

November 16, 2017

Mr. Sam Wade, Chief
Transportation Fuels Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Mr. Wade,

The Renewable Fuels Association (RFA) appreciates the opportunity to submit these comments in response to the upcoming regulatory amendments to the Low Carbon Fuel Standard (LCFS) that were discussed during a series of California Air Resources Board (CARB) stakeholder workshops this fall.

RFA is the leading national trade association representing U.S. fuel ethanol producers. Many of our member companies produce low-carbon ethanol that is consumed in California and the participate in the LCFS program as “fuel pathway holders.” Thus, our member companies would be directly affected by many of the planned amendments outlined by CARB during the recent workshops. The comments we offer below reflect concerns and questions raised by our ethanol producer members.

Our comments are meant to respect the intent of the planned amendments while minimizing costs and reducing regulatory inefficiency and redundancy. We are concerned that some of the regulatory text modifications planned by CARB could create unnecessary administrative burdens and increased cost with little or no additional regulatory benefit. Further, we believe some of the planned amendments could have the unintended consequence of stifling the innovation and investment that could lead to additional carbon intensity (CI) reductions under the LCFS. As such, we encourage CARB to seriously consider the recommendations below prior to releasing the Staff Report and presenting the amended regulation to the Board for approval.

I. VERIFICATION, VALIDATION, AND CERTIFICATION

While we understand the intent behind the draft provisions requiring that fuel pathway holders submit to third-party validation and verification services, we are concerned by several aspects of these planned amendments. An overarching concern with the proposed fuel pathway and fuel transaction verification program is that it appears to be based primarily on the mandatory GHG reporting regulation (MRR) and California GHG cap-and-trade program. These are very different programs with different regulated entities, and the reporting/verification regimes that may work well for MRR and cap-and-trade may not be appropriate for the LCFS.

Our specific concerns are outlined further below:

- **The planned verification body rotation requirements are unwarranted and may actually lead to more—not less—verification errors and uncertainty.** There are a limited number of firms with the necessary expertise and experience to perform quality verification and validation services for low-carbon fuel pathway holders. The proposed verifier rotation requirements may force ethanol producers to periodically switch away from using qualified, knowledgeable verifiers to using verifiers with less experience regarding the LCFS program and ethanol production processes. We believe frequent switching of verification bodies could increase the opportunity for auditing errors, as new verification bodies will be less familiar and less informed on the operations of fuel pathway holders. We recommend that CARB eliminate the requirement to entirely rotate verification bodies, as the requirements for verifier accreditation, training, and submittal of a verification plan already mitigate against verification errors and non-compliance. That said, CARB’s proposed accreditation requirements appear excessive and may further reduce the pool of available qualified verifiers, thus reducing efficiency and raising costs for fuel pathway holders.
- **In lieu of requiring rotation of the firms performing verification services, CARB could instead require rotation of the lead auditor.** We believe CARB could accomplish its goals by allowing the same verification body to be used without rotation, but requiring that the person in charge of the audit must periodically rotate.
- **CARB’s proposed conflict of interest requirements are excessive and may disqualify reputable and experienced firms from serving as verification bodies.** CARB’s draft provisions require potential verification bodies to conduct a conflict of interest (COI) self-assessment and submit it to CARB for review prior to offering verification services. Among the activities considered by CARB to constitute a “high conflict of interest” are providing bookkeeping, other accounting services, or accounting software/automation support to the company requiring verification services. We do not believe firms that serve as verification bodies should be barred from providing financial accounting or other related services to the pathway holder, as numerous safeguards and independence requirements are already in place to mitigate against any potential conflicts of interest. At a minimum, CARB should reclassify these situations as “low” or “medium” risk and allow verification body applicants to provide a mitigation plan explaining how potential COIs will be mollified.
- **CARB’s verification program should be designed in a way that maximizes synergies with existing reporting, recordkeeping, and auditing requirements under the Renewable Fuel Standard (RFS).** Much of the information that must be verified under CARB’s draft verification program is already reviewed and verified by third-party auditors for the RFS program. Specifically, every renewable fuel producer undergoes an annual RIN attest engagement, which requires auditors to verify operational data and other information. Further, EPA has approved RIN generation pathways for many ethanol producers through the Efficient Producer Pathway and conventional pathway petition processes. Monitoring plans related to these pathways are reviewed by third-party auditors annually to ensure valid RIN generation. Further, some biofuel producers (particularly advanced and cellulosic) use third

parties to administer EPA-approved RIN Quality Assurance Plans (QAPs) to provide additional assurance and validation to counterparties. CARB should strive to ensure its verification program capture synergies with these existing verification programs rather than “re-creating the wheel.”

- **It seems unreasonable to require verification of two calendar years’ worth of operational data if the verification is being performed annually.** This provision would result in a given year’s operational data being verified twice, which would be duplicative and unnecessary.

II. ADDRESSING DISCREPANCIES BETWEEN VERIFIED CARBON INTENSITY AND CERTIFIED CARBON INTENSITY

As many commenters have pointed out through the stakeholder process, low-carbon biofuel producers face a number of uncontrollable factors that may cause the actual (i.e., verified) carbon intensity (CI) of their fuel to be slightly different than the certified CI in the fuel pathway approved by CARB. For example, extreme weather conditions in a given growing season may impact feedstock yields and quality, or changing market conditions may cause feedstock and fuel transportation distances to deviate slightly from the values in the pathway. These sorts of changes may result in minor variations in the actual CI performance of the pathway. Due to these operational uncertainties, ethanol producers often use conservative operational values for the fuel pathway applications they submit to CARB for approval, leading to slight overestimation of CI performance and leaving a margin for slight variance in actual CI performance.

However, it is not uncommon for a plant’s actual CI performance to be better (i.e., lower) than the certified pathway CI, meaning the ethanol pathway is generating more actual GHG reduction than is indicated by the certified pathway. This is typically due to more efficient operation of the biorefinery, but also may result from higher-than-expected feedstock yields and quality.

Unfortunately, CARB’s proposal for addressing these slight discrepancies is inequitable and fails to incentivize more efficient practices that would drive actual CI performance below the certified pathway CI. CARB is proposing that if the actual verified CI is lower than the certified CI, the pathway holder can either: 1) retain the originally certified CI; or 2) request to replace the previously certified CI with the updated (verified) CI on a go-forward basis. In either case, the ethanol producer is forced to forgo the additional CI credit generated below the certified CI level, meaning actual GHG reductions are not being recognized.

On the other hand, if the actual verified CI is found to exceed the previously certified CI, the fuel pathway holder is deemed “out of compliance” and “may be subject to credit adjustment and possible enforcement investigations.” Thus, ethanol producers are not rewarded for actual CI performance that is lower than the certified CI, but face enforcement penalties if the actual CI performance is higher than the certified CI.

We strongly recommend that CARB allow ethanol producers to hold credit “buffer accounts” that would allow them to generate and store CI credits when actual verified CI performance is lower than

the certified pathway CI. These credits would then be available to the producer to offset potential credit invalidation in the event that a future verification audit finds that the producer's actual CI performance is above the certified CI.

CARB is already proposing to establish such credit "buffer accounts" for CCS projects as a "safeguard mechanism against the risk of credit invalidation." We see absolutely no reason why the buffer account concept should not also be applicable to ethanol producers to help address potential variances in actual CI performance and reduce risk across the supply chain.

III. DRAFT LCFS STARCH ETHANOL SIMPLIFIED CI CALCULATOR

We are still reviewing the newest draft version of the Starch Ethanol Simplified CI Calculator and associated manual and may have additional comments as we become more familiar with the tool. In the interim, we'd like to offer three initial comments.

First, we are pleased that CARB has added the capability to separately account for denatured and undenatured ethanol production. Because denaturant can have considerable effects on the overall pathway CI, it is appropriate for the calculator to account for only the actual amount of denaturant used for denatured fuel ethanol.

Second, we were encouraged to see that the manual specifies that "beginning corn inventory" must be recorded in bushels *with 15% standard moisture included* and "not to be reported on a dry basis." Additionally, we agree with CARB's decision to allow alternate approaches to recording corn inventory only if the applicant provides all appropriate conversion factors to CARB. This will eliminate potential errors and uncertainties regarding ethanol yield per bushel.

Third, it appears the new CA-GREET 3.0 and the CI Calculator continue to use outdated assumptions regarding grain sorghum production from the latest version of GREET from Argonne National Laboratory. We encourage CARB to reconsider the agricultural assumptions regarding grain sorghum production and we believe more current and robust data is available to support updating key default values.

IV. LCFS LOOKUP TABLE PATHWAYS

CARB recently released a draft of several new lookup table pathway CI values, including an updated value for CARBOB. The new proposed value for CARBOB is 101.69 grams CO₂e/megajoule (g/MJ), an increase of nearly 2 g/MJ over the current value. We believe this value for CARBOB is appropriate based on updated results from OPGEE, Argonne, and other lifecycle analyses.

However, as shown in the most current draft regulatory text, the increase in the CI of CARBOB leads to an increase in the CI of baseline gasoline (CaRFG) to 100.26 g/MJ and affects the LCFS gasoline compliance schedule for 2019-2030. The new CaRFG value of 100.26 g/MJ *implies that the ethanol in CaRFG has an average CI of 87.39 g/MJ*. CARB does not explain the assumptions behind this assumed CI value for the ethanol in baseline CaRFG and it seems somewhat arbitrary.

The ethanol CI value of 87.39 g/MJ embedded in CaRFG seems inappropriately high, given that the actual average CI of ethanol has been 70.5 g/MJ over the past four quarters, according to CARB's own LRT data. Since CARB is using the most current available data to update the CI of the CARBOB portion of CaRFG, it should ensure consistency by using the most current available data to update the CI of the 10% ethanol portion of CaRFG. Using the most recent 12-month actual average CI for ethanol would result in a CaRFG value of approximately 98.6 g/MJ—very close to the current CaRFG value of 99.47 g/MJ. We believe CARB should revisit its calculation of baseline CaRFG for 2019-2030 and use a more reasonable value for the ethanol portion of baseline gasoline.

V. **FUEL ETHANOL TEMPERATURE CORRECTION FOR FUEL TRANSACTION REPORTS**

We agree with CARB's proposal to require fuel ethanol volume transactions under the LCFS to be corrected to a standard temperature of 60 degrees F. Specifically, we support the use of the temperature correction methodology employed by U.S. EPA for RFS reporting.

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Thank you for considering our comments as you prepare to advance amendments and modifications to the LCFS program. Please contact me at 636.594.2284 with any questions or comments.

Sincerely,

A handwritten signature in black ink that reads "Geoff Cooper". The signature is written in a cursive style with a large, sweeping "G" and "C".

Geoff Cooper
Executive Vice President