

October 16, 2024

Ms. Rajinder Sahota Deputy Executive Officer Climate Change and Research California Air Resources Board 1001 I St Sacramento, CA 95814

Re: Comments on Modifications to the Proposed Low Carbon Fuel Standard Amendments Issued October 1, 2024

Dear Ms. Sahota:

The Renewable Fuels Association (RFA) appreciates the opportunity to comment on the modifications to the proposed Low Carbon Fuels Standard (LCFS) amendments released on October 1, 2024, as the Second 15-day Changes to Proposed Regulation Order. The RFA is the leading trade association for America's ethanol industry. Our mission is to drive growth in sustainable renewable fuels and bioproducts for a better future.

RFA has commented extensively over the last three years during the California Air Resources Board's (CARB) process of modifying and updating the LCFS program. Most recently, we provided comments on the first 15-day Changes to Proposed Regulation Order released on August 12, 2024, which should be considered in conjunction with this letter and are attached here for reference.

The Proposed Sustainability Requirements are Unnecessary for U.S.-Produced Ethanol and Are Unworkable as Proposed.

Concern about a "rapid expansion of biofuel production and biofuel feedstock demand" was CARB's stated rationale for including sustainability requirements in the proposed LCFS amendments. However, RFA has repeatedly substantiated in our comments that U.S. corn ethanol is not undergoing and does not pose a threat of rapid expansion and, therefore, the sustainability requirements should not apply to it.

Yet, CARB has been completely unresponsive to this evidence. There is a clear lack of accountability in CARB's process for incorporating stakeholder comments into its rulemaking process, as demonstrated by its continuing to subject ethanol to sustainability requirements even as those requirements have grown more stringent in successive versions of the proposal.

RFA also detailed in its previous comments that the sustainability requirements are not only unjustified but also unworkable. The second 15-day proposed changes only make matters worse.

In section 95488.9(g)(2), CARB states, "Biomass must be cultivated and harvested in accordance with all local, State and federal rules and permits." Otherwise, "the finished fuel developed from ineligible biomass must be assigned the CARBOB carbon intensity for ethanol produced using uncertified biomass." While it is the expectation of ethanol producers that their feedstock suppliers comply with all relevant rules and permits, this is outside of the knowledge or control of the ethanol producer, and it is up to the relevant local, state or federal agencies to enforce.

In section 95488.9(g)(3) that was added in the first 15-day changes, CARB prescribed "best environmental management practices" that must be followed by feedstock producers starting in 2031. Now, after the second 15-day changes, CARB would effectively be acting as the enforcer of "rules and permits" in other jurisdictions—a role for which it is doubtful CARB has the authority.

Notably, this overreaching language doesn't limit the rules and permits to environmental or sustainability criteria. In theory, if a farmer were out of compliance with a labor rule and the ethanol producer did not detect this and avoid purchasing his/her corn, the resulting ethanol would be subject to a punitive CI score. This is just one example. CARB should seriously reconsider such a broad and sweeping mandate that could result in an invalidation of LCFS credits due to an unrelated violation that occurs outside of both a fuel provider's control and CARB's jurisdiction.

By adding this provision, CARB is "piling on" to requirements that were already largely unworkable for reasons RFA detailed in its August 27 comments on the first 15-day changes. If the sustainability requirements are implemented as proposed, the practical result could be to make it infeasible for farmers, grain elevators, and biofuel producers to supply ethanol to California. California's citizens would pay more for gasoline, and greenhouse gas emissions would increase.

Accounting for Land Use Change Provisions Should be Subject to an Appropriate Public Rulemaking Process.

RFA has commented extensively on how the land use change (LUC) emissions estimates used for the LCFS are in serious need of updating. Yet, this was not included as a topic in the public workshops during the amendment process, and CARB did not include LUC revisions in its LCFS proposal. Instead, in the first 15-day comment package, CARB included broad new discretion for the Executive Officer to unilaterally adjust LUC factors for existing pathways and to assign new LUC factors for feedstock/fuel combinations not included in the current lookup table. RFA noted in its August 27 comments that the language in section 95488.3(d) was overly vague and that it appeared to allow new discretion for the Executive Officer to unilaterally increase LUC factors but not decrease them. However, no material clarifications or modifications were made to this section in the second 15-day package.

Given the magnitude of the implications of the LUC provisions, it seems inappropriate and outside of the bounds of California regulatory guidelines for CARB to make unilateral changes to LUC factors without following a well-defined process, including public workshops and a formal rulemaking. Additionally, greenhouse gas reductions from climate-smart agricultural practices should be incorporated into the LCFS the next time LUC emissions are considered. When carbon deficits are assessed for LUC without the very real and offsetting credits generated from improved agricultural practices, it unfairly disadvantages the use of biofuels to meet the LCFS.

Thank you for the opportunity to submit these comments. RFA looks forward to working with CARB board members and staff to move the LCFS program forward.

Sincerely,

Scott Richman Chief Economist

ATTACHMENT



August 27, 2024

Ms. Rajinder Sahota Deputy Executive Officer Climate Change and Research California Air Resources Board 1001 I St Sacramento, CA 95814

Re: Comments on Modifications to the Proposed Low Carbon Fuel Standard Amendments Issued August 12, 2024

Dear Ms. Sahota,

The Renewable Fuels Association (RFA) appreciates the opportunity to comment on the modifications to the proposed Low Carbon Fuels Standard (LCFS) amendments released on August 12, 2024. The RFA is the leading trade association for America's ethanol industry. Our mission is to drive growth in sustainable renewable fuels and bioproducts for a better future.

RFA has commented extensively over the last two years during the California Air Resources Board's (CARB) process of modifying and updating the LCFS program. The comments here are responsive to the August 12 proposal and should be considered in conjunction with our other comment letters. In particular, we are attaching to this letter the comments we submitted regarding the April 10, 2024, LCFS workshop in order to ensure that they are part of the formal record.

Approval of E15 Is Necessary to Meet the Proposed Increase in Compliance Stringency at the Lowest Practical Cost to California Consumers

In our last comment letter, RFA supported an increase to a 9% one-time step-down in the compliance curve, contingent on a commitment from CARB to begin the regulatory process to approve E15. While the modifications to the proposed LCFS amendments do include the 9% step-down, a schedule for a rulemaking to approve E15 has not been released.

As RFA has pointed out multiple times, limiting ethanol to a 10% blend not only locks in a 90% petroleum dependence in the gasoline market with myriad negative environmental and public health consequences, but it also severely limits needed credit generation in the gasoline pool. The proposed caps on soybean and canola oil-derived biomass-based diesel (BBD) are likely to slow the generation of excess LCFS credits in the diesel pool that have been used to cover ever-increasing cumulative net LCFS deficits in the gasoline pool. E15 is a critical near-term strategy for decarbonizing liquid fuels, which will continue to dominate transportation in California for years, if not decades, to come.

From a consumer perspective, E15 offers a unique opportunity to lower the cost of gasoline while cutting emissions of greenhouse gases and criteria pollutants. California drivers could save \$0.20 per gallon if the state allowed gas stations to sell E15 fuel, according to a new study authored by David Zilberman, PhD, a distinguished professor in the Agricultural and Resources Economics Department at the University of California, Berkeley, and Scott Kaplan, PhD, assistant professor in the Economics Department at the U.S. Naval Academy.¹ The study found that the potential savings for California consumers could reach \$2.7 billion annually and that "low-income commuters may stand to gain the most from a transition towards E15," given their propensity to have longer commutes and less fuel-efficient vehicles.

California is the only state in the U.S. that has not approved E15. The state's failure to approve the use of E15 essentially amounts to a gas price hike at a time when hard-working Californians can least afford it.

SB 32, which extended the goals of California's groundbreaking AB 32 legislation, is clear in the mandate for CARB to adopt rules and regulations to "achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions." Expeditiously approving E15 use in California is consistent with that directive and necessary for CARB to comply with state clean-air policies, bringing significant environmental, health, and cost benefits to California citizens.

The Primary Rationale for Introducing Biomass Sustainability Requirements in the LCFS Amendments No Longer Exists

During public workshops held in 2022 and 2023 regarding potential changes to the LCFS, CARB openly considered whether any measures should be taken in response to the growth in the use of crop-based feedstocks for BBD. In the workshop on July 7, 2022, staff noted that CARB had received feedback in which it was "[r]ecommended that CARB set an upper limit on biofuel volumes from lipid-based feedstocks."² For CARB's February 22, 2023, workshop, the staff presentation contained three slides showing increases in BBD and related crop-based feedstock usage and then asked, "Are there regulatory mechanisms staff should consider?"³

Rather than imposing a lipid "cap," CARB established feedstock sustainability requirements in the proposed LCFS amendments issued in December 2023. In the Crop-Based Biofuels Sustainability Criteria section of its Initial Statement of Reasons,

¹ <u>https://d35t1syewk4d42.cloudfront.net/file/2823/Impact%20of%20Introducing%20E15%20in%20California%207-9-24.pdf</u>

² https://ww2.arb.ca.gov/sites/default/files/2022-07/LCFSWorkshop_Presentation.pdf

³ https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/lcfs_meetings/LCFSpresentation_02222023.pdf

CARB explained, "To reduce the risk that rapid expansion of biofuel production and biofuel feedstock demand could result in deforestation or adverse land use change, CARB staff are proposing additional guardrails on the use of crop-based feedstocks for biofuel production."⁴

However, in the 15-day changes to the proposed amendments issued on August 12, 2024, CARB reversed course and capped the generation of credits for BBD from "virgin soybean oil and canola oil" at 20% of annual BBD volumes on a company-wide basis. Yet, CARB did not remove the sustainability requirements, even though they were intended to accomplish the same objective. Instead, CARB doubled down by making the requirements more onerous.

Certification Under the Proposed Sustainability Requirements Is Unnecessary for U.S.-Produced Ethanol

As discussed at length in the attached comments RFA submitted in response to the CARB workshop that was held on April 10, 2024, the risk that U.S. ethanol production will result in adverse outcomes of concern to CARB is essentially nonexistent.

As noted above, the proposed sustainability requirements were intended to reduce the risk associated with a *"rapid expansion* of biofuel production and biofuel feedstock demand." (Emphasis added.) However, fuel ethanol production has receded since 2018, and the market for ethanol in U.S. road transportation is mature. Moreover, total U.S. cropland has been declining for decades, and the entire increase in U.S. corn production since 2007 has come from rising yields (and switching acreage from other crops), not expanding crop area.

This was implicitly acknowledged by CARB. In the Crop-Based Biofuels Sustainability section of the staff presentation to the April workshop, which was held four months after the proposed amendments were issued, all six of the charts focused on BBD and related feedstocks, especially soybean oil. In the Topics for Discussion slide in that section, the first three bullets addressed BBD and related feedstocks. Notably, however, CARB asked, "Should E15 be considered to help reduce retail gasoline costs?" This indicates that the same concerns did not extend to ethanol.

The Latest Version of the Sustainability Requirements Is Unjustifiably Onerous and Likely Unworkable, Which Could Have Ramifications for the State's Fuel Supply

The sustainability requirements are scheduled to be phased in over time. Starting in 2026, biofuel producers "must maintain attestations … and geographical shapefiles or coordinates of plot boundaries (farm, plantation or forest) that are managed to produce the biomass with the annual fuel pathway report."⁵ However, even this initial phase will be difficult for some ethanol producers and unworkable for others.

⁴ https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/isor.pdf

⁵ https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/15day_atta-1.pdf

For those ethanol producers that predominantly originate corn and sorghum directly from farmers, a typical facility will buy grain from hundreds of growers. And, for those producers that purchase a significant share of their feedstock from grain elevators, the complications of complying with the requirements would be compounded.

Not all farmers will want to share their shapefiles/coordinates with ethanol producers or elevators, and land sales and shifts in rentals from year to year would make it challenging to ensure that all records are up to date. Often, elevators and the grain-purchasing areas of ethanol plants are sparsely staffed and have basic computer systems, and elevators operate on razor-thin margins, making it unattractive to incur additional costs that do not come with associated revenues.

Additionally, an officer of each ethanol company will be required to sign an attestation *under penalty of perjury* that "the biomass used to produce [the fuel] is sourced from land that was cleared or cultivated prior to January 1, 2008, and actively managed or fallow, and non-forested since January 1, 2008. Biomass has not been sourced from land that is protected by international or national law or by the relevant competent authority for nature protection purposes." He or she must "further certify that geographical shapefiles or coordinates of plot boundaries (farm, plantation or forest) accurately represent the source of biomass used under this fuel pathway."

However, ethanol facility employees will not have firsthand knowledge of the land history and field dimensions of farms where the feedstock was produced, and they will likely be extremely reluctant or unwilling to sign such an attestation. This requirement is unlike the one for specified source feedstocks (e.g., waste fats, oils, and greases), where suppliers, who are directly responsible for and knowledgeable about the origin and handling of the materials, are required to provide the attestations.

Starting in 2028, biofuel producers are required to meet chain-of-custody requirements similar to those for specified source feedstocks, including feedstock transfer documents. In the case of corn, a highly efficient elevator system, in which grain from numerous origins is commingled, has evolved over decades if not longer. For an ethanol plant that sources a significant share of its grain from one or more elevators (i.e., an elevator is the "first gathering point"), having to "show shipments of feedstock type and quantity directly from point of origin to the fuel production facility" is not workable, at least without receiving a premium for ethanol that would offset the cost of setting up and operating an identity-preservation system. Using a mass-balance approach would at least be theoretically possible, but "material balance or energy balance systems that control and record the assignment of input characteristics to output quantities at relevant points along the feedstock supply chain between the point of origin and the fuel production facility" are not currently in place.

However, some farmers and elevators would not want to go through the extra effort associated with the 2026 and 2028 requirements and would instead sell their grain into other market channels (e.g., for livestock feeding or exports) rather than ethanol. As

discussed in RFA's comments on the April 2024 workshop, if California moves ahead with any feedstock certification program, there should be a provision to designate all U.S.-produced ethanol as already in compliance, so long as aggregate cropland area does not expand beyond a 2007 baseline. This would be consistent with the EPA's approach under the federal Renewable Fuel Standard.

The final set of sustainability requirements to be implemented in 2031 would be extremely onerous for ethanol facilities' purchases of feedstock directly from farmers and completely unworkable for purchases through grain elevators. While the objective underlying the requirement that feedstock "be produced according to best environmental management practices" might be commendable, the four sustainability areas that are addressed (biodiversity, soil quality, "contamination" from fertilizers and other inputs, and water quality) are all-encompassing for farm operations yet barely defined in the CARB proposal.

In 2023, 1.34 billion gallons of corn- and fiber-based ethanol were used in California toward the LCFS.⁶ This represented 8.6% of the ethanol produced in the U.S. During the 2023/24 crop-marketing year, USDA estimates that 35.5% of the U.S. corn crop will be used for ethanol and coproducts.⁷ This means that the equivalent of 3.0% of the U.S. corn crop is used to produce ethanol consumed in California. Given the Advanced Clean Cars II program, it is likely that less ethanol will be consumed in California in 2031—especially if it remains the only state not to allow sales of E15 blends—while corn yields will continue to increase. As a result, on the present trajectory, well under 3% of the U.S. corn crop will be used to provide ethanol to California in 2031.

As a result, a large majority of farmers would have the option not to incur the additional effort and cost of complying with the California sustainability requirements. They are supplying commodity corn that is not receiving a premium, so why would they choose to sell it at a lower profit with a higher administrative burden? They could simply sell it into livestock feeding or export channels—or even to ethanol plants that are not shipping to California.

The same applies to grain elevators. They typically buy from local farmers or from smaller elevators and then commingle the corn that they receive. They do not necessarily know in advance which farms they will originate/handle corn from—and if they buy from a feeder elevator, they might never know. Elevators would suddenly be in the position of having to stipulate in advance to farmers the production practices that must be followed, in addition to undertaking the additional recordkeeping. Again, they are supplying commodity corn that is not receiving a premium, so why would they choose to sell it at a lower profit with a higher administrative burden?

The situation would be exponentially more difficult in a drought year. An ethanol plant in a drought area can have to buy substantial quantities of corn from a distant elevator, rather than purchasing from local farmers and elevators with which they usually do

⁶ https://ww2.arb.ca.gov/resources/documents/low-carbon-fuel-standard-reporting-tool-guarterly-summaries

⁷ https://www.usda.gov/oce/commodity/wasde/wasde0824.pdf

business. The shift in suppliers is unexpected, so there is no ability to retroactively have the distant elevator inform growers in the area that they will need to meet California's environmental requirements that season.

All of this could cause some ethanol producers to have great difficulty complying with the sustainability criteria in 2028 and 2031—or they could simply not want to incur the potential exposure associated with noncompliance and particularly with signing the attestation. Therefore, they might decide not to sell ethanol to California. From the state's perspective, this could cause volume constraints and price increases in the gasoline pool at a time when California is already concerned about how to avoid problems in the liquid fuel supply during the transition to ZEVs.⁸

If the state is going to consider sustainability criteria, it would be far more reasonable for those to be implemented as part of a program that allows greenhouse gas-reducing feedstock production practices to be recognized in determining the carbon intensity (CI) of the resulting biofuels—after an extensive process of consultation with industry. This would provide an opportunity for a premium to be received for feedstock that would at least offset the additional cost and effort incurred by farmers, elevators, and biofuels producers. It is worth noting that at the federal level the Inflation Reduction Act provided billions of dollars to incentivize farmers to undertake climate-smart agriculture practices, rather than simply mandating that they follow such practices, in order to dramatically kickstart adoption where it was not already occurring.⁹

The New Language Regarding Land Use Change Is Unclear and Potentially Problematic

In the proposed amendments, a column labeled 2015 Region of Analysis was added to Table 6, Land Use Change Values for Use in CI Determination. Ostensibly, this was done to assist in the determination of a land use change (LUC) "value appropriate to use for a region/feedstock/fuel combination not currently listed" in the table.

However, CARB also added the following language about LUC as section 95488.3(d)(2):

The Executive Officer may determine that no value in Table 6 is conservatively representative of a particular region/feedstock/fuel combination and assign a more conservative LUC value. Such determination must be based on the best available empirical data, including but not limited to satellite-based remote sensing data for land cover monitoring, crop yields, and emission factors from the AEZ-EF model or carbon stock datasets. For feedstocks not listed in Table 6, the Executive Officer may determine and assign an appropriate LUC value based on empirical land cover data, crop yields, and emission factors.

⁸ <u>https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/081624-californias-governor-looks-to-regulate-gasoline-price-shocks-during-the-energy-transition-period</u>

⁹ https://www.usda.gov/media/press-releases/2024/08/16/fact-sheet-celebrating-two-years-inflation-reduction-act

The first sentence in the section is open-ended, and only the last sentence refers to a factor (limited to feedstock) that is not listed in Table 6. In order to ensure that this provision cannot be interpreted more broadly, CARB should add language at the beginning of section 95488.3(d)(2) specifying that it only applies to region/feedstock/fuel combinations not listed in Table 6.

It is also notable that the section appears to allow new discretion for the Executive Officer of CARB to unilaterally increase LUC factors but not decrease them. RFA and many other stakeholders have documented how the existing LUC factors for corn ethanol are overstated and should be revised downward.

RFA and others have also provided analysis demonstrating that modern farming practices are capable of significantly decreasing feedstock CI. The federal government is recognizing these benefits in the regulatory framework for tax credits under the Inflation Reduction Act, and CARB should finally move forward with similar recognition under the LCFS.

Thank you for the opportunity to submit these comments. RFA looks forward to working with CARB board members and staff to strengthen and extend the successful LCFS program.

Sincerely,

Scott Richman