

are not subject to the emission standards in this part. Once emission standards apply to these engines and vehicles, they are excluded from the requirements of this part under § 1048.5(a)(1).

Subpart C—Certifying Engine Families

§ 1048.201 What are the general requirements for submitting a certification application?

(a) Send us an application for a certificate of conformity for each engine family. Each application is valid for only one model year.

(b) The application must not include false or incomplete statements or information (see § 1048.255).

(c) We may choose to ask you to send us less information than we specify in this subpart, but this would not change your recordkeeping requirements.

(d) Use good engineering judgment for all decisions related to your application (see 40 CFR 1068.5).

(e) An authorized representative of your company must approve and sign the application.

§ 1048.205 What must I include in my application?

In your application, do all the following things unless we ask you to send us less information:

(a) Describe the engine family's specifications and other basic parameters of the engine's design. List the types of fuel you intend to use to certify the engine family (for example, gasoline, liquefied petroleum gas, methanol, or natural gas).

(b) Explain how the emission-control systems operate.

(1) Describe in detail all the system components for controlling exhaust emissions, including auxiliary emission-control devices and all fuel-system components you will install on any production or test engine. Explain why any auxiliary emission-control devices are not defeat devices (see § 1048.115(g)). Do not include detailed calibrations for components unless we ask for them.

(2) Describe the evaporative emission controls.

(c) Explain how the engine diagnostic system works, describing especially the engine conditions (with the corresponding diagnostic trouble codes) that cause the malfunction-indicator light to go on. Propose what you consider to be extreme conditions under which the diagnostic system should disregard trouble codes, as described in § 1048.110.

(d) Describe the engines you selected for testing and the reasons for selecting them.

(e) Describe any special or alternate test procedures you used (see § 1048.501).

(f) Describe how you operated the engine or vehicle prior to testing, including the duty cycle and the number of engine operating hours used to stabilize emission levels. Describe any scheduled maintenance you did.

(g) List the specifications of the test fuel to show that it falls within the required ranges we specify in 40 CFR part 1065, subpart C.

(h) Identify the engine family's useful life.

(i) Propose maintenance and use instructions for the ultimate buyer of each new nonroad engine (see § 1048.125).

(j) Propose emission-related installation instructions if you sell engines for someone else to install in a piece of nonroad equipment (see § 1048.130).

(k) Identify each high-cost warranted part and show us how you calculated its replacement cost, including the estimated retail cost of the part, labor rates, and labor hours to diagnose and replace defective parts.

(l) Propose an emission control information label.

(m) Present emission data to show that you meet emission standards.

(1) Present exhaust emission data for HC, NO_x, and CO on a test engine to show your engines meet the duty-cycle emission standards we specify in § 1048.101(a) and (b). Show these figures before and after applying deterioration factors for each engine. Starting in the 2007 model year, identify the duty-cycle emission standards to which you are certifying engines in the engine family. Include test data for each type of fuel from 40 CFR part 1065, subpart C, on which you intend for engines in

the engine family to operate (for example, gasoline, liquefied petroleum gas, methanol, or natural gas). If we specify more than one grade of any fuel type (for example, a summer grade and winter grade of gasoline), you only need to submit test data for one grade, unless the regulations of this part specify otherwise for your engine. Note that § 1048.235 allows you to submit an application in certain cases without new emission data.

(2) If your engine family includes a volatile liquid fuel (and you do not use design-based certification under § 1048.245) present evaporative test data to show your vehicles meet the evaporative emission standards we specify in subpart B of this part. Show these figures before and after applying deterioration factors, where applicable.

(n) Report all test results, including those from invalid tests or from any nonstandard tests (such as measurements based on exhaust concentrations in parts per million).

(o) Identify the engine family's deterioration factors and describe how you developed them. Present any emission test data you used for this.

(p) Describe all adjustable operating parameters (see § 1048.115(e)), including the following:

(1) The nominal or recommended setting.

(2) The intended physically adjustable range, including production tolerances if they affect the range.

(3) The limits or stops used to establish adjustable ranges.

(q) Describe everything we need to read and interpret all the information broadcast by an engine's onboard computers and electronic control modules and state that you will give us any hardware or tools we would need to do this. You may reference any appropriate publicly released standards that define conventions for these messages and parameters. Format your information consistent with publicly released standards.

(r) State whether your engine will operate in variable-speed applications, constant-speed applications, or both. If your certification covers only constant-speed or only variable-speed applications, describe how you will prevent use of these engines in the appli-

cations for which they are not certified.

(s) Starting in the 2007 model year, state that all the engines in the engine family comply with the field-testing emission standards we specify in § 1048.101(c) for all normal operation and use (see § 1048.515). Describe in detail any testing, engineering analysis, or other information on which you base this statement.

(t) State that you operated your test engines according to the specified procedures and test parameters using the fuels described in the application to show you meet the requirements of this part.

(u) State unconditionally that all the engines in the engine family comply with the requirements of this part, other referenced parts, and the Clean Air Act.

(v) Include estimates of U.S.-directed production volumes.

(w) Show us how to modify your production engines to measure emissions in the field (see § 1048.115(d)).

(x) Add other information to help us evaluate your application if we ask for it.

§ 1048.210 May I get preliminary approval before I complete my application?

If you send us information before you finish the application, we will review it and make any appropriate determinations listed in § 1048.215(b)(1) through (7). Decisions made under this section are considered to be preliminary approval. We will generally not disapprove applications under § 1048.215(b)(1) through (5) where we have given you preliminary approval, unless we find new and substantial information supporting a different decision.

(a) If you request preliminary approval related to the upcoming model year or the model year after that, we will make a "best-efforts" attempt to make the appropriate determinations as soon as possible. We will generally not provide preliminary approval related to a future model year more than two years ahead of time.