

# Third Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information

## Proposed Low Carbon Fuel Standard Amendments

Public Hearing Date: November 8, 2024

Public Availability Date: April 4, 2025

Deadline for Public Comment: April 21, 2025

On November 8, 2024, the California Air Resources Board (Board or CARB) held a public hearing to consider Proposed Amendments to the Low Carbon Fuel Standard (LCFS) Regulation (Proposed Amendments). After considering staff's presentation of the Proposed Amendments and all public comments received, the Board approved the Proposed Amendments. On January 3, 2025, CARB staff submitted a final rulemaking package to the Office of Administrative Law (OAL) for review. On February 18, 2025, OAL disapproved the rulemaking package. On February 25, 2025, CARB received a "Decision of Disapproval of Regulatory Action" from OAL identifying 26 proposed regulatory provisions that OAL determined did not comply with the clarity standard of the Administrative Procedure Act (APA). OAL also noted that the final regulation text and documents incorporated by reference required non-substantive revisions pursuant to Section 40, Title 1 of the California Code of Regulations. All regulatory documents for this rulemaking, as well as OAL's Decision of Disapproval, are available at: <https://ww2.arb.ca.gov/rulemaking/2024/lcfs2024>.

As outlined in Government Code section 11349.4, CARB may rewrite and resubmit the amendments to OAL within 120 days of its receipt of OAL's decision. CARB has developed the proposed modifications (Third 15-Day Changes) as stated below in the "Summary of Proposed Modifications" section of this notice. The Attachments showing the specific proposed modifications to the text of the proposed regulation being made with these 15-Day Changes are shown in multiple ways in order to meet the requirements of the APA and provide increased accessibility.

The Attachments are as follows:

**Attachment A - Amendments to Sections 95481, 95482, 95483, 95483.1, 95483.2, 95486.1, 95486.2, 95486.3, 95486.4, 95488, 95488.3, 95488.8, 95488.9, 95488.10, 95489, 95491, 95491.2, and 95500, Title 17, California Code of Regulations**

- Attachment A-1: Proposed Third 15-Day Modifications to Proposed Regulation Order (compared to version submitted to OAL for approval)
- Attachment A-1.1: ~Alternative format to Attachment A-1 (Proposed Sections for Amendments)~

- Attachment A-1.2: Proposed Third 15-Day Modifications to Proposed Regulation Order (First, Second, and Third 15-Day Modifications and 45-Day Modifications combined and compared to existing regulatory text) in Alternative format
- Attachment A-2: Proposed Third 15-Day Modifications to Proposed Regulation Order (Proposed Sections for Adoption) (compared to version submitted to OAL for approval)
- Attachment A-2.1: ~Alternative format to Attachment A-2 (Proposed Sections for Adoption)~
- Attachment A-2.2: Proposed First, Second, and Third 15-Day Modifications to Proposed Regulation Order (Proposed Sections for Adoption) (compared to version released for 45-Day comments) in Alternative format

The Attachments showing the specific proposed modifications to the text of the proposed regulation orders available for comment with this Notice are provided in the two formats denoted with the suffixes “-1,” “-1.1,” “-2,” and “-2.1.”

In the versions denoted Attachment A-1 and A-2, the 45-Day Changes (proposed regulatory language as posted on December 19, 2023), and First and Second 15-Day Changes are shown in “normal type.” The deletions and additions to the version of the regulation submitted to OAL on January 3, 2025, that comprise the Third 15-Day Changes that are being made public and available for comment with this Notice are shown in ~~strikeout~~ to indicate deletions and underline to indicate additions.

In the versions denoted Attachment A-1.1 and A-2.1, the Third 15-Day Changes are provided in a tracked-changes format to meet the requirement for accessible electronic documents. The 45-Day Changes and First and Second 15-Day Changes are incorporated into these versions as plain, clean text because they are not being made available for public comment by this Notice. The Proposed Third 15-Day Changes are shown in tracked changes and are made public with this Notice and available for comment. To review this document in a clean format, without underline or strikeout to show changes, that shows all the proposed regulations being considered for adoption, please select “Simple Markup” or “No Markup,” or accept all changes in Microsoft Word’s Review menu. You can also change the view to the Final Regulation Order submitted to OAL (originally proposed regulatory text prior to these proposed modifications) by selecting “Original” or rejecting all tracked changes. Additionally, “Advanced Track Changes Options” will allow for further options regarding color and other markings.

In the version denoted Attachment A-1.2, the existing, original regulatory language currently adopted into the California Code of Regulations (pre-45-Day Changes) is shown as plain, clean text, while the 45-Day Changes and the proposed First, Second, and Third 15-Day Changes are combined and shown in tracked changes. To review the net proposal in this document in a clean format (no underline or strikeout to show changes), please select “Simple Markup” or “No Markup” in Microsoft Word’s Review menu or accept all changes. You can also change the view to the original (originally proposed regulatory text prior to any proposed modifications, or 45-Day Changes) by selecting “Original” or rejecting all tracked changes. By progressing through the changes and comparing them with the Third 15-Day Changes, the public can see the net and stepwise changes being proposed in relation to existing law. Please refer to the versions denoted A-1 and A-2 to review the 15-Day Changes available for comment and their companion/alternate versions A-1.1 and A-2.1 to view accessible versions showing the Third 15-Day Changes.

In the version denoted Attachment A-2.2, the 45-Day Changes are shown as plain, clean text, while the proposed First, Second, and Third 15-Day Changes are combined and shown in tracked changes. To review the net proposal in this document in a clean format (no underline or strikethrough to show changes), please select “Simple Markup” or “No Markup” in Microsoft Word’s Review menu or accept all changes. You can also change the view to the original (originally proposed regulatory text prior to any proposed modifications, or 45-Day Changes) by selecting “Original” or rejecting all tracked changes. By progressing through the changes and comparing them with the Third 15-Day Changes, the public can see the net and stepwise changes being proposed in relation to existing law. Please refer to the versions denoted A-1 and A-2 to review the 15-Day Changes available for comment and their companion/alternate versions A-1.1 and A-2.1 to view accessible versions showing the Third 15-Day Changes.

In an addendum to the Final Statement of Reasons, staff will respond to all comments received during the noticed comment period. The APA 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 Attachments A-1 and A-2.

## **Summary of Proposed Modifications**

The following summary does not include all modifications to correct typographical or grammatical errors, changes in numbering or formatting, nor does it include all of the non-substantive revisions made to improve clarity.

### **Modifications to Section 95481. Definitions and Acronyms.**

1. In section 95481(a), staff proposes to add, delete, or modify a number of definitions, including but not limited to: “Break ground,” “Clean Fuel Reward,” “Battery Electric Motorcycle,” “LCFS Data Management System,” “Quality-assured data,” and “Standard value.”

### **Modifications to Section 95482. Fuels Subject to Regulation.**

1. In subsection 95482(f), staff proposes to change “LCFS program” to “LCFS Data Management System” to improve clarity and consistency.
2. In subsection 95482(g), staff proposes to change “LCFS program” to “LCFS Data Management System” to improve clarity and consistency.
3. In subsection 95482(h), staff proposes to allow hydrogen produced with accompanying carbon capture and sequestration technology to count toward the 80% renewable hydrogen requirement by 2030. Staff also proposes to exclude hydrogen produced with accompanying carbon capture and sequestration technology from the existing phaseout of fossil hydrogen by 2035. This modification would allow the LCFS to further support growing supplies of low-CI hydrogen in alignment with federal incentives and investment in carbon dioxide removal technology as well as California’s 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update).

### **Modifications to Section 95483. Fuel Reporting Entities.**

1. In subsection 95483(c), staff proposes to remove an option for the Executive Officer to direct a portion of base credits to Original Equipment Manufacturers (OEMs) following a specified regulatory trigger. With that option removed, all base credits will be allocated

to Electrical Distribution Utilities (EDUs) following the regulatory default, and a portion of these credit proceeds will be allocated to a Clean Fuel Reward program following the requirements listed in section 95483(c)(1)(A). As specified by the definition of the term as amended in section 95481, the Clean Fuel Reward program will provide reductions in price for electric medium-and heavy-duty vehicles, in support of the State’s climate goals, Executive Order N-79-20, and the 2022 Scoping Plan Update. The program is designed to support emissions reductions from on-road fleets that disproportionately impact air quality for communities adjacent to goods movement corridors—thereby helping to close existing health gaps. In addition, staff proposes to include battery electric on-road motorcycles in the Clean Fuel Reward program, in alignment with the 2022 Scoping Plan Update, Board direction in Resolution 24-14, and Executive Order N-79-20. The transportation sector accounts for 50 percent of greenhouse gas emissions in California and 45 percent of particulate matter and 85 percent of oxides of nitrogen. Reducing emissions in this sector is critical for achieving California’s air quality and greenhouse gas targets.

**Modifications to Section 95483.1. Opt-In Entities.**

1. Staff proposes to delete subsection 95483.1(a)(1)(D) for consistency with the removal of the option for base credits to go to OEMs in section 95483(c).

**Modifications to Section 95483.2. LCFS Data Management System.**

1. In section 95483.2., staff proposes to clarify that the LCFS Data Management System comprises three interactive web-based systems, consistent with the proposed definition of “LCFS Data Management System” in section 95481(a).

**Modifications to Section 95486.1. Generating and Calculating Credits and Deficits Using Fuel Pathways.**

1. In subsection 95486.1(c)(1), staff proposes to remove references to OEM base crediting for consistency with the proposed changes to section 95483(c).
2. In subsection 95486.1(g), staff proposes to clarify that a fuel pathway holder that will generate a deficit obligation following a verified CI exceedance must register in the LCFS Reporting Tool/ Credit Bank and Transfer System (LRT-CBTS) so that the deficits can be applied to their account.

**Modifications to Section 95486.2. Generating and Calculating Credits for ZEV [zero-emission vehicle] Fueling Infrastructure Pathways.**

1. In subsection 95486.2(a)(3)(A), staff proposes to change “prior quarter” to “most recent quarter for which data is available” for consistency with quarterly reporting deadlines and with the Hydrogen Refueling Infrastructure (HRI) crediting formula specified in 95486.2(a)(3)(A).
2. In subsection 95486.2(b)(3)(A)(1), staff proposes to change “prior quarter” to “most recent quarter for which data is available” for consistency with quarterly reporting

deadlines and with the DC Fast Charging Infrastructure (FCI) crediting formula specified in 95486.2(b)(3)(B).

3. In subsection 95486.2(b)(3)(A)(2), staff proposes to change “prior quarter” to “most recent quarter for which data is available” for consistency with quarterly reporting deadlines and with the FCI crediting formula specified in 95486.2(b)(3)(B).

### **Modifications to Section 95486.3. Generating and Calculating Credits for ZEV Fueling Infrastructure Pathways for Light- and Medium-Duty Vehicles.**

1. In subsection 95486.3(a)(2)(F), staff proposes to modify the derating factor for LMD (light- and medium-duty) HRI stations. The proposed modifications increase the derating factor from the previous staff proposal and align with the proposed derating factors for the HD-HRI (heavy-duty HRI) program, which is expected to allow more stations to participate in the LMD-HRI program.
2. In subsection 95486.3(a)(4)(H), staff proposes to remove language that would have limited the estimated cumulative value of HRI credits generated by a particular station to 1.5 times the initial capital expenditures. This proposed change, made in tandem with the modification to the derating factor, reflects the need for increased support for hydrogen refueling.

### **Modifications to Section 95486.4. Generating and Calculating Credits for ZEV Fueling Infrastructure Pathways for Heavy-Duty Vehicles.**

1. In subsection 95486.4(a)(1)(B)(1), staff proposes to clarify that the five-mile distance requirement for shared HD-HRI stations will be calculated based upon the shortest great-circle distance between the proposed site and an Alternative Fuel Corridor.
2. In subsection 95486.4(a)(2)(E), staff proposes to clarify that the HyCap model used to calculate the station nameplate refueling capacity will be the version released on March 12, 2025.
3. In subsection 95486.4(a)(2)(F), staff proposes to modify the derating factor for HD-HRI stations in order to increase credit generation opportunities for these stations and support investment in infrastructure buildout.
4. In subsection 95486.4(a)(4)(I), staff proposes to remove language that would have limited the estimated cumulative value of HRI credits generated by a particular station to 1.5 times the initial capital expenditures. This proposed change, made in tandem with the modification to the derating factor, reflects the need for increased support for hydrogen refueling.
5. In subsection 95486.4(b)(1)(B)(1), staff proposes to clarify that the five-mile distance requirement for shared HD-FCI chargers will be calculated based upon the shortest great-circle distance between the proposed site and an Alternative Fuel Corridor.

### **Modifications to Section 95488. Entities Eligible to Apply for Fuel Pathways.**

1. In subsection 95488(c)(1), staff proposes to clarify that fuel pathway holders should use the CA-GREET4.0 model or associated Tier 1 CI Calculators incorporated by the

regulation as amended beginning with the 2025 Annual Fuel Pathway Reports, with adjusted CIs becoming effective and available for fuel transactions beginning in 2027.

2. In subsection 95488(c)(2), staff proposes to clarify that fuel pathway applicants should use the CA-GREET4.0 or associated Tier 1 CI Calculators beginning after the effective date of the regulation.
3. In subsection 95488(d), staff proposes to change “may choose not to” to “shall not” in order to clarify that the Executive Officer will not accept new fuel pathway applications for biomass-based diesel if the specified conditions are met.

#### **Modifications to Section 95488.3. Calculation of Fuel Pathway Carbon Intensities.**

1. In subsection 95488.3(b)(9), staff proposes to remove text related to updates to Tier 1 Calculators as unnecessary.
2. In subsection 95488.3(d), staff added contextual detail on the models used to calculate the Land Use Change (LUC) values in Table 6, and clarified that the Executive Officer will calculate a conservative LUC value only if an entity’s fuel pathway application does not exactly match the biomass/region/fuel combination in Table 6, and if no Table 6 value is appropriate. Additions of detailed definitions that include specified data sources clarify the procedure for calculating new LUC values. The term “crop” was replaced with “biomass” to improve regulatory consistency

#### **Modifications to Section 95488.8. Fuel Pathway Application Requirements Applying to All Classifications.**

1. In subsection 95488.8(g)(1)(D)(3)(e), staff proposes to add “produced” to the specified source feedstock attestation language to improve consistency with the attestation requirements set forth in subsection 95488.8(g)(1)(D)(2)(c).

#### **Modifications to Section 95488.9. Special Circumstances for Fuel Pathway Applications.**

1. In subsection 95488.9(f)(3)(A), staff proposes to clarify that the Executive Officer will renew crediting periods for fuel pathways certified before the effective date of the regulation, upon receiving the request.
2. In subsection 95488.9(g)(5)(C)(1), staff proposes to clarify that both the fuel pathway holder and a fuel pathway applicant (who would become a fuel pathway holder following

fuel pathway certification) utilizing biomass under section 95488.9(g)(1)(A) must maintain an attestation letter.

3. In subsection 95488.9(g)(6)(C)(2), staff proposes to change “may” to “shall” in order to clarify that the Executive Officer will approve certification systems that meet the specified criteria.
4. In subsection 95488.9(g)(7)(C)(1), staff proposes to change “may” to “shall” in order to clarify that the Executive Officer will approve certification systems that meet the specified criteria.
5. In subsection 95488.9(g)(8)(A), staff proposes to change “may” to “shall” in order to clarify that the Executive Officer will approve certification systems that meet the specified criteria.
6. In subsection 95488.9(g)(8)(H), staff proposes to clarify under which conditions the Executive Officer will modify, suspend, or revoke the approval status of certification systems.
7. In subsection 95488.9(g)(8)(I) staff propose to clarify under what conditions the Executive Officer will suspend or revoke the approval status of the certification systems
8. In subsection 95488.9(g)(8)(J) staff propose to consistently use the term “certification system.”
9. In subsection 95488.9(g)(8)(K) staff propose to identify the date that a modification, suspension, or revocation will begin, and specify how the information will be transmitted to the certification system.

#### **Modifications to Section 95488.10. Maintaining Fuel Pathways.**

1. In subsection 95488.10(a)(6), staff proposes to update “2024” to “2025” for consistency with modifications to subsection 95488(c).
2. In subsection 95488.10(b), staff proposes to change “may” to “shall” with regard to the Executive Officer’s authority to perform a credit true up for a fuel pathway. Staff also proposes to clarify that in order to be eligible for a credit true up, a fuel pathway must both have a lower verified operational CI and complete operational data in the applicable AFPR.

#### **Modifications to Section 95489. Provisions for Petroleum-Based Fuels.**

1. In subsection 95489(c)(3)(B), staff proposes to clarify how the notification of readiness for validation will occur, as well as the content of the notification. Staff also proposes to clarify that the list of eligibility requirements for validation is specified in section 95489(c).
2. In subsection 95489(e)(4)(B), staff proposes to clarify how the notification of readiness for validation will occur, as well as the content of the notification. Staff also proposes to

clarify that the list of eligibility requirements for validation is specified in section 95489(e).

3. In subsection 95489(f)(4)(B), staff proposes to clarify how the notification of readiness for validation will occur, as well as the content of the notification. Staff also proposes to clarify that the list of eligibility requirements for validation is specified in section 95489(f).

#### **Modifications to Section 95491. Fuel Transactions and Compliance Reporting.**

1. In subsection 95491(b)(2), staff proposes to change “may” to “shall” in order to make it more clear under which conditions the Executive Officer will issue credits as a partial and limited exception to the prohibition on retroactive credit claims in section 95486(a)(2).
2. Staff proposes to delete subsection 95491(e)(5)(A)(4) for consistency with the removal of the OEM base crediting option made to subsection 95483(c).

#### **Modifications to Section 95491.2. Measurement Accuracy and Data Provisions.**

1. In subsection 95491.2(a)(1)(A), staff proposes to clarify that a calibration method that meets the accuracy requirements specified in section 95491.2 must be documented in the monitoring plan, if manufacturer’s recommended procedures do not exist.
2. In subsection 95491.2(b)(2)(A), staff proposes to swap this subsection with subsection 95491.2(b)(2)(B) for clarity, and to clarify under what circumstances and on what basis the Executive Officer will determine whether to approve an alternate method for reporting missing data.
3. In subsection 95491.2(b)(2)(B), staff proposes to swap this subsection with subsection 95491.2(b)(2)(A) for clarity, and to clarify under what circumstances the missing data substitution methods in Table 13 shall be used.
4. In subsection 95491.2(b)(2), Table 13, staff proposes to clarify the data substitution method that should be used when the data capture rate is exactly 90.00 percent. Staff also proposes to clarify the number of significant figures to use.
5. In subsection 95491.2(b)(2)(C), staff proposes to clarify the process and criteria that the Executive Officer will use to assign an alternate method for the missing data timeframe.
6. Staff proposes to add subsection 95491.2(b)(2)(D) in order to clarify that fuel reporting entities will receive retroactive credits if they use missing data methods that extend beyond a quarter.

#### **Modifications to Section 95500. Requirements for Validation of Fuel Pathway Applications; and Verification of Annual Fuel Pathway Reports, Quarterly Fuel Transactions Reports, Crude Oil Quarterly and Annual Volumes Reports, Project Reports, and Low-Complexity/Low-Energy-Use Refinery Reports.**

1. In subsection 95500(c)(2)(B), staff proposes to clarify the eligibility requirements for deferred verification. The maximum threshold is 10,000 credits. It is not additive of 6,000 and 10,000 credits.

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.



These modifications do not change implementation of the regulation in any way that affects the conclusions of the Final Environmental Impact Analysis (EIA) certified by CARB with Resolution 24-14. The modifications primarily consist of clarifications that do not alter the compliance responses or associated identified environmental impact conclusions. Any modifications that may affect compliance responses do not result in any new reasonably foreseeable significant environmental impacts or substantially increase the severity of an identified environmental impact. Therefore, the Final EIA adequately addresses the modifications, and no additional environmental analysis is required.

## **Additional Documents Added to the Record**

In the interest of completeness and in accordance with Government Code section 11347.1, subdivision (a), staff has also added to the rulemaking record and invites comments on:

### **Documents Incorporated by Reference**

1. Internal Revenue Service, Guidance Notice 2022-61. Federal Register. Volume 87, No. 229. November 30, 2022. Available at:  
<https://www.federalregister.gov/documents/2022/11/30/2022-26108/prevaling-wage-and-apprenticeship-initial-guidance-under-section-45b6bii-and-other-substantially>
2. Hydrogen Fueling Capacity (HyCap) Model. March 12, 2025.

These documents are available for inspection at the California Air Resources Board, 1001 I Street, Sacramento, California, 95814, between the hours of 9:00am to 4:00pm, Monday through Friday (excluding holidays). To inspect these documents please contact Jennifer Simpson, BARCU Manager, at (279) 208-7216.

## **Agency Contacts**

Inquiries concerning the substance of the proposed regulation may be directed to Dillon Miner, Staff Air Pollution Specialist, Alternative Fuels Section, at (279) 208-7437 or (designated back-up contact) Jordan Ramalingam, Manager, Alternative Fuels Section, at (916) 277-0499.

## **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: Clerks' Office, California Air Resources Board  
1001 I Street, Sacramento, California 95814

*Electronic submittal:* <https://ww2.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.

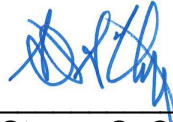
In order to be considered by the Executive Officer, comments must be directed to CARB in one of the two forms described above and received by CARB no later than the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-

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 Clerks' Office 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 alterno 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 laborales 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



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Steven S. Cliff, Ph.D.,  
Executive Officer

Date: April 4, 2025

#### 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](http://www2.arb.ca.gov) ([www2.arb.ca.gov](http://www2.arb.ca.gov)).*