

**Proposed Amendments to the Fleet Rule for Transit Agencies, including New Rules for Transit Fleet Vehicles (Non-Urban Buses)**

Currently only transit agencies with urban buses (and the urban buses operated by those transit agencies) are subject to the requirements in the Fleet Rule for Transit Agencies. This proposal contains suggested new rules for buses and vehicles other than urban buses, owned or operated by transit agencies. In addition to the new proposed regulations, staff is proposing language for a newly formed transit agency and proposing to modify the current particulate matter (PM) emission requirements for urban buses to allow for fleet growth. Various additional clarifying changes are also being proposed. Finally, staff is proposing to move the Fleet Rule for Transit Agencies to the regulation sections that have been set aside for diesel PM control measures for in-use vehicles. While the Fleet Rule for Transit Agencies is not solely a PM control measure, and also governs new vehicles, staff believes that it will be better to locate the rule in these sections than in the current location, which houses rules primarily concerned with engine exhaust standards for new vehicles.

**New Sections for the Fleet Rule for Transit Agencies:**

Staff is proposing to move the Fleet Rule for Transit Agencies from section 1956.2 through 1956.4, title 13, California Code of Regulations (13 CCR) to section 2023. The Air Resources Board (ARB or Board) has set aside sections 2020 through 2027 for diesel PM control measures for in-use vehicles. Staff is not proposing to move section 1956.1, which houses the exhaust emission standards for 1985 model year and subsequent heavy duty urban bus engines and vehicles.

The new proposed sections will be organized as follows:

Section 2023 will contain definitions and requirements pertinent to both urban bus and other transit fleet vehicle engines that are currently in section 1956.2 (b), along with some of the general requirements in (f);  
Section 2023.1 will house the remaining 1956.2 requirements;  
Section 2023.2 will contain the new transit fleet vehicle requirements;  
Section 2023.3 will contain requirements currently in section 1956.3, the zero-emission bus requirements; and  
Section 2023.4 will include record keeping requirements currently in section 1956.4, plus new reporting requirements necessitated by the amendments being proposed herein.

Note that the definitions in section 2020 may be applicable to the fleet rule for transit agencies. For example, the definition of “alternative fuel” will be deleted from the Fleet Rule for Transit Agencies as it is to be located in section 2020, as adopted on September 24, 2003.

## Proposed Modifications to the Fleet Rule for Transit Agencies:

~~Strikethrough~~ is used for the deletion of previously adopted language. Underline is used for addition of new language. Language without underline or strikethrough is previously adopted language that is moved to a new section. Language in *italics* is proposed language scheduled to be heard by ARB on June 24, 2004 – not all the proposed language is included. For the complete proposed language to be considered by the ARB on June 24, 2004, go to [www.arb.ca.gov/regact/bus03/bus03.htm](http://www.arb.ca.gov/regact/bus03/bus03.htm).

### 2023 Fleet Rule for Transit Agencies

#### Definitions

- (a) For the purposes of the fleet rule specified in sections 2023, 2023.1, 2023.2, 20.23.3, and 2023.4, the following definitions apply. In addition, the definitions in section 2020 shall apply to these sections:
- (1) ~~“Alternate fuel”~~
  - (2) “Active fleet” [No change]
  - (3) “Emergency contingency vehicle” [No change]
  - (4) “Heavy-duty pilot ignition engine” [No change]
  - (5) *“Hybrid-electric bus” means an urban bus equipped with at least two sources of energy on board; this energy is converted to motive power using electric drive motors and an auxiliary power unit, which converts consumable fuel energy into mechanical or electrical energy. The electric drive motors must be used partially or fully to drive the vehicle’s wheels.*
  - (6) “Spare bus” [No change]
  - (7) “Transit agency” [No change]
- “Transit Fleet Vehicle” means a vehicle greater than 8,500 gross vehicle weight owned or operated by a transit agency, and which is not an urban bus.
- (8) “Urban bus” [No change]
- (b) A new transit agency established January 1, 2005, or later shall notify the Executive Officer in writing of its existence and shall comply with all applicable requirements of section 2023. In addition the new transit agency shall

- (1) Choose a compliance path for its active fleet and notify the Executive Officer within 120 days of formation of its intent to follow either the diesel path or the alternative fuel path, as described in section 2023.1 (a), except that a new transit agency that is a successor to an existing transit agency shall follow the compliance path of the transit agency out of which it has been formed; and
- (2) submit reports to the Executive Officer as required in section 2023.4.

**(These sections from 1956.2 will apply to the new transit fleet vehicle requirements but have not changed, except where noted, from 1956.2)**

- (c) A transit agency that is unable to comply with an implementation deadline specified in section 2023.1 (f) (1), (2), (3), or (4) or section 2023.2 (b)(1), (2), (3), or (4) because of the unavailability of technology may apply in writing no later than ninety (90) days prior to the applicable implementation deadline to the Executive Officer for an extension, for a time of up to, but not to exceed, one year. The applicant must demonstrate that the technology is unavailable; shall explain why the transit agency cannot comply by replacing older buses; and shall provide a schedule for compliance.
- (d) A transit agency that owns, operates, or leases fewer than 20 diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid-electric buses in its active fleet or ten transit fleet vehicles and that operates in a federal one-hour ozone attainment area may delay implementation of the intermediate total diesel PM emission reduction requirements provided the transit agency complies with the implementation deadlines set forth in section 2023.1 paragraphs (f)(3)(A) or (f)(4).
- (e) A transit agency that installs a diesel emission control strategy to reduce diesel PM shall use a diesel emission control strategy that is verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR, or an urban bus retrofit device that has been exempted under Vehicle Code section 27156 as an engine rebuild kit and that reduces PM to 0.10 g/bhp-hr when used on an engine model 6V92TA DDEC for the model years specified for that engine.
- (f) A transit agency with fewer than 20 urban buses or ten transit fleet vehicles ~~in its bus fleet~~ may apply for an extension to comply with the provisions of ~~section 1956.2~~ 2023.1 and section 2023.2 by submitting documentation of financial hardship to the Executive Officer, in writing, at least thirty (30) days before the requirement becomes applicable for approval by the Executive Officer. Documentation of financial hardship shall include, but is not limited to, an analysis of the cost of compliance, the sources of available funds, and the shortfall between funds available and the cost of compliance. The transit agency must also specify the date and means by which compliance will be achieved in the request for a delay.

**Move section 1956.2 Fleet Rule for Transit Agencies to 2023.1 and modify:**

2023.1 Fleet Rule for Transit Agencies – Urban Bus Requirements

(a) [No change]

~~(b)~~ [Moved to section 2023(a)]

~~(e)~~(b) [No change]

~~(d)~~(c) [No change to text, but note the following section proposed for addition, to be heard at the June 24, 2004, Board hearing]

(9) *The Executive Officer shall authorize, in writing, a transit agency on the diesel path to purchase one or more diesel-fueled hybrid-electric bus certified under title 13, CCR, section 1956.1 (a)(11)(B) provided that:*

(A) *The transit agency shall submit a mitigation plan and letter requesting approval by January 1, 2005, to the Executive Officer that demonstrates that the transit agency will provide surplus emission reductions from urban buses in its fleet that will offset the NOx emission difference between the certified NOx emission standard of the hybrid-electric bus and 0.5 g/bhp-hr. The transit agency may not use NOx emission reductions that are otherwise required by any statute, regulation, or order or the emission reductions that will accrue from the retirement of an urban bus to be replaced by a hybrid-electric bus for the offset;*

(B) *The transit agency shall complete implementation of all mitigation measures set forth in the approved plan to offset NOx emissions prior to the receipt of the last diesel-fueled hybrid-electric bus; and*

(C) *The transit agency shall submit the reports required by section ~~1956.4~~ 2023.4(g).*

~~(e)~~(d) Beginning October 1, 2002 and beyond, no transit agency shall own, operate, or lease an active fleet of urban buses with average NOx emissions in excess of 4.8 g/bhp-hr, based on the engine certification standards of the engines in the active fleet.

(1) through (3) [No change]

~~(f)~~(e) [No changes to (1) & (2)]

(3) No later than January 1, 2007:

(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of diesel-fueled active fleet buses, whichever is greater.

(B) [No change]

(4) No later than January 1, 2009, the diesel PM emissions total for a transit agency on the alternative path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of diesel-fueled active fleet buses, whichever is greater.

~~(5)~~ [Moved to section 2023(c)]

(5) A transit agency that is a successor to an existing transit agency shall have a PM baseline and compliance path as the transit agency out of which it is formed. A new transit agency established January 1, 2005 or after, may not have a diesel PM emission total exceeding the following values:

(A) For a new transit agency established January 1, 2005 through December 31, 2009, 0.05 g/bhp-hr (exhaust emission value) times the total number of buses in the active fleet;

(B) On January 1, 2010 and beyond, all new transit agencies established after January 1, 2005 shall not have PM emission total not exceeding 0.01 g/bhp-hr (exhaust emission value) times the total number of buses in the active fleet.

(6) [No change]

~~(7)~~ [Moved to section 2023(d)]

~~(8)~~ [Moved to section 2023(e)]

~~(9)~~ (7) [No change]

~~(g)~~ [moved to section 2023(f)]

### **Add Proposed New Requirements for Transit Fleet Vehicles Operated by Transit Agencies:**

#### 2023.2 Fleet Rule for Transit Agencies – Transit Fleet Vehicle Requirements

(a) The average of the NOx emissions for all transit fleet vehicles owned, operated, or leased by a transit agency, based on the engine certification standards, may not exceed the following values as of the specified dates.

- (1) Beginning January 1, 2007 through December 31, 2009, 3.2 g/bhp-hr;
- (A) A transit agency may retire all 1995 and earlier model year transit fleet vehicles by January 1, 2007, to comply in lieu of meeting this NOx emission average requirement;
- (B) For a new transit agency established after January 1, 2007 and through December 31, 2009, either 3.2 g/bhp-hr or no higher than the NOx average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.
- (2) Beginning January 1, 2010 and beyond, 2.4 g/bhp-hr;
- (A) A transit agency may retire all 2002 and earlier model year transit fleet vehicles by January 1, 2008, to comply in lieu of meeting this NOx emission average requirement;
- (B) For a new transit agency established after January 1, 2010, either 2.4 g/bhp-hr or no higher than the NOx average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.
- (3) A transit agency may use a diesel emission control strategy that is verified to reduce NOx by the Executive Officer in accordance with section 2700 et seq., title 13, CCR to comply with the fleet average requirement, in addition to bus purchases, retirements, or engine repowering.
- (b) A transit agency shall reduce the total PM emissions of its diesel-fueled transit fleet vehicles relative to its total diesel PM emissions from diesel transit fleet vehicle as of January 1, 2005, according to the schedule below. A transit agency shall calculate its diesel PM emission total for transit fleet vehicle by summing the PM (FTP) certification standard (g/bhp-hr), for each transit fleet vehicle, as identified in the Executive Order for the specific engine and engine model year used in the vehicle. For 1987 and earlier model year engines, the PM certification standard shall be deemed to be 1.0 g/bhp-hr.
- (1) No later than January 1, 2006, the diesel PM emission total shall be no more than 75 percent of its diesel PM emission total on January 1, 2005.
- (2) No later than January 1, 2008, the diesel PM emission total shall be no more than 50 percent of its diesel PM emission total on January 1, 2005.
- (3) No later than January 1, 2011, the diesel PM emission total shall be no more than 20 percent of its diesel PM emission total on January 1, 2005, or equal

to 0.01 grams per brake horsepower-hour (g/bhp-hr) times the total number transit fleet vehicles, whichever is greater.

(4) A transit agency that is a successor to an existing transit agency shall have a PM baseline and compliance path of the transit agency out of which it is formed. A new transit agency established after January 1, 2005 may not have a diesel PM emission total exceeding the following values.

(a) For a new transit agency established January 1, 2005 through December 31, 2007, 0.1 g/bhp-hr (exhaust emission value) times the total number of buses in the transit fleet vehicle fleet. This value will serve as the transit agency's PM baseline and shall be reduced meeting the requirements set forth in 2023.2(b)(2) and 2023.2(b)(3);

(b) For a new transit agency established January 1, 2008 through December 31, 2009, 0.1 g/bhp-hr (exhaust emission value) times the total number of buses in the active fleet and shall meet a 50 percent reduction of the transit agencies start-up fleet PM emissions by January 1, 2010;

(c) For a new transit agency established January 1, 2010 through December 31, 2012, 0.05 g/bhp-hr (exhaust emission value) times the total number of buses in the transit fleet vehicle fleet;

(d) On January 1, 2015 and beyond, all new transit agencies established after January 1, 2005 shall not have PM emission total exceeding 0.01 g/bhp-hr (exhaust emission value) times the total number of buses in the transit fleet vehicle fleet.

### **Move 1956.3 Zero-emission Bus Requirements to 2023.3**

### **Move section 1956.4 Reporting Requirements for all Urban Bus Transit Agencies to 2023.4, and modify:**

#### 2023.4 Reporting Requirements for all ~~Urban Bus~~ Transit Agencies

(a) The following reports on new bus purchases and/or leases by transit ~~operators~~agencies on the alternative-fuel path shall be submitted as below:

(1) [No change]

(2) [No change]

(3) Each transit agency shall submit an annual report containing: the number, manufacturer, make, and model year of engines, and fuel used for each ~~transit~~urban bus it currently owns or operates, urban bus purchases and/or

leases beginning January 1, 2000, and annual average percentage of total urban bus purchases and/or leases that were alternative-fuel buses. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(b) The following reports on new urban bus purchases and/or leases by transit operators ~~agencies~~ on the diesel path shall be submitted as below:

(1) [No change]

(2) Each transit agency shall submit an annual report containing the number, manufacturer, make, and model year of engines, and fuel used for each ~~transit~~urban bus it currently owns or operates, and urban bus purchases and/or leases beginning January 1, 2000. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(3) [No change]

(c) Each transit agency shall submit the following reports on the NOx fleet average requirement:

(d) Each transit agency shall submit the following reports on the total PM emission requirement for urban buses: [rest of section - no change]

(e) Each transit agency shall submit the following reports relative to its transit fleet vehicles:

(1) An annual report of the number, manufacturer, make, and model year of engines, and fuel used for each transit fleet vehicle it currently owns, leases, or operates as of January 1, beginning with 2006. The first report shall be submitted no later than January 31, 2006, and subsequent reports shall be submitted annually no later than January 31 through the year 2016.

(2) No later than January 31, 2007, the NOx emission average of transit fleet vehicles as of January 1, 2007, or documentation of the retirement of all model year 1995 and earlier transit fleet vehicle engines as of January 1, 2007.

(3) No later than January 31, 2010, the NOx emission average of all transit fleet vehicles as of January 1, 2010, or documentation of the retirement of all model year 2002 and earlier transit fleet vehicle engines as of January 1, 2010.

(4) For the total diesel PM reduction requirements set forth in section 2023.2 (b):

- (A) Initial documentation submitted no later than January 31, 2006, of the PM engine certification value of each transit fleet vehicle engine and the transit fleet vehicle diesel PM total as of January 1, 2005.
- (B) No later than January 31, 2007, the transit fleet vehicle diesel PM total as of January 1, 2007, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2 (b)(1).
- (C) No later than January 31, 2009, the transit fleet vehicle diesel PM total as of January 1, 2009, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2 (b)(2).
- (D) No later than January 31, 2011, the transit fleet vehicle diesel PM total as of January 1, 2011, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2 (b)(3).
- (E) If a diesel emission control strategy has been applied to an engine, each report specified above must include the Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2705 (g)(2), and the date of installation correlated to a specific transit fleet vehicle engine.

~~(e)~~(f) [No change]

~~(f)~~(g) [No change]

~~(g)~~(h) [No change]

~~(h)~~(i) *A transit agency requesting approval for the purchase of diesel-fueled hybrid-electric buses pursuant to paragraph (d)(9), section 1956.2, title 13, CCR, shall:*

- (1) *submit an application for approval that meets the requirements of paragraphs (d)(9)(A) and (d)(9)(B), section 1956.2, title 13, CCR;*
- (2) *include in the application all of the following: the number, manufacturer, make and model year of diesel-fueled hybrid-electric buses to be purchased; the schedule for the purchase and delivery of the buses; a detailed description of all measures that will be used to offset the excess NOx emissions including identification of the specific buses to which the measures will be applied, and the schedule for implementing those measures; and*

- (3) *submit a final report to the Executive Officer within 30 days of receipt of the last diesel-fueled hybrid-electric bus that documents the schedule of delivery of the diesel-fueled hybrid-electric buses, timing, and completion of all measures to achieve the NOx offset.*

(i) A new transit agency shall submit the following information to the Executive Officer:

- (1) within 120 days of formation, its NOx fleet average for its active fleet and, separately, its transit fleet vehicles, and of its diesel PM emission total for its active fleet and, separately, its transit fleet vehicles.
- (2) within 60 days of formation, the name of the new transit agency, its mailing address, name of a contact and that person's e-mail address and phone number; a description of the service area, and proposed routes; and the planned number of urban bus and transit fleet vehicles, including the model years of engines;
- (3) Neither the NOx fleet average nor the diesel PM emission total for a new transit agency that is a successor to an existing transit agency may exceed the NOx fleet average or diesel PM emission total of the transit agency out of which it has been formed.