

Mail Out # MSC-16

State of California
AIR RESOURCES BOARD

**Notice of Public Availability of Modified Text
and Supporting Documents**

**PUBLIC HEARING TO CONSIDER THE ADOPTION OF A REGULATION FOR
A PUBLIC TRANSIT BUS FLEET RULE AND EMISSION STANDARDS FOR
NEW URBAN BUSES**

First Public Hearing Date: January 27, 2000
Continued To: February 24, 2000
Public Availability Date: August 16, 2000
Deadline for Public Comment: August 31, 2000

At a public hearing held on January 27, 2000, the Air Resources Board (Board or ARB) considered the adoption of a regulation for a public transit bus fleet rule and emission standards for new urban buses. After extensive public testimony, the Chairman closed the public record for the proposed regulation and continued the hearing until February 24, 2000.

At the February 24, 2000, hearing, the Board approved the adoption of new sections 1956.1, 1956.2, 1956.3, and 1956.4, title 13, California Code of Regulations (CCR). These new sections provide for: 1) more stringent emission standards for some new urban bus engines beginning with 2002 model year engines produced on or after October 1, 2002; 2) a multi-component urban transit bus fleet rule applicable to transit agencies; 3) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and 4) reporting requirements with which transit agencies must demonstrate compliance with the urban transit bus fleet rule.

The Board also approved amendments to section 1956.8, title 13, CCR, and the incorporated "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Engines and Vehicles." The amendments to this section delete the urban bus exhaust emission standards, which are now contained in new section 1956.1, cited above, and modify existing heavy-duty vehicle (exclusive of urban buses) optional, reduced emission standards used for generating mobile source emission reduction credits.

At the January 27, 2000 hearing, the staff presented modifications to the regulation originally proposed in the Staff Report: Initial Statement of Reasons released and made available to the public on December 10, 1999. These changes were made in response to comments received subsequent to

publication of the Staff Report. At the February 24, 2000, hearing, the staff presented additional modifications to the regulation originally proposed in the Staff Report released on December 10, 1999, in response to public testimony and Board direction at the January 27, 2000, hearing. The Board approved the staff's proposal with the modifications presented at both the January and February hearings, with minor changes. The following text describes the modifications approved by the Board, as presented by the staff at the January and February public hearings, and as directed by the Board.

Section 1956.1, Title 13, CCR: Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy-Duty Urban Bus Engines and Vehicles

Paragraph (a)(7) was added to require that diesel-fueled, dual-fuel, and bi-fuel urban bus engines shall meet a 0.01 grams per brake horsepower-hour (g/bhp-hr) particulate matter (PM) standard beginning with 2002 model year engines produced beginning October 1, 2002. This modification was in response to a commitment by the Engine Manufacturers Association to produce such engines meeting a 0.01 g/bhp-hr PM standard, made subsequent to the publication of the originally proposed regulation in the Staff Report released on December 10, 1999.

Paragraph (a)(12) was modified to delete restrictions on averaging, banking, and trading provisions for engine manufacturers based on comments made by the Engine Manufacturers Association subsequent to the publication of the originally proposed regulation in the Staff Report released on December 10, 1999.

Section 1956.2, Title 13, CCR: Fleet Rule for Urban Transit Bus Operators

Paragraph (c)(5) was added to clarify requirements for diesel-fueled, dual-fuel, or bi-fuel new bus purchases made by transit agencies on the alternative-fuel path.

Paragraph (d)(4) was modified to clarify requirements for diesel-fueled, dual-fuel, bi-fuel, or alternative-fuel new bus purchases made by transit agencies on the diesel path.

Paragraph (d)(7) was added to allow transit bus fleets, upon approval by the Executive Officer, to implement an alternative emission reduction strategy to achieve emission reductions greater than those that would be achieved through implementation of the staff's originally proposed emission standards for model year 2004 through 2006 diesel and dual-fuel urban bus engines. As proposed by the staff at the February hearing, the alternative strategy was originally to achieve emission reductions

equivalent to the proposed 2004 through 2006 emission standards. The Board, however, required that emission reductions achieved through an approved alternative emission reduction strategy must be greater than those achieved through implementation of the 2004 through 2006 emission standards.

Subdivision (f), pertaining to PM retrofit requirements, was modified for clarity based on comments from the Engine Manufacturers Association made subsequent to the publication of the originally proposed regulation in the Staff Report released on December 10, 1999. It was also modified to accelerate the PM retrofit schedule for transit agencies on the diesel path based on comments from environmental groups made at the January hearing.

Paragraph (f)(7) was added to incorporate, by reference, a certification procedure for use by retrofit device manufacturers in certifying retrofit devices to reduce PM emissions from diesel-fueled, dual-fuel, bi-fuel, and diesel hybrid electric urban transit buses. The entire certification procedure is new and was a suggested modification presented by staff at the January hearing and approved by the Board at the February hearing. Providing the certification procedure within a new, separate document entitled "California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Diesel Engines" is a clarifying modification made subsequent to the February hearing and is discussed in further detail later in this notice.

At the January hearing, staff proposed adding Health and Safety Code section 43701(b) as the legal authority for the ARB to require retrofits for heavy-duty diesel vehicles. This modification is shown in the legal authorities and references cited for section 1956.2, title 13, CCR.

Section 1956.3, Title 13, CCR: Zero Emission Bus Requirements

Paragraphs (c)(4)(A) and (c)(4)(B) were added to allow transit agencies to earn credits for placing zero emission buses, other than zero emission buses used in required demonstration projects, in service earlier than required by the purchase/lease requirements specified in subdivision (c).

Section 1956.4, Title 13, CCR: Reporting Requirements for all Urban Bus Transit Agencies

The reporting requirements were modified in subdivisions (a), (d), and (f) to reflect that urban bus transit agencies must submit annual reports regarding bus purchases and leases, and compliance with required PM retrofit requirements, rather than just maintain records for inspection upon request.

Subdivision (b) was added to specify that urban bus transit agencies on the fleet rule's diesel path must submit an initial report stating an agency's intent to follow the diesel path and annual reports regarding new bus purchases and leases.

Section 1956.8, Title 13, CCR: Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy-Duty Engines and Vehicles

The table in paragraph (a)(2) was modified in response to comments made by International Truck and Engine Corporation (formerly known as Navistar) subsequent to publication of the originally proposed regulation in the Staff Report released on December 10, 1999. The modifications to the table and the addition of new footnote H are intended to clarify that each heavy-duty engine manufacturer is subject to its respective requirements in settlement agreements reached with the ARB and the federal Environmental Protection Agency (EPA) in an enforcement action concerning violations of emission standards. In addition, the table was retitled to more accurately reflect its contents.

Board Resolution Resolution 00-2, which is attached hereto and incorporated by reference herein, sets forth the Board's action. Attachment A to Resolution 00-2 contains the approved regulatory language, with additions to the originally proposed text shown by double underline and deletions shown by ~~double underline~~.

The modified regulatory language included in Attachment A also contains additional modifications, not presented at either the January or February hearings, in response to direction provided by the Board at the February hearing. These changes are sufficiently related to the original text of the regulation such that the public was placed on notice that the changes could result from the originally proposed regulatory action. Additions to the originally proposed text are shown by double underline and deletions are shown by ~~double underline~~. In addition to minor, nonsubstantive modifications to correct typographical errors or provide further clarity or conformity within the regulation, these modifications include:

Section 1956.1, Title 13, CCR: Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy-Duty Urban Bus Engines and Vehicles

Paragraphs (a)(8) and (a)(9) were modified to provide clarity in the applicability of the ARB's optional, reduced emission standards for 2002 and subsequent model year urban bus engines, produced beginning October 1, 2002.

Paragraph (a)(11) was modified to include bi-fuel urban bus engines, to provide clarity with respect to proposed emission standards for non-methane hydrocarbons, carbon monoxide, and formaldehyde, and to provide specificity regarding the ability of engine manufacturers to sell bus engines certified to emission standards other than those required by paragraph (a)(11).

Subdivision (b) was added to incorporate by reference the document entitled "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," adopted April 8, 1985, and last amended on February 26, 1999.

Section 1956.2, Title 13, CCR: Fleet Rule for Urban Transit Bus Operators

Subdivision (a) was modified to require transit agencies choosing the fleet rule's diesel path to notify the ARB of this action.

Subdivision (b) was added to define, for the purpose of the fleet rule described in section 1956.2, the following terms: alternative fuel; active fleet; transit agency; and urban bus.

Paragraph (e)(1) was modified to allow zero-emission buses not defined as an urban bus to be used in calculating a transit agency's oxides of nitrogen fleet average standard.

Subdivision (f) was modified for clarity by including bi-fuel urban bus engines.

Paragraph (f)(7) incorporates by reference a certification procedure for use by retrofit device manufacturers in certifying retrofit devices to reduce PM emissions from diesel-fueled, dual-fuel, bi-fuel, and diesel hybrid electric urban transit buses. The entire certification procedure is a modification recommended by staff at the January hearing and approved by the Board at the February hearing. As presented at the January hearing, the certification procedure was originally included in section 1956.3, title 13, CCR. To provide clarity and specificity, the staff removed the procedure from section 1956.3 subsequent to the February hearing, added more detail to the certification requirements, and incorporated the procedure within a new, separate document entitled "California Certification Procedures for PM Retrofit Devices for On-Road Heavy-Duty Diesel Engines."

Section 1956.4, Title 13, CCR: Reporting Requirements for all Urban Bus Transit Agencies

The term “leasing companies” was deleted from the title of section 1956.4 because the reporting requirements described therein only apply to urban bus transit agencies.

Paragraph (a)(2) was modified to specify requirements for a transit agency that is requesting a deviation from the 85 percent alternative-fuel bus purchase/lease requirement for transit agencies on the fleet rule’s alternative-fuel path.

Subdivision (d) was modified to conform the reporting requirements for PM retrofits to the modified PM retrofit requirements for transit agencies on the fleet rule’s diesel path.

Paragraph (f)(2) was modified to specify requirements for a transit agency that is requesting a deviation from the 15 percent zero emission purchase/lease requirement for large transit agencies on the fleet rule’s diesel and alternative-fuel paths.

Subdivision (g) was added to include reporting requirements for transit agencies exempted from the requirements for new purchases of 2004 through 2006 model year diesel-fueled, dual-fuel, bi-fuel, or alternative-fuel urban buses.

Section 1956.8, Title 13, CCR: Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy-Duty Engines and Vehicles

The language in paragraph (a)(1) was modified to accurately reflect the contents of the modified table contained therein.

Footnote G in paragraph (a)(1) is new language in the regulation originally proposed in the Staff Report released on December 10, 1999, that was not shown as a proposed amendment. Hence, it is included in Attachment A to this notice as modified text for which public comment is invited.

Paragraphs (a)(4)(A) and (a)(4)(B) were modified to conform with footnote modifications in paragraphs (a)(1) and (a)(2), pertaining to the dual fueling mode certification process.

Footnote A in subdivision (h) was modified to include reference to section 1961, title 13, CCR – Exhaust Emission Standards and Test Procedures – 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

Section 1965, Title 13, CCR: Emission Control and Smog Index Labels – 1979 and Subsequent Model Year Motor Vehicles

Section 1965 in title 13, incorporates by reference the document entitled “California Motor Vehicle Emission Control and Smog Index Label Specifications.” These specifications for tune-up labels, vehicle/engine emission configuration bar-code labels, and vehicle identification number bar-code labels apply to all new 1979 and subsequent model-year heavy-duty engines, as well as other categories of motor vehicles. Conforming amendments to section 1965 were inadvertently omitted from the regulation as originally proposed in the Staff Report released on December 10, 1999. Hence, section 1965 is included in Attachment A to this notice, along with conforming modifications to the incorporated “California Motor Vehicle Emission Control and Smog Index Label Specifications,” adopted March 1, 1978, and last amended on October 22, 1999. The conforming modifications, on which public comment is invited, are shown in double underline and ~~double underline~~ strikeout.

California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles

The document entitled “California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles,” adopted April 8, 1985, and last amended February 26, 1999, is incorporated by reference in sections 1956.1 and 1956.8, title 13, CCR. The ARB and the federal EPA work very closely together in regulating motor vehicles, including heavy-duty diesel vehicles. Hence, this document contains various sections of the Code of Federal Regulations (CFR) promulgated by the EPA pertaining to heavy-duty diesel vehicles, including urban transit buses. Some of the CFR provisions in the “California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles” remain the same as those for the federal motor vehicle control program, while others have been modified to conform to the unique requirements of California’s motor vehicle control program. Various sections of the CFR with proposed amendments were inadvertently omitted from the regulation originally proposed in the Staff Report released on December 10, 1999. The omitted CFR sections with proposed amendments, sections 86.098-15 and 86.004-15, title 40, are included in Attachment A to this notice. The proposed amendments to this

federal language reflect nonsubstantive conforming modifications, based on proposed amendments to section 1956.8 and new section 1956.1, title 13, CCR.

In addition, CFR sections 86.098-11 and 86.004-11, title 40, which were included in the regulation as originally proposed, contain additional amendments to conform them to the modifications to CCR sections 1956.1 and 1956.8 described in this notice and included in Attachment A.

For CFR section 86.098-11, the additional amendments include clarification of the PM standard for 2002 and subsequent model year diesel-fueled, dual-fuel, and bi-fuel urban bus engines produced beginning October 1, 2002, and further clarification of the optional, reduced emission standards for urban bus engines and heavy-duty truck engines.

For CFR section 86.004-11, the additional amendments include clarification of the emission standards for all 2004 and subsequent model year urban bus engines, and proposed language included in the regulation as originally proposed in the Staff Report released on December 10, 1999, that was not shown in underline/strikeout format as proposed amendments. This originally proposed language in the Staff Report that was not shown in underline/strikeout is now shown by double underline and ~~double underline strikeout~~, and is contained in subdivision (e) and in subdivision (g) paragraphs (1)(i)(A) through (1)(i)(E), with minor nonsubstantive corrections.

The staff has also added to the rulemaking record two memoranda from the ARB's legal counsel regarding: 1) ARB authority to regulate urban bus fleets, labeled as Attachment B; and 2) local air pollution control/air quality management district authority to regulate fleets, labeled as Attachment C. These are available for public comment pursuant to section 11346.8(d) of the Government Code.

In accordance with section 11346.8(c) of the Government Code, the Board directed the Executive Officer to make the modified amendments and any conforming modifications to the regulation for a public transit bus fleet rule and emission standards for new urban buses available to the public for comment for a period of 15 days. The Board further provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if warranted.

Board Resolution 00-2, the text of the 15-day modifications to the public transit bus fleet rule and emission standards for new urban buses, and the supporting documentation added to this rulemaking record are available electronically on the Board's Internet site at <http://www.arb.ca.gov/regact/bus/bus.htm>. Copies of

these documents can also be obtained from the Board's Public Information Office at 2020 L Street, Sacramento, California 95814, (916) 322-2990, or by contacting Ms. Krista Fregoso at (916) 445-5035.

Written comments must be submitted to the Clerk of the Board, Air Resources Board, P.O. Box 2815, Sacramento, California 95812, no later than August 31, 2000, for consideration by the Executive Officer prior to final action. Only comments relating to the modifications and materials added to the record as described in this notice shall be considered by the Executive Officer.

Attachments

Board Resolution 00-2

Attachment A: Text of the 15-day Modifications

Attachment B: ARB Memo Dated January 26, 2000

Attachment C: ARB Memo Dated February 11, 2000