost-effective combination of controls to achieve reductions in motor vehicle exhaust and evaporative emissions.

Furthermore, Vehicle Code section 27156 provides that no person shall advertise, sell, or install any device or system intended for use with, or as part of, any required motor vehicle pollution control system which modifies its original design or performance.

In addition, Vehicle Code section 27156 authorizes the ARB to allow a device or system to be sold if it satisfies either of the following conditions: a) the device or system does not reduce the effectiveness of any required emission control device; or b) the modified vehicle complies with the applicable emission standards for the model year in which it was produced.

The proposed changes to the California Certification and Installation Procedures for Alternative Fuel Retrofit Systems for Motor Vehicles Certified for 1994 and Subsequent Model Years would enable heavy-duty vehicle retrofits to generate emission reduction credits. The proposed changes would also facilitate durability testing and certification. The credit-related changes would define the ceiling standards, and no retrofit system that would cause an increase in emissions to 110 percent or more of the ceiling standard would be allowed to generate emission reduction credits. To facilitate durability testing and certification, the proposed amendments would a) extend the phase-in period for the procedures by one year; b) allow kit manufacturers until the end of the following calendar year to complete durability testing; and c) allow installers to use an alternative inspection schedule for high volume (fleet) conversions. The proposed amendments also include an alternate test plan for heavy-duty vehicles, and those medium-duty vehicles originally certified on an engine dynamometer. The alternate test plan would allow retrofit kit manufacturers to complete durability testing after certification, and includes further changes to the durability testing provisions.

III. AMENDMENTS TO THE CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR SYSTEMS DESIGNED TO CONVERT MOTOR VEHICLES CERTIFIED FOR 1993 AND EARLIER MODEL YEARS TO USE LIQUEFIED PETROLEUM GAS OR NATURAL GAS FUELS

Health and Safety Code Section 43006 provides that the Board may certify the fuel system of any motor vehicle which meets the standards specified by Section 43004 and adopt test procedures for such certification for motor vehicles powered by a fuel other than gasoline or diesel.

The proposed amendments would reflect the proposed new title and phase-in schedule for the 1994 and later model year retrofit procedures, and would allow an alternative inspection schedule for high volume conversions.

IV. AMENDMENTS TO THE CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR SYSTEMS DESIGNED TO CONVERT MOTOR VEHICLES CERTIFIED FOR 1993 AND EARLIER MODEL YEARS TO USE ALCOHOL OR ALCOHOL/GASOLINE FUELS

Health and Safety Code Section 43006 provides that the Board may certify the fuel system of any motor vehicle which meets the

standards specified by Section 43004 and adopt test procedures for such certification for motor vehicles powered by a fuel other than gasoline or diesel.

The proposed amendments would reflect the proposed new title and phase-in schedule for the 1994 and later model year retrofit procedures, and would allow an alternative inspection schedule for high volume conversions.

V. AMENDMENTS TO PROCEDURES FOR APPROVAL OF SYSTEMS DESIGNED TO CONVERT MOTOR VEHICLES TO USE FUELS OTHER THAN THE ORIGINAL CERTIFICATION FUEL

Health and Safety Code Section 43006 provides that the Board may certify the fuel system of any motor vehicle which meets the standards specified by Section 43004 and adopt test procedures for such certification for motor vehicles powered by a fuel other than gasoline or diesel.

Article 5, Chapter 1, Division 3, Title 13, of the California Code of Regulations is titled "Approval of Systems Designed to Convert Motor Vehicles to Use Fuels Other Than the Original Certification Fuel." There are two sections of Article 5 that contain references to "The California Certification And Installation Procedures for Alternative Fuel Retrofit Systems for Motor Vehicles Certified for 1994 and Subsequent Model Years" ("the procedures"). These sections are Section 2030, "Liquefied Petroleum Gas or Natural Gas Retrofit Systems," and Section 2031, "Alcohol or Alcohol/Gasoline Fuels Retrofit Systems." Because of the proposed change in the title of the procedures to reflect their applicability to performing retrofits to meet optional credit standards, non-substantive amendments are being proposed to Article 5 and Sections 2030 and 2031 of Article 5 to reflect the change in the title of the procedures.

AVAILABILITY OF DOCUMENTS AND CONTACT PERSON

The Board staff has prepared a Staff Report which includes the initial statement of reasons for the proposed action and a summary of the environmental impacts of the proposal, if any. Copies of the Staff Report and the full text of the proposed regulatory language may be obtained from the Board's Public Information Office, 2020 L Street, Sacramento, CA 95814, (916) 322-2990. The Board staff has compiled a record which includes all information upon which the proposal is based. This material is available for inspection upon request to the contact person identified immediately below.

The ARB has determined that it is not feasible to draft the regulations in plain English due to the technical nature of the regulations. However, a plain English summary of the regulations

is available from the agency contact person named in this notice, and is also presented above in this notice for the regulatory action in the updated informative digest.

Further inquiries regarding this matter should be directed to Renee Kemena, Regulatory Strategy Section, Mobile Source Division, at (916) 327-2938.

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred in reasonable compliance with the proposed regulations are presented below.

The Executive Officer has determined that the proposed regulatory action will not create costs or savings, as defined in Government Code section 11346.5(a)(6), to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to local agencies.

The Executive Officer has also determined that adoption of the proposed regulatory action will not have a significant adverse economic impact on businesses, including the ability of California businesses to compete with businesses in other states.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new business or elimination of existing businesses within California, or the expansion of businesses currently doing business within California. An assessment of the economic impacts of the proposed regulatory action can be found in the Staff Report.

The Board's Executive Officer has also determined, pursuant to Government Code section 11346.5 (a)(3)(B), that the proposed action will not have an affect on small businesses because the changes will not significantly affect their cost of doing business.

Finally, the Executive Officer has determined that there will be no, or an insignificant, potential cost impact, as defined in Government Code section 11346.5(a)(9), on private persons or businesses directly affected resulting from the proposed action.

In addition, before taking final action on the proposed regulatory action, the Board must determine that no alternative considered by the agency would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing. To be considered by the Board, written submissions must be addressed to and received by the Board Secretary, Air Resources Board, P. O. Box 2815, Sacramento, CA 95812, no later than 12:00 noon, July 26, 1995, or received by the Board Secretary at the hearing.

The Board requests but does not require that 20 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

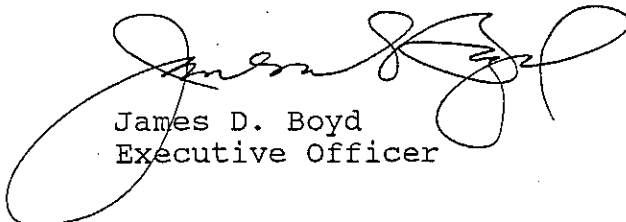
STATUTORY AUTHORITY AND HEARING PROCEDURES

This regulatory action is proposed under that authority granted in Health and Safety Code sections 39515, 39600, 39601, 43006, 43013, 43018, 43103, and 43104, and Vehicle Code section 27156. This action is proposed to implement, interpret and make specific Health and Safety Code sections 39002, 39003, 43000, 43004, 43006, 43008.6, 43013, 43018, 43100, 43101.5, 43102, 43103, 43104, 43106, and 43204, and Vehicle Code section 27156.

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Title 2, Division 3, Part 1, Chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with nonsubstantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action; in such event the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted. The public may request a copy of the modified regulatory text from the Board's Public Information Office, 2020 L Street, Sacramento, CA 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD



James D. Boyd
Executive Officer

Date: May 30, 1995