

STD. 400 (REV. 01-09)

OAL FILE NUMBERS	NOTICE FILE NUMBER Z-2012-0831-01	REGULATORY ACTION NUMBER 2012-1206-01S	EMERGENCY NUMBER
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For use by Office of Administrative Law (OAL) only

RECEIVED FOR FILING PUBLICATION DATE

AUG 31 '12 SEP 14 '12

Office of Administrative Law

NOTICE

2012 DEC -6 PM 4:44

OFFICE OF
ADMINISTRATIVE LAW

REGULATIONS

2012 DEC 31 PM 3:08

J. J. J. J. J.
J. J. J. J. J.
J. J. J. J. J.AGENCY WITH RULEMAKING AUTHORITY
Air Resources Board

AGENCY FILE NUMBER (if any)

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE LEV III GHG ZEV Regulation for Federal Compliance		TITLE(S) 13	FIRST SECTION AFFECTED 1900	2. REQUESTED PUBLICATION DATE September 14, 2012
3. NOTICE TYPE <input checked="" type="checkbox"/> Notice re Proposed Regulatory Action <input type="checkbox"/> Other		4. AGENCY CONTACT PERSON Amy J. Whiting	TELEPHONE NUMBER 916-322-6533	FAX NUMBER (Optional) 916-322-3928
OAL USE ONLY	ACTION ON PROPOSED NOTICE <input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved as Modified <input type="checkbox"/> Disapproved/Withdrawn		NOTICE REGISTER NUMBER 2012-37-2	PUBLICATION DATE 9-14-2012

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S) LEV III GHG ZEV Regulation for Federal Compliance		1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S)
2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (including title 26, if toxics related)		
SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)	ADOPT	
	AMEND	
	1900, 1956.8, 1960.1, 1961, 1961.2, 1961.3, 1962.1, 1962.2, and 1976	
TITLE(S) 13	REPEAL	

3. TYPE OF FILING

- ☒ Regular Rulemaking (Gov. Code §11346)
- ☐ Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)
- ☐ Emergency (Gov. Code, §11346.1(b))
- ☐ Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.
- ☐ Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)
- ☐ Emergency Readopt (Gov. Code, §11346.1(h))
- ☐ File & Print
- ☐ Other (Specify) _____
- ☐ Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
- ☐ Print Only

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)

November 19, 2012 through December 5, 2012

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)

- ☐ Effective 30th day after filing with Secretary of State
- ☒ Effective on filing with Secretary of State
- ☐ §100 Changes Without Regulatory Effect
- ☐ Effective other (Specify) _____

6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY

- ☐ Department of Finance (Form STD. 399) (SAM §6660)
- ☐ Fair Political Practices Commission
- ☐ State Fire Marshal
- ☐ Other (Specify) N/A

7. CONTACT PERSON Amy J. Whiting, Regulations Coord.	TELEPHONE NUMBER (916) 322-6533	FAX NUMBER (Optional) (916) 322-3928	E-MAIL ADDRESS (Optional) awhiting@arb.ca.gov
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8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE

DATE

12/6/12

TYPED NAME AND TITLE OF SIGNATORY

Chief Deputy Executive Officer

TOM CACKETT

per agency
request

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED

DEC 11 2012

J. J. J. J. J.

State of California
AIR RESOURCES BOARD

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR
2004 AND SUBSEQUENT MODEL
HEAVY-DUTY OTTO-CYCLE ENGINES**

Adopted: December 27, 2000
Amended: December 12, 2002
Amended: July 26, 2007
Amended: October 17, 2007
Amended: September 27, 2010
Amended: March 22, 2012
Amended: December 6, 2012

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted March 22, 2012. [No change] indicates proposed federal provisions that are also proposed for incorporation herein without change. Existing intervening text that is not amended in this rulemaking is indicated by " * * * * ".

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**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST
PROCEDURES FOR 2004 AND SUBSEQUENT MODEL
HEAVY-DUTY OTTO-CYCLE ENGINES**

* * * *

**Part I. GENERAL PROVISIONS FOR CERTIFICATION AND IN-USE
VERIFICATION OF EMISSIONS**

**Subpart A - General Provisions for Emission Regulations for 1977 and Later
Model Year New Light-Duty Vehicles, Light-Duty Trucks and Heavy-Duty Engines,
and for 1985 and Later Model Year New Gasoline-Fueled, Natural Gas-Fueled,
Liquefied Petroleum Gas-Fueled and Methanol-Fueled Heavy Duty Vehicles**

* * * *

10. **Emission standards for Otto-cycle heavy-duty engines and vehicles. [§86.xxx-10]**
- * * * *

B. California provisions.

1. Exhaust emissions from new 2004 and later model year Otto-cycle medium- and heavy-duty engines, except for Otto-cycle medium- and heavy-duty engines subject to the alternative standards in 40 CFR §86.005-10(f), shall not exceed:

California Emission Standards for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines^A
(in g/bhp-hr)

Model Year	Emission Category	NMHC + NOx	NMHC	NOx	CO ^H	HCHO	PM
Standards for Heavy-Duty Otto-Cycle Engines Used In 2004 through 2019 <u>2021</u> Model Medium-Duty Vehicles 8,501 to 10,000 pounds GVW^B and 2004 and Subsequent Model Medium-Duty Vehicles 10,001 to 14,000 pounds GVW^C							
2004	ULEV	2.4 or 2.5 with 0.5 NMHC cap ^D	n/a	n/a	14.4	0.05	n/a
	SULEV	2.0	n/a	n/a	7.2	0.025	n/a
2005 through 2007 ^F	ULEV	1.0 ^{D,F}	n/a	n/a	14.4	0.05	n/a
	SULEV	0.5 ^{D,F}	n/a	n/a	7.2	0.025	n/a
2008 and subsequent ^G	ULEV	n/a	0.14 ^F	0.20 ^F	14.4	0.01	0.01
	SULEV	n/a	0.07 ^F	0.10 ^F	7.2	0.005	0.005
Standards for Heavy-Duty Otto-Cycle Engines Used In Heavy-Duty Vehicles Over 14,000 pounds GVW							
2004	n/a	2.4 or 2.5 with 0.5 NMHC cap ^D	n/a	n/a	37.1	0.05 ^E	n/a
2005 through 2007 ^F	n/a	1.0 ^{C,E}	n/a	n/a	37.1	0.05 ^E	n/a
2008 and subsequent ^G	n/a	n/a	0.14 ^F	0.20 ^E	14.4	0.01	0.01

* * * *

^B For the ~~2020~~2 and subsequent model years, medium-duty vehicles 8,501 to 10,000 pounds GVW must certify to the LEV III primary emission standards and test procedures for complete vehicles specified in section 1961.2, title 13, CCR.

* * * *

2. Optional Standards for Complete and Incomplete Heavy-Duty Vehicles.

Manufacturers may request to group complete and incomplete heavy-duty vehicles into the same test group as vehicles certifying to the LEV III exhaust emission standards and test procedures specified in title 13, CCR, §1961.2, so long as those complete and incomplete heavy-duty Otto-cycle vehicles meet the most stringent LEV III standards to which any vehicle within that test group certifies.

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State of California
AIR RESOURCES BOARD

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES
FOR 2004 AND SUBSEQUENT MODEL
HEAVY-DUTY DIESEL-ENGINES AND VEHICLES**

Adopted: December 12, 2002
Amended: July 24, 2003
Amended: September 1, 2006
Amended: July 26, 2007
Amended: October 17, 2007
Amended: October 14, 2008
Amended: September 27, 2010
Amended: October 12, 2011
Amended: March 22, 2012
Amended: December 6, 2012

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**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES
FOR 2004 AND SUBSEQUENT MODEL
HEAVY-DUTY DIESEL ENGINES AND VEHICLES**

* * * *

**PART 86 – CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY
VEHICLES AND ENGINES**

**I. GENERAL PROVISIONS FOR CERTIFICATION AND IN-USE VERIFICATION
OF EMISSIONS.**

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**Subpart A - General Provisions for Emission Regulations for 1977 and Later
Model Year New Light-Duty Vehicles, Light-Duty Trucks, and Heavy-Duty Engines,
and for 1985 and Later Model Year New Gasoline-Fueled, Natural Gas-Fueled,
Liquefied Petroleum Gas-Fueled and Methanol-Fueled Heavy-Duty Vehicles.**

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11. Emission standards for diesel heavy-duty engines and vehicles. [§86.xxx-11]

* * * *

A. California provisions.

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5. Standards for Medium-Duty Engines.

**5.1 Requirements Specific to Heavy-Duty Engines Used in
Medium-Duty Vehicles 8,501 to 10,000 pounds GVW.** For the 2004
through 2019 ~~2021~~ model years, a manufacturer of heavy-duty engines used
in medium-duty vehicles 8,501 to 10,000 pounds GVW may choose to comply
with the following standards as an alternative to the primary emission
standards and test procedures specified in title 13, CCR, §1961 or §1961.2,
as applicable. A manufacturer that chooses to comply with these optional
heavy-duty standards and test procedures shall specify, in the application for
certification, an in-use compliance test procedure, as provided in title 13,
CCR, §2139(c). For the 2020~~202~~ and subsequent model years, a manufacturer
of heavy-duty engines used in medium-duty vehicles 8,501 to 10,000 pounds

GVW must comply with the primary emission standards and test procedures specified in title 13, CCR, §1961.2.

* * * *

5.3 Exhaust Emission Standards for Medium-Duty Engines. The exhaust emissions from new 2004 through ~~2019~~ 2021 model heavy-duty diesel engines used in ultra-low emission and super-ultra-low emission medium-duty diesel vehicles 8,501 to 10,000 pounds GVW and 2004 and subsequent model heavy-duty diesel engines used in ultra-low emission and super-ultra-low emission medium-duty diesel vehicles 10,001 to 14,000 pounds GVW shall not exceed:

Exhaust Emission Standards for 2004 through 2006 Model Medium-Duty ULEVs and SULEVs					
Vehicle Emission Category	NOx + NMHC	CO	PM	HCHO	
ULEV ¹ Option A	2.5 (with a 0.5 cap on NMHC)	14.4	0.10	0.050	
ULEV ¹ ; Option B	2.4	14.4	0.10	0.050	
Exhaust Emission Standards for 2007 through 2019 <u>2021</u> Model Medium-Duty ULEVs and SULEVs 8,501-10,000 lbs. GVW and 2007 and Subsequent Model Medium-Duty ULEVs and SULEVs 10,001-14,000 lbs. GVW					
Vehicle Emission Category	NOx	NMHC or NMHCE	CO	PM	HCHO
ULEV ¹	0.20	0.14	15.5	0.01	0.050
SULEV ¹	0.10	0.07	7.7	0.005	0.025

Emissions averaging may be used to meet these standards using the requirements for participation averaging, banking and trading programs, as set forth in Section I.15 of these test procedures.

5.4 Optional Standards for Complete and Incomplete Heavy-Duty Vehicles. Manufacturers may request to group complete and incomplete heavy-duty vehicles into the same test group as vehicles certifying to the LEV III exhaust emission standards and test procedures specified in title 13, CCR, §1961.2, so long as those complete and incomplete heavy-duty diesel vehicles meet the most stringent LEV III standards to which any vehicle within that test group certifies.

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II. TEST PROCEDURES

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Subpart H – Engine Fluids, Test Fuels, Analytical Gases and Other Calibration Standards

1065.701 General requirements for test fuels. April 30, 2010.

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B. California provisions.

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3. Identification of New Clean Fuels to be Used in Certification Testing.

Any person may petition the state board to establish by regulation certification testing specifications for a new clean fuel for which specifications for the new clean fuel are not specifically set forth in paragraph §86.1313-98 as amended herein. Prior to adopting such specifications, the state board shall consider the relative cost-effectiveness of use of the fuel in reducing emissions compared to the use of other fuels. Whenever the state board adopts specifications for a new clean fuel for certification testing, it shall also establish by regulation specifications for the fuel as it is sold commercially to the public.

(a) If the proposed new clean fuel may be used to fuel existing motor vehicles, the state board shall not establish certification specifications for the fuel unless the petitioner has demonstrated that:

(1) Use of the new clean fuel in such existing motor vehicles would not increase emissions of NMHC, NOx, and CO, and the potential risk associated with toxic air contaminants, as determined pursuant to the procedures set forth in the "California Test Procedures for Evaluating Substitute Fuels and New Clean Fuels through 2014," ~~as amended March 22, 2012~~ or the "California Test Procedures for Evaluating Substitute Fuels and New Clean Fuels in 2015 and Subsequent Years," ~~as adopted March 22, 2012~~ which are incorporated by reference in title 13, CCR, §2317, as applicable. In the case of fuel-flexible vehicles or dual-fuel vehicles that were not certified on the new clean fuel but are capable of being operated on it, exhaust and evaporative emissions from the use of the new clean fuel shall not increase compared to exhaust and evaporative emissions from the use of gasoline that complies with Title 13, Division 3, Chapter 5, Article 1, California Code of Regulations.

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