

**§ 86.1846-01**

**40 CFR Ch. I (7-1-10 Edition)**

EFFECTIVE DATE NOTE: At 75 FR 25690, May 7, 2010, § 86.1845-04 was amended by revising paragraphs (a)(1), (b)(5)(i), and (c)(5)(i), effective July 6, 2010. For the convenience of the user, the revised text is set forth as follows:

(b)(3) of this section or the expanded sample size as provided for in this paragraph (c).

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**§ 86.1845-04 Manufacturer in-use verification testing requirements.**

**§ 86.1846-01 Manufacturer in-use confirmatory testing requirements.**

(a) \* \* \*

(1) A manufacturer of LDVs, LDTs, MDPVs and/or complete HDVs must test, or cause to have tested, a specified number of LDVs, LDTs, MDPVs and complete HDVs. Such testing must be conducted in accordance with the provisions of this section. For purposes of this section, the term vehicle includes light-duty vehicles, light-duty trucks and medium-duty passenger vehicles.

(a) *General requirements.* (1) A manufacturer of LDVs, LDTs and/or MDPVs must test, or cause testing to be conducted, under this section when the emission levels shown by a test group sample from testing under §§ 86.1845-01 or 86.1845-04, as applicable, exceeds the criteria specified in paragraph (b) of this section. The testing required under this section applies separately to each test group and at each test point (low and high mileage) that meets the specified criteria. The testing requirements apply separately for each model year starting with model year 2001. These provisions do not apply to heavy-duty vehicles or engines prior to the 2007 model year.

\* \* \* \* \*

(b) \* \* \*

(5) \* \* \*

(i) Each test vehicle of a test group shall be tested in accordance with the Federal Test Procedure and the US06 portion of the Supplemental Federal Test Procedure as described in subpart B of this part, when such test vehicle is tested for compliance with applicable exhaust emission standards under this subpart. Test vehicles subject to applicable exhaust CO<sub>2</sub> emission standards under this subpart shall also be tested in accordance with the highway fuel economy test as described in part 600, subpart B of this chapter.

(2) Except for vehicles certified under the NLEV provisions of subpart R of this part or unless otherwise approved by the Administrator, no emission measurements made under the requirements of this section may be adjusted by Reactivity Adjustment Factors (RAFs).

\* \* \* \* \*

(c) \* \* \*

(5) \* \* \*

(i) Each test vehicle shall be tested in accordance with the Federal Test Procedure and the US06 portion of the Supplemental Federal Test Procedure as described in subpart B of this part when such test vehicle is tested for compliance with applicable exhaust emission standards under this subpart. Test vehicles subject to applicable exhaust CO<sub>2</sub> emission standards under this subpart shall also be tested in accordance with the highway fuel economy test as described in part 600, subpart B of this chapter. The US06 portion of the SFTP is not required to be performed on vehicles certified in accordance with the National LEV provisions of subpart R of this part. One test vehicle from each test group shall receive a Federal Test Procedure at high altitude. The test vehicle tested at high altitude is not required to be one of the same test vehicles tested at low altitude. The test vehicle tested at high altitude is counted when determining the compliance with the requirements shown in Table S04-06 and Table S04-07 in paragraph

(3) For purposes of this section, the term vehicle includes light-duty vehicles, light-duty trucks and medium-duty passenger vehicles.

(4) Upon a manufacturer's written request, prior to in-use testing, that presents information to EPA regarding pre-conditioning procedures designed solely to remove the effects of high sulfur in gasoline from vehicles produced through the 2007 model year, EPA will consider allowing such procedures on a case-by-case basis. EPA's decision will apply to manufacturer in-use testing conducted under this section and to any in-use testing conducted by EPA. This provision does not apply to heavy-duty vehicles and engines. After the 2007 model year, this provision can be used only for in-use vehicles in American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands, but this provision only can be used for such vehicles in any of those

## Environmental Protection Agency

## § 86.1846-01

locations if low sulfur gasoline is determined by the Administrator to be unavailable in that specific location.

(b) *Criteria for additional testing.* A manufacturer shall test a test group or a subset of a test group as described in paragraph (j) of this section when the results from testing conducted under §§ 86.1845-01 and 86.1845-04, as applicable, show mean emissions for that test group of any pollutant(s) to be equal to or greater than 1.30 times the applicable in-use standard and a failure rate, among the test group vehicles, for the corresponding pollutant(s) of fifty percent or greater.

(1) This requirement does not apply to Supplemental FTP testing conducted under § 86.1845-04(b)(5)(i) or evaporative/refueling testing conducted under § 86.1845-01 or § 86.1845-04. Testing conducted at high altitude under the requirements of §§ 86.1845-01 and 86.1845-04 will be included in determining if a test group meets the criteria triggering testing required under this section.

(2) The vehicle tested under the requirements of § 86.1845-01(c)(2) or § 86.1845-04(c)(2) with a minimum odometer miles of 75% of useful life will not be included in determining if a test group meets the triggering criteria.

(3) The SFTP composite emission levels shall include the IUVP FTP emissions, the IUVP US06 emissions, and the values from the SC03 Air Conditioning EDV certification test (without DFs applied). The calculations shall be made using the equations prescribed in § 86.164-01. If more than one set of certification SC03 data exists (due to running change testing or other reasons), the manufacturer shall choose the SC03 result to use in the calculation from among those data sets using good engineering judgment.

(c) *Useful life.* Vehicles tested under the provisions of this section must be within the useful life specified for the emission standards which were exceeded in the testing under § 86.1845-01 or § 86.1845-04, as applicable. Testing should be within the useful life specified, subject to sections 207(c)(5) and (c)(6) of the Clean Air Act where applicable.

(d) *Number of test vehicles.* A manufacturer must test a minimum of ten vehi-

cles of the test group or Agency-designated subset. A manufacturer may, at the manufacturer's discretion, test more than ten vehicles under this paragraph for a specific test group or Agency-designated subset. If a manufacturer chooses to test more than the required ten vehicles, all testing must be completed within the time designated in the testing completion requirements of § 86.1846-01(g). Any vehicles which are eliminated from the sample either prior to or subsequent to testing, or any vehicles for which test results are determined to be void, must be replaced in order that the final sample of vehicles for which test results acceptable to the Agency are available equals a minimum of ten vehicles. A manufacturer may cease testing with a sample of five vehicles if the results of the first five vehicles tested show mean emissions for each pollutant to be less than 75.0 percent of the applicable standard, with no vehicles exceeding the applicable standard for any pollutant.

(e) *Emission testing.* Each test vehicle of a test group or Agency-designated subset shall be tested in accordance with the Federal Test Procedure and/or the Supplemental Federal Test Procedure (whichever of these tests performed under § 86.1845-01 produces emission levels requiring testing under this section) as described in subpart B of this part, when such test vehicle is tested for compliance with applicable exhaust emission standards under this subpart.

(f) *Geographical limitations.* (1) Test groups or Agency-designated subsets certified to 50-state standards: For low altitude testing no more than 50 percent of the test vehicles may be procured from California. The test vehicles procured from the 49 state area must be procured from a location with a heating degree day 30 year annual average equal to or greater than 4000.

(2) Test groups or Agency-designated subsets certified to 49 state standards: For low-altitude testing all vehicles shall be procured from a location with a heating degree day 30 year annual average equal to or greater than 4000.

(3) Vehicles procured for high altitude testing may be procured from any

**§86.1847-01**

**40 CFR Ch. I (7-1-10 Edition)**

area provided that the vehicle's primary area of operation was above 4000 feet.

(g) *Testing.* Testing required under this section must commence within three months of completion of the testing under §86.1845-01 or §86.1845-04 which triggered the confirmatory testing and must be completed within seven months of the completion of the testing which triggered the confirmatory testing. Any industry review of the results obtained under §86.1845-01 or §86.1845-04 and any additional vehicle procurement and/or testing which takes place under the provisions of §86.1845-01 or §86.1845-04 which the industry believes may affect the triggering of required confirmatory testing must take place within the three month period. The data and the manufacturers reasoning for reconsideration of the data must be provided to the Agency within the three month period.

(h) *Limit on manufacturer conducted testing.* For each manufacturer, the maximum number of test group(s) (or Agency-designated subset(s)) of each model year for which testing under this section shall be required is limited to 50 percent of the total number of test groups of each model year required to be tested by each manufacturer as prescribed in §86.1845-01 or §86.1845-04 rounded to the next highest whole number where appropriate. For each manufacturer with only one test group under §86.1845-01 or §86.1845-04, as applicable, such manufacturer shall have a maximum potential testing requirement under this section of one test group (or Agency-designated subset) per model year.

(i) Prior to beginning in-use confirmatory testing the manufacturer must, after consultation with the Agency, submit a written plan describing the details of the vehicle procurement, maintenance, and testing procedures (not otherwise specified by regulation) it intends to use.

(j) *Testing a subset.* EPA may designate a subset of the test group based on transmission type for testing under this section in lieu of testing the entire test group when the results for the entire test group from testing conducted under §86.1845-01 or §86.1845-04 show mean emissions and a failure rate

which meet these criteria for additional testing.

[64 FR 23925, May 4, 1999, as amended at 65 FR 6866, Feb. 10, 2000; 65 FR 59977, Oct. 6, 2000; 66 FR 19310, Apr. 13, 2001; 71 FR 78094, Dec. 28, 2006]

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**§86.1846-01 Manufacturer in-use confirmatory testing requirements.**

(a) \* \* \*

(1) A manufacturer of LDVs, LDTs and/or MDPVs must test, or cause testing to be conducted, under this section when the emission levels shown by a test group sample from testing under §§86.1845-01 or 86.1845-04, as applicable, exceeds the criteria specified in paragraph (b) of this section. The testing required under this section applies separately to each test group and at each test point (low and high mileage) that meets the specified criteria. The testing requirements apply separately for each model year starting with model year 2001. These provisions do not apply to heavy-duty vehicles or heavy-duty engines prior to the 2007 model year. These provisions do not apply to emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O.

\* \* \* \* \*

(b) *Criteria for additional testing.* A manufacturer shall test a test group or a subset of a test group as described in paragraph (j) of this section when the results from testing conducted under §§86.1845-01 and 86.1845-04, as applicable, show mean emissions for that test group of any pollutant(s) (except CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) to be equal to or greater than 1.30 times the applicable in-use standard and a failure rate, among the test group vehicles, for the corresponding pollutant(s) of fifty percent or greater.

\* \* \* \* \*

**§86.1847-01 Manufacturer in-use verification and in-use confirmatory testing; submittal of information and maintenance of records.**

(a) The manufacturer who conducts or causes to be conducted testing of any motor vehicle under §86.1845-01 shall establish, maintain and retain the following records organized and indexed by test group and evaporative/refueling family: