

§ 86.1542-84 Information required.

(a) *General data—heavy-duty engines.* Information shall be recorded for each idle emission test as specified in 40 CFR part 1065, subpart G. The following test data are required:

- (1) Date and time of day.
- (2) Test number.
- (3) Engine intake air or test cell temperature.
- (4) Barometric pressure.

NOTE: A central laboratory barometer may be used: *Provided*, That individual test cell barometric pressures are shown to be within ± 0.1 percent of the barometric pressure at the central barometer location.

- (5) Engine intake or test cell and CVS dilution air humidity.
- (6) Curb idle speed during the test.
- (7) Idle exhaust CO concentration (dry basis).
- (8) Idle exhaust raw CO₂ concentration (if applicable).
- (9) Dilute bag sample CO and CO₂ concentrations (if applicable).
- (10) Total CVS flow rate with calculated dilution factor for the idle mode (if applicable).

(b) *General data—light-duty trucks.* The following information shall be recorded with respect to each test:

- (1) Test number.
- (2) System or device tested (brief description).
- (3) Date and time of day for the test.
- (4) Instrument operated.
- (5) Vehicle: ID number, manufacturer, model year, standards, engine family, evaporative emissions family, basic engine description (including displacement, number of cylinders, turbo-charger used and catalyst usage), fuel system (including number of carburetors, number of carburetor barrels, fuel injection type and fuel tank(s) capacity and location), engine code, gross vehicle weight rating, inertia weight class and transmission configuration, as applicable.

(6) All pertinent instrument information such as tuning, gain, serial number, detector number and range. As an alternative a reference to a vehicle test cell number may be used, with the advance approval of the Administrator, provided test cell calibration records show the pertinent instrument information.

(7) Recorder charts or computer printouts: Identify zero, span, exhaust gas and dilution air sample traces or computer readings (if applicable).

(8) Test cell ambient temperature and, if applicable, barometric pressure and humidity.

NOTE: A central laboratory barometer may be used: *Provided*, That individual test cell barometric pressures are shown to be within $+ 0.1$ percent of the barometric pressure at the central barometer location.

(9) Pressure of the mixture of exhaust and dilution air entering the CVS metering device (or pressure drop across the CFV), the pressure increase across the device, and the temperature at the inlet (if applicable). The temperature may be recorded continuously or digitally to determine temperature variations (if applicable).

(10) The number of revolutions of the positive displacement pump accumulated while exhaust samples are being collected (if applicable). The number of standard cubic feet metered by a critical flow venturi would be the equivalent record for a CFV (if applicable).

(11) The humidity of the dilution air.

NOTE: If conditioning columns are not used (see §§ 86.122 and 86.144) this measurement can be deleted. If the conditioning columns are used and the dilution air is taken from the test cell, the ambient humidity can be used for this measurement.

(12) Curb idle engine speed during the test.

(13) Idle exhaust CO concentration (dry basis).

(14) Idle exhaust raw CO₂ concentration (if applicable).

(15) Dilute bag sample CO and CO₂ concentrations (if applicable).

(16) Total CVS flow rate with calculated dilution factor for the idle mode (if applicable).

[48 FR 52252, Nov. 16, 1983, as amended at 49 FR 48149, Dec. 10, 1984; 70 FR 40441, July 13, 2005]

EFFECTIVE DATE NOTE: At 73 FR 37194, June 30, 2008, § 86.1542-84 was redesignated as § 86.1542, effective July 7, 2008.

§ 86.1544-84 Calculation; idle exhaust emissions.

(a) The final idle emission test results shall be reported as percent for carbon monoxide on a dry basis.

(b) If a CVS sampling system is used, the following procedure shall apply: