At its April 25, 2019, public hearing, the California Air Resources Board (CARB or Board) approved for adoption the proposed amendments to sections 2411, 2412, 2415, 2416, 2418, and 2419.4, Title 13 California Code of Regulations (CCR), which would end the red sticker certification program for off-highway recreational vehicles (OHRV) in 2022 and establish new emission standards for OHRV.

At the hearing, staff presented, and the Board approved for adoption, updates to the regulatory language developed in response to comments received following the release of the Staff Report: Initial Statement of Reasons (ISOR) on March 5, 2019. These updates include clarifying revisions to the regulation text regarding which alternative certification standards a manufacturer can use for evaporative emissions control system.

The Board directed the Executive Officer to make the modified regulatory language, and any additional conforming modifications, available for public comment, with any additional supporting documents and information, for a period of at least 15 days as required by Government Code section 11346.8. The Board further directed the Executive Officer to consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days, and present the regulation to the Board for further consideration if warranted, or take final action to adopt the regulation after addressing all appropriate modifications.

The resolution and all other regulatory documents for this rulemaking are available online at the following CARB website:

https://ww2.arb.ca.gov/rulemaking/2019/redstickeramendments

The text of the modified regulatory language is shown in Attachment A. The originally proposed regulatory language is shown in strikethrough to indicate deletions and underline to indicate additions. New deletions and additions to the proposed language that are made public with this 15-day notice are shown in double strikethrough and double underline format, respectively.
In the Final Statement of Reasons, staff will respond to all comments received on the record during the comment periods. The Administrative Procedure Act requires that staff respond to comments received regarding all noticed changes. Therefore, staff will only address comments received during this 15-day comment period that are responsive to this notice, documents added to the record, or the changes detailed in Attachment A and B.

**Summary of Proposed Modifications**

Staff's proposed modifications to the CCR, Title 13, sections 2412, 2418, 2419.4, and its incorporated text *California Exhaust Emissions Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines*, are summarized below and attached to this Notice as Attachments A and B. The following summary does not include all modifications and other non-substantive updates to correct typographical or grammatical errors and changes in numbering or formatting, and to improve clarity.

The proposed modifications do not change implementation of the regulation in any way that would affect the conclusions of the environmental analysis included in the Staff Report because they do not change the performance characteristics or expected emissions from certified OHRV, so no additional environmental analysis or recirculation of the analysis is required.

The following summary provides an overview of the primary proposed revisions to the regulation:

1. **Modifications to Section 2412. Emission Standards and Test Procedures – New Off-Highway Recreational Vehicles and Engines**

   **Section 2412(b)(1)**

   This proposal removes “1.2 grams per kilometer” and adds the word “applicable” in footnote 3 to the table titled *Exhaust Emission Standards Based on Chassis-Based Testing.* It is modified to refer more generally to the applicable hydrocarbon (HC) or hydrocarbon plus oxides of nitrogen (HC + NOx) standard rather than a specific standard. This change is needed because standards for ATVs and utility vehicles change incrementally from 2021 through 2028, and the corporate fleet averaging provisions can be used to meet whatever the applicable standard is in any given year.

   **Section 2412(c)(1) and (d)(1)**

   The proposal deletes the existing reference to the last amended date as October 25, 2012, and replaces it with the proposed regulations new effective date. These sections are modified to update the amendment date of the incorporated document, known as the *California Exhaust Emissions Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines.* The 45-day proposal included changes to
emissions standards and test procedures that need to be incorporated into this document for consistency. Those amendments, therefore, require that these sections be updated to acknowledge the effective date of those amendments.

The proposed modifications to section 2412 are reflected in Attachment A.

2. Modifications to Section 2418. Evaporative Emission Standards and Test Procedures

Section 2418(b)(1)

The proposal deletes the fuel hose permeation of “5.0 @ 35°C (95°F)” and inserts “15.0 @ 23°C (74°F)” in Table 2. The standard for fuel hose permeation in Table 2 is modified to be consistent with U.S. EPA permeation requirements. Staff conducted a review of CARB certified fuel hoses for various applications (small off-road engines, watercraft) and found that only two hoses had been certified to meet the previous standard of 5 grams per square meter per day. Those hoses are very rigid, and are therefore not well suited to OHRV applications. Amending this standard to be consistent with U.S. EPA requirements provides a reasonable degree of emissions control while ensuring a range of certified fuel hoses will be available.

Section 2418(c)(2)

This section is modified to clarify that a manufacturer may also use the alternative certification process outlined in section 2418(e) when certifying evaporative emissions control systems. The proposed amendments to section 2418(e) in the 45-day proposal would allow for this alternative certification process and the new proposed modification to 2418(c)(2) acknowledges this. This was inadvertently not included in the original regulation order and is now proposed to be updated for consistency.

Section 2418(c)(2)(A) and (B)

The test procedures for fuel hose and fuel tank permeation are modified to be consistent with U.S. EPA permeation requirements (40 CFR Part 1060.515(a)(1) for fuel hose permeation and 40 CFR Part 1051.515 for fuel tank permeation). Section 2418(c)(2)(A) also clarifies that it incorporates by reference ASTM D471-06, Standard Test Method for Rubber Property - Effect of Liquids, approved October 1, 2006 (“ASTM D471”). These sections of the federal regulations are incorporated by reference into California Code of Regulations, Title 13. The reference is incorporated because it helps to specify the required test fuel and harmonize with federal requirements. Harmonizing with U.S. EPA requirements will allow manufacturers to market the same OHRV products in the California and U.S. markets, eliminates the need for duplicative testing, and keeps consistent with industry standards. This will help to reduce compliance costs and ensure a wide range of certified OHRV are available in the California marketplace.
Section 2418(c)(3)

This section describes the required procedure for obtaining CARB certification for evaporative control components – fuel tank, hose, and carbon canister. The previous proposal referenced the existing certification procedure for spark-ignition marine watercraft. This has been modified to reference the existing OHRV small volume manufacturer process in section 2419.4(b)(3). The result is that all evaporative control components for OHRV will be certified by CARB using the same process.

Section 2418(e)

The engine displacement Tables 3, 4 and 5 are modified by increasing it from 110cc to 112cc. The proposal is intended to capture all OHRV manufacturer's youth models that are marketed as 110cc or less. Some of these youth-oriented models are marketed as 110cc but have an actual engine displacement of slightly more than 110cc. By changing the requirement from 110cc to 112cc these models are eligible for the alternative evaporative control standards that are in place for small displacement, youth-oriented models.

Additionally, the fuel hose permeation in Table 3 (Alternative Standards for Off-Road Motorcycles) and Table 4 (Alternative Standards for ATVs) are modified to harmonize with U.S. EPA requirements (15 g/m²/day at 23°C) through 2026, then transition to more stringent California-specific requirements (15 g/m²/day at 40°C) from 2027 onward. Harmonizing with U.S. EPA requirements will allow manufacturers to market the same OHRV products in the California and U.S. markets, and eliminates the need for duplicative testing through 2026. The more stringent California-specific requirements (15 g/m²/day at 40°C) will further reduce evaporative emissions from OHRV in 2027 and beyond. The proposed standard is identical to the current hose permeation standard for small off-road engines, and more than 100 hose models are currently CARB approved, so staff is confident that the standard is technically feasible and cost effective.

The proposed modifications to section 2418 are reflected in Attachment A.

3. Modifications to Section 2419.4. Evaporative Emissions Control System Testing and Certification Requirement

Section 2419.4(b)(1), (3), and (5)

The certification requirements for evaporative emissions control system testing is modified to clarify that alternative standards found in section 2418(e) and test procedures in section 2418(c) are permissible as set forth in the 45-day proposal. This was inadvertently not included in the original regulation order and section 2419.4(b) is now proposed to be updated for consistency.

Section 2419.4(b)(4)(J)

The proposal deletes the words “small volume” and “Table 2” from the regulatory text and
adds section 2418(e) to the certification requirements. The proposal clarifies that the
design-based certification process applies to all OHRV manufacturers, not just small
volume manufacturers. It also allows manufacturers to use an evaporative control system
made up of CARB approved fuel hose, fuel tank, and carbon canister. Vehicles using the
design-based certification process do not need to have a full evaporative system test, and
can be CARB certified based on the certification of their individual evaporative
components. Previously, design-based certification was limited to small-volume OHRV
manufacturers only. The alternative procedures in section 2418(e) allow for design-based
certification for certain OHRV from all manufacturers, regardless of manufacturer size, so
this section is amended to clarify applicability of the design-based certification process.

Section 2419.4(b)(5)(C)

The proposal deletes the words “generated by an independent laboratory,” adds in the
word “section” before 2418(C)(2), and adds in an allowance for the Executive Officer to
approve evaporative emission control system components that have been approved by the
U.S. EPA in accordance with 40 CFR Parts 1051 and 1060. These sections of the federal
regulations are incorporated by reference into California Code of Regulations, Title 13.
The requirement for independent laboratory testing is deleted to be consistent with the U.S
EPA requirements for OHRV, and with the CARB requirements for small off road engines
(SORE). Removing the requirement for an independent testing lab will reduce compliance
costs by eliminating duplicative testing and allowing OHRV manufacturers to use certified
SORE fuel hoses for OHRV.

This section is also amended to explicitly allow for CARB certification of OHRV evaporative
control components (tanks fuel hoses, and carbon canisters) that have been approved for
OHRV by U.S. EPA from 2020 through 2026. This change is necessary to harmonize with
U.S. EPA requirements to allow manufacturers to market the same OHRV products in the
California and U.S. markets, and eliminates the need for duplicative testing through 2026.
Beyond 2026, evaporative components will be subject to more stringent CARB-specific
standards and certification procedures that will deliver additional emission reductions.

The proposed modifications to section 2419.4 are reflected in Attachment A.

4. Modifications to section 86.410-90(a)(1), (a)(2), and (a)(3) of the document
known as California Exhaust Emissions Standards and Test Procedures for
1997 and Later Off-Highway Recreational Vehicles and Engines, which is
incorporated by reference

The proposal amends section 86.410-90 (a)(1), (a)(2), and (a)(3) by adding “Unless
otherwise specified in California Code of Regulations, Title 13, section 2412.” The exhaust
emissions standards set forth in California Code of Regulations, Title 13, section 2412
were modified for certain years. The 45-day proposal included changes to some of the
emissions standards in section 2412. The new proposal updates the Test Procedures to
allow for a different exhaust emission standard where section 2412 allows for a different
exhaust emission standard. This is necessary to provide consistency amongst the exhaust
emission standards in section 2412 and the Test Procedures.
The proposed modifications to this document are reflected in Attachment B.

5. Modifications to section 86.410-90(b) of the document known as California Exhaust Emissions Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines, which is incorporated by reference

The proposal also removes “HC” and the “2.5g/km” standard from section 86.410-90 (b)’s “STDjx” definition and adds “10 g/km HC or 20 g/km HC+NOx” as well as a fourth criteria for zero emission OHRV to be assigned an emission standard of negative 1 (-1). These changes are consistent with the 45-day proposal, section 2412(d)(1), and are intended to incentivize development of zero emissions OHRV and provide OHRV manufacturers with greater flexibility in corporate fleet emissions averaging. As explained in the Initial Statement of Reasons, certain OHRV models may be better suited to more stringent emissions controls than others. For example, it may be easier for manufacturers to incorporate catalytic converters and sophisticated electronic engine management on a large off-highway utility vehicle than a small off-highway motorcycle. By providing greater flexibility in corporate fleet emissions averaging, the proposal helps manufacturers to bring a wide range of certified OHRV to the California market while still controlling overall emissions.

The proposed modifications to this document are reflected in Attachment B.

6. Modifications to section 86.410-90(e) of the document known as California Exhaust Emissions Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines, which is incorporated by reference

The proposal also revises section 86.410-90 (e)(1) to extend as an option to the standards for OHV and ATVs to be limited to model years 2003 through 2021, extending the operation during certain periods of riding areas until January 1, 2025. These changes are consistent with the 45-day proposal, sections 2415 and 2416, and are intended to end the current regulatory provision that allows for CARB certification and recreational use of off-highway motorcycles and ATVs with no emissions controls. The current regulation allowing for certification and recreational use of uncontrolled OHRV, commonly referred to as the “Red Sticker Program,” was adopted in 1997 as a temporary measure to provide manufacturers with additional time to develop a full range of OHRV that comply with emissions standards. As explained in the Initial Statement of Reasons, staff has determined that the control technologies needed to comply with emissions standards are readily available, and the Red Sticker program should be ended in order to reduce OHRV emissions and help improve air quality in California.

The proposed modifications to this document are reflected in Attachment B.
In addition to the modifications described above, additional modifications correcting grammar, punctuation and spelling have been made throughout the proposed changes. These changes are nonsubstantive.

**Additional Documents Added to the Record**

In the interest of completeness, staff has also added to the rulemaking record and invites comments on the additional documents:


- Title 40, Part 1060, Code of Federal Regulations, last amended September 16, 2010, or on the date otherwise specified by each of the aforementioned provisions of Title 40, incorporated by reference in section 2419.4(b)(5)(C).

- Title 40, Part 1051, Code of Federal Regulations, last amended April 30, 2010, or on the date otherwise specified by each of the aforementioned provisions of Title 40, incorporated by reference in section 2419.4(b)(5)(C).

These documents are available for inspection by contacting Bradley Bechtold, Regulations Coordinator, at (916) 322-6533.

**Agency Contacts**

Inquiries concerning the substance of the proposed regulation may be directed to Scott Monday, Staff Air Pollution Specialist, Engineering and Regulatory Development Section, at (916) 455-9319 or Scott Bacon, Air Resources Supervisor, Engineering and Regulatory Development Section, at (916) 322-8949.

**Public Comments**

Written comments will only be accepted on the modifications identified in this Notice. Comments may be submitted by postal mail or by electronic submittal no later than the due date to the following:

Postal mail: Clerk of the Board, California Air Resources Board
1001 I Street, Sacramento, California 95814
Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

Please note that under the California Public Records Act (Gov. Code § 6250 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

In order to be considered by the Executive Officer, comments must be directed to CARB in one of the two forms described above and received by CARB on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alternativo u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborables a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

CALIFORNIA AIR RESOURCES BOARD

Richard W. Corey
Executive Officer

Date: July 8, 2019

Attachments

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see CARB’s website at www.CARB.ca.gov.