

year. Your request must include a description of the auxiliary emission control device(s) which will be used to maintain emissions to the lowest practical level, considering the deficiency being requested, if applicable. An application for a deficiency must be made during the certification process; no deficiency will be granted to retroactively cover engines already certified.

(2) For the next four model years after the period covered by paragraph (f)(1) of this section, we may allow up to three deficiencies per engine family. The provisions of paragraphs (f)(1) of this section apply for deficiencies allowed by this paragraph (f)(2). In determining whether to allow the additional deficiencies, we may consider any relevant factors, including the factors identified in paragraph (f)(1) of this section. If we approve additional deficiencies, we may set any additional conditions that we determine to be appropriate.

(3) Unmet requirements should not be carried over from the previous model year, except where unreasonable hardware or software modifications would be necessary to correct the deficiency, and we determine that you have demonstrated an acceptable level of effort toward compliance. The NTE deficiency should only be seen as an allowance for minor deviations from the NTE requirements. The NTE deficiency provisions allow you to apply for relief from the NTE emission requirements under limited conditions. We expect that you should have the necessary functioning emission-control hardware in place to comply with the NTE standards.

(g) *Test fuels.* The diesel test fuel for model years 2008 through 2010 is the diesel test fuel specified in 40 CFR 1065.205, with the following exception: the sulfur content must be 300–500 ppm instead of 7–15 ppm. This paragraph (g) also allows the early use of 7–15 ppm sulfur test fuels in certain cases.

(1) For model years 2008 through 2010, you may use the 7–15 ppm sulfur test fuel for any engine family where you can demonstrate that the engines in the family will operate only on fuel with less than 15 ppm sulfur in-use.

(2) For model years 2008 through 2010, you may use the 7–15 ppm sulfur test fuel for any engine family containing only engines with maximum engine power less than 56 kW, provided:

(i) You ensure that ultimate purchasers of equipment using these engines are informed that the use of fuel meeting the 15 ppm specification is recommended.

(ii) You provide along with your installation instructions to equipment manufacturers labels to be applied at the fuel inlet recommending 15 ppm fuel. This labeling requirement applies instead of the requirement in § 1039.135(f).

(iii) None of the engines in your engine family employ sulfur-sensitive technologies.

(4) For engines certified under § 1039.101(j) in model year 2010, the diesel test fuel is the diesel test fuel specified in 40 CFR 1065.205.

(h) *Requirements for equipment manufacturers.* The provisions of this paragraph (h) apply to equipment manufacturers that use engines certified to the Tier 3 standards under Option #2 of Table 2 of § 1039.102 in any model year from 2008 to 2011. For model year 2012, you must use engines certified under Option #2 of Table 2 of § 1039.102 in any product for which you previously used an engine certified to the Tier 3 standards under Option #2 of Table 2 of § 1039.102. Use of an engine in model year 2012 that was certified under Option #1 of Table 2 of § 1039.102 in such equipment would be a violation of § 1068.101(a)(1).

§ 1039.105 What smoke standards must my engines meet?

Your engines must have less than 22 percent opacity when measured with the smoke test procedure in § 1039.501 throughout its useful life.

§ 1039.107 What evaporative emissions standards and requirements apply?

There are no evaporative emission standards for diesel-fueled engines, or engines using other nonvolatile or nonliquid fuels (for example, natural gas). If your engine uses a volatile liquid fuel, such as methanol, you must meet the evaporative emission requirements of 40 CFR part 1048 that apply to spark-ignition engines, as follows:

(a) Follow the steps in 40 CFR 1048.245 to show that you meet the requirements of 40 CFR 1048.105.

(b) Do the following things in your application for certification:

(1) Describe how your engines control evaporative emissions.

(2) Present test data to show your vehicles meet the evaporative emission standards we specify in subpart B of this part if you do not use design-based certification under 40 CFR 1048.245. Show these figures before and after applying deterioration factors, where applicable.

§ 1039.110 [Reserved]

§ 1039.115 What other requirements must my engines meet?

Your engines must meet the following requirements:

(a) *Crankcase emissions.* Crankcase emissions may not be discharged directly into the ambient atmosphere from any engine, except as follows:

(1) Engines equipped with turbochargers, pumps, blowers, or superchargers for air induction may discharge crankcase emissions to the ambient atmosphere if the emissions are added to the exhaust emissions (either physically or mathematically) during all emission testing.

(2) If you take advantage of this exception, you must:

(i) Manufacture the engines so that all crankcase emission can be routed into the applicable sampling systems specified in 40 CFR part 1065.

(ii) Account for deterioration in crankcase emissions when determining exhaust deterioration factors.

(3) For the purpose of this paragraph (a), crankcase emissions that are routed to the exhaust upstream of exhaust aftertreatment during all operation are not considered to be “discharged directly into the ambient atmosphere.”

(b)–(d) [Reserved]

(e) *Adjustable parameters.* Engines that have adjustable parameters must meet all the requirements of this part for any adjustment in the physically adjustable range. An operating parameter is not considered adjustable if you permanently seal it or if it is not normally accessible using ordinary tools. We may require that you set adjustable parameters to any specification within the adjustable range during any testing, including certification testing, selective enforcement auditing, or in-use testing.

(f) *Prohibited controls.* You may not design your engines with emission-control devices, systems, or elements of design that cause or contribute to an unreasonable risk to public health, welfare, or safety while operating. For example, this would apply if the engine emits a noxious or toxic substance it would otherwise not emit that contributes to such an unreasonable risk.

(g) *Defeat devices.* You may not equip your engines with a defeat device. A defeat device is an auxiliary emission control device that reduces the effectiveness of emission controls under conditions that the engine may reasonably be expected to encounter during normal operation and use. This does not apply to auxiliary emission control devices you identify in your