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test. Obtain methanol and formaldehyde sample analyses, if applicable, within 24 hours of the end of the sample period. (If it is not possible to perform analysis on the methanol and formaldehyde samples, within 24 hours the samples should be stored in a dark cold (4–10 °C) environment until analysis. The samples should be analyzed within fourteen days.)

(20) Disconnect the exhaust tube from the vehicle tailpipe(s) and drive the vehicle from dynamometer.

(21) The CVS or CFV may be turned off, if desired.

(22) Vehicles to be tested for evaporative emissions will proceed according to § 86.138. For all others this completes the test sequence.

[71 FR 77925, Dec. 27, 2006]

§ 86.237–94 Dynamometer test run, gaseous emissions.

(a) The complete dynamometer test consists of a cold start drive of approximately 7.5 miles (12.1 kilometers) and a hot start drive of approximately 3.6 miles (5.8 kilometers).

(b) If the preconditioned vehicle is not already on the dynamometer, it shall be pushed into position.

(c) The vehicle is allowed to stand on the dynamometer during the ten minute time period between the cold and hot start test. The cold start test is divided into two periods. The first period, representing the cold start “transient” phase, terminates at the end of the deceleration which is scheduled to occur at 505 seconds of the driving schedule. The second period, representing the “stabilized” phase, consists of the remainder of the driving schedule, including engine shutdown. The hot start test is identical to the first part or transient phase of the cold start test. Therefore, the hot start test terminates after the first period (505 seconds) is run.

(d) The provisions of § 86.137(b) apply to this subpart.

§§ 86.238–94—86.239–94 [Reserved]

§ 86.240–94 Exhaust sample analysis.

The provisions of § 86.140 apply to this subpart.

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§ 86.241–94 [Reserved]

§ 86.242–94 Records required.

The provisions of § 86.142–90 apply to this subpart.

§ 86.243–94 [Reserved]

§ 86.244–94 Calculations; exhaust emissions.

The provisions of § 86.144–94 apply to this subpart, except that NO_x measurements are optional. Should NO_x measurements be calculated, note that the humidity correction factor is not valid at colder temperatures. Light-duty vehicles and light-duty trucks must calculate and report the weighted mass of each relevant pollutant, i.e., THC, CO, THCE, NMHC, NMHCE, CH₄, NO_x, and CO₂ in grams per vehicle mile.

[71 FR 77926, Dec. 27, 2006; 72 FR 7921, Feb. 21, 2007]

§ 86.245–94 [Reserved]

§ 86.246–94 Intermediate temperature testing.

(a) This section is applicable to tests which are conducted at an intermediate temperature as defined in § 86.094–2.

(b) For testing during ambient temperatures of less than 50 °F (10 °C), the test procedure is identical to the test procedure that is used for testing at 20 °F (–7 °C) contained in 40 CFR part 86, subpart C.

(c) For testing at temperatures of 50 °F (10 °C) or higher, the FTP shall be used.

Subpart D—Emission Regulations for New Gasoline-Fueled and Diesel-Fueled Heavy-Duty Engines; Gaseous Exhaust Test Procedures

AUTHORITY: Secs. 202, 206, 207, 208, 301(a), Clean Air Act, as amended (42 U.S.C. 1857f–1, 1857f–5, 1857f–5a, 1857f–6, 1857g(a)).

SOURCE: 42 FR 45154, Sept. 8, 1977, unless otherwise noted.

§ 86.301–79 Scope; applicability.

This subpart contains gaseous emission test procedures for gasoline-fueled

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and Diesel heavy-duty engines. It applies to 1979 and later model years.

§ 86.302-79 Definitions.

The definitions in §§ 86.077-2, 86.078-2, and 86.079-2 apply to this subpart.

§ 86.303-79 Abbreviations.

The abbreviations in § 86.078-3 apply to this subpart.

§ 86.304-79 Section numbering; construction.

(a) The model year of initial applicability is indicated by the section number. The two digits following the hyphen designate the first model year for which a section is effective. A section remains effective until superseded.

Example: Section 86.311-79 applies to the 1979 and subsequent model years until superseded. If a § 86.311-81 is promulgated it would take effect beginning with the 1981 model year; § 86.311-79 would apply to model years 1979 and 1980.

(b) A section reference without a model year suffix refers to the section applicable for the appropriate model year.

(c) Unless indicated, all provisions in this subpart apply to both gasoline-fueled and Diesel heavy-duty engines.

§ 86.305-79 Introduction; structure of subpart.

(a) This subpart describes the equipment required and the procedures to follow in order to perform exhaust emission tests on gasoline-fueled and Diesel heavy-duty engines. Subpart A

sets forth the testing requirements and test intervals necessary to comply with EPA certification procedures.

(b) Four topics are addressed in this subpart. Sections 86.306 through 86.318 set forth specifications and equipment requirements; §§ 86.319 through 86.333 discuss calibration methods and frequency; test procedures and data requirements are listed (in approximately chronological order) in §§ 86.334 through 86.343; and calculation formulas are found in §§ 86.344 and 86.345. Alternative procedures and calculations are set forth in §§ 86.346 and 86.347.

§ 86.306-79 Equipment required and specifications; overview.

(a) This subpart contains procedures for both gasoline-fueled and Diesel engine gaseous emission tests. Generally, the equipment required is identical for both types of engines. Equipment required and specifications are found in §§ 86.307 through 86.318.

(b) Some analyzer specifications refer to calibration checks found in §§ 86.320 through 86.332.

§ 86.307-82 Fuel specifications.

(a) *Gasoline.* (1) Gasoline having the following specifications will be used by the Administrator in exhaust emission testing. Gasoline having the following specifications or substantially equivalent specifications approved by the Administrator shall be used by the manufacturer in exhaust testing, except that the lead and octane specifications do not apply.

Item designation	ASTM	Leaded	Unleaded
Octane, research, minimum	D2699	100	96
PB (organic), grams/U.S. gallon	¹ 1.4	0.00-0.05
Distillation Range:			
IBP, °F	D86	75-95	75-95
10 pct point, °F	D86	120-135	120-135
50 pct point, °F	D86	200-230	200-230
90 pct point, °F	D86	300-325	300-325
EP, °F (maximum)	D86	415	415
Sulfur, weight percent, maximum	D1266	0.10	0.10
Phosphorus, grams/U.S. gallon, maximum	0.01	0.005
RVP pounds per square inch	D323	8.0-9.2	8.0-9.2
Hydrocarbon composition:			
Olefins, percent, maximum	D1319	10	10
Aromatics, percent maximum	D1319	35	35
Saturates	D1319	(²)	(²)

¹ Minimum. ² Remainder.