

1. During any 12 consecutive months, the geometric mean value of all 24-hour averages of suspended particulate matter concentrations in ambient air shall not exceed 60 micrograms per cubic meter; and

2. During any 12 consecutive months, 24-hour average concentrations may exceed 150 micrograms per cubic meter no more than once.

#### 7:27-13.4 Ambient air quality standards for sulfur dioxide

(a) The primary air quality standards are:

1. During any 12 consecutive months, the arithmetic mean concentration of sulfur dioxide in ambient air shall not exceed 80 micrograms per cubic meter (0.03 ppm); and

2. During any 12 consecutive months, 24-hour average concentrations may exceed 365 micrograms per cubic meter (0.14 ppm) no more than once.

(b) The secondary air quality standards are:

1. During any 12 consecutive months, the arithmetic mean concentration of sulfur dioxide in ambient air shall not exceed 60 micrograms per cubic meter (0.02 ppm);

2. During any 12 consecutive months, 24-hour average concentrations may exceed 260 micrograms per cubic meter (0.1 ppm) no more than once; and

3. During any 12 consecutive months, three-hour average concentrations may exceed 1,300 micrograms per cubic meter (0.5 ppm) no more than once.

#### 7:27-13.5 Ambient air quality standards for carbon monoxide

(a) The primary and secondary air quality standards are:

1. During any 12 consecutive months, eight-hour average concentrations of carbon monoxide in ambient air may exceed ten milligrams per cubic meter (9 ppm) no more than once; and

2. During any 12 consecutive months, one-hour average concentrations may exceed 40 milligrams per cubic meter (35 ppm) no more than once.

Amended by R.1985 d.252, effective May 20, 1985 (operative June 6, 1985).

See: 16 N.J.R. 1676(a), 17 N.J.R. 1292(a).

#### 7:27-13.6 Ambient air quality standards for ozone

(a) The primary air quality standard is:

1. During any 12 consecutive months, daily maximum one-hour average concentrations of ozone in ambient air may exceed 0.12 ppm (235 micrograms per cubic meter) no more than once.

(b) The secondary air quality standard is:

1. During any 12 consecutive months, one-hour average concentrations of ozone in ambient air may exceed 0.08 ppm (160 micrograms per cubic meter) no more than once.

Amended by R.1985 d.252, effective May 20, 1985 (operative June 6, 1985).

See: 16 N.J.R. 1676(a), 17 N.J.R. 1292(a).

(a) added; original section is now (b)1.

#### 7:27-13.7 Ambient air quality standards for lead

(a) The primary and secondary air quality standards are:

1. During any three consecutive months, the arithmetic mean of 24-hour averages of lead concentrations in ambient air shall not exceed 1.5 micrograms per cubic meter.

Amended by R.1985 d.252, effective May 20, 1985 (operative June 6, 1985).

See: 16 N.J.R. 1676(a), 17 N.J.R. 1292(a).

Deleted old text and substituted new.

#### 7:27-13.8 Ambient air quality standards for nitrogen dioxide

(a) The primary and secondary air quality standards are:

1. During any 12 consecutive months, the arithmetic mean concentration of nitrogen dioxide in ambient air shall not exceed 100 micrograms per cubic meter (0.05 ppm).

Amended by R.1985 d.252, effective May 20, 1985 (operative June 6, 1985).

See: 16 N.J.R. 1676(a), 17 N.J.R. 1292(a).

Added "(a) The primary . . . standards are:".

## SUBCHAPTER 14. CONTROL AND PROHIBITION OF AIR POLLUTION FROM DIESEL-POWERED MOTOR VEHICLES

### 7:27-14.1 Definitions

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

"Alternative smoke opacity standard" means the smoke opacity standard applicable to a specific vehicle-engine-chassis combination, as determined by the procedure set forth at N.J.A.C. 7:27B-4.5.

"Black smoke" means smoke in the exhaust emissions of a diesel-powered motor vehicle which has a dark achromatic visual value and produces no predominant hue.

"Blue smoke" means smoke in the exhaust emissions of a diesel-powered motor vehicle which has a hue of the portion

of the visible light spectrum which lies between green and violet.

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

"Certified configuration" means a heavy-duty diesel engine design or a light-duty diesel-powered motor vehicle-engine-chassis design certified by either of the following agencies as meeting the applicable emission standards for heavy-duty diesel engines or light-duty diesel-powered motor vehicles manufactured in a given model year:

1. EPA, for model year 1971 or for a more recent model year heavy-duty diesel vehicle engine;
2. EPA, for model year 1968 or for a more recent model year light-duty diesel vehicle;
3. CARB, for model year 1973 or for a more recent model year heavy-duty diesel vehicle engine; or
4. CARB, for model year 1966 or for a more recent model year light-duty diesel vehicle.

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

"Diesel bus" means any diesel-powered autobus or motor-bus of any size or configuration, whether registered in this State or elsewhere, that is designed or used for intrastate or interstate transportation of passengers for hire or otherwise on a public road, street or highway or any public or quasi-public property in this State, including, but not limited to, autobuses under the jurisdiction of the New Jersey Department of Transportation pursuant to Titles 27 or 48 of the Revised Statutes; autobuses of the New Jersey Transit Corporation and its contract carriers that are under the inspection jurisdiction of the New Jersey Department of Transportation; autobuses that are subject to Federal motor carrier safety regulations; autobuses under the authority of the Interstate Commerce Commission or its successor agency; school buses, as defined pursuant to N.J.S.A. 39:1-1; and hotel, casino, charter, and special buses.

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

"Diesel-powered" means utilizing a diesel engine.

"Division of Motor Vehicles" or "DMV" means the Division of Motor Vehicles within the New Jersey Department of Transportation.

"Element of design" means any part or system on a motor vehicle or a motor vehicle engine pertaining to the vehicle's or engine's certified configuration.

"Emission control apparatus" means any device utilized by the vehicle manufacturer and/or the engine manufacturer to control the release of any regulated emission, including any associated component which monitors the function and maintenance of such a device.

"EPA" means the United States Environmental Protection Agency.

"Exhaust emissions" means the emissions (including any liquid or solid particles in the gaseous stream) released into the atmosphere from any opening downstream from the exhaust ports of a motor vehicle engine.

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

"Heavy-duty diesel vehicle" or "HDDV" means a diesel-powered motor vehicle, other than a diesel bus, that has a GVWR exceeding 8,500 pounds and is designed primarily for transporting persons or property.

"High speed diesel engine" means any diesel engine with a maximum governed engine speed over 2,800 RPM.

"Idle" means an operating mode where the vehicle engine is not engaged in gear and where the engine operates at a speed at the revolutions per minute specified by the engine or vehicle manufacturer.

"Light-duty diesel vehicle" or "LDDV" means a diesel-powered motor vehicle, other than a diesel bus, that has a GVWR of 8,500 pounds or less and is designed primarily for transporting persons or property.

"Low speed diesel engine" means any diesel engine with a maximum governed engine speed of no more than 2,200 RPM.

"Medium speed diesel engine" means any diesel engine with a maximum governed engine speed of 2,201 RPM to 2,800 RPM.

"Model year" means the engine manufacturer's annual production period, consistent with 40 C.F.R. 86.082, as the same is amended or supplemented, which includes January 1 of such calendar year, provided, that if the manufacturer has no annual production period, this term shall mean a calendar year. The manufacturer's annual production period shall include January 1 of the calendar year for which it is designated and shall not include a January 1 of any other calendar year. Thus, the maximum duration of a model year is one calendar year plus 364 days (or 365 days if the model year includes February 29 in a leap year).

"Motor vehicle" means all vehicles propelled otherwise than by muscular power, excepting motorized bicycles and such vehicles as run only upon rails or tracks.

"Opacity" means the property of a substance whereby it partially or wholly obstructs the transmission of visible light expressed as the percentage to which light is obstructed.

"Peak smoke opacity" means the highest numerical value of smoke opacity obtained through the testing procedures for the snap acceleration smoke opacity test at N.J.A.C. 7:27B-4.3(a), or the rolling acceleration smoke opacity test at N.J.A.C. 7:27B-4.3(b), or the stall smoke opacity test at N.J.A.C. 7:27B-4.3(c).

"Person" means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships, and joint stock companies, and shall also include, without limitation, all political subdivisions of any states, and any agencies or instrumentalities thereof.

"Quasi-public roadway" means any roadway that, although under private ownership or control, is accessible to the public. This term shall include, but shall not be limited to, the New Jersey Turnpike, the Garden State Parkway, and the Atlantic City Expressway, but shall not include shopping mall roadways and parking lots, private business roadways, residential and nonresidential parking lots, and private driveways.

"Regulated emission" means any solid, liquid or gaseous substance which is emitted from a motor vehicle or motor vehicle engine and which is regulated by the EPA pursuant to 40 C.F.R. Part 86.

"Retrofitted diesel bus" means a diesel bus which is equipped with an engine which has been retrofitted or rebuilt to meet a particulate emission standard of 0.10 g/bhp-hr (grams per brake horsepower per hour) in conformance with the requirements set forth at 40 C.F.R. 85.1403(b) or (c).

"Smoke" means the emissions, including airborne solid and/or liquid particles, exclusive of water vapor, released into the atmosphere from a process of combustion.

R.1970 d.148, eff. June 19, 1971.  
See: 2 N.J.R. 54(c), 3 N.J.R. 4(a).  
Amended by R.1985 d.1, effective January 21, 1985 (operative July 1, 1985).

See: 16 N.J.R. 2888, 17 N.J.R. 189(b).

Section substantially amended.

Administrative Corrections.

See: 23 N.J.R. 1432(d).

Amended by R.1997 d.393, effective September 15, 1997 (operative October 7, 1997).

See: 29 N.J.R. 971(a), 29 N.J.R. 4108(a).

Added "Alternative smoke opacity standard", "Black smoke", "Blue smoke", "California Air Resources Board", "Certified configuration", "Diesel bus", "Division of Motor Vehicles", "Element of design", "Emission control apparatus", "EPA", "Gross vehicle weight rating", "Heavy-duty diesel vehicle", "Light-duty diesel vehicle", "Low speed engine", "Model year", "Peak smoke opacity", "Quasi-public roadway", "Regulated emission", "Retrofitted diesel bus" and "Smokemeter"; amended and changed the name of "Diesel-powered engine" to read "Diesel engine" and "Diesel-powered motor vehicle" to read "Diesel

powered"; deleted "Autobus"; and amended "Department", "Exhaust emissions", "Idle", "Opacity", "Person" and "Smoke".

Amended by R.1998 d.309, effective July 6, 1998 (operative July 21, 1998).

See: 30 N.J.R. 901(a), 30 N.J.R. 2476(b).

Deleted "Smokemeter" definition.

Amended by R.1999 d.210, effective July 6, 1999 (operative August 10, 1999).

See: 31 N.J.R. 828(a), 31 N.J.R. 1803(b).

Inserted "High speed diesel engine" and "Medium speed diesel engine"; and rewrote "Low speed engine" as "Low speed diesel engine".

Administrative change.

See: 33 N.J.R. 3550(a).

#### 7:27-14.2 Applicability

(a) Except as provided in (b) and (c) below, this subchapter applies to all diesel-powered motor vehicles.

(b) This subchapter does not apply to a diesel-powered motor vehicle with a GVWR equal to or greater than 18,000 pounds that is designed or used for the transporting of property on any public road, street or highway, on any public property, or on any quasi-public roadway in this State, and is owned and operated by a county, municipality, fire district, or duly incorporated nonprofit organization for first aid, emergency, ambulance, rescue, or fire-fighting purposes.

(c) N.J.A.C. 7:27-14.5 and 14.6 do not apply to light-duty diesel vehicles.

Repeal and New Rule, R.1997 d.393, effective September 15, 1997 (operative October 7, 1997).

See: 29 N.J.R. 971(a), 29 N.J.R. 4108(a).

For inspection standards formerly codified at this section see N.J.A.C. 7:27-14.6.

#### 7:27-14.3 General prohibitions

(a) No person shall cause, suffer, allow, or permit the engine of a diesel-powered motor vehicle to idle for more than three consecutive minutes if the vehicle is not in motion, except:

1. A motor vehicle at the vehicle operator's place of business where the motor vehicle is permanently assigned may idle for 30 consecutive minutes; or
2. A motor vehicle may idle for 15 consecutive minutes when the vehicle engine has been stopped for three or more hours.

(b) The provisions of (a) above shall not apply to:

1. A diesel bus while it is discharging or picking up passengers;
2. A motor vehicle stopped in a line of traffic;
3. A motor vehicle whose primary power source is utilized in whole or in part for necessary and definitively prescribed mechanical operation other than propulsion, passenger compartment heating or passenger compartment air conditioning;

4. A motor vehicle being or waiting to be examined by a State or Federal motor vehicle inspector;
5. An emergency motor vehicle in an emergency situation;
6. A motor vehicle while it is being repaired;
7. A motor vehicle while it is engaged in the process of connection or detachment of a trailer or of exchange of trailers; or
8. A motor vehicle, manufactured with a sleeper berth, while it is being used, in a non-residentially zoned area, by the vehicle's operator for sleeping or resting, unless the vehicle is equipped with a functional auxiliary power system designed in whole or in part to maintain cabin or sleeper berth comfort or to mitigate cold weather start-up difficulties.

(c) No person shall cause, suffer, allow or permit any emission control apparatus or element of design installed on any diesel-powered motor vehicle or diesel engine to be disconnected, detached, deactivated, or in any other way rendered inoperable or less effective, in respect to limiting or controlling emissions than it was designed to be by the original equipment or vehicle manufacturer, except for the purposes of diagnostics, maintenance, repair or replacement and only for the duration of such operations.

(d) (Reserved)

R.1970 d.148, eff. June 19, 1971.  
 See: 2 N.J.R. 54(c), 3 N.J.R. 4(a).  
 Amended by R.1985 d.1, effective January 21, 1985 (operative July 1, 1985).  
 See: 16 N.J.R. 2888, 17 N.J.R. 189(b).  
 Section recodified to 14.2 and this section repealed.  
 New Rule, R.1985 d.610, effective December 2, 1985 (operative May 5, 1986).  
 See: 16 N.J.R. 2886(a), 17 N.J.R. 2887(a).  
 Amended by R.1997 d.393, effective September 15, 1997 (operative October 7, 1997).  
 See: 29 N.J.R. 971(a), 29 N.J.R. 4108(a).  
 In (b)1. substituted "diesel bus" for "autobus"; in (b)8. added ", unless the vehicle ... start-up difficulties"; and added (c) and (d).

#### 7:27-14.4 General public highway standards

(a) No person shall cause, suffer, allow or permit the operation of any diesel-powered motor vehicle upon the public roads, streets or highways of the State or upon any public property or upon any quasi-public roadway in the State, if the vehicle:

1. Emits smoke in the exhaust emissions, the opacity of which exceeds any applicable smoke opacity standards set forth at N.J.A.C. 7:27-14.6;
2. Emits visible blue smoke in the exhaust emissions for more than three consecutive seconds;
3. Does not have a properly functioning and properly maintained emission control apparatus, as determined according to the emissions control apparatus examination procedures established at N.J.A.C. 7:27B-4.4; or

4. Has an emission control apparatus or an element of design installed on the vehicle or diesel engine which has been disconnected, detached, deactivated, or in any other way rendered inoperable or less effective than designed by the original equipment or vehicle or engine manufacturer.

New Rule, R.1997 d.393, effective September 15, 1997 (operative October 7, 1997).  
 See: 29 N.J.R. 971(a), 29 N.J.R. 4108(a).  
 Administrative change.  
 See: 33 N.J.R. 3550(a).

#### 7:27-14.5 Test requirements

(a) A person testing a diesel-powered motor vehicle as part of the roadside enforcement program established pursuant to N.J.S.A. 39:8-64 and N.J.A.C. 13:20-46 shall use one or more of the following tests, as designated by the Director of the Division of Motor Vehicles in consultation with the Department and the New Jersey Department of Transportation, and with the approval of the Attorney General:

1. The snap acceleration smoke opacity test, for a vehicle with a low or a medium speed diesel engine, only, as described at N.J.A.C. 7:27B-4.3(a);
2. The rolling acceleration smoke opacity test, as described at N.J.A.C. 7:27B-4.3(b);
3. The stall smoke opacity test, for a vehicle with a medium or high speed diesel engine and an automatic transmission, only, as described at N.J.A.C. 7:27B-4.3(c); or
4. The visible black smoke screening test, as described at N.J.A.C. 7:27B-4.3(d).

(b) A person testing a heavy-duty diesel vehicle as part of the periodic inspection program established pursuant to N.J.S.A. 39:8-64 and N.J.A.C. 13:20-26.17 shall use one of the following tests:

1. The snap acceleration smoke opacity test, for a vehicle with a low or a medium speed diesel engine, only, as described at N.J.A.C. 7:27B-4.3(a);
2. The rolling acceleration smoke opacity test, as described at N.J.A.C. 7:27B-4.3(b);
3. The stall smoke opacity test, for a vehicle with a medium or high speed diesel engine and an automatic transmission, only, as described at N.J.A.C. 7:27B-4.3(c); or
4. (Reserved)

(c) A person testing a diesel bus as part of the periodic inspection program pursuant to N.J.A.C. 13:20-30, or N.J.S.A. 48:4-1 et seq. and N.J.A.C. 16:53, shall use one of the following tests: