

State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text

**PUBLIC HEARING TO CONSIDER REQUIREMENTS TO REDUCE IDLING
EMISSIONS FROM NEW AND IN-USE TRUCKS, BEGINNING IN 2008**

Public Hearing Date: October 20, 2005
Public Availability Date: June 28, 2006
Deadline for Public Comment: July 13, 2006

The Board's Action at the October 20, 2005 Hearing and Staff Follow-up

At its October 20, 2005 public hearing, the Air Resources Board (the Board or ARB) approved amendments to title 13, California Code of Regulations (CCR) sections 1956.8, 2404, 2424, 2425, and 2485, and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines." The approved amendments to the regulations and test procedures establish idling reduction requirements for new heavy-duty diesel engines and in-use sleeper berth equipped trucks and emission performance requirements for technologies used as alternatives to main engine idling.

At the hearing, the Board adopted Resolution 05-55, in which it approved the originally proposed amendments with several modifications. Some of the modifications had been suggested by staff in a document entitled "Staff's Suggested Modifications to the Original Proposal" that was distributed at the hearing and was Attachment C to the Resolution. Other modifications were suggested by commentors and approved by the Board during the hearing: (1) technologies utilizing electrical shore power or comparably clean emission technologies would be allowed as options to comply with the in-use idling regulations set forth in section 2485 of title 13, California Code of Regulations, (2) military tactical vehicles would be exempted from the proposed amendments to sections 1956.8, 2404, 2424, 2425 of title 13, California Code of Regulations, and (3) the current exemption applicable to military tactical vehicles in section 2485 of title 13, California Code of Regulations would be clarified to also exempt operational modes such as training, testing, and deployment. The Resolution and its Attachment C are available at ARB's Internet web page for this rulemaking: <http://www.arb.ca.gov/regact/hdvidle/hdvidle.htm> The Resolution directed the Executive Officer to incorporate the modifications into the proposed regulatory text, with such other conforming modifications and technical amendments as may be appropriate, and to make the modified text available for a supplemental comment period of at least 15 days.

Subsequent to the hearing, the staff has identified a number of additional, primarily technical modifications that are appropriate to make the amended regulations work as effectively as possible. The most significant post-hearing modifications are: (1) allowing the engine shutdown system to be overridden during exhaust emission control device regeneration or maintenance periods, or if servicing or maintenance of the engine requires extended idling, (2) clarifying that the engine shutdown system requirements do not apply to emergency vehicles or to medium-duty vehicles, (3) clarifying in the test procedures portion of the rulemaking that for compliance with the optional NOx idling standard, the average NOx emissions of each mode of the supplemental NOx idling test procedure should not exceed the optional NOx standard, and (4) modifying the definition of auxiliary power system (APS) in the ATCM portion of the rulemaking to extend the availability of compliant APSs as a compliance alternative to buses and other non-truck commercial vehicles.

Modifications to the Originally Proposed Text

The rationale for the modifications to the regulation and associated test procedures are explained below, and modifications developed after the hearing are specifically identified.

I. Modifications to Regulatory Text of Title 13, CCR Section 1956.8 Being Made Available for Comment

A. Override Switch Setting During Power Take Off Mode

As directed by the Board, the modifications being made available modify the provision allowing the engine shutdown system to be overridden during power take off-mode to not require the override switch be designed to fail in the “off” setting, to accommodate safety concerns. (Section 1956.8(a)(6)(A)2.a.).

B. Exempting Military Tactical Vehicles from the Engine Shutdown System Requirement

As directed by the Board, the modifications clarify that military tactical vehicles are exempted from the engine shutdown system requirement. (Section 1956.8(a)(6)(B)).

C. Exempting Authorized Emergence Vehicles from the Engine Shutdown System Requirement

Subsequent to the hearing, staff has recognized the need to explicitly exempt authorized emergency vehicles from the engine shutdown system requirement. This modification simply clarifies the applicability of the requirement since California Vehicle Code section 27156.2 already exempts emergency vehicles from any motor vehicle emission control device requirements. (Section 1956.8(a)(6)(B))

D. Exempting Medium-Duty Vehicles from the Engine Shutdown System Requirement

Subsequent to the hearing, staff became aware that, due to an oversight, the proposed amendments had not explicitly exempted medium-duty vehicles from the engine shutdown system requirement. However, in its presentation to the Board staff clearly stated that this requirement only applied to heavy-duty diesel engines over 14,000 pounds. The modifications remedy this oversight. (Section 1956.8(a)(6)(B)).

E. Shutdown System Override for Exhaust Emission Control Device Regeneration or Maintenance

Subsequent to the hearing, staff has recognized a need for the engine shutdown system to be overridden during periods when the vehicle's exhaust emission control device (e.g., diesel particulate matter trap) requires regeneration or maintenance during periods of engine idling and the override is needed to prevent aftertreatment or engine damage (Section 1956.8(a)(6)(A)2.c.). Staff believes that any regeneration or maintenance period should not require more than 30 minutes. Regeneration events that require more than 30 minutes are subject to advance Executive Officer approval. Staff is also proposing that any override system incorporate a light in the vehicle's dashboard to indicate that the exhaust emission control device is regenerating during idling conditions.

F. Shutdown System Override for Engine Servicing, Maintenance or Diagnosis

Subsequent to the hearing, staff recognized a need for the engine shutdown system to be overridden up to 60 minutes if required for engine servicing, maintenance, or diagnostic routines that require idling the truck engine for more than 5 minutes. The modified text requires the engine shutdown system be deactivated only with the use of a diagnostic scan tool to prevent unauthorized overrides of the shutdown system. (Section 1956.8(a)(6)(A)2.d.).

G. Emissions of CO, ROG, and PM for Engines Certifying to the Optional NOx Idling Standard

Subsequent to the hearing, staff became aware that the regulatory text did not clearly stated how a manufacturer may determine if emissions of CO, ROG, and PM are or are not adversely affected, in meeting the optional NOx standard. This modification clarifies staff's intent that in order to determine whether or not emissions of CO, ROG, and PM are adversely affected, a manufacturer certifying an engine to the optional NOx standard may compare emissions of CO, ROG, and PM from the supplemental NOx idling test procedure to corresponding emissions from the idle mode of the supplemental steady state cycle (European Stationary Cycle) and/or idle portions of the transient test cycle (the Federal Test Procedure). With approval from the Executive

Officer, a manufacturer may also use other methods of ensuring emissions are not adversely affected in meeting the optional NOx standard. In addition, to avoid confusion with the term “supplemental steady state test cycle” (which refers to the European Stationary Cycle), the term “supplemental steady state test procedure” (which referred to the optional NOx standard certification test cycle) has been changed to “supplemental NOx idling test procedure.” (Section 1956.8(a)(6)(C))

H. Incorporate Revisions into Applicable Test Procedure Section

Subsequent to the hearing, staff realized it inadvertently had not incorporated the proposed revisions to the “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles” into Section 1956.8(b), which specifies test procedures applicable to 1985 and subsequent model heavy-duty diesel engines and vehicles. The modification remedies this oversight.

I. Correction of Minor Oversight

Subsequent to the hearing, staff realized it had inadvertently omitted the phrase “reference in subsection (b)” to subparagraph (a)(6)(C) of section 1956.8, which specifies vehicle label specifications incorporated by reference into the engine shutdown system requirements. The modification corrects this oversight.

II. Modifications to Regulatory Text of “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines”

A. Label Location and Attachment Requirement

Subsequent to the hearing, staff realized that the proposed Test Procedure text did not clearly identify the specific surface area of the hood – interior or exterior – to which the label should be affixed. This modification clarifies staff’s intent that the label should be affixed on the designated location on the exterior area of the hood. (Part I, Subpart A, subsection 35.B.4.3.1)

B. Label Application

Subsequent to the hearing, staff realized it had inadvertently failed to include truck manufacturers as possible installers of labels for engines certified to the optional NOx idling standard or for compliant diesel-fueled APSs. This modification corrects this oversight. (Part I, Subpart A, subsection 35.B.4.5)

C. Compliance with the Optional NOx Idling Emission Standard

Subsequent to the hearing, staff recognized that it was not clearly stated in the proposed test procedure how the idling NOx emission standard should be compared to emissions results from the supplemental NOx idling test procedure in order to demonstrate compliance with the requirements. This modification clarifies staff's intent that, for compliance, the calculated average NOx emissions of each mode of the supplemental NOx idling test procedure may not exceed the optional NOx idling standard of 30 grams per hour. (Part II Test Procedures, Subpart N, 86.1360-2007, subsection B.4.2.3.)

III. Modifications to Regulatory Text of Title 13, CCR Section 2485 Being Made Available for Comment

A. Exempting Military Tactical Vehicles from In-Use Idling Requirement

As directed by the Board, the modifications being made available clarify that the current exemption of military tactical vehicles from the in-use idling requirement also encompasses operational modes including training, testing, and deployment. (Section 2485(d)(2)(K)).

B. On-Shore Electrical Power or Equivalent Technologies

As directed by the Board, the modifications clarify that technologies utilizing on-shore electrical power or comparably clean emission technologies will be allowed as options to comply with the in-use idling regulations set forth in section 2485.

C. Battery Powered APS and Electric Infrastructure Provisions

As directed by the Board, the modifications clarify that a manufacturer using a battery powered APS, power inverter/charger for on-shore electrical power, or an electric infrastructure or comparably clean technology is not required to seek and receive advance Executive Officer approval before using such alternative technology (Section 2485(c)(3)(C)). Attachment C to Resolution 05-55 does not explicitly mention fuel cell APSs as an equivalently clean technology, but subsequent to the hearing, staff determined that fuel cell APSs are within the category of comparably clean technologies that should also not require advance Executive Officer approval.

D. Coordinating Exemption for Aftertreatment System Regeneration or Maintenance Provision in 13 CCR Section 1956.8(a)(6)(A)(ii)(III))

Subsequent to the hearing, staff recognized a need to clarify that idling occurring during the override permitted by in 13 CCR Section 1956.8(a)(6)(A)2.c. for exhaust aftertreatment system regeneration or maintenance, as indicated by the required dash board indicator light, is also exempted from the 5 minute in-use idling restriction. (Section 2485(d)(2)(G)). This clarification is needed to maintain consistency between the new engine and in-use portions of the rulemaking.

E. Expanding Definition of APS to Other Classes of Vehicles

Subsequent to the hearing, staff recognized that manufacturers of vehicles other than sleeper berth equipped trucks might wish to offer a compliant APS as an alternative to having the main engine idle. The definition of an APS (section 2485(h)) has therefore been modified to allow non-truck commercial vehicles (e.g., buses) to utilize compliant APSs.

Material Being Made Available and Process for Submitting Comments

Attachment 1 to this notice contains the proposed regulatory text of sections 1956.8, 2404, 2424, 2425 and 2485, title 13, CCR, showing the Board-approved modifications and modifications developed by staff after the hearing. Attachment 2 to this notice contains the proposed modified text of the incorporated “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines.” In both attachments, text being added by the modifications is denoted by double underline and text being deleted by the modifications is denoted by ~~double strikeout~~. The regulatory documents for this rulemaking are available online at the following ARB internet site:

<http://www.arb.ca.gov/regact/hdvidle/hdvidle.htm>

In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt the amendments to sections 1956.8, 2404, 2425 and 2485 of title 13, CCR, and the incorporated “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines”, as modified, after making them available to the public for comment for a period of at least 15 days. The Board conditioned this directive with the instruction 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.

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

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

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

Facsimile submittal: (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 shall be considered by the Executive Officer.

Attachments