

State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text

**PUBLIC HEARING TO CONSIDER THE PROPOSED AMENDMENTS TO THE
EXHAUST EMISSION STANDARDS FOR 2007-2009 MODEL-YEAR HEAVY-DUTY
URBAN BUS ENGINES AND THE FLEET RULE FOR TRANSIT AGENCIES**

First Public Hearing Date: September 15, 2005
Continued To: October 20 & 27, 2005
Public Availability Date: April 28, 2006
Deadline for Public Comment: May 15, 2006

At a public hearing held on September 15, 2005, the Air Resources Board (ARB or Board) considered amendments presented by staff affecting urban buses owned or operated by transit agencies. Staff presented two policy decisions for the Board's consideration: 1) amending the statewide urban bus emission standards and 2) mandating that all transit agencies operating in the South Coast Air District be required to follow the alternative-fuel compliance path. The Board adopted Resolution 05-47, which adopted the amendment mandating transit agencies in the South Coast Air District to switch to the alternative-fuel path. The Board deferred consideration of the amendment to the statewide urban bus emission standard until October 20, 2005.

On October 20, 2005, staff presented modifications to the regulation originally proposed in the Staff Report: Initial Statement of Reasons released and made available to the public on July 29, 2005. Staff presented three options to the Board: 1) retain the current new urban bus emissions standards, 2) align the 2007 and subsequent model-year new urban bus engine emission standards with the equivalent model year heavy-duty truck engine emission standard, and 3) require all transit agencies to purchase/lease only alternative fuel buses. At the conclusion of the hearing, the Board adopted Resolution 05-53, in which it approved modified amendments subject to the Board's consideration at an October 27 hearing of a report from the staff on the likely effect of one element of the modified amendments.

At the October 27, 2005 hearing, after considering the staff's report, the Board adopted Resolution 05-61, approving the modifications previously approved with one additional modification. The modified amendments align the 2007 and subsequent model-year urban bus engine emission standards with the equivalent model-year California heavy-duty truck engine emission standards, but require diesel path transit agencies with more than 30 urban buses in their fleets that purchase 2007 through 2009 model-year urban buses with diesel engines not certified at or below 0.2 grams per brakehorse power-hour (g/bhp-hr) oxides of nitrogen (NOx) engine emission standard to meet specified conditions. The conditions require the transit agency to mitigate the NOx emissions through retrofitting an existing urban bus or transit fleet vehicle within its fleet with a

level 3 diesel emission control strategy with a 40 percent NOx reduction, and if a device is not verified, a minimum of 25 percent NOx reduction, until vehicles in the agency's fleet are retrofitted or are incapable of being retrofitted.

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 transit fleet rule 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 Resolutions 05-47, 05-53 and 05-61, and the text of the 15-day modifications to the transit fleet rule are available electronically on the Board's Internet site at <http://www.arb.ca.gov/regact/sctransit/sctransit.htm>. Copies of these documents can also be obtained from the Board's Public Information Office at 1001 I Street, Sacramento, California 95814, (916) 322-2990, or by contacting Ms. Kathleen Mead at (916) 324-9550.

Written comments on the modifications approved by the Board in Resolution 05-61 may be submitted by postal mail, electronic mail, or facsimile as follows:

Postal Mail is to be sent to:
Clerk of the Board
Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Facsimile submissions are to be transmitted to: (916) 322-3928

In order to be considered by the Executive Officer, comments must be directed to the ARB in one of the three forms described above and received by the ARB by 5:00 p.m. on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations will be considered by the Executive Officer.

Attachments

ATTACHMENT A
REGULATORY AMENDMENTS

**TEXT OF THE 15-DAY MODIFICATIONS TO:
EXHAUST EMISSION STANDARDS FOR 2007-2009 MODEL YEAR HEAVY DUTY
URBAN BUS ENGINES AND THE FLEET RULE FOR TRANSIT AGENCIES**

TEXT OF THE 15-DAY MODIFICATIONS

Amend the following sections of title 13, California Code of Regulations, to read as set forth in the following pages:

Amend:	
Section 1956.1	Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy Duty Urban Bus Engines and Vehicles.
Section 1956.8(a)(2)(A)	Exhaust Emissions Standards and Test Procedures – 1985 and Subsequent Model Heavy Duty Urban Bus Engines and Vehicles
Section 2023.1(a)(5)	Fleet Rule for Transit Agencies – Urban Bus Requirements
Section 2023.4(b)	Reporting Requirements for Transit Agencies

Notes: This document is printed in a style to indicate changes to the preexisting regulations. The originally-noticed amendments, released in connection with the July 29, 2005, Initial Statement of Reasons, are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. Modifications, approved by the Board on October 27, 2005, are shown in double underline to indicate additions and ~~double strikeout~~ to indicate deletions from the July 29, 2005, proposed regulatory language. The symbol “* * * * *” means that intervening text not being amended is not shown. “[No Change]” means that no changes are being proposed to a specified subsection, the text of which is not shown. “[No modification]” means that no modifications to the originally-noticed amendments are being proposed.

The Board approved the modified amendments conditional to the 15-day change procedure. This document shows the proposed 15-day amendments to the text.

Amend Section 1956.1 to read as follows:

§ 1956.1 Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Through - 2006 Model-Year Heavy Duty Urban Bus Engines and Vehicles.

(a) The exhaust emissions from new 1985 and subsequent model heavy-duty diesel cycle urban bus engines and vehicles fueled by methanol, natural gas, liquefied petroleum gas, and petroleum shall not exceed the following, by model year:

(1) [No Change]

(2) [No Change]

(3) [No Change]

(4) [No Change]

(5) [No Change]

(6) [No Change]

(7) [No Change]

(8) [No Change]

(9) [No Change]

(10) [No Modification]

(11) [No Change]

~~(12) 2007 and subsequent 0.2 g/bhp-hr NO_x, 0.01 g/bhp-hr PM, 0.05 g/bhp-hr NMHC, 5.0 g/bhp-hr CO, and 0.01 g/bhp-hr formaldehyde.~~

(b) [No Modification]

(c) [No Modification]

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43100, 43101, 43104, and 43806, Health and Safety Code, and section 28114, Vehicle Code. Reference: Sections 39002, 39003, 39017, 39033, 39500, 39650, 39657, 39667, 39701, 40000, 43000, 43000.5, 43009, 43013, 43018, 43102, and 43806, Health and Safety Code, and section 28114, Vehicle Code.

Amend section 1956.8 (a)(2)(A) to read as follows:

§ 1956.8. Exhaust Emissions Standards and Test Procedures – 1985 and Subsequent Model Heavy-Duty Engines and Vehicles.

(a)(1) [No Change]

(2)(A) The exhaust emissions from new 2004 and subsequent model heavy-duty diesel engines, heavy-duty natural gas-fueled and liquefied-petroleum-gas-fueled engines derived from diesel-cycle engines, and heavy-duty methanol-fueled diesel engines, and the optional, reduced-emission standards for 2002 and subsequent model engines produced beginning October 1, 2002, except in all cases engines used in medium-duty vehicles, shall not exceed:

Exhaust Emission Standards for 2004 and Subsequent Model Heavy-Duty Engines, and Optional, Reduced Emission Standards for 2002 and Subsequent Model Heavy-Duty Engines Produced Beginning October 1, 2002, Other than Urban Bus Model-Year Engines Produced From October 1, 2002 ~~¶~~Through 2006^L (grams per brake horsepower-hour [g/bhp-hr])

<i>Model Year</i>	<i>Oxides of Nitrogen Plus Non-methane Hydrocarbons</i>	<i>Optional Oxides of Nitrogen Plus Non-methane Hydrocarbons</i>	<i>Oxides of Nitrogen</i>	<i>Non-methane Hydrocarbons</i>	<i>Carbon Monoxide</i>	<i>Particulates</i>
2004-2006 ^H	2.4 ^{A,C,E,J}	2.5 ^{B,C,E,J}	n/a	n/a	15.5	0.10 ^C
October 1, 2002-2006	n/a	1.8 to 0.3 ^{A,D,F}	n/a	n/a	15.5	0.03 to 0.01 ^G
2007 and subsequent ^M	n/a	n/a	0.2 ^I	0.14	15.5	0.01 ^K

Footnotes A-K [No Change]

^L For 2007 and subsequent model year urban bus engines, this section applies. For urban bus model-year engines produced from October 1, 2002 through 2006, refer to section 1956.1.

^M For model years between 2007 and 2009, transit agencies purchasing urban buses and/or urban bus engines shall meet the requirements set forth in section 2023.1.

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43100, 43101, 43104, 43105, and 43806, Health and Safety Code, and section 28114, Vehicle Code. Reference: Sections 39002, 39003, 39500, 43000, 43013, 43018, 43100, 43101, 43102, 43104, 43106, 43202, 43204, 43206, 43210, 43211, 43212, 43213, and 43806, Health and Safety Code; and section 28114, Vehicle Code.

Amend section 2023.1(a) to read as follows:

§ 2023.1. Fleet Rule for Transit Agencies – Urban Bus Requirements

(a) To encourage transit agencies that operate urban bus fleets to purchase or lease lower emission alternative-fuel buses, while also providing flexibility to such fleet operators to determine their optimal fleet mix in consideration of such factors as air quality benefits, service availability, cost, efficiency, safety, and convenience, two paths to compliance with this fleet rule are available: the alternative-fuel path and the diesel path.

(1) [No Change].

(2) [No Change]

(3) [No Change]

(4) A transit agency within the jurisdiction of the South Coast Air Quality Management District shall follow the alternative-fuel path. If the transit agency had previously stated its intent to follow the diesel path, the change to the alternative-fuel path shall be effective on [Insert effective date of subsection].

(5) Transit agencies on the diesel path with more than 30 buses in their fleets purchasing model year 2007 through 2009 urban buses that are not certified at or below 0.2 g/bhp-hr NOx emission level shall:

(A) Mitigate the increased NOx emissions for each urban bus purchased by retrofitting an existing urban bus or transit fleet vehicle within the fleet with a level 3 particulate matter (PM) verified diesel emission control strategy with an oxides of nitrogen (NOx) reduction efficiency of at least 40 percent, if available, otherwise, with a NOx reduction efficiency of at least 25 percent. This retrofit requirement applies on a one-to-one basis until all diesel urban buses and transit fleet vehicles within the transit agency's fleet are either retrofitted or are determined to be unable to be retrofitted as specified in (B) below.

(B) Obtain Executive Officer approval for purchasing a 2007 through 2009 model year urban bus not subject to (A) above by submitting to the Executive Officer a report 90 days prior to the delivery of the urban bus. The report shall provide information that demonstrates that all vehicles in the transit agency's fleet have been retrofitted or are determined to be unable to be retrofitted including when the inability to retrofit occurs for reasons other than a device not verified for the specific urban bus or transit fleet vehicle engine family.

(C) Submit annual reports that meet the requirements in section 2023.4(b)(4).

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NOTE: Authority cited: Sections 39600, 39601, 39667, 43013, 43018 and 43104~~7~~(b), Health and Safety Code. Reference: Sections 39002, 39003, 39017, 39500, 39650, 39667, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and sections 233 and 28114, Vehicle Code.

Amend section 2023.4(b) to read as follows:

§ 2023.4 Reporting Requirements for Transit Agencies.

- (a) [No Change]
- (b) The following reports on new urban bus purchases and/or leases by transit agencies on the diesel path shall be submitted as described below:
 - (1) [No Change]
 - (2) [No Change]
 - (3) [No Change]
 - (4) As set forth in section 2023.1(a)(5), transit agencies with more than 30 buses in their fleet that purchase model-years 2007 through 2009 urban buses not certified at or below 0.2 g/bhp-hr NOx emissions shall submit the following information for each urban bus purchased: the manufacturer, make, and model year of the engine of the urban bus or transit fleet vehicle retrofitted and for each diesel emission control strategy applied, the date of installation, the device's product serial number, and its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2705(g)(2), title 13, CCR. The first report shall be submitted by January 31, 2007. Subsequent reports shall be submitted annually by January 31 through the year 2016.

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NOTE: Authority cited: Sections 39600, 39601, 39667, 43013, 43018 and 43701(b), Health and Safety Code. Reference: Sections 39002, 39003, 39017, 39500, 39650, 39667, 40000, 43000, 43000.5, 43013, 43018, 43701(b), 43801 and 43806, Health and Safety Code; and sections 233 and 28114, Vehicle Code.