Environmental Protection Agency § 86.1846–01

Manufacturer in-use confirmatory testing requirements.

(a) General requirements. (1) Manufacturers 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 exceed 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. These provisions apply to heavy-duty vehicles starting with model year 2007. These provisions do not apply to emissions of CO, CH4, and N2O.

(2) The provisions of §86.1845–04(a)(3) regarding fuel sulfur effects apply equally to testing under this section. (b) Criteria for additional testing. (1) 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 show mean exhaust emissions for that test group of any pollutant(s) (except CO, CH4, and N2O) 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.

(i) Additional testing is not required under this paragraph (b)(1) based on Supplemental FTP testing or evaporative/refueling testing. Testing conducted at high altitude under the requirements of §86.1845–04(b) will be included in determining if a test group meets the criteria triggering testing required under this section.

(ii) The vehicle tested under the requirements of §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.

(iii) 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 §86.184. 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.

(2) If fewer than 50 percent of the vehicles from a leak family pass either the leak test or the diurnal test under §86.1845, EPA may require further leak testing under this paragraph (b)(2). Testing under this section must include five vehicles from the family. If all five of these vehicles fail the test, the manufacturer must test five additional vehicles.

EPA will determine whether to require further leak testing under this section after providing the manufacturer an opportunity to discuss the results, including consideration of any of the following information, or other items that may be relevant:

(i) Detailed system design, calibration, and operating information, technical explanations as to why the individual vehicles tested failed the leak standard.

(ii) Comparison of the subject vehicles to other similar models from the same manufacturer.

(iii) Data or other information on owner complaints, technical service bulletins, service campaigns, special policy warranty programs, warranty repair data, state I/M data, and data available from other manufacturer-specific programs or initiatives.

(iv) Evaporative emission test data on any individual vehicles that did not pass leak testing during IUVP.

(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. 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 vehicles 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 paragraph (g) of this section. 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 FTP and/or the SFTP (whichever of these tests performed under §86.1845 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 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 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 and any additional vehicle procurement and/or testing which takes place under the provisions of §86.1845 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, rounded to the next highest whole number where appropriate. For each manufacturer with only one test group under §86.1845, such manufacturer shall have a maximum potential testing requirement under this section of one test group (or Agency-designated subset) per model year.

(i) Testing plan. 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. EPA must approve the test plan before the manufacturer may start further testing.

(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 show mean emissions and a failure rate which meet these criteria for additional testing.

[79 FR 23732, Apr. 28, 2014]

§ 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