Frequently Asked Questions

These Frequently Asked Questions (FAQ) relate to the implementation of the 2024 LCFS amendments. The California Air Resources Board's (CARB) Low Carbon Fuel Standard (LCFS) regulation, which appears at sections 95480 to 95503 of title 17, California Code of Regulations, is designed to reduce greenhouse gas emissions associated with the life cycle of transportation fuels used in California. Unlike the regulation itself, these FAQ do not have the force of law. They are not intended to and cannot establish requirements beyond those that are in the LCFS regulation, nor can they supplant, replace, or amend any of the legal requirements of the regulation. Conversely, any omission or truncation of regulatory requirements does not relieve entities of their legal obligation to fully comply with all requirements of the regulation. The FAQs will be updated periodically.

1. How will the amended 2025 carbon intensity (CI) benchmarks apply to quarterly reporting and credit generation?

The amended 2025 carbon intensity benchmarks came into effect on July 1, 2025, and apply to fuels supplied in Q3 2025 and beyond. Benchmark values included in the LCFS regulation sections 95484(d) Table 1 for gasoline, 95484(e) Table 2 for diesel, and 95484(f) Table 3 for jet fuel will apply to credit generation calculations included in various sections, including section 95486.1 of the LCFS regulation, starting with Q3 2025 quarterly fuel transaction reports due by December 31, 2025.

2. Given there are two different 2025 CI benchmarks applicable to different parts of 2025 – is CARB also implementing two different crude CI scores from "Table 9" in 2025?

Yes. For Q1 and Q2 2025 quarterly fuel transactions, the pre-amendment[1] Table 9 values apply. For Q3 and Q4 quarterly fuel transactions, the amended Table 9 values apply as shown in the current regulation that went into effect on July 1, 2025.[2]

3. Will the credit true-up provisions apply to all 2025 reported transactions?

Section 95488.10(b) of the LCFS regulation specifies that when a CI is verified at a lower value than it was certified and reported, credits representing the difference will be issued to fuel reporting entities. These "true-up credits" will be issued starting with the 2025 Annual Fuel Pathway Report (AFPR) and will apply to all fuel transactions

[1] https://ww2.arb.ca.gov/sites/default/files/2020-07/2020_lcfs_fro_oal-approved_unofficial_06302020.pdf
[2] https://ww2.arb.ca.gov/sites/default/files/2025-07/2025_lcfs_fro_oal-approved_unofficial_07012025.pdf

covered in the report. CARB will issue the true-up credits after 2025 AFPR verification completes in the fall of 2026.

4. When does the CI exceedance deficit obligation begin?

Deficit obligations resulting from CI exceedances will apply to all 2025 reporting (Q1 – Q4). The CI exceedance deficit obligation will be generated after AFPR verification completes in the fall of 2026. Section 95486.1(g) of the LCFS regulation specifies that when a CI is verified at a higher value than it was certified and reported, a deficit obligation equal to 4 times the exceedance based on reported fuel volumes and credit generation will be added to the fuel pathway holder's LRT-CBTS account. Any fuel pathway holder without an LRT-CBTS account generating a deficit obligation must create an LRT-CBTS account.

To reduce the chance of having a CI exceedance, a fuel pathway holder may request to add a margin of safety (MOS) to their pathway CI during the AFPR verification process each year, pursuant to section 95488.10(a)(6) of the LCFS regulation. A pathway holder may establish a conservative margin of safety (MOS) in fall of 2025 to be applicable to both the 2025 and 2026 data year in order to ensure no CI exceedance for the 2025 data year. To facilitate an implementation transition associated with the midyear (July 1, 2025) effective date of the amendments, any MOS established for the 2025 data year in the fall of 2025 will be applied to fuel transactions reporting for purposes of credit generation following 2025 Annual Fuel Pathway Report verification (in 2026).

5. When can I request to add or update a conservative margin of safety (MOS) for my fuel pathway CI?

According to sections 95488.4(a) and 95488.10(a)(6)(B), a fuel pathway applicant or fuel pathway holder may request to add a margin of safety during the initial pathway certification or when replacing a previously certified CI with the verified operational CI during the AFPR process. Please see the previous question regarding CI exceedance deficit obligation for additional information.

6. On July 1, 2025, regulatory amendments to the Low Carbon Fuel Standard (LCFS) regulations came into effect months later than previously targeted. Will the California Air Resources Board (CARB) allow extra time for feedstock suppliers and fuel pathway holders to implement the sustainability requirements added to the regulation under new subsection 95488.9(g)?

CARB recognizes that regulated entities will need to adjust to implementation of new systems and processes to comply with the sustainability requirements provisions that became effective July 1, 2025. CARB will work with regulated entities to support compliance with the 2026 requirements identified in 95488.9(g)(5) based on good faith efforts and using the best available information. CARB staff understands there may be challenges with demonstrating 100% compliance with the 2026 requirements identified in 95488.9(g)(5).

Failure to meet certification requirements applicable starting in 2028 under 95488.9(g)(6) triggers the assignment of the ULSD (California ultra-low sulfur diesel) or CARBOB (California reformulated gasoline blendstock for oxygenate blending) carbon intensities to finished fuel developed from ineligible biomass. CARB staff are committed to continuing to monitor fuel pathway holder progress to meeting those 2028 requirements.

7. When are attestation letters for biomass under section 95488.9(g)(5)(C) required to be maintained?

CARB staff recognizes that biomass covered under section 95488.9(g)(1)(A) may have been planted, contracted for, or harvested prior to the July 1, 2025 effective date of the amended LCFS regulation, and that fuel pathway holders and feedstock producers may need to adjust future feedstock contracts to ensure attestations and geographic shapefiles are available as required by the amended regulation.

For existing fuel pathways: Beginning with the 2026 data year submitted in 2027 (i.e., the 2026 AFPR), holders of pathways utilizing biomass covered under section 95488.9(g)(1)(A) must maintain attestations as specified by section 95488.9(g)(5)(C). Attestation letters must cover any biomass planted, contracted for, and harvested after July 1, 2025 (if any one of these activities happened prior to July 1, 2025, the updated regulatory requirements do not apply), and must attest to the veracity of the information supplied and declare that the reported information accurately represents the geographical shapefiles or coordinates of plot boundaries (farm, plantation or forest) that are managed to produce the biomass. The attestation letters must be submitted upon request by a CARB accredited verifier or the Executive Officer.

For new fuel pathways: New fuel pathway applications that include biomass covered under section 95488.9(g)(1)(A) planted, contracted for, and harvested *after* July 1, 2025, must maintain an attestation letter as specified by section 95488.9(g)(5)(C). If any one of these activities (either planting, harvesting, or contracting) happened prior to July 1, 2025, the updated regulatory requirements do not apply for that volume of biomass. The attestation letter must attest to the veracity of the information supplied and declare that the reported information accurately represents the geographical shapefiles or coordinates of plot boundaries (farm, plantation or forest) that are managed to produce the biomass and meet all other requirements listed in section 95488.9(g)(5)(C). The attestation letters must be submitted upon request by a CARB accredited verifier or the CARB Executive Officer.

8. When are geographical shapefiles or coordinates of plot boundaries required to be submitted to CARB?

Existing fuel pathways: Beginning with annual fuel pathway report for the 2026 data year submitted in 2027 (i.e., the 2026 AFPR), holders of pathways utilizing biomass covered under section 95488.9(g)(1)(A) planted, contracted for, and delivered after July 1, 2025 must submit to CARB geographical shapefiles or coordinates of plot boundaries (farm, plantation or forest) that are managed to produce the biomass with the annual fuel pathway report.

New fuel pathways: Beginning July 1, 2025, for any biomass covered under section 95488.9(g)(1)(A) planted, contracted for, and delivered after July 1, 2025, new fuel pathway applicants must submit to CARB geographical shapefiles or coordinates of plot boundaries (farm, plantation, or forest) that are managed to produce the biomass with the fuel pathway application.

9. What file formats can be used to submit shapefiles or coordinates of plot boundaries? Can a centroid coordinate satisfy the geographical shapefile or coordinates of plot boundaries submission requirement?

The shapefile should clearly indicate the boundaries of the fields used to produce the crops. Farms can include the entire farm boundaries for ease or limit the boundaries to the fields actually used to produce the sustainable crops. Any fields outside the farm boundary that are leased to produce sustainable feedstocks must also be included in the shapefile. ESRI file types are preferred but any common GIS format is acceptable (see The Ultimate List of GIS Formats and Geospatial File Extensions - GIS Geography).

Centroid coordinates may be submitted if that is the best available data. CARB is evaluating additional options that may be used by fuel pathway holders to facilitate demonstrations of plot boundaries, including utilizing data made available by third parties reflecting crop boundaries.

10. Do all farms need to be included in the geographical shapefile or coordinates of plot boundaries submission even if only some of the land is used to grow biomass for transportation fuels?

The amended LCFS regulation requires that lands managed to produce biomass for a fuel pathway be represented in the geographical shapefile or coordinates of plot boundaries submission regardless of land ownership. To assist in the transition, for the first year, CARB would accept shape files that include broader boundaries of all farms used even if only some of the land is used to grow biomass for transportation fuels, if that is the best available data.

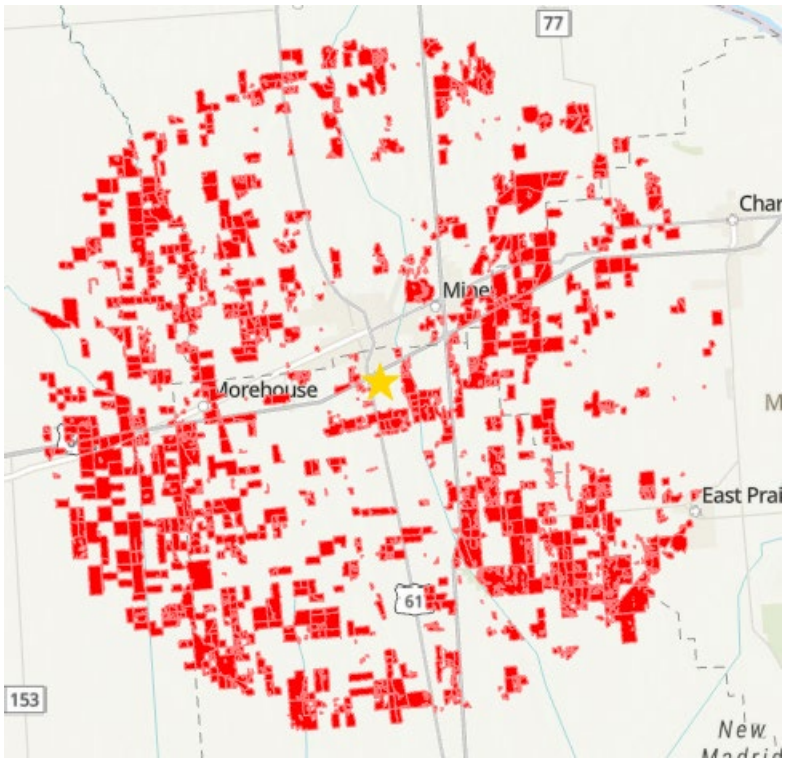
11. Can CARB provide an example of information that would support meeting the requirements under section 95488.9(g)(5) related to identifying plot boundaries that are managed to produce aggregated or commingled agricultural biomass?

Consistent with LCFS regulatory requirements, the best available information may include:

- Identification of the sourcing area for the biomass used in the LCFS pathway;
- Documentation showing how lands were assessed to demonstrate that the land was cleared or cultivated prior to January 1, 2008, and actively managed or fallow since January 1, 2008;

- Records supporting mass balance, chain of custody, and eligible volume calculations; and/or
- Exclusion of biomass from sustainability claims where the origin, land-use status, or supporting documentation cannot be adequately demonstrated.

The figure below provides a simplified hypothetical example of how a biomass sourcing area may be screened in support of identifying feedstock meeting the requirements of 95488.9(g). The example is provided for informational purposes only and does not prescribe a required methodology, data source, or format. Fuel pathway holders remain responsible for demonstrating compliance with all applicable LCFS sustainability requirements.



The star in the center of the figure represents a biomass-based fuel production facility, and the red shapes represent the crop boundaries from which the facility typically purchases crops.

Fuel pathway holders or applicants may disclose a reasonable biomass sourcing area. Field boundaries within the biomass sourcing area can come from company data, farmer data, third-party data, federal data sets (i.e., USDA - National Agricultural Statistics Service - Crop Sequence Boundaries (CSB)), or other sources. Pathway holders or applicants should screen the fields identified to confirm that land was cleared or cultivated prior to January 1, 2008. The attestation letter required pursuant to section 95488.9(g)(5)(C) of the LCFS regulation will cover all such confirmed delineated fields in the biomass sourcing area.

12. Does biomass need to be separately stored and transported to meet the sustainability requirements?

No. Conformance can be demonstrated by mass balance. For example, if 10 tons of biomass that meets all sustainability requirements was placed in a silo containing 100 tons of biomass that do not meet the sustainability requirements, up to 10 tons of biomass can be removed from that silo and used as either a feedstock or process energy for an approved pathway.

13. Does the requirement to submit to CARB geographical shapefiles or coordinates of plot boundaries end in 2028 when third-party certification is required?

Yes, shapefiles would no longer need to be submitted to CARB in 2028 when third-party certification is completed. However, shapefiles or some delineation of the plot boundaries will continue to be necessary to demonstrate compliance with the requirements of section 95488.9(g)(2), and so must be retained and made available to certification systems, verifiers, and/or CARB staff on request as necessary to meet recordkeeping requirements as specified by section 95491.1.

14. Will sourcing biomass from suppliers who are certified under a certification system approved by the CARB Executive Officer before 2028 meet the requirements applicable before 2028?

Yes. CARB staff encourage fuel pathway holders and applicants to source biomass certified by an Executive Officer approved certification system (including certification systems that have been recognized by the European Commission for the European Union Renewable Energy Directive (EU RED)) before 2028. While subsection 95488.9(g)(6) requires maintenance of those certifications beginning in 2028, such certifications provide a path to comply with the initial (post-2026) phasing-in certification requirements of section 95488.9(g)(5).

15. Is corn *stover* subject to sustainability requirements of section 95488.9(g)?

No. Corn stover is a specified source feedstock and is not subject to the sustainability requirements of section 95488.9(g); however, corn stover is subject to the specified source feedstock requirements of section 95488.8(g).

16. What is the relationship between the definition of "forest biomass waste" as defined under section 95481 and the use of that term in section 95488.8(g)(1)(A)3. in the list of specified source feedstocks?

Characteristics of forest-derived material that is considered to be a waste are included in the definition of "forest biomass waste" in section 95481. Section 95488.8(g)(1)(A) specifies that forest biomass waste eligible as a specified-source feedstock must include forestry residues generated as a result of activities that are conducted for the purposes of wildfire risk reduction, forest health restoration, and for

the protection of critical infrastructure such as power lines and evacuation routes. Section 95488.8(g)(1)(A) also requires that forest biomass waste be sourced from non-industrial forestland in order to be considered a specified source feedstock, in recognition of the fact that forest health restoration and wildfire risk reduction treatments are needed on public lands and unmanaged lands.

Sources of forest biomass not meeting this definition may still be used as feedstock for fuel supplied to California but will be subject to sustainability requirements in section 95488.9(g). Staff recognizes that there are cases in which clear-cutting is silviculturally appropriate and can be conducted in a manner that is consistent with California Forest Practice Rules. Feedstock obtained from operations on industrial forestlands or from clear-cutting are subject to sustainability criteria to ensure the operations are performed in compliance with legal requirements, and to provide CARB with the information necessary to appropriately assess potential climate and land use change impacts. In section 95488.9(g)(1)(B), staff included a compliance option to the sustainability requirements for forest-derived biomass sourced from forest land that meets General Eligibility Requirements identified in Section 3.1(a) of CARB's Compliance Offset Protocol U.S. Forest Projects (Adopted June 25, 2015), with the exception of section 3.1(a)(5).

The forest biomass waste criteria in section 95488.8(g)(1)(A) of the Amendments indicates which feedstocks are subject to the chain of custody evidence and other requirements in section 95488.8(g)(1)(B). Biomass that does not meet these criteria is subject to sustainability certification in section 95488.9(g). These designations do not specify the carbon intensity of biomass feedstocks, which is assessed during the pathway application process based on applicable data.

17. What considerations may apply for verifiers if fuel pathway holders are using online feedstock tracking platforms?

Entities may choose to use online feedstock tracking platforms (e.g., Veriflux, Recycle Ledger, BioLedger Aegex FACTs, etc.) to track specified source feedstocks and/or information necessary for compliance with the sustainability requirements for biomass specified in section 95488.9(g) of the LCFS regulation. These platforms are not regulated or overseen by CARB and are not required to be used for the LCFS program. However, they are being used in greater numbers to help supply chain entities with the traceability of materials. Verifiers may gain access to the unencrypted online tracking platform data when performing sampling for feedstock traceability. Verifiers may use their professional judgment to determine the value of these platforms to verification. Verifiers and other LCFS regulated entities must comply with all applicable regulatory requirements, regardless of whether feedstock tracking platforms are used. The use of online feedstock tracking platforms does not automatically reduce risk. The verification team's sampling plan must describe whether a feedstock tracking platform is used, their assessment of the risk of misstatement, and justify why their review of data (including any tracking platform and

other data management system, chain of custody documentation, and information from upstream suppliers) was sufficient to justify the verification statement submitted.

18. When using the mass balance approach to demonstrate conformance with sustainability requirements for biomass under section 95488.9(g), over what time period must the balancing occur?

Mass balancing time periods for sustainable biomass feedstocks used to produce transportation fuels must match the quarterly fuel transactions reporting period for fuel reporting entities (see LCFS Guidance 19-08). For supply chain entities that are farms or first gathering points, the mass balance period may be the calendar year. All eligible biomass-derived fuel reported must be trued-up with biomass meeting the requirements of section 95488.9(g) by the end of the mass balance period.

19. Is corn *fiber* subject to sustainability requirements of section 95488.9(g)?

No. Corn fiber is considered a by-product feedstock and thus not subject to the sustainability requirements of section 95488.9(g); however, corn fiber is subject to the specified source feedstock requirements of section 95488.8(g).

20. For 2025 and 2026 reporting, section 95488.10(a)(7)(C) allows fuel pathway holders to demonstrate that their verified operational CI exceedances are solely due to the transition from CA-GREET3.0 and CA-GREET4.0. How may this be demonstrated?

To demonstrate that verified operational CI exceedances are solely due to calculator updates, fuel pathway holders must submit in the AFP both CA-GREET3.0 and CA-GREET4.0 modeling tools populated with the operational data for the same reporting period. This information is subject to annual verification, and the determination that the exceedance is due solely to changes in CA-GREET is based on the final verified CA-GREET4.0 tool, compared with the final verified CA-GREET3.0 tool that reflects the same operational data. If operational data changes due to findings identified during the verification process, that data must be updated in both CA-GREET3.0 and 4.0 to allow for an accurate comparison. If verification findings result in a GREET4.0 CI exceedance that was not shown in the initial annual fuel pathway report submission, we recommend that fuel pathway holders interested to demonstrate that the verified operational CI exceedance is solely due to calculator updates submit a GREET3.0 model using the same operational data in the AFP as soon as possible.

21. Section 95488.9(g)(1)(A) requirements, including attestation and shapefile submission, apply to feedstocks that were planted, contracted for, or harvested after July 1, 2025. For feedstocks contracted for and harvested after that date but planted before, how do we provide evidence of that planting date?

Fuel pathway holders and applicants are encouraged to identify objective evidence that directly demonstrates the planting dates. However, if that evidence is not

available, fuel pathway holders can work with their verifiers to determine what other information, or evidence can provide confidence that the planting occurred prior to July 1, 2025. This can include information about the crop's lifecycle or interviews with farmers or other experts that indicate the planting date relative to known harvest dates for given crop types and regions. As stated in FAQ #7 above, CARB is asking for a good faith demonstration with the best available information.

22. If a farmer cleared land in partnership with a state or federal conservation program, or had an evaluation and approval from USDA-NRCS to remove trees and have documentation of this, would they meet the new requirements proposed to CARB if this happened after 2008?

As noted in these FAQs, only lands where the biomass is grown for use in the LCFS are subject to the requirements of the regulation, and, for example, small land conversions since 2008 do not mean that the biomass grown across the entire property is ineligible.

CARB also recognizes that there may be circumstances where limited land conversion or tree removal occurred on a property that may have been done for ecologically appropriate reasons. Reach out to CARB for details on your specific questions.

23. What certification systems are currently approved by the CARB executive officer? Is there a pathway for additional certification system approval prior to 2028?

Certification systems recognized by the EU RED 2018/201 as of December 31, 2025, will be approved for use in the LCFS program, pursuant to section 95488.9(g)(6)(C)1. That list is available here: https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/voluntary-schemes_en (Systems approved by EU RED after December 31, 2025, will not be approved for LCFS under this subsection.

Certification systems interested in pursuing Executive Officer approval under section 95488.9(g)(6)(C)2. will be required to submit an application for CARB review. The application will be posted on the CARB website in the future.

24. For the 2026 and 2027 planted crops, may a single set of centroid coordinates be submitted if that is the best available data?

As mentioned in FAQ #9 above, centroid coordinates may be submitted if that is the best available data. The centroid should be at minimum one GPS point per farm and could be the location of the farm buildings, the location of the farm address, the physical center of the farm, or any other reasonable location that would allow CARB staff to determine the approximate location of the farm boundaries.

25. For the 2026 planted crop, farmers will be required to attest that the feedstock was not grown on land cleared after 2008 and submit geolocation information. How does this information move through the value chain (e.g. aggregators, crushers)?

There is no regulatory requirement for a farmer's attestation. Per the LCFS regulation, the fuel pathway applicant and fuel pathway holder (not the farmer) must provide and maintain the attestation letter. How information about the sustainability of the feedstock moves through the value chain is up to the applicant or pathway holder. CARB understands that this is a process that will take time to develop and therefore as previously stated CARB will rely on good faith efforts using the best available information. CARB staff understands there may be challenges with collecting geolocation data covering 100% of the feedstock supplied during the 2026 data year and CARB will work with regulated entities to support compliance with the 2026 requirements identified in 95488.9(g)(5) based on good faith efforts.

26. Can CARB confirm that the 2008 land clearing requirement applies only to the land on which the crop was grown in that year and does not disqualify the entire farm's acreage and production?

Yes. As noted in FAQ #25 above, only lands where the biomass is grown for use in the LCFS are subject to the requirements of the regulation.

27. Will CARB require any proof to directly tie the bushels (feedstock) used to produce fuel to the exact acres used to produce the biomass?

No. A stated above in FAQ #11, a mass balance approach will be used. For example, on a particular farm CARB will rely on a mass balance approach whereby the percentage of feedstock meeting the sustainability requirements is equal to the percentage of acreage meeting the sustainability requirements.

28. Are there any requirements to document yield?

See answers to mass balancing questions in FAQs #11 and #17 above. In order to utilize a mass balancing approach, the fuel pathway applicant or pathway holder must also be able to calculate and document the percentage of total biomass feedstock from a farm that meets the sustainability requirements.

29. If a feedstock producer has a certification system program in place prior to the 2028 certification requirement, do all shapefiles still need to be submitted, or do we follow the applicable certification process specified by the certification system?

See FAQ #12 above about submitting shapefiles post 2028. If a feedstock producer voluntarily[3] meets the 2028 certification requirements prior to 2028 and if the certification system demonstrates that it effectively satisfies the 95488.9(g)(5)(A) requirements, shapefiles would no longer need to be submitted to CARB.

30. On July 1, 2025, regulatory amendments to the Low Carbon Fuel Standard (LCFS) regulations came into effect months later than previously targeted. Will the California Air Resources Board (CARB) allow extra time for specified source feedstock suppliers and fuel

[3] The fuel producer would need to make sustainability certification proof available to CARB and the verifier upon request.

pathway holders to implement the attestation requirements added to the regulation under subsection 95488.8(g)(1)(D)?

CARB recognizes that regulated entities will need to adjust to implementation of new systems and processes to comply with the specified source feedstock attestation provisions that became effective July 1, 2025. CARB will work with regulated entities to support compliance with the new attestation requirements identified in 95488.8(g)(1)(D) based on good faith efforts and using the best available information. CARB staff understands there may be challenges with demonstrating 100% compliance with the requirements identified in 95488.8(g)(1)(D).

31. **Does the specified source feedstock attestation letter required in section 95488.8(g)(1)(D) always need to be on company letterhead?**

Yes. One way to satisfy the letterhead requirement could be to provide a valid contract between two entities reflecting the exact wording and requirements for the attestation, perhaps attached to a cover letter on company letterhead if the contract itself is not on company letterhead.

32. **If 10,000 gallons of a specified source or biomass feedstock are used to produce a finished fuel and 100 gallons of feedstock are found to not meet the regulatory requirements for specified source feedstocks in section 95488.8(g)(1) or the requirements for sustainability certification in section 95488.9(g) respectively, would the whole volume of finished fuel be ineligible for LCFS credits?**

No, only the portion of finished fuel produced using the ineligible feedstock would be ineligible for LCFS crediting.

Missing Data FAQs

33. **We have less than 10 days of missing data, and it is not possible to replace the data using the methods in Table 13 of the LCFS Regulation. Can CARB provide an example of an alternate method that could be approved in such a situation?**

In situations where there is minimal missing data (i.e., less than 10 days as identified in the question) one example of an alternative method approach CARB has previously approved is to use either a simple or weighted average of monthly data to replace the missing data. Entities should make every reasonable effort to repair inoperable equipment promptly.

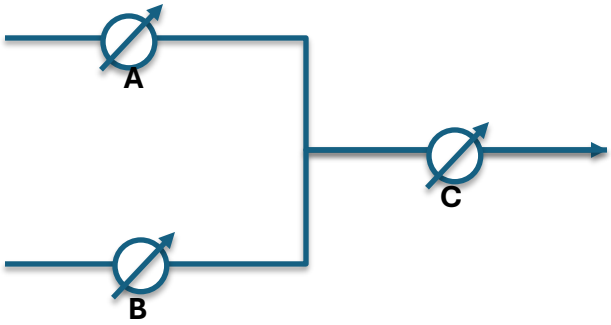
34. **We have a meter that did not record data for a period of time, but we are able to recreate the unrecorded data using other meters. Is this considered missing data?**

This situation would not be considered missing data and recreation of the unrecorded data is appropriate. In situations where there are duplicative measurement devices and it is required to switch from one measurement device to

another, it is not considered missing data. There are multiple situations where this could occur. First, if there are two devices measuring the same flow, or other parameter, if one device is inoperable the other can be used if the two measurements were previously shown to agree within ±5%.

In the second situation it may be mathematically possible to determine the values for an inoperable measurement device using other measurement devices. In Figure 1 any two meters can be used to calculate the missing flow for the third one (e.g., A+B=C or C-B=A).

Figure 1: Mathematical Metering Schematic



An example of a third situation is when a meter to a device that produces a measurable output does not record data, the measured output of the device can be used as a basis to recreate the unrecorded data. In the case of electricity generation, information about the relationship between fuel usage and electricity output can be used to recreate the unrecorded data. The electricity generator may have original equipment manufacturer (OEM) documentation on the fuel usage per output, or previous collected data can be used to develop a correlation where the substituted data is accurate or conservative.

None of these situations triggers applicable missing data requirements, but such situations must be noted in the facility monitoring plan. Every effort to repair the inoperable device in a timely manner should be made.

35. We have a totalizer meter that is missing short periods of data. It is not possible to use the methods in Table 13 to replace totalizer meter data. What should we do?

An alternate method request must be submitted to CARB as directed by subsection 95491.2(b) of the LCFS regulation. In a situation like this, an example of an option that CARB staff have previously accepted is to conduct a regression analysis or interpolation between available data points to reconstruct the missing data values. Entities should make every reasonable effort to repair the inoperable equipment promptly.

36. Our meter is showing small negative or positive flows where there is nothing flowing through the meter. How should this be handled?

Measurement devices may produce small positive or negative readings when operating outside of their linear range at low flow. Many meters address low flow through a low flow cutoff setting that reports zero flow below a specified threshold. If such functionality is unavailable or not operating correctly, entities may retain the raw measurement data for verifier review, and replace low flow readings with zero values, provided that the zero value accurately represents the true flow rate and the adjustment is supported during verification. This should be documented in the monitoring plan by the entity.

37. Our in-line continuous methane analyzer is not operating correctly; can a handheld analyzer be used to capture methane concentrations while the in-line analyzer is being prepared.

Yes, a handheld analyzer or comparable device may be used temporarily if it provides measurements within ±5% accuracy and thus may be used for the inoperable device consistent with section 95491.2(a) of the LCFS regulation. This would not trigger applicable missing data requirements but must be documented in the facility monitoring plan. Entities should make every reasonable effort to restore the primary analyzer to service promptly and ensure that all calibration requirements are met.

Contact

LCFS Workshop Feedback
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