

SIMW Evaporative Component Certification FAQs

Revised 9/13/17

CARB staff has compiled this list of commonly asked questions about marine watercraft evaporative component certification. Staff will update this document periodically as additional questions are brought to our attention. If you have questions about marine watercraft evaporative component certification that are not addressed in this document, please contact Mr. Scott Monday at Scott.Monday@arb.ca.gov or (916) 445-9319.

Component Testing

1. Can evaporative system component manufacturers obtain CARB certification for their components based on testing conducted in-house by the manufacturer?

Response: No, the SIMW regulation requires that all testing must be performed by an independent laboratory according to §2856(a)(3)(D). Independent laboratory is defined per §2853(a)(18). Note that the durability portion of test procedures can be performed in-house, but the test data must be generated by an independent laboratory.

2. How many components must be tested in order to obtain CARB certification?

Response: Five. The SIMW regulation requires that a component manufacturer must test a minimum of five components according to §2856(a)(3)(D). All five components tested must pass the applicable standard(s) in order to obtain certification.

Carbon Canisters

1. Can the test results from a single, “worst case” model of carbon canister be scaled and applied to similarly constructed canisters of various sizes?

Response: Yes, worst case carbon canisters are defined as the lowest length/diameter (L/D) for the evaporative family. A canister evaporative family is defined as all canisters using the same carbon and same cross section design with the only difference being the length of the carbon bed. The emissions test results can be scaled on a carbon volume basis to arrive at tank size ratings for the

other carbon canisters in the same canister evaporative family. The canister dimensions and associated maximum fuel tank size for each canister model must be submitted as part of the component certification application package.

2. Can evaporative system designers use a single canister to control emissions from multiple tanks within a single vessel if the canister is certified to cover the total volume of the multiple tanks?

Response: Yes, a single canister can be used for multiple fuel tanks as long as the canister is designed to control the total volume of fuel stored in those tanks and meet the applicable standard. For example, a canister that is certified for use on tanks up to 50 gallons may also be used on a fuel system that consists of two 24-gallon tanks.

Fuel Hoses

1. Which fuel hose(s) used in the watercraft's fuel system must meet the hose permeation standard and have a component EO for California?

Response: According to §2853(a)(16), all fuel hoses from the watercraft fuel tank to the first attachment point on the marine engine must to be certified. Fuel hoses that are installed on the engine itself, such as hoses running from a fuel rail to an individual fuel injector, are not subject to this fuel hose certification requirement.

2. If a boat has two fuel tanks and has a "T" fitting to the engine, does the hose running from the "T" fitting to the engine need to be certified?

Response: Yes, all fuel hoses that connect from the watercraft fuel tank to the first attachment point on the marine engine will need to be certified. This rule applies even with outboard marine engines that are installed by someone other than the watercraft manufacturer (dealer, service company, owner, etc.).

Fuel Tanks

1. How is the "worst case" configuration determined for fuel tank permeation emissions?

Response: The fuel tank with the minimum volume to internal surface area ratio may be tested to represent the fuel tank family. Test results for the “worst case” of a fuel tank family may be used to certify all tank sizes in that family.

2. Can test results from the smallest fuel tank in a family be used to certify larger tank sizes of the same family if the smallest tanks meets the criteria of “worst case”?

Response: Yes, per TP-1504, Test Procedures for Determining Permeation Emissions from Installed Marine Fuel Tanks, Marine Fuel Hoses and Marine Fuel Caps, the fuel tank may be tested as long as it has a standardized (representative) geometry that it is made of the same material(s) and appropriate wall thickness.

3. Do metal tanks need to be certified as meeting permeation emission standards?

Response: No, per 13 CCR section 2866, metal tanks are exempt from certification and do not need to obtain a Component Executive Order of Certification.

Pressure Relief Valves

1. Can pressure relief valves that also open under vacuum be certified?

Response: Yes, pressure relief valves that also provide vacuum relief may be certified if the valve meets all the same standards as pressure relief valves without vacuum relief. Any portion of the test procedure that requires sealed vacuum settings may be amended, if approved, to accommodate these type of valves. Please contact CARB SIMW component certification staff for additional details.

Certification Application

1. Is there a checklist that SIWM evaporative control component manufacturers can use when putting together their certification application?

Response: Yes. A certification checklist, which serves as a guideline for preparing component applications, can be provided. Please contact CARB SIMW component certification staff for additional details.

Certification Executive Orders

1. Where do I look up the CARB executive orders for watercraft and watercraft components?

Response: Please find below the link to look up CARB spark-ignited marine engine Executive Orders:

<https://www.arb.ca.gov/msprog/offroad/cert/cert.php>

Please find below the link for SIMW component Executive Orders:

<https://www.arb.ca.gov/msprog/offroad/recmarine/simcomponent.htm>

Please find below the link for boat builder Executive Orders:

http://www.arb.ca.gov/msprog/offroad/cert/cert_mfr.php

2. Certified component are often distributed and marketed under several brand names. In this case, do the component distributors need to obtain separate certification for their branded components?

Response: No. If the original component Executive Order holder notifies CARB that their certified component will be distributed under other brand names, those distributors may use the original certified component EO number and/or the identifying mark on the label with their company name. If the distributor wants a separate Executive Order that is issued only in their name, the distributor would need to certify the component through the CARB certification process.

Regulation

1. How is the length of the marine watercraft defined?

Response: Per 33 CFR 183.3, the length of a vessel is defined as “the straight line horizontal measurement of the overall length from the foremost part of the boat to the aftermost part of the boat, measured from end to end over the deck excluding sheer, and measured parallel to the centerline. Bow sprits,

bumpkins, rudders, outboard motor brackets, handles, and other similar fittings, attachments, and extensions are not included in the measurement.”