#### NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION NEW JERSEY ADMINISTRATIVE CODE TITLE 7, CHAPTER 27 SUBCHAPTER 26

## NATIONAL LOW EMISSION VEHICLE (NLEV) AND HEAVY-DUTY DIESEL NEW ENGINE REQUIREMENTS PROGRAM

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Please note: The Department has made every effort to ensure that this text is identical to the official, legally effective version of this rule, set forth in the New Jersey Register. However, should there be any discrepancies between this text and the official version of the rule, the official version will prevail.

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#### **7:27-26.1 Definitions**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Air contaminant emission control system" means the equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine, or a system or engine modification on a motor vehicle or motor vehicle engine which causes a reduction of air contaminants emitted from the motor vehicle or motor vehicle engine, including but not limited to exhaust control systems, fuel evaporation control systems and crankcase ventilating systems.

"Business" means an occupation, profession or trade; a person or partnership or corporation engaged in commerce, manufacturing, or a service; a profit-seeking enterprise or concern.

"California Air Resources Board" or "CARB" means the agency established and empowered to regulate sources of air pollution in the state of California, including motor vehicles, pursuant to California Health & Safety Code Sections 39500 et seg..

"California standards" means those emission standards for motor vehicles and new motor vehicle engines that the state of California has adopted and for which it has received a waiver from the United States Environmental Protection Agency pursuant to the authority of 42 U.S.C.A. Section 7543 and which other states are permitted to adopt pursuant to 42 U.S.C.A. Section 7507.

"CCR" shall the mean the California Code of Regulations (Barclays, 1991).

"Certificate of conformity" means that document issued by the Executive Officer of

the California Air Resources Board, or the United States Environmental Protection Agency.

"Certification application" means the application and associated information that a motor vehicle manufacturer, a motor vehicle engine manufacturer or an air contaminant emission control system manufacturer submits to the California Air Resources Board in the process of applying for certification of a motor vehicle, motor vehicle engine, engine family or air contaminant emission control system.

"Certified" means, in respect to a motor vehicle, motor vehicle engine or engine family, or air contaminant emission control system, having been found by the California Air Resources Board to have satisfied the criteria adopted by the California Air Resources Board for the control of specified air contaminants from motor vehicles.

"Clean Air Act §177 Program" means a program, adopted by the State pursuant to section 177 of the Clean Air Act, 42 U.S.C. §§7401 et seq., establishing and enforcing standards for any model year relating to the control of emissions from new motor vehicles or new motor vehicle engines.

"Dealer" includes every person actively engaged in the business of buying, transferring, leasing, selling or exchanging motor vehicles and who has an established place of business.

"Department" means the New Jersey Department of Environmental Protection.

"Diesel" means powered by an engine where the primary means of controlling power output is by limiting the amount of fuel that is injected into the combustion chambers of the engine.

"Diesel engine" means a compression ignition type of internal combustion engine.

"Dual fueled" means a motor vehicle that is engineered and designed to be capable of operating on a petroleum fuel and on another fuel which is stored separately on-board the vehicle.

"Durability vehicle basis" means the number of miles during which the test vehicle used by a motor vehicle manufacturer to certify to the prescribed exhaust emission standards must maintain those specified standards.

"Emission standards" means specified limitations on the discharge of air contaminants into the atmosphere.

"Engine family" means the basic classification unit comprised of the engine and drive-train configuration selected by a manufacturer and used for the purpose of certification testing.

"Established place of business" means a place actually occupied either continuously

or at regular periods for business use.

"Evaporative emissions" means vaporized fuel emitted into the atmosphere from the fuel system of a motor vehicle.

"Field fixes" mean modifications, to motor vehicle engines or air contaminant emission control systems, specified by the vehicle manufacturer that are to be effected by the manufacturer's authorized service representative, and that are implemented to correct design defects that may result in excess emissions from the motor vehicle.

"Fleet average" means a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases from all vehicles subject to this subchapter which are produced and delivered for sale in the State of New Jersey in any model year, beginning with model year 1996, based on the calculation in N.J.A.C. 7.27-26.5(a).

"Fuel flexible" means a methanol-fueled motor vehicle that is engineered and designed to be operated using any gasoline-methanol fuel mixture or blend.

"Fuel system" means the combination of fuel tank(s), fuel lines and carburetor, or fuel injector, and includes all vents and fuel evaporative emission control systems or devices.

"G/mi" means grams per mile.

"Gross vehicle weight rating" or "GVWR" means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

"Heavy-duty diesel engine" means a diesel engine that is used to propel a heavy-duty motor vehicle.

"Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.

"Heavy-duty motor vehicle" means a motor vehicle with a GVWR of 14,001 pounds or more.

"Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

"HEV contribution factor" means the NMOG emission contribution of HEVs to the fleet average NMOG value.

"Highway" means the entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel, and also includes any limited-access highway designated as a "freeway" or "parkway" by authority of law, and any semi-public or private way to which the provisions of Subtitle 1 of Title 39 of the Revised Statutes, N.J.S.A. 39:1-1 et seq., have been made

applicable pursuant to the provisions of N.J.S.A. 39:5A-1.

"Hybrid electric vehicle" or "HEV" means a motor vehicle which allows power to be delivered to the driver wheels solely by a battery-powered electric motor but which also incorporates the use of a combustion engine to provide power to the battery, or any vehicle which allows power to be delivered to the driver wheels by either a combustion engine and/or a powered electric motor.

"Intermediate compliance standards" means in-use compliance standards that are effective prior to the effective date of the final in-use compliance standards.

"Intermediate volume manufacturer" means any vehicle manufacturer with sales between 3,001 and 35,000 new light-duty and medium-duty vehicles per model year based on the average number of vehicles sold in California by the manufacturer each model year from 1989 to 1993; provided that, for manufacturers certifying for the first time in California, model year sales shall be based on projected California sales.

"In-use compliance" means the adherence of a motor vehicle to specified exhaust emission standards while the motor vehicle is used and properly maintained within the guidelines of the motor vehicle manufacturer.

"Light-duty truck" means any motor vehicle, rated at 6,000 pounds gross vehicle weight or less and a loaded vehicle weight of 5,750 pounds or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off- street or off-highway operation and use.

"Light-duty vehicle" means light-duty trucks and passenger cars.

"Loaded vehicle weight" or "LVW" means vehicle curb weight plus 300 pounds.

"Low emission vehicle" or "LEV" means a motor vehicle which has been certified as not exceeding the applicable standards set forth in N.J.A.C. 7:27-26.4.

"Manufacturer's sales fleet" means all passenger cars and light-duty trucks a manufacturer sells or offers for sale in New Jersey.

"Medium-duty vehicle" means any pre-1995 model year heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8,500 pounds or less, any 1992 and subsequent model year heavy-duty low emission vehicle or ultra-low emission vehicle having a manufacturer's gross vehicle weight rating of 14,000 pounds or less, or any 1995 and subsequent model year heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 14,000 pounds or less.

"Mg/mi" means milligrams per mile.

"Model-year" or "MY" means the manufacturers' annual production period as set

forth in 40 C.F.R. Part 85, Subpart X.

"Motor vehicle" or "vehicle" means every device in, upon, or by which a person or property is or may be transported otherwise than by muscular power, excepting such devices as run only upon rails or tracks and motorized bicycles.

"Motor vehicle engine" means an engine that is used to propel a motor vehicle.

"New motor vehicle" or "new vehicle" means a motor vehicle, the equitable or legal title to which has never been transferred to the ultimate purchaser.

"New motor vehicle dealer" means the agent, distributor or authorized dealer of the manufacturer of a new motor vehicle who has an established place of business.

"New motor vehicle engine" means a new engine in a motor vehicle.

"NLEV Program" or "National Low Emission Vehicle Program" means a Federally enforceable, voluntary nationwide clean car program designed to reduce smog and other pollution from new motor vehicles and that would achieve emission reductions from new motor vehicles in the Ozone Transport Region equivalent to or greater than would be achieved by the OTC-LEV Program.

"Non-methane organic gas" or "NMOG" means the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

"Off-highway" means any place other than a highway.

"Offset vehicle" means a Federally-certified light-duty vehicle that has been certified by the California Air Resources Board as meeting the standards and procedures set forth in the "Guidelines for Certification of 1983 and Subsequent Model Year Federally Certified Light-Duty Motor Vehicles for Sale in California," adopted July 20, 1982, as last amended July 12, 1991.

"Organic material hydrocarbon equivalent" or "OMHCE" means the sum of the carbon mass contributions of non-oxygenated hydrocarbons, methanol and formaldehyde as contained in an exhaust gas sample, expressed as gasoline-fueled vehicle hydrocarbons. In the case of exhaust emissions, the hydrocarbon-to-carbon ratio of the equivalent hydrocarbon is 1.85:1. In the case of diurnal and hot-soak emissions, the hydrocarbon-to-carbon ratios of the equivalent hydrocarbons are 2.33:1, respectively.

"OTC-LEV program" means the program established in this subchapter at N.J.A.C. 7:27-26.1 through 7, 26.15 and 26.16, which regulates certain motor vehicles, certain motor vehicle engines or engine families, and/or certain air contaminant emission control systems.

"OTC-LEV program control system" means an air contaminant emission control

system designed for use and/or used to enable an OTC-LEV program engine or a OTC-LEV program vehicle to meet the emission standards of the OTC-LEV program.

"OTC-LEV program engine" means an engine subject to the requirements of the OTC-LEV program.

"OTC-LEV program vehicle" means a motor vehicle subject to the requirements of the OTC-LEV program.

"Ozone Transport Commission - Low Emission Vehicle Program" or "OTC-LEV Program" means a LEV program as set forth in 40 C.F.R. 51.120(c).

"Ozone Transport Region or OTR" means the ozone transport region established pursuant to 42 U.S.C. 7511c(a), comprised of the States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Pennsylvania, Vermont, the Consolidated Metropolitan Statistical Area that includes northern portions of Virginia and the District of Columbia.

"Passenger car" or "PC" means any motor vehicle designed primarily for transportation of persons and having a design capacity of 12 or fewer persons.

"Person" means an individual, public or private corporation, company, partnership, firm, association, society or joint stock company, municipality, state, interstate body, the United States, or any Board, commission, employee, agent, officer or political subdivision of a state, an interstate body or the United States.

"Reactivity adjustment factor" means a fraction applied to the NMOG emissions from a vehicle powered by a fuel other than conventional gasoline for the purpose of determining a gasoline-equivalent NMOG level. The reactivity adjustment factor means the ozone-forming potential of clean fuel vehicle exhaust divided by the ozone-forming potential of gasoline vehicle exhaust.

"Rental agency" means a business engaged in renting motor vehicles for temporary use.

"Running changes" means modifications to motor vehicle engines or air contaminant emission control systems specified by the vehicle manufacturer that are to be effected by the manufacturer during vehicle production, and which are implemented to correct design defects that may result in excess emissions from the motor vehicle.

"Sale" or "sell" means the transfer of equitable or legal title to a motor vehicle or motor vehicle engine to the ultimate or subsequent purchaser.

"Small volume manufacturer" means any vehicle manufacturer with sales less than or equal to 3,000 new light-duty vehicles and medium-duty vehicles per model year based

on the average number of vehicles sold in California by the manufacturer each model year from 1989 to 1991; provided that, for manufacturers certifying for the first time in California, model-year sales shall be based on projected California sales.

"Standard vehicle" or "SV" means a motor vehicle which has been certified as not exceeding the applicable standards set forth in N.J.A.C. 7:27-26.4.

"State" means the State of New Jersey, unless otherwise specified.

"Transitional low emission vehicle" or "TLEV" means a motor vehicle which has been certified as not exceeding the applicable standards set forth in N.J.A.C. 7:27-26.4.

"Type A HEV" shall mean an HEV which achieves a minimum range of 60 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k) of Title-13, California Code of Regulations.

"Type B HEV" shall mean an HEV which achieves a range of 40 to 59 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k) of Title-13, California Code of Regulations.

"Type C HEV" shall mean an HEV which achieves a range of 0 to 39 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k) of Title-13, California Code of Regulations.

"Ultra low emission vehicle" or "ULEV" means a motor vehicle which has been certified as not exceeding the applicable standards set forth in N.J.A.C. 7:27-26.4.

"Ultimate purchaser" means, with respect to any new motor vehicle or new motor vehicle engine, the first person who in good faith purchases a new motor vehicle or new motor vehicle engine for purposes other than resale.

"Ultra-small volume manufacturer" means any manufacturer with cumulative California sales of new passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and heavy-duty engines, that total no more than 300 per model year based on the average number of vehicles and engines sold by the manufacturer in the previous three consecutive model years.

"Urban bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine, or of a type normally powered by a heavy heavy-duty diesel engine, with a load capacity of 15 or more passengers and intended primarily for intra-city operation, that

is, within the confines of a city or greater metropolitan area. Operation of such vehicles is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or token, rather than purchased in advance in the form of tickets, such vehicles would normally have equipment installed for the collection of fares. Such vehicles are also typically characterized by the absence of equipment and facilities for long distance travel, for example, restrooms, large luggage compartments, and facilities for stowing carry-on luggage.

"Useful life" means a period of use denoted by the emission standards to which a given vehicle is certifying. For those light-duty vehicles certified to optional 100,000 mile standards and those 1996 and subsequent model year vehicles certified to 100,000 emission standards, and for those transitional low-emission, low-emission, and ultra-low emission vehicles and hybrid electric vehicles (HEVs) certified to 100,000 emission standards, the useful life shall mean 10 years or 100,000 miles, whichever first occurs. For light-duty vehicles certified only to 50,000 mile standards useful life shall mean five years or 50,000 miles, whichever first occurs.

"Vehicle curb weight" means the actual or the manufacturer's estimated weight of the vehicle in operational status with all standard equipment, and weight of fuel at nominal tank capacity, and the weight of optional equipment computed in accordance with 40 C.F.R. § 86.082-24. Incomplete light-duty trucks shall have the curb weight specified by the manufacturer.

"Zero emission vehicle" or "ZEV" means any vehicle which is certified by the Executive Officer of the California Air Resources Board to produce zero emissions of any criteria pollutants under any and all possible operational modes and conditions. Incorporation of a fuel-fired heater shall not preclude a vehicle from being certified as a ZEV provided the fuel-fired heater cannot be operated at ambient temperatures above 40 degrees Fahrenheit and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.

#### 7:27-26.2 Applicability

- (a) N.J.A.C. 7:26.1 through 7, 26.11, 26.15 and 26.16 shall apply to all 1999 model year and subsequent model year motor vehicles which are passenger cars and light-duty trucks, motor vehicle engines in such motor vehicles, and air contaminant emission control systems for such motor vehicles and motor vehicle engines, otherwise referred to in this subchapter as "OTC-LEV program vehicles, engines and control systems."
- (b) Notwithstanding (a) above, for the duration of the State's participation in NLEV, manufacturers may comply with NLEV or equally stringent mandatory Federal standards in lieu of compliance with any program, including the provisions of this subchapter and including any mandates for sales of ZEVs, adopted by the State pursuant to the authority provided in §177 of the Clean Air Act (CAA), 42 U.S.C. §§7401 et seq., applicable to passenger cars, light-duty trucks up through 6,000 pounds GVWR, and/or

medium-duty vehicles from 6,001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, §1900, incorporated herein by reference.

- 1. The State's participation in NLEV extends until the commencement of model year 2006, except as provided in 40 C.F.R. §86.1707. If, no later than December 15, 2000, the EPA does not adopt standards at least as stringent as the NLEV standards provided in 40 C.F.R. Part 86, subpart R, that apply to new motor vehicles in model year 2004, 2005 or 2006, the State's participation in NLEV extends only until the commencement of model year 2004, except as provided in 40 C.F.R. §86.1707.
- 2. If a covered manufacturer, as defined at 40 C.F.R. 86.1702, opts out of the NLEV program pursuant to the EPANLEV regulations at 40 C.F.R. §86.1707, the transition from NLEV requirements to any State Clean Air Act §177 Program applicable to passenger cars, light-duty trucks up through 6000 pounds GVWR, and/or medium-duty vehicles from 6001 to 14,000 pounds GVWR if designed to operate on gasoline, as these categories of motor vehicles are defined in the California Code of Regulations, Title 13, Division 3, Chapter 1, Article 1, §1900, incorporated herein by reference, will proceed in accordance with the EPA NLEV regulations at 40 C.F.R. §86.1707.
- 3. Additional, non-regulatory language required by EPA at 40 C.F.R. §86.1705-99(g)(4) and (5) as part of the State's opt into the NLEV Program appears in the Appendix to this subchapter.(b)
- (c) Upon termination of the State's participation in the NLEV Program, the provisions of N.J.A.C. 7:27-26.1 through 7, 26.11, 26.15 and 26.16 shall apply to OTC-LEV program vehicles, engines, and control systems. Notice of such termination shall be published in the New Jersey Register.
- (d) Notwithstanding (a) above, the provisions of N.J.A.C. 7:27-26.1 through 7, 26.11, 26.15 and 26.16 shall not apply to OTC-LEV program vehicles, engines, and control systems unless the combined number of registrations of new motor vehicles in those states and the District of Columbia, excluding New Jersey, within the OTR that have enacted legislation or adopted rules and regulations establishing and implementing a low emission vehicle program for a motor vehicle model year not later than 1999, is equal to or greater than 40 percent of the total number of registrations of new motor vehicles in all of the states and the District of Columbia within the OTR.
- (e) N.J.A.C. 7:27-26.1, 26.8 through 26.11, 26.15 and 26.16 shall apply to all new heavy-duty motor vehicles which are equipped with 2005 and subsequent model year heavy-duty diesel engines.

#### 7:27-26.3 Prohibitions (OTC-LEV Program)

- (a) No person who is a resident of or who operates an established place of business within this State shall sell, register, import, deliver, purchase, lease, give, acquire, receive or otherwise transfer a 1999 model year or subsequent model-year new motor vehicle, new motor vehicle engine, or motor vehicle with a new motor vehicle engine, for use, registration or resale within this State, unless such new motor vehicle or new motor vehicle engine has been certified in accordance with this subchapter. No person shall attempt or assist in any such action.
- (b) No person who is a resident of or who operates an established place of business within this State shall offer for rent a 1999 model year or subsequent model year motor vehicle for use within this State unless such motor vehicle has been certified in accordance with this subchapter.
- 1. If a vehicle which is delivered to a New Jersey rental car agency from a non-New Jersey origination point is not rented to a final destination outside of New Jersey within 30 days from such delivery to the New Jersey rental car agency, it shall remain idle until it is next rented with a final destination outside of New Jersey.
- (c) The prohibitions contained in (a) and (b) above shall not apply to the following passenger cars or light-duty trucks:
- 1. A vehicle acquired by a resident of this State for the purpose of replacing a vehicle registered to such resident which was damaged, or became inoperative, beyond reasonable repair or was stolen while out of this State; provided that such replacement vehicle is acquired out of State at the time the previously owned vehicle was either damaged or became inoperative or was stolen;
  - 2. A vehicle transferred by inheritance;
  - 3. A vehicle transferred by court decree;
- 4. A vehicle transferred after the date on which this subchapter becomes applicable under N.J.A.C. 7:27-26.2, if the vehicle was registered in this State before such date;
- 5. A vehicle having a certificate of conformity issued pursuant to the Federal Clean Air Act (42 U.S.C. Sec. 7401 et seq.) and originally registered in another state by a resident of that state who subsequently establishes residence in this State;
  - 6. A vehicle which is an offset vehicle:
  - 7. A vehicle transferred by a dealer to another dealer;
  - 8. A vehicle transferred for the purpose of being wrecked or dismantled;
  - 9. A vehicle transferred for use exclusively off-highway; or

- 10. A vehicle transferred for registration out of State.
- (d) To register any vehicle exempted under (c) above, the person seeking registration must provide satisfactory evidence, as determined by the New Jersey Division of Motor Vehicles, demonstrating that the exemption is applicable.
- (e) For the purposes of this subchapter, it is conclusively presumed that the equitable or legal title to any motor vehicle with an odometer reading of 7,500 miles or more has been transferred to an ultimate purchaser, and that the equitable or legal title to any motor vehicle with an odometer reading of less than 7,500 miles has not been transferred to an ultimate purchaser.

#### 7:27-26.4 Emission certification standards (OTC-LEV Program)

- (a) Except as otherwise provided in N.J.A.C. 7:27-26.3(c), all 1999 model year and subsequent model year motor vehicles subject to this subchapter must be certified as not exceeding the following emission standards for standard vehicles, low emission vehicles, transitional low emission vehicles, ultra-low emission vehicles, zero emission vehicles or hybrid electric vehicles. Vehicles must be certified as meeting the applicable emission certification standards for one of such categories of vehicles.
- (b) The exhaust emission certification standards for 1999 model year and subsequent model year passenger cars and light duty trucks which are certified as standard vehicles are as follows:
- 1. The exhaust emission certification standards for non-methane hydrocarbons, carbon monoxide and oxides of nitrogen are set forth in Table 1.

Table 1

1999 MODEL YEAR AND SUBSEQUENT MODEL YEAR PASSENGER CAR
AND LIGHT-DUTY TRUCK STANDARD VEHICLE EXHAUST EMISSION CERTIFICATION
STANDARDS

Vehicle Type <sup>(1)</sup>	Loaded Vehicle Weight (lbs)	Durability Vehicle Basis (mi)	Non-Methane Hydrocarbons (g/mi) <sup>(2)</sup>	Carbon Monoxide (g/mi)	Oxides of Nitrogen (g/mi)
PC	All	50,000	0.25	3.4	0.4
PC	All	100,000	0.31	4.2	0.6
Diesel PC (Option 2)	All	100,000	0.31	4.2	1.0
LDT	0-3,750	50,000	0.25	3.4	0.4
LDT	0-3,750	100,000	0.31	4.2	0.6
Diesel LDT (Option 2)	0-3,750	100,000	0.31	4.2	1.0
LDT	3,751-5,750	50,000	0.32	4.4	0.7
LDT	3,751-5,750	100,000	0.40	5.5	0.97
Diesel LDT (Option 1)	3,751-5,750	100,000	0.40	5.5	1.5

<sup>(1) &</sup>quot;PC" means passenger cars, "LDT" means light-duty trucks.

<sup>(2)</sup> For methanol- or ethanol-fueled vehicles certifying to these standards, including fuel-flexible vehicles when certifying on methanol or ethanol, "Non-Methane Hydrocarbons" shall mean "Organic Material Non-Methane Hydrocarbon Equivalent" (or "OMNMHCE").

- 2. Methanol-fueled passenger cars, and methanol-fueled light-duty trucks up to 3,750 pounds loaded vehicle weight, certifying to these standards are subject to a formaldehyde exhaust emission standard and an in-use compliance standard of 15 mg/mi., determined on a 50,000 mile durability vehicle basis. Methanol-fueled light-duty trucks from 3,751 to 5,750 pounds loaded vehicle weight certifying to these standards are subject to a formaldehyde exhaust emission standard and an in-use compliance standard of 18 mg/mi., determined on a 50,000 mile durability vehicle basis.
- 3. The maximum projected emissions of oxides of nitrogen measured on the Federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall be not greater than 1.33 times the applicable passenger car standards and 2.00 times the applicable light-duty truck standards shown in Table I. Both the projected emissions and the HWFET standard shall be rounded in accordance with American Society for Testing Materials (ASTM) E29-67 to the nearest 0.1 g/mi before being compared.
- 4. Diesel passenger cars and light-duty trucks certifying to these standards are subject to a particulate exhaust emission standard of 0.08 g/mi, determined on a 50,000 mile durability vehicle basis.
- 5. For all vehicles, except those certifying to optional diesel standards, in-use compliance with the exhaust emission standards shall be limited to vehicles with less than 75,000 miles.
- 6. For the 1995 and 1996 model years, all manufacturers, except those certifying to optional diesel standards, are permitted alternative in-use compliance. Alternative in-use compliance is permitted for 60 percent of a manufacturer's vehicles in the 1995 model year and 20 percent of a manufacturer's vehicles in the 1996 model year. For the 1995 and 1996 model years, small volume manufacturers only are permitted alternative in-use compliance for 100 percent of the fleet. The percentages shall be applied to the manufacturers' total projected sales of California-certified passenger cars and light-duty trucks for the model-year. "Alternative in-use compliance" shall consist of the following:
- i. For all passenger cars and those light-duty trucks from zero to 3,750 pounds, loaded vehicle weight, except those diesel vehicles certifying to optional 100,000 mile standards, in-use compliance standards shall be 0.32 g/mi non-methane hydrocarbon and 5.2 g/mi carbon monoxide for 50,000 miles.
- ii. For light-duty trucks from 3,751 to 5,750 pounds, loaded vehicle weight, except those diesel light-duty trucks certifying to optional 100,000 mile standards, in-use compliance standards shall be 0.41 g/mi non-methane hydrocarbon and 6.7 g/mi carbon monoxide for 50,000 miles.
  - iii. In-use compliance standards shall be waived beyond 50,000 miles.
- 7. All passenger cars and light-duty trucks, except those diesel vehicles certifying to optional standards, are subject to non-methane hydrocarbon, carbon monoxide and

oxides of nitrogen standards determined on a 50,000 mile durability basis and non-methane hydrocarbon and carbon monoxide standards determined on an 100,000 mile durability basis.

- 8. 100,000 mile  $NO_x$  standards are applicable for 1996 and subsequent model-year vehicles.
- 9. Each manufacturer shall also comply with the requirements specified in California Code of Regulations, Title-13, Section 1960.1 (g)(2).
- (c) The exhaust emission certification standards and test procedures for non-methane organic gases (NMOG), oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO) and particulates for 1999 model year and subsequent model-year passenger cars and light-duty trucks which are certified as transitional low emission vehicles, low emission vehicles, or ultra-low emission vehicles are as follows:
- 1. The exhaust emission certification standards for NMOG, CO and  $NO_x$  are set forth in Table 2.

Table 2

EXHAUST EMISSION CERTIFICATION STANDARDS
FOR TRANSITIONAL LOW EMISSION VEHICLES, LOW EMISSION VEHICLES
AND ULTRA-LOW EMISSION VEHICLES IN PASSENGER CAR
AND LIGHT-DUTY TRUCK VEHICLE CLASSES<sup>(3)</sup>

Vehicle Type <sup>(1)</sup>	Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)	Vehicle Emission Category	Non-Methane Organic Gases (g/mi)	Carbon Monoxide (g/mi)	Oxides of Nitrogen (g/mi)
Pc and LDT	AII 0-3,750	50,000	TLEV LEV ULEV	0.125 (0.188) 0.075 (0.100) 0.040 (0.058)	3.4 (3.4) 3.4 (3.4) 1.7 (2.6)	0.4 (0.4) 0.2 (0.3) 0.2 (0.3)
		100,000	TLEV LEV ULEV	0.156 0.090 0.055	4.2 4.2 2.1	0.6 0.3 0.3
LTD	3,751-5,750	50,000	TLEV LEV ULEV	0.160 (0.238) 0.100 (0.128) 0.050 (0.075)	4.4 (4.4) 4.4 (4.4) 2.2 (3.3)	0.7 (0.7) 0.4 (0.5) 0.4 (0.5)
		100,000	TLEV LEV ULEV	0.200 0.130 0.070	5.5 5.5 2.8	0.9 0.5 0.5

- (1) "PC" means passenger cars, "LDT" means light-duty trucks.
- (2) "TLEV" means transitional low emission vehicles, "LEV" means low emission vehicles, "ULEV" means ultra-low emission vehicles.
- (3) The standards in parentheses are intermediate in-use compliance standards for 50,000 miles, applicable under (c)5 below.

- 2. To demonstrate compliance with an NMOG standard, NMOG emissions shall be measured in accordance with the "California Non-Methane Organic Gas Test Procedures" as adopted July 12, 1991 and last amended September 22, 1993. For TLEVs, LEVs and ULEVs certified to operate exclusively on any fuel other than conventional gasoline, and for fuel-flexible and dual-fuel TLEVs, LEVs and ULEVs when certifying on a fuel other than gasoline, manufacturers shall multiply NMOG exhaust certification levels by the applicable reactivity adjustment factor set forth in section 13 of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles:" as incorporated by reference in section 1960.1(k), Title 13, California Code of Regulations or established by the Executive Officer of the CARB pursuant to Appendix VIII of the foregoing test procedures. In addition, natural gas vehicles certifying to TLEV, LEV or ULEV standards shall calculate a reactivityadjusted methane exhaust emission value by multiplying the methane exhaust certification level by the applicable methane reactivity adjustment factor set forth in section 13 of the above-referenced test procedures. The product of the NMOG exhaust certification levels and the reactivity adjustment factor shall be compared to the exhaust NMOG mass emission standards established for the particular vehicles emission category to determine compliance. For natural gas vehicles, the reactivity-adjusted NMOG value shall be added to the reactivity-adjusted methane value and then compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance.
- 3. Fuel-flexible and dual-fuel PCs and LDTs from zero to 5,750 pounds LVW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on any available fuel other than gasoline, and gasoline.
- i. For TLEVs, LEVs, and ULEVs, when certifying for operation on a fuel other than gasoline, manufacturers shall multiply exhaust NMOG certification levels by the applicable reactivity adjustment factor. In addition to multiplying the exhaust NMOG certification levels the applicable reactivity adjustment factor, natural gas vehicles shall multiply the exhaust methane certification level by the applicable methane reactivity adjustment factor and add that value to the reactivity-adjusted NMOG value. The exhaust NMOG certification levels for fuel-flexible or dual-fuel vehicles when certifying on gasoline shall not be multiplied by a reactivity adjustment factor.
- ii. For PCs and LDTs from zero to 3,750 pounds LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on conventional gasoline shall be:
  - (1) For TLEVs, 0.25 g/mi and 0.31 g/mi for 50,000 and 100,000 miles, respectively;
  - (2) For LEVs, 0.125 g/mi and 0.156 g/mi for 50,000 and 100,000 miles, respectively.
- (3) For ULEVs,  $0.075~\mathrm{g/mi}$  and  $0.090~\mathrm{g/mi}$  for  $50,000~\mathrm{and}$   $100,000~\mathrm{miles}$ , respectively.

- iii. For LDTs from 3,751 to 5,750 pounds LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:
  - (1) For TLEVs, 0.32 g/mi and 0.40 g/mi for 50,000 and 100,000 miles, respectively;
- (2) For LEVs 0.160 g/mi and 0.200 g/mi for 50,000 and 100,000 miles, respectively; and
  - (3) For ULEVs, 0.100 g/mi and 0.130 g/mi for 50,000 and 100,000 miles, respectively.
- 4. The maximum projected emissions of oxides of nitrogen measured on the Federal Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B) shall be not greater than 1.33 times the applicable light-duty vehicle standards shown in Table 2. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.
- 5. For PCs and LDTs from zero to 5,750 pounds LVW, including fuel-flexible and dual-fuel vehicles when operating on any available fuel other than gasoline, intermediate in-use compliance standards shall apply to TLEVs through the 1995 model year, and LEVs and ULEVs through the 1998 model-year. In-use compliance with standards beyond 50,000 miles shall be waived through the 1995 model year for TLEVs, and through the 1998 model year for LEVs and ULEVs.
- i. For TLEVs, LEVs, and ULEVs designed to operate on any fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on any fuel other than gasoline, exhaust NMOG mass emissions results shall be multiplied by the applicable reactivity adjustment factor to determine compliance with intermediate in-use compliance standards for NMOG. In addition to multiplying the exhaust NMOG emission results by the applicable reactivity adjustment factor, natural gas vehicles shall multiply the exhaust methane emission results by the applicable methane reactivity adjustment factor and add that value to the reactivity-adjusted NMOG value. Exhaust NMOG mass emissions from fuel-flexible or dual-fuel vehicles when operating on gasoline shall not be multiplied by a reactivity adjustment factor.
- ii. For fuel-flexible and dual-fuel PCS and LDTs from zero to 3,750 pounds LVW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.32 g/mi, 0.188 g/mi, and 0.100 g/mi for TLEVs, LEVs, and ULEVs, respectively.
- iii. For fuel-flexible and dual-fuel LDTs from 3,751 to 5,750 pounds LVW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.41 g/mi, 0.238 g/mi, and 0.128 g/mi for TLEVs, LEVs and ULEVs, respectively.
  - 6. Manufacturers of diesel vehicles must also certify to particulate standards for

100,000 miles. For all PCS and LDTs from zero to 5,750 pounds loaded vehicle weight, the particulate standard is 0.08 g/mi, 0.08 g/mi and 0.04 g/mi for TLEVs, LEVs and ULEVs, respectively.

- 7. Manufacturers shall demonstrate compliance with the above standards for NMOG, CO, and  $\mathrm{NO_x}$  at 50 degrees Fahrenheit according to the procedure specified in Section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium Duty Vehicles" as adopted May 20, 1987 and last amended September 22, 1993. Hybrid electric, natural gas, and diesel-fueled vehicles shall be exempt from 50 degrees Fahrenheit test requirements.
- 8. In-use compliance testing shall be limited to vehicles with fewer than 75,000 miles.
- 9. Deterioration factors for hybrid electric vehicles shall be based on the emissions and mileage accumulation of the auxiliary power unit. For certification purposes only, Type A hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors), and demonstrating compliance with 100,000 mile emission standards shall not be required. For certification purposes only, Type B hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 75,000 mile deterioration factors). For certification purposes only, Type C hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 100,000 mile deterioration factors).
- (d) Formaldehyde exhaust emission standards apply to vehicles designed to operate on any available fuel, including fuel-flexible and dual-fuel vehicles. The exhaust emission certification standards for formaldehyde, for 1999 model year and subsequent model-year passenger cars and light-duty trucks which are certified as transitional low emission vehicles, low emission vehicles, or ultra-low emission vehicles, are as follows:
- 1. The exhaust emission certification standards for formaldehyde are set forth in Table 3.

Table 3

# FORMALDEHYDE EXHAUST EMISSION CERTIFICATION STANDARDS FOR TRANSITIONAL LOW EMISSION VEHICLES, LOW EMISSION VEHICLES, AND ULTRA-LOW EMISSION VEHICLES IN THE LIGHT-DUTY VEHICLES WEIGHT CLASS

Vehicle Type <sup>(1)</sup>	Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)	Vehicle Emission Category <sup>(2)</sup>	Formaldehyde (mg/mi) <sup>(3)(4)</sup>
PC and LDT	AII 0-3,750	50,000	TLEV LEV ULEV	15 (23) 15 (15) 8 (12)
		100,000	TLEV LEV ULEV	18 18 11
LDT	3,751-5,750	50,000	TLEV LEV ULEV	18 (27) 18 (18) 9 (14)
		100,000	TLEV LEV ULEV	23 23 13

- (1) "PC" means passenger cars, "LDT" means light-duty trucks.
- (2) "TLEV" means transitional low emission vehicles, "LEV" means low emission vehicles, "ULEV" means ultra-low emission vehicles.
- (3) The standards in parenthesis are intermediate compliance standards for 50,000 miles applicable under (d)2 below.
- (4) Formaldehyde exhaust emission standards apply to vehicles certified to operate on any available fuel, including fuel-flexible and dual-fuel vehicles.

- 2. For PCS and LDTs from zero to 5,750 pounds LVW, including fuel-flexible and dual-fuel vehicles, intermediate in-use compliance standards shall apply to LEVs and ULEVs through the 1998 model-year. In-use compliance with standards beyond 50,000 miles shall be waived through 1998 for LEVs and ULEVs.
- 3. Manufacturers shall demonstrate compliance with the above standards for formaldehyde at 50 degrees Fahrenheit according to the procedures specified in section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Year Passenger Cars, Light Duty Trucks and Medium Duty Vehicles" as incorporated by reference in section 1960.1(k), Title-13, California Code of Regulations. Hybrid electric, natural gas, and diesel-fueled vehicles shall be exempt from 50 degrees Fahrenheit test requirements.
- 4. In-use compliance testing shall be limited to passenger cars and light-duty trucks with fewer than 75,000 miles.
- (e) The evaporative emissions certification standards for all 1999 model year and subsequent model-year gasoline-fueled, liquefied petroleum gas-fueled and methanol-fueled motor vehicles, except petroleum-fueled diesel vehicles, are as follows:
- 1. Evaporative emissions for 1979 and subsequent model gasoline-fueled, 1983 and subsequent model liquefied petroleum gas-fueled, and 1993 and subsequent model alcohol-fueled motor vehicles and hybrid electric vehicles subject to exhaust emission standards under this article, except petroleum-fueled diesel vehicles, compressed natural gas-fueled vehicles, hybrid electric vehicles that have sealed fuel systems which can be demonstrated to have no evaporative emissions, and motorcycles, shall not exceed the following standards.
- i. For the vehicles identified below, tested in accordance with the test procedure which includes the running loss test, the hot soak test, and the 72 hour diurnal test, the evaporative emission standards are:

Table 4  $\label{eq:table_eq} \mbox{Hydrocarbons or OMCHE}^{(1)}$ 

Vehicle Type	Model Year	Three-Day Diurnal + Hot Soak (grams/test) Useful Life <sup>(2)</sup>	Running Loss (grams/mile) Useful Life <sup>(2)</sup>
PC	1995 and subsequent	2.0	0.05
LDT		2.0	0.05
HEPC	1993 and	2.0	0.05
HELDT	subsequent	2.0	0.05

PC = Passenger Cars
LDT = Light-Duty Trucks
HEPC = Hybrid Electric Passenger Cars
HELDT = Hybrid Electric Light-Duty Trucks

- (1) The applicable evaporative emission standards for alcohol-fueled vehicles are expressed as organic material hydrocarbon equivalent (OMHCE).
- (2) For purposes of this paragraph, "useful life" shall have the same meaning as provided in section 2112, Title-13, California Code of Regulations. Approval of vehicles which are not exhaust emission tested using a chassis dynamometer pursuant to section 1960.1, Title-13, California Code of Regulations shall be based on an engineering evaluation of the system and data submitted by the applicant.

- 2. Evaporative emission standards shall be tested in accordance with the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", adopted April 16, 1975, as last amended December 15, 1994.
- 3. Beginning with the 1999 model year, all motor vehicles subject to the running loss and useful life standards, including those produced by small volume manufacturers, shall be certified to the specified standards.

#### 7:27-26.5 Fleet average (OTC-LEV Program)

(a) The fleet average non-methane organic gas exhaust emissions from passenger cars and light-duty trucks produced and delivered for sale in New Jersey by a manufacturer each model year shall not exceed the values set forth in Table 5.

### FLEET AVERAGE NON-METHANE ORGANIC GAS EXHAUST EMISSION REQUIREMENTS FOR LIGHT-DUTY VEHICLE WEIGHT CLASSES<sup>(5)</sup>

Vehicle Type	Loaded Vehicle Weight (lbs.)	Durability Vehicle Basis (mi)	Model Year (g/mi)	Fleet Average Non-Methane Organic Gases (1, 2, 3, 4)
PC and LDT	All 0-3,750	50,000	1996 1997 1998 1999 2000 2001 2002 2003 and subsequent	0.225 0.202 0.157 0.113 0.073 0.070 0.068
LDT	3,751-5,750	50,000	1996 1997 1998 1999 2000 2001 2002 2003 and subsequent	0.287 0.260 0.205 0.150 0.099 0.098 0.095 0.093

- 1. For the purpose of calculating fleet average NMOG values, a manufacturer may adjust the certification levels of hybrid electric vehicles (or "HEVs") based on the range of the HEV without the use of the engine.
- i. For the purpose of calculating fleet average NMOG values, vehicles which have no tailpipe emissions but use fuel-fired heaters and which are not certified as ZEVs shall be treated as "Type A HEV ULEVs."
- 2. Each manufacturer's fleet average NMOG value for the total number of PCS and LDTs from zero to 3,750 pounds loaded vehicle weight produced and delivered for sale in New Jersey shall be calculated in units of grams per mile NMOG according to the following equation, where the term "produced" means produced and delivered for sale in New Jersey: {[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (e)(1) of Title-13, California Code of Regulations, and produced) x (0.39)] + [No. of standard vehicles produced x (0.25)] + [(No. of Transitional Low-Emission Vehicles excluding HEVs produced) x (0.075)] + [(No. of Ultra-Low Emission Vehicles excluding HEVs produced) x (0.040)] + (HEV contribution factor)}/(Total No. of vehicles produced, including ZEVs and HEVs):
  - i. The HEV contribution factor shall be calculated in units of g/mi as follows:
- (1) HEV contribution factor = {[No. of "Type A HEV" TLEVs produced]  $x (0.100) + [No. of "Type B HEV" TLEVs produced] <math>x (0.113) + [No. of "Type C HEV" TLEVs produced] x (0.125)]} + {[No. of "Type A HEV" LEVs produced] x (0.057) + [No. of "Type B HEV" LEVs produced] x (0.066) + [No. of "Type C HEV" LEVs$

produced] x (0.075)} + ([No. of "Type A HEV" ULEVs produced] x (0.020) + [No. of "Type B HEV" ULEVs produced] x (0.030) + [No. of "Type C HEV" ULEVs produced] x (0.040)}

- ii. Zero-emission vehicles classified as light-duty trucks, 3,751 to 5,750 pounds LVW, may be designated by the manufacturer as passenger cars and light-duty trucks zero to 3,750 pounds LVW, for the purposes of calculating fleet average NMOG values.
- 3. Manufacturers that certify LDTs from 3,751 to 5,750 pounds LVW, shall calculate a fleet average NMOG value in units of g/mi NMOG according to the following equation, where the term "produced" means produced and delivered for sale in New Jersey: {[No. of standard vehicles produced x (0.32)] + [(No. of TLEVs produced excluding HEVs) x (0.160)] + [(No. of LEVs produced excluding HEVs) x (0.050)] + (HEV contribution factor)}/Total No. of vehicles produced, including ZEVs and HEVs).
- i. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term "produced" means produced and delivered for sale in New Jersey:
- (1) HEV contribution factor = {[No. of "Type A HEV" TLEVs produced] x (0.130) + [No. of "Type B HEV" TLEVs produced] x (0.145) + [No. of "Type C HEV" TLEVs produced] x (0.160)} + {[No. of "Type A HEV" LEVs produced] x (0.075) + [No. of "Type B HEV" LEVs produced] x (0.087) + [No. of "Type C HEV" LEVs produced] x (0.100)} + {[No. of "Type A HEV" ULEVs produced] x (0.025) + [No. of "Type B HEV" ULEVs produced] x (0.037) + [No. of "Type C HEV's ULEVs produced] x (0.050)}
- 4. In 2000 and subsequent model-years, small volume manufacturers shall comply with fleet average NMOG requirements.
- i. Prior to the year 2000, compliance with the specified fleet average NMOG requirements shall be waived for small volume manufacturers.
- ii. In 2000 and subsequent model-years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.075 g/mi for PCS and LDTs from zero to 3,750 pounds LVW.
- iii. In 2000 and subsequent model-years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.100 g/mi for LDTs from 3,751 to 5,750 pounds LVW.
- iv. If a manufacturer's average California sales exceeds 3,000 units of new PCS, LDTs, and medium duty vehicles based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall no longer be treated as a small volume manufacturer and shall comply with the fleet average requirements applicable for larger manufacturers as specified in section 1960.1 (g)(2), Title-13, California Code of Regulations, beginning with the fourth model year after the last of the three consecutive model years.
- v. If a manufacturer's average California sales falls below 3,000 units of new PCS, LDTs, and medium-duty vehicles based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall be treated as a small volume manufacturer and shall be subject to requirements for small volume manufacturers as specified in section 1960.1 (g)(2), Title-13, California Code of Regulations, beginning with the next model year.
- (b) In 1992 and subsequent model years, manufacturers that achieve fleet average NMOG values lower than the fleet average NMOG requirements for the corresponding model year shall receive credits in units of grams per mile NMOG determined as: {[(Fleet Average NMOG Requirement) (Manufacturer's Fleet Average NMOG Value)] x (Total No. of Vehicles Produced and Delivered for Sale in New Jersey, Including ZEVs and HEVs)}.

- 1. Manufacturers with fleet average NMOG values greater than the fleet average requirement for the corresponding model year shall receive debits in units of gram per mile NMOG equal to the amount of negative credits determined by the aforementioned equation. For any given model year, the total grams per mile NMOG credits or debits earned for PCS and LDTs zero to 3,750 pounds LVW and for LDTs 3,751 to 5,750 pounds LVW shall be summed together. The resulting amount shall constitute the grams per mile NMOG credits or debits accrued by the manufacturer for the model year.
- 2. For the 1994 through 1997 model years, manufacturers shall equalize emission debits within three model years and prior to the end of the 1998 model year by earning gram per mile NMOG emission credits in an amount equal to their grams per mile NMOG debits, or by submitting a commensurate amount of grams per mile NMOG credits that were earned previously or acquired from another manufacturer. For 1998 and subsequent model years, manufacturers shall equalize emission debits by the end of the following model year.
- 3. The grams per mile NMOG emission credits earned in any given model year shall retain full value through the subsequent model year.
- 4. The grams per mile NMOG value of any credits not used to equalize the previous model year's debit, shall be discounted by 50 percent at the beginning of the second model year after being earned, discounted to 25 percent of its original value if not used by the beginning of the third model year after being earned, and will have no value if not used by the beginning of the fourth model year after being earned.

#### 7:27-26.6 Enforcement (OTC-LEV Program)

- (a) Commencing with the 1999 model year, each manufacturer shall report to the Department the fleet average NMOG emissions of its total deliveries for sale of vehicles in each engine family for New Jersey for that particular model year. Such reports shall be submitted within 60 days after the end of each model year, and shall be submitted in a form and manner to be determined by the Department. Fleet average reports shall, at a minimum, identify the total number of vehicles including offset vehicles sold in each engine family delivered for sale in New Jersey and California, respectively, the specific vehicle models comprising the sales in each state and the corresponding certification standards, and the percentage of each model sold in New Jersey and California in relation to total fleet sales in the respective states.
- (b) In addition to all other requirements contained in this subchapter, new motor vehicle dealers shall comply with the following requirements.
- 1. No dealer shall sell or offer or deliver for sale a new passenger car or light-duty truck subject to this subchapter unless such vehicle conforms to the following standards and requirements:

- i. Ignition timing is set to manufacturer's specification with an allowable tolerance of <u>+</u>three degrees;
- ii. Idle speed is set to manufacturer's specification with an allowable tolerance of ±100 revolutions per minute;
- iii. Required exhaust and evaporative emission controls, such as exhaust gas recirculation (EGR) valves, are operating properly;
- iv. Vacuum hoses and electrical wiring for emission controls are correctly routed and connected, and operating properly; and
- v. Idle mixture is set to manufacturer's specification or according to manufacturer's recommended service procedure.
- 2. The requirements set forth in this subsection shall also apply to a dealer when servicing emission related components. However, only that requirement(s) appropriate to the service performed shall apply.

#### 7:27-26.7 Additional requirements (OTC-LEV Program)

- (a) In addition to all other requirements set forth in this subchapter, new motor vehicles and new motor vehicle engines which are certified to the emission certification standards contained in N.J.A.C. 7:27-26.4 shall comply with the following requirements:
- 1. Passenger cars, and light-duty trucks up to 5,750 pounds loaded vehicle weight, shall be equipped with emission control labels which conform to the requirements contained in the "California Motor Vehicle Emission Control Label Specifications" adopted March 1, 1978 as last amended July 12, 1991.
- 2. Passenger cars, and light-duty trucks up to 5,750 pounds loaded vehicle weight, shall be equipped with emission control malfunction and diagnostic systems which conform to the requirements contained in the California Code of Regulations, Title-13, Section 1968.1.
- 3. Passenger cars, and light-duty trucks up to 5,750 pounds loaded vehicle weight, which are gasoline-fueled or methanol-fueled shall comply with the requirements set forth in California's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks," dated March 26, 1976 and last amended February 21, 1990.

#### 7:27-26.8 Requirements for vehicle transactions (New HDDE Standards Program)

(a) No person who is a resident of this State, or who operates an established place of business within this State, shall sell, lease, rent, import, deliver, purchase, acquire, receive or otherwise transfer in this State, or offer for sale, lease, or rental in this State (or attempt or assist in any of these actions) any of the following types of motor vehicles or

engines that are intended primarily for use or for registration in this State, unless the manufacturer of the engine has received an Executive Order issued by the California Air Resources Board for such engine, certifying that the engine complies with the applicable exhaust emission standards under Title 13, section 1956.8 of the California Code of Regulations, incorporated herein by reference:

- 1. A 2005 or subsequent model year heavy-duty diesel engine;
- 2. A new motor vehicle equipped with a 2005 or subsequent model year heavyduty diesel engine; or
- 3. A motor vehicle with a new 2005 or subsequent model year heavy-duty diesel engine.
- (b) For the purposes of this subchapter, it is conclusively presumed that the equitable or legal title to any motor vehicle with an odometer reading of 7,500 miles or more has been transferred to an ultimate purchaser, and that the equitable or legal title to any motor vehicle with an odometer reading of less than 7,500 miles has not been transferred to an ultimate purchaser.

#### 7:27-26.9 Exemptions and technology review (New HDDE Standards Program)

- (a) Notwithstanding the provisions of N.J.A.C. 7:27-26.8, the requirements set forth at N.J.A.C. 7:27-26.8 through 26.11 shall not apply to:
- 1. A model year 2005 or 2006 heavy-duty diesel engine manufactured by an ultra-small volume manufacturer or intended for use in an urban bus;
- 2. A heavy-duty diesel engine of a model year and engine family for which CARB has determined, based upon its technology review, that compliance with its heavy-duty diesel engine standards is not required;
- 3. A vehicle acquired outside of New Jersey by a New Jersey resident for the purpose of replacing a vehicle registered to the resident which, while out of New Jersey, was stolen, or was damaged, or became inoperative, beyond reasonable repair; provided that such replacement vehicle is acquired within a reasonable amount of time following the time the previously owned vehicle was either stolen, damaged, or became inoperative;
- 4. A vehicle transferred by inheritance, or by a decree of divorce, dissolution, or legal separation entered by a court of competent jurisdiction;
  - 5. An emergency vehicle;
  - 6. A military tactical vehicle or equipment; or
- 7. Any other vehicle exempted by the California Health and Safety Code, section 43656.

## 7:27-26.10 Manufacturer compliance with California orders and voluntary recalls (New HDDE Standards Program)

(a) Any order or enforcement action taken by the California Air Resources Board to correct noncompliance with any heavy-duty diesel engine requirements adopted by such Board on December 8, 2000 shall be applicable to all such engines and motor vehicles

subject to this subchapter that are sold, leased, or rented, offered for sale, lease, or rental, or registered in New Jersey, except where the manufacturer demonstrates to the Department's satisfaction, within 21 days of issuance of such California Air Resources Board action, that this action is not applicable to such engines or vehicles in New Jersey.

(b) Any voluntary or influenced emission-related recall campaign initiated by any manufacturer pursuant to Title 13, sections 2113 through 2121 of the California Code of Regulations shall extend to all applicable engines and motor vehicles subject to this subchapter, sold, leased, or rented, offered for sale, lease, or rental, or registered in New Jersey, except where the manufacturer demonstrates to the Department's satisfaction, within 21 days of approval of the campaign by the California Air Resources Board, that this campaign is not applicable to such engines or vehicles in New Jersey.

#### 7:27-26.11 Enforcement

- (a) The Department and its representatives shall have the right to enter and inspect any site, building, equipment, or vehicle, or any portion thereof, at any time, in order to ascertain compliance or non-compliance with the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., this subchapter, any exemption, or any order, consent order, agreement, or remedial action plan issued, approved or entered into pursuant thereto. Such right shall include, but not be limited to the right to test or sample any materials, motor vehicles or motor vehicle engines or any emissions therefrom, at the facility, to sketch or photograph any portion of the site, building, vehicles or motor vehicle engines, to copy or photograph any document or records necessary to determine such compliance or non-compliance, and to interview any employees or representatives of the owner, operator or registrant. Such right shall be absolute and shall not be conditioned upon any action by the Department, except the presentation of appropriate credentials as requested and compliance with appropriate standard safety procedures.
- (b) Except with respect to the fleet average requirements set forth in N.J.A.C. 7:27-26.5(a), failure to comply with any of the obligations or requirements of this subchapter shall subject the violator to an enforcement action pursuant to the provisions of N.J.S.A. 26:2C-19.

#### 7:27-26.12 through 26.14. (Reserved)

#### 7:27-26.15 Incorporation by reference

- (a) Any reference in this subchapter to any of the documents or sources listed in (e) below shall be deemed to incorporate such document or source by reference, together with any future supplements or amendments thereto.
- (b) If the entity which promulgated a document or source incorporated by reference into this subchapter proposes to amend or supplement the document or source, the Department will publish a notice of the proposed amendment or supplement in the New Jersey Register. The notice shall state how to obtain a copy of the proposal, and to whom comments on the proposal can be submitted. The Department will publish the notice within 60 days after publication of the proposed amendment or supplement.

- (c) The adoption of any proposed amendment or supplement described in (b) above shall become operative in New Jersey no earlier than 30 days after publication by the Department of a notice of such adoption in the New Jersey Register.
- (d) If the Department proposes to not incorporate any future supplements or amendments to any of the documents or sources incorporated by reference into this subchapter, the Department will propose an amendment to this subchapter, and will provide opportunity for public comment on such proposed amendment, in accordance with the Administrative Procedures Act, N.J.S.A 52:14B-1 et seq.
- (e) The following documents and sources are incorporated by reference within this subchapter:
  - 1. California Code of Regulations, Title-13, Section 1968.1;
- 2. "Guidelines for Certification of 1983 and Subsequent Model Year Federally Certified Light-Duty Motor Vehicles for Sale in California," adopted July 20, 1982, as last amended July 12, 1991, CARB;
- 3. "California Non-Methane Organic Gas Test Procedures" adopted September 22, 1993, CARB;
- 4. "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted May 20, 1987, as last amended September 22, 1993, CARB;
- 5. "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," adopted April 16, 1975, as last amended December 15, 1994, CARB;
- 6. "California Motor Vehicle Emission Control Label Specifications" adopted March 1, 1978, as last amended July 12, 1991, CARB;
- 7. California's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks," adopted March 26, 1976, as last amended February 21, 1990, CARB;
  - 8. American Society for Testing Materials Standard Practice E29-88;
- 9. "Federal Highway Fuel Economy Test Procedure" 40 C.F.R. Part 600 Subpart B; and
  - 10. 40 C.F.R. § 86.082-24
- 11. "Control of Air Pollution from New and In-Use Motor Vehicles and New and In-Use Motor Vehicle Engines: Certification and Test Procedures," 40 C.F.R. Part 86, Subparts A and B.

- 12. 40 Code of Federal Regulations (CFR) Parts 51, 52 and 85.
- (f) Any of the documents in (e) above may be obtained by contacting the Office of Administrative Law or by contacting:

Department of Environmental Protection Office of Air Quality Management Bureau of Transportation Control PO Box 411 Trenton, New Jersey 08625-0411

#### **7:27-26.16 Severability**

Each section of this subchapter is severable. In the event that any section, subsection or division is held invalid in a court of law, the remainder of this subchapter shall continue in full force and effect.

#### **APPENDIX**

The State commits to support the NLEV Program as an acceptable alternative to the State's light-duty Clean Air Act §177 Program otherwise referred to in this subchapter as the OTC-LEV Program for the duration of the State's participation in the NLEV Program.

The State recognizes that its commitment to NLEV is necessary to ensure that NLEV remain in effect.

The State is submitting this SIP revision in accordance with the applicable Clean Air Act requirements at §110 and EPA regulations at 40 C.F.R. Part 86 and 40 C.F.R. Parts 51 and 52.

For the duration of the State's participation in NLEV, the State intends to forbear from adopting and implementing a ZEV mandate effective prior to model year 2006. Notwithstanding the previous sentence, if, no later than December 15, 2000, the US EPA does not adopt standards at least as stringent as the NLEV standards provided in 40 C.F.R. Part 86, subpart R that apply to new motor vehicles in model year 2004, 2005, or 2006, the State intends to forbear from adopting and implementing a ZEV mandate effective prior to model year 2004.