

**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 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 A section remains effective until superseded.

*Example:* Section 86.311-79 applies to the 1979 and subsequent model years until superseded.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 .....	.....	11.4	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