

§ 1045.115

40 CFR Ch. I (7–1–12 Edition)

TABLE 1 TO § 1045.112—PHASE-IN SCHEDULE FOR UNDER-COWL FUEL LINES ON OUTBOARD ENGINES

Model year	Percentage phase-in
2010	30
2011	60
2012–2014	90
2015+	100

(ii) You may instead meet the permeation standards of this paragraph (a) by complying with the specified standards with 100 percent of your under-cowl fuel lines across your full lineup of 2011 model year outboard engines. In this case, the requirements of this part would not apply to under-cowl fuel lines before the 2011 model year. To use this option, you must notify the Designated Compliance Officer before December 31, 2009 of your intent to meet permeation standards on all your under-cowl fuel lines in the 2011 model year.

(b) *Tank permeation.* Fuel tanks must meet the permeation requirements specified in 40 CFR 1060.103. Portable marine fuel tanks must meet permeation standards starting January 1, 2011. Fuel tanks for personal watercraft must meet permeation standards starting in the 2011 model year. Other installed fuel tanks must meet permeation standards starting in the 2012 model year. Vessel manufacturers may generate or use emission credits to show compliance with the requirements of this paragraph under the averaging, banking, and trading (ABT) program, as described in subpart H of this part. Starting in the 2014 model year for personal watercraft and in the 2015 model year for other installed fuel tanks, family emission limits may not exceed 5.0 g/m²/day if testing occurs at a nominal temperature of 28 °C, or 8.3 g/m²/day if testing occurs at a nominal temperature of 40 °C. These FEL caps do not apply to fuel caps that are certified separately to meet permeation standards. Portable marine fuel tank manufacturers may not generate or use emission credits under subpart H of this part.

(c) *Running loss.* The running loss requirements specified in 40 CFR part 1060 do not apply.

(d) *Diurnal emissions.* Installed fuel tanks must meet the diurnal emission requirements specified in 40 CFR 1060.105. Fuel tanks for personal watercraft must meet diurnal emission standards starting in the 2010 model year. Other installed fuel tanks must meet diurnal emission standards for vessels produced on or after July 31, 2011, except as allowed by §1045.625. Fuel tanks meeting the definition of *portable marine fuel tank* in §1045.801 must comply with the diurnal requirements specified in 40 CFR part 1060 starting January 1, 2010.

(e) *Other requirements.* The requirements of 40 CFR 1060.101(e) and (f) apply to vessel manufacturers even if they do not obtain a certificate.

(f) *Engine manufacturers.* To the extent that engine manufacturers produce engines with fuel lines or fuel tanks, those fuel-system components must meet the requirements specified in this section. The timing of new standards is based on the date of manufacture of the engine.

§ 1045.115 What other requirements apply?

The following requirements apply with respect to engines that are required to meet the emission standards of this part:

(a) *Crankcase emissions.* Crankcase emissions may not be discharged directly into the ambient atmosphere from any engine throughout its useful life.

(b) *Torque broadcasting.* Starting in the 2013 model year, electronically controlled engines must broadcast their speed and output shaft torque (in newton-meters). Engines may alternatively broadcast a surrogate value for determining torque. Engines must broadcast engine parameters such that they can be read with a remote device, or broadcast them directly to their controller area networks. Your broadcasting protocol must allow for valid measurements using the field-testing procedures in 40 CFR part 1065, subpart J.

(c) *EPA access to broadcast information.* If we request it, you must provide us any hardware or tools we would need to readily read, interpret, and record

all information broadcast by an engine's on-board computers and electronic control modules. If you broadcast a surrogate parameter for torque values, you must provide us what we need to convert these into torque units. We will not ask for hardware or tools if they are readily available commercially.

(d) *Altitude adjustments.* Engines must meet applicable emission standards for valid tests conducted under the ambient conditions specified in 40 CFR 1065.520. Engines must meet applicable emission standards at all specified atmospheric pressures, except that for atmospheric pressures below 94.0 kPa you may rely on an altitude kit for all testing if you meet the requirements specified in §1054.205(s). If you rely on an altitude kit for certification, you must identify in the owners manual the altitude range for which you expect proper engine performance and emission control with and without the altitude kit; you must also state in the owners manual that operating the engine with the wrong engine configuration at a given altitude may increase its emissions and decrease fuel efficiency and performance.

(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, production-line testing, 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 effec-

tiveness of emission controls under conditions that the engine may reasonably be expected to encounter during normal operation and use. This does not apply for altitude kits installed or removed consistent with §1045.655. This also does not apply to auxiliary emission control devices you identify in your application for certification if any of the following is true:

(1) The conditions of concern were substantially included in the applicable duty-cycle test procedures described in subpart F of this part.

(2) You show your design is necessary to prevent engine (or vessel) damage or accidents. For example, you may design your engine to include emergency operating modes (sometimes known as limp-home operation) that would allow a vessel to return to land in the event of a malfunction even if such operating modes result in higher emissions.

(3) The reduced effectiveness applies only to starting the engine.

§1045.120 What emission-related warranty requirements apply to me?

(a) *General requirements.* You must warrant to the ultimate purchaser and each subsequent purchaser that the new engine, including all parts of its emission control system, meets two conditions:

(1) It is designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser with the requirements of this part.

(2) It is free from defects in materials and workmanship that may keep it from meeting these requirements.

(b) *Warranty period.* Your emission-related warranty must be valid during the periods specified in this paragraph (b). You may offer an emission-related warranty more generous than we require. The emission-related warranty for an engine may not be shorter than any published warranty you offer without charge for that engine. Similarly, the emission-related warranty for any component may not be shorter than any published warranty you offer without charge for that component. If an engine has no hour meter, we base the warranty periods in this paragraph (b) only on the engine's age (in years). The warranty period begins when the engine is placed into service.