

§ 1051.230

40 CFR Ch. I (7-1-07 Edition)

(b) To amend your application for certification, send the Designated Compliance Officer the following information:

(1) Describe in detail the addition or change in the vehicle model or configuration you intend to make.

(2) Include engineering evaluations or data showing that the amended engine family complies with all applicable requirements. You may do this by showing that the original emission-data vehicle is still appropriate with respect to showing compliance of the amended family with all applicable requirements.

(3) If the original emission-data vehicle for the engine family is not appropriate to show compliance for the new or modified vehicle, include new test data showing that the new or modified vehicle meets the requirements of this part.

(c) We may ask for more test data or engineering evaluations. You must give us these within 30 days after we request them.

(d) For engine families already covered by a certificate of conformity, we will determine whether the existing certificate of conformity covers your new or modified vehicle. You may ask for a hearing if we deny your request (see §1051.820).

(e) For engine families already covered by a certificate of conformity, you may start producing the new or modified vehicle anytime after you send us your amended application, before we make a decision under paragraph (d) of this section. However, if we determine that the affected vehicles do not meet applicable requirements, we will notify you to cease production of the vehicles and may require you to recall the vehicles at no expense to the owner. Choosing to produce vehicles under this paragraph (e) is deemed to be consent to recall all vehicles that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days, you must stop producing the new or modified vehicles.

(f) You may ask to change your FEL in the following cases:

(1) You may ask to raise your FEL for your engine family after the start of production. You must use the higher FEL for the entire family to calculate your average emission level under subpart H of this part. In your request, you must demonstrate that you will still be able to comply with the applicable average emission standards as specified in subparts B and H of this part.

(2) You may ask to lower the FEL for your engine family after the start of production only when you have test data from production vehicles indicating that your vehicles comply with the lower FEL. You may create a separate subfamily with the lower FEL. Otherwise, you must use the higher FEL for the family to calculate your average emission level under subpart H of this part.

(3) If you change the FEL during production, you must include the new FEL on the emission control information label for all vehicles produced after the change.

[70 FR 40494, July 13, 2005]

§ 1051.230 How do I select engine families?

(a) Divide your product line into families of vehicles that are expected to have similar emission characteristics throughout the useful life. Except as specified in paragraph (f) of this section, you must have separate engine families for meeting exhaust and evaporative emissions. Your engine family is limited to a single model year.

(b) For exhaust emissions, group vehicles in the same engine family if they are the same in all the following aspects:

(1) The combustion cycle.
(2) The cooling system (liquid-cooled vs. air-cooled).

(3) Configuration of the fuel system (for example, port fuel injection vs. carburetion).

(4) Method of air aspiration.
(5) The number, location, volume, and composition of catalytic converters.

(6) Type of fuel.
(7) The number, arrangement, and approximate bore diameter of cylinders.

(8) Numerical level of the emission standards that apply to the vehicle.

(c) For evaporative emissions, group vehicles in the same engine family if fuel tanks are similar and fuel lines are similar considering all the following aspects:

(1) Type of material (including additives such as pigments, plasticizers, and UV inhibitors).

(2) Emission-control strategy.

(3) Production methods. This does not apply to differences in production methods that would not affect emission characteristics.

(d) You may subdivide a group of vehicles that is identical under paragraph (b) or (c) of this section into different engine families if you show the expected emission characteristics are different during the useful life.

(e) You may group vehicles that are not identical with respect to the things listed in paragraph (b) or (c) of this section in the same engine family, as follows:

(1) You may group such vehicles in the same engine family if you show that their emission characteristics during the useful life will be similar.

(2) If you are a small-volume manufacturer, you may group engines from any vehicles subject to the same emission standards into a single engine family. This does not change any of the requirements of this part for showing that an engine family meets emission standards.

(f) You may divide your product line into engine families based on a combined consideration of exhaust and evaporative emission-control systems, consistent with the requirements of this section. This would allow you to use a single engine-family designation for each engine family instead of having separate engine-family designations for exhaust and evaporative emission-control systems for each model.

(g) Select test engines from the engine family as described in 40 CFR 1065.401. Select test components related to evaporative emission-control systems that are most likely to exceed the applicable emission standards. For example, select a fuel tank with the smallest average wall thickness (or barrier thickness, as appropriate) of those tanks you include in the same family.

[70 FR 40495, July 13, 2005]

§ 1051.235 What emission testing must I perform for my application for a certificate of conformity?

This section describes the emission testing you must perform to show compliance with the emission standards in subpart B of this part.

(a) Test your emission-data vehicles using the procedures and equipment specified in subpart F of this part. Where specifically required or allowed, test the engine instead of the vehicle. For evaporative emissions, test the fuel system components separate from the vehicle.

(b) Select from each engine family an emission-data vehicle, and a fuel system for each fuel type with a configuration that is most likely to exceed the emission standards, using good engineering judgment. Consider the emission levels of all exhaust constituents over the full useful life of the vehicle.

(c) We may measure emissions from any of your test vehicles or engines (or any other vehicles or engines from the engine family), as follows:

(1) We may decide to do the testing at your plant or any other facility. If we do this, you must deliver the test vehicle or engine to a test facility we designate. The test vehicle or engine you provide must include appropriate manifolds, aftertreatment devices, electronic control units, and other emission-related components not normally attached directly to the engine block. If we do the testing at your plant, you must schedule it as soon as possible and make available the instruments, personnel, and equipment we need.

(2) If we measure emissions on one of your test vehicles or engines, the results of that testing become the official emission results. Unless we later invalidate these data, we may decide not to consider your data in determining if your engine family meets applicable requirements.

(3) Before we test one of your vehicles or engines, we may set its adjustable parameters to any point within the physically adjustable ranges (see § 1051.115(c)).

(4) Before we test one of your vehicles or engines, we may calibrate it within normal production tolerances