

§ 1048.245

40 CFR Ch. I (7-1-04 Edition)

emissions at the low-hour test point. Adjust the official emission results for each tested engine at the selected test point by multiplying the measured emissions by the deterioration factor. If the factor is less than one, use one.

(2) For engines that do not use aftertreatment technology, the deterioration factor is the difference between exhaust emissions at the end of useful life and exhaust emissions at the low-hour test point. Adjust the official emission results for each tested engine at the selected test point by adding the factor to the measured emissions. If the factor is less than zero, use zero.

(d) After adjusting the emission levels for deterioration, round them to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard for each test engine.

§ 1048.245 How do I demonstrate that my engine family complies with evaporative emission standards?

(a) For certification, your engine family is considered in compliance with the evaporative emission standards in subpart B of this part if you do either of the following:

(1) You have test results showing that evaporative emissions in the family are at or below the standards throughout the useful life.

(2) Where applicable, you comply with the design specifications in paragraph (e) of this section.

(b) Your engine family does not comply if any fuel system representing that family has test results showing emission levels above the standards.

(c) Use good engineering judgment to develop a test plan to establish deterioration factors to show how much emissions increase at the end of useful life.

(d) If you adjust the emission levels for deterioration, round them to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard for each test fuel system.

(e) You may demonstrate that your engine family complies with the evaporative emission standards by demonstrating that you use the following control technologies:

(1) For certification to the standards specified in § 1048.105(a)(1), with the following technologies:

(i) Use a tethered or self-closing gas cap on a fuel tank that stays sealed up to a positive pressure of 24.5 kPa (3.5 psig) or a vacuum pressure of 10.5 kPa (1.5 psig).

(ii) [Reserved]

(2) For certification to the standards specified in § 1048.105(a)(3), demonstrating that you use design features to prevent fuel boiling under all normal operation. You may do this using fuel temperature data measured during normal operation.

(3) We may establish additional options for design-based certification where we find that new test data demonstrate that a technology will ensure compliance with the emission standards in this section.

§ 1048.250 What records must I keep and make available to EPA?

(a) Organize and maintain the following records to keep them readily available; we may review these records at any time:

(1) A copy of all applications and any summary information you sent us.

(2) Any of the information we specify in § 1048.205 that you did not include in your application.

(3) A detailed history of each emission-data engine. In each history, describe all of the following:

(i) The test engine's construction, including its origin and buildup, steps you took to ensure that it represents production engines, any components you built specially for it, and all emission-related components.

(ii) How you accumulated engine operating hours, including the dates and the number of hours accumulated.

(iii) All maintenance (including modifications, parts changes, and other service) and the dates and reasons for the maintenance.

(iv) All your emission tests, including documentation on routine and standard tests, as specified in part 40 CFR part 1065, and the date and purpose of each test.

(v) All tests to diagnose engine or emission-control performance, giving the date and time of each and the reasons for the test.