

## ENCLOSURE B

California Environmental Protection Agency  
AIR RESOURCES BOARD

### PROPOSED 15-DAY MODIFICATIONS

**CALIFORNIA 2001 THROUGH 2014 MODEL CRITERIA POLLUTANT EXHAUST EMISSION STANDARDS AND TEST PROCEDURES AND FOR 2009 THROUGH 2016 AND SUBSEQUENT MODEL GREENHOUSE GAS EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM-DUTY VEHICLES**

Adopted: August 5, 1999  
Amended: December 27, 2000  
Amended: July 30, 2002  
Amended: September 5, 2003 (corrected February 20, 2004)  
Amended: May 28, 2004  
Amended: August 4, 2005  
Amended: June 22, 2006  
Amended: October 17, 2007  
Amended: May 2, 2008  
Amended: December 2, 2009  
Amended: February 22, 2010  
Amended: March 29, 2010  
Amended: September 27, 2010  
Amended: [INSERT DATE OF AMENDMENT]

Note: The following text contains staff's suggested modifications to these test procedures as originally proposed December 7, 2011. The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as last amended September 27, 2010. Modifications to the originally proposed language made available in connection with this "15-Day Notice" are shown in double underline to indicate additions and ~~double-strikeout~~ to indicate deletions compared to the test procedures as proposed December 7, 2011. Staff is proposing modifications to limited portions of the original proposal; for some portions where no modifications are proposed the text has been omitted and the omission indicated by "\* \* \* \*."

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Amend “CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 2001 AND SUBSEQUENT MODEL PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES, “ as incorporated by reference in Title 13, California Code of Regulations, Section 1961(d) to read:

\* \* \* \*

**CALIFORNIA 2001 THROUGH 2014 MODEL CRITERIA POLLUTANT EXHAUST EMISSION STANDARDS AND TEST PROCEDURES AND FOR 2009 THROUGH 2016 AND SUBSEQUENT MODEL GREENHOUSE GAS EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES**

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

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**D. §86.1810 General standards; increase in emissions; unsafe conditions; waivers**

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**2. Supplemental FTP General Provisions for California.**

2.1 Amend 40 CFR §86.1810-01(i) as follows:

\* \* \* \*

2.1.4 Delete subparagraph (6); replace with: **Air to Fuel Ratio Requirement.** With the exception of cold-start conditions, warm-up conditions and rapid-throttle motion conditions (“tip-in” or “tip-out” conditions), the air to fuel ratio shall not be richer at any time than, for a given engine operating condition (e.g., engine speed, manifold pressure, coolant temperature, air charge temperature, and any other parameters), the leanest air to fuel mixture required to obtain maximum torque (lean best torque) with a tolerance of ~~six~~ three six percent of the fuel consumption. ~~The emission control system shall remain in the operating mode producing the best balance of HC, CO, and NOx catalyst efficiency (e.g. closed loop/stoichiometric operation on 3-way catalyst systems) under all conditions, except when required for engine component temperature protection, driver power request, start enrichment requirements, fuel shut-off situations (decelerations, rev limiter, torque management, etc.), or certain component malfunctions preventing safe~~

~~closed-loop operation.~~ The Executive Officer may approve a manufacturer's request for approval to use additional enrichment in subsequent testing if the manufacturer demonstrates that additional enrichment is needed to protect the vehicle, occupants, engine, or emission control hardware.

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**E. California Exhaust Emission Standards.**

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**2. Emission Standards Phase-In Requirements for Manufacturers**

**2.1 Fleet Average NMOG Requirements for Passenger Cars and Light-Duty Trucks.**

2.1.1 The fleet average non-methane organic gas exhaust mass emission values from the passenger cars and light-duty trucks produced and delivered for sale in California each model year by a manufacturer other than a small volume manufacturer or an independent low volume manufacturer shall not exceed:

<b>FLEET AVERAGE NON-METHANE ORGANIC GAS EXHAUST MASS EMISSION REQUIREMENTS FOR LIGHT-DUTY VEHICLE WEIGHT CLASSES</b> (50,000 mile Durability Vehicle Basis)		
Model Year	Fleet Average NMOG (g/mi)	
	All PCs; LDTs 0-3750 lbs. LVW	LDTs 3751 lbs. LVW - 8500 lbs. GVWR
2001	0.070	0.098
2002	0.068	0.095
2003	0.062	0.093
2004	0.053	0.085
2005	0.049	0.076
2006	0.046	0.062
2007	0.043	0.055
2008	0.040	0.050
2009	0.038	0.047
2010-2014 <sup>1</sup> +	0.035	0.043

<sup>1</sup> For the 2014 model year only, a manufacturer may comply with the fleet average NMOG+NOx values in the “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” in lieu of complying with the NMOG fleet average values in this table. A manufacturer must either comply with the NMOG+NOx fleet average requirements for both its PC/LDT1 fleet and its LDT2/MDPV fleet or comply with the NMOG fleet average requirements for both its PC/LDT1 fleet and its LDT2/MDPV fleet. A manufacturer must calculate its fleet average NMOG+NOx values using the applicable full useful standards.

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**H. Certification, Information and Reporting Requirements.**

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**3. §86.1843 General information requirements**

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3.2 **Alternative Fuel Information.**

For ~~TLEVs, LEVs, ULEVs, and SULEVs~~ passenger cars, light-duty trucks, and medium-duty vehicles not certified exclusively on gasoline or diesel, except for vehicles that use hydrogen fuel, the manufacturer shall submit projected California sales and fuel economy data nineteen months prior to January 1 of the model year for which the vehicles are certified. For vehicles that use hydrogen fuel, the manufacturer shall submit projected California sales and leases, fuel economy data, vehicle fuel pressure rating, name of air basin(s) where vehicles will be delivered for sale or lease, and number of vehicles projected to be delivered to each air basin, thirty-three months prior to January 1 of the model year for which the vehicles are certified. For calendar year 2012 only, the manufacturer of vehicles that use hydrogen fuel shall submit projected California sales and leases, fuel economy data, vehicle fuel pressure rating, name of air basin(s) where vehicles will be delivered for sale or lease, and number of vehicles projected to be delivered to each air basin, twenty-nine months prior to January 1 of the model year for which the vehicles are certified.

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