



Gavin Newsom, Governor
Yana Garcia, CalEPA Secretary
Liane M. Randolph, Chair

DATE: February 24, 2023

Manufacturers Advisory Correspondence (MAC) ECCD-2023-01

TO: All Manufacturers of 2024MY and subsequent Spark-Ignition Marine Watercraft (SIMW) and Spark-Ignition Marine Engines (SIME)

SUBJECT: Spark-Ignition Marine Watercraft Evaporative Regulatory Clarification and Certification Requirements for 2024MY and Subsequent Spark-Ignition Marine Watercraft (SIMW) and Spark-Ignition Marine Engines (SIME)

This letter transmits a MAC to provide needed clarification to manufacturers of spark-ignition marine watercraft (SIMW) and spark-ignition marine engines (SIME), and all other interested parties, that the certification requirements listed in the SIMW evaporative emissions regulation (Cal. Code Regs. tit. 13 § 2850 and following) apply to spark-ignition marine watercraft with outboard engines with engine-mounted fuel tanks.¹

If you have general questions about the SIMW evaporative emissions regulation, please contact Scott Monday at (279) 208-7021 or via email at Scott.Monday@arb.ca.gov or Scott Bacon at (279) 842-9122 or via email at Scott.Bacon@arb.ca.gov. If you have questions about the SIMW certification process, please contact Kumar Muthukumar at (626) 575-7040 or via email at Kumar.Muthukumar@arb.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Robin U. Lang".

Robin U. Lang, Chief
Emissions Certification and Compliance Division

¹ The document is not intended to be a substitute for the regulations. Please refer to the full provisions of the SIMW regulation, codified in California Code of Regulations, Title 13, sections 2850 to 2871. All section references are to the SIMW regulation in California Code of Regulations, Title 13.

State of California (CA)
California Air Resources Board (CARB)
Manufacturers Advisory Correspondence (MAC) 2023-01

Subject: Clarification of Spark-Ignition Marine Watercraft Evaporative Regulatory Certification Requirements for 2024 MY and Subsequent Spark-Ignition Marine Watercraft (SIMW) and Spark-Ignition Marine Engines (SIME)

Applicability: 2024 MY and Subsequent SIMW That Use Outboard Engines with Engine-Mounted Fuel Tanks

References:

1. Evaporative Emissions Requirements for Spark-Ignition Marine Watercraft with Gasoline-Fueled Engines Regulations [Title 13, California Code of Regulations, Sections 2850 et seq. (13 CCR § 2850 et seq.)]
2. Portable Outboard Marine Tank and Components Regulation [13 CCR § 2468.10(a)(16)]
3. Control of Evaporative Emissions from New and In-Use Nonroad and Stationary Equipment [Title 40, Code of Federal Regulations (CFR), Part 1060 et seq. (40 CFR § 1060)]

Issue:

In 2015, CARB adopted more stringent standards, durability requirements, certification requirements, and new test procedures for 2018 and subsequent SIMW. The SIMW regulation applies broadly to “all new model year (MY) 2018 or later spark-ignition marine watercraft (SIMW), spark-ignition marine engines (SIME), and/or any of its evaporative emissions control system components for sale, lease, use, or offered for sale, lease or use, or otherwise introduced into commerce in California...”², with a few stated exceptions.

SIMW that use portable marine fuel tanks are exempt from the SIMW regulation but are regulated under the Portable Outboard Marine Tank (OMT) regulation. However, some smaller outboard engines have engine-mounted fuel tanks that are integral to the outboard engine, typically located under the engine cover or cowl. Such engine-mounted fuel tanks are not portable outboard marine fuel tanks regulated under the OMT regulations. SIMW with engine-mounted fuel tanks are not covered by the portable marine fuel tank exemption and are therefore subject to regulation under the SIMW regulation. This document provides an overview of the SIMW regulation to watercraft with engine-mounted fuel tanks.

² Cal. Code Regs., tit. 13, § 2851

Background:

The SIMW regulation applies broadly to all model year (MY) 2018 and later SIMW and SIME sold in California. Section 2851 describes applicability provisions for SIMW and SIME that are required to meet CARB evaporative emissions standards and certification procedures (CCR, Title 13, § 2851 (a).) Certain SIMW categories are exempt from certification requirements, including "SIMW that use portable marine fuel tanks, compression-ignition engines, or SIME or SIMW powered with compressed natural gas, propane, liquefied petroleum gas, or liquefied natural gas." (§ 2851, subd. (b) (1).) CARB has determined that this exemption **does not apply** to outboard engines with engine-mounted fuel tanks, as explained below. Therefore, outboard engines with engine-mounted fuel tanks are subject to the SIMW regulation and must obtain CARB certification to avoid enforcement action.

Watercraft with outboard engines using portable marine fuel tanks are expressly exempted from the SIMW regulation and certification by section 2851(b)(1) because they are regulated under different regulations. Portable marine fuel tanks are defined as "any container with a nominal capacity of thirty (30) gallons or less that is designed, used, sold, advertised or offered for sale for supplying fuel to an outboard engine. Portable outboard marine tanks do not include fuel tanks designed exclusively for permanent installation in a specific marine vessel. (CCR Title 13, § 2468.10 subd. (a)(16).)³ This definition explicitly excludes fuel tanks designed for permanent installation in specific marine watercraft.

Requirements Under the Regulation:

Since **outboard marine engines with engine-mounted fuel tanks** are designed for permanent installation attached to a marine watercraft, they are **not defined as portable fuel tanks** and not expressly exempted from the regulation. Therefore, outboard engines with engine-mounted fuel tanks are not expressly exempted under the portable fuel tank exemption and are subject to certification under the SIMW regulation.

Evaporative Emissions Standards:

CARB expects that most outboard engines with engine-mounted fuel tanks are less than 30kW and will therefore be subject to certification under standards in section 2854. This section provides that SIMW with engines less than or equal to 30 kW must meet the applicable U.S. EPA standards and test procedures in order to obtain CARB certification (i.e., meet the U.S. EPA evaporative emissions requirements). The CARB emission requirements in section 2854 reference, and are designed to harmonize with, the federal requirements in 40 CFR Part 1060.

³ "Portable Outboard Marine Tank" means any container with a nominal capacity of thirty (30) gallons or less that is designed, used, sold, advertised or offered for sale for supplying fuel to an outboard engine. Portable outboard marine tanks do not include fuel tanks designed exclusively for permanent installation in a specific marine vessel." (Cal. Code Regs., tit. 13, § 2468.10 (a)(16).)

The U.S EPA has explicit marine evaporative standards that apply to all marine spark-ignition (SI) engines including those with engine-mounted fuel tanks. These emission requirements include fuel hose permeation, fuel tank permeation and a diurnal emission control requirement. The evaporative emissions requirements for outboard engines with engine-mounted fuel tanks are the same as those for permanently installed fuel tanks and can be found in 40 CFR Part 1060. Please consult the federal regulations and the SIMW requirements applicable to your watercraft type and contact CARB staff for any remaining certification questions.

CARB Certification Requirements:

Section 2856 subdivision (b) of the SIMW regulation sets forth design-based certification requirements applicable to all MY 2018 and subsequent SIMW types, which include outboard engines with engine-mounted fuel tanks. CARB design-based certification requires that manufacturers submit a certification application that lists certified components that will be used for the SIMW evaporative emissions system. This includes certification of marine fuel tanks, fuel hoses, and diurnal venting controls such as carbon canisters and pressure relief valves. As most outboard engines with engine-mounted fuel tanks are less than 30kW, manufacturers will likely be required to only submit the list of U.S. EPA-approved evaporative emissions components as part of their CARB certification application (see § 2856 subd. (b)(2)). Additionally, an emissions label indicating the evaporative emissions control system information will be required per section 2860. This label may be combined with the exhaust label, if necessary. Please consult the regulation for all applicable requirements for certification and contact CARB staff for additional assistance if needed.

Timeline for Certification Processing:

In light of this clarification, to give manufacturers adequate time to prepare their certification applications, CARB will be reviewing certifications of outboard engines with engine-mounted fuel tanks beginning in the 2024 MY (beginning on August 31, 2023). This will allow SIMW manufacturers time to complete their certification applications for the next model year. As most manufacturers have already certified their components with the U.S. EPA, they will only need to reference these EPA certificate of conformity numbers in their CARB certification application. In addition, most manufacturers will be able to combine most, if not all, their outboard engines with engine-mounted fuel tanks into one evaporative family for the certification application for a combined fee. Manufacturers will be assigned a CARB certification representative to assist them through the certification process.