

April 27th, 2018

The Honorable Mary Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Low Carbon Fuel Standard Extension Draft Regulation

Dear Chair Nichols,

EcoEngineers would like to thank the California Air Resources Board (referred to as CARB hereafter) for the opportunity to provide comments on the proposed Low Carbon Fuel Standard (LCFS hereafter) draft regulation. We are excited to be a part of the process and have prepared the following comments for your consideration.

Background & Qualifications

EcoEngineers is a renewable energy consultant and an EPA approved Q-RIN Quality Assurance Program (QAP) provider under the Renewable Fuel Standard (RFS). We conduct quarterly audits of over 70 domestic and international renewable fuel producers to ensure compliance under the RFS, and we have about 2.3 billion gallons of biofuel production enrolled in our compliance management programs.

EcoEngineers has extensive experience working with the California LCFS program and the CA GREET model. EcoEngineers has a full-time engineer dedicated to modeling fuel pathways in GREET and we have modeled more than 60 pathways using the CA-GREET model (1.8b & 2.0). We have submitted over 70 applications to CARB for registration under the LCFS. EcoEngineers has supported the development of biodiesel, renewable diesel, ethanol and biogas industries in California since the inception of the LCFS. We currently provide RIN QAP, compliance management, GREET modeling, and other consulting and auditing services to numerous clients who either produce biofuels in or sell biofuels into California and contribute to reaching the goals of the LCFS.

We believe CARB plays a leadership role in guiding global low-carbon fuel policies, and a successful LCFS program is key to reducing greenhouse gases from the transportation sector. We would like to congratulate CARB on steadfastly maintaining the policy objectives of the LCFS over the past decade and having the vision to take it into the next. Our comments are being provided with the intention of building on LCFS' past successes and helping CARB create a robust program for the future.

Conflict of Interest Provisions for a Verification Body (§ 95503)

EcoEngineers supports CARB's efforts to put in place a robust training program and clear qualification and conflict of interest standards for verification bodies and verifiers. However, we disagree with CARB's approach of borrowing the standards for qualification, training and conflict of interest as-is from another program without thoroughly reviewing its applicability, utility and practicality for the LCFS. We believe there should be a review of specific components of the requirements for verification bodies and the conflict of interest provisions for their applicability to LCFS verification services.

CARB seems to believe that any verification body that also offers consulting service to the same client is at risk of being in high conflict. CARB seems to be partial to "pure play" verification bodies as the

preferred vehicle to conduct validation and certification work. CARB further seems to believe that the lure of selling consulting work will compromise a verification body's impartiality. We disagree with CARB's beliefs on this matter. CARB should not assume that a diversified company that offers consulting and auditing services is inherently pre-disposed to be biased or is at greater risk of being biased relative to companies that only offer verification services. A diversified company offering both verification and consulting services can perform quality, impartial validation, and, conversely, a company that only provides verification can be biased and/or tempted to compromise the quality of their validation.

EcoEngineers provides consulting and verification services to the biofuels industry. Our multiple business offerings and our broad client base mean that our future is not beholden to maintaining one client or one service. We are more likely to deny certification and lose a future stream of revenue than someone exclusively dependent on one service offering or a handful of clients. We urge CARB to take a broader view of this issue and allow greater flexibility for verification bodies to provide auditing and consulting services. Not doing so will also have the negative side effect of limiting the availability of experienced auditors, who may be working for a diversified company, to perform LCFS verification services.

We recommend that the conflict of interest provisions be limited to individual verifiers and verification teams, and not to verification bodies. We recommend CARB allow verification bodies to create isolated teams dedicated to performing verification for a specific client, and concurrently have separate consulting teams that offer consulting services to the same client. It will be up to the verification body to demonstrate, and for CARB to review and approve, how it intends to keep these teams' decision making independent of each other.

Below are some specific examples of how the conflict of interest requirements may be too restrictive:

§ 95503(b)(2)(A)

- This provision prohibits verification bodies from providing "data management system for data submitted pursuant to this subarticle or MRR." EcoEngineers offers a RIN tracking system to the biofuels industry that allows data transmittals from biofuel plants to the EPA for RIN generation purposes. The system acts as a virtual mail service that transfers data from one party to another and stores it for future retrieval for record-keeping and auditing purposes. We do not believe this creates a high conflict scenario and it provides our auditors up-to-date information on fuel transaction and credit generation at the facility. However, the broad language in the proposed regulation creates the potential for a high degree of conflict and may prevent us from using this valuable tool to enhance our verification services.

§ 95503(b)(2)(H)

- This provision triggers a high conflict if a verification body provides "verification services that are not conducted in accordance with, or equivalent to, section 95503 requirements." The EPA's QAP program is currently the most common verification program among U.S. biofuel producers and it is unlikely to be in accordance with section 95503 requirements. We recommend that CARB modify the language in this section to allow current QAP providers to perform LCFS verification activities without triggering any conflict of interest.

§ 95503(b)(2)(L) and §95503(b)(2)(C)

- § 95503(b)(2)(L) triggers a high conflict if a verification body provides "appraisal services of carbon or greenhouse gas liabilities or asset," and §95503(b)(2)(C) triggers a high conflict if a

verification body provides “consultative engineering” services. EcoEngineers sometimes provides its clients the current market value of renewable fuel credits as seen in 3rd party market transactions or other publicly available data such as CARB’s website. This data may or may not be part of an independent economic analysis that compares potential revenues from credits with estimated capital and operating costs at a facility. It is our unbiased, independent opinion of the value of the credits that creates value for our clients. We do not believe these services trigger a high conflict, and there should be some allowance for these types of relationships to continue; however, the proposed rules create significant ambiguity and may prevent us from providing validation services for some clients.

Other General Comments

§ 95488.8(g)(1)(B) Specified Source Feedstocks

- EcoEngineers supports CARB’s efforts to create more transparency in feedstock markets; however, we also caution against placing overly burdensome requirements on biofuel producers. The proposed record-keeping requirements for Specified Source Feedstocks require a fuel pathway holder that acquires Specified Source Feedstocks from 3rd party suppliers to maintain “information from 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.” This may not be possible for biofuel producers who are not vertically integrated and who do not have the ability to force their suppliers to reveal this information.
- We recommend that CARB either allow the biofuel producer to maintain a letter of attestation from a 3rd party feedstock supplier or require access to directly audit the feedstock supplier. If CARB is going to directly audit the feedstock supplier, there should be more clarity on the roles and responsibilities of feedstock suppliers as Regulated Entities.

§ 95488. (c)(2)

- We request additional clarity on the transition to GREET 3.0. A timeline that demonstrates when a fuel pathway applicant can use GREET 2.0 versus 3.0 and CARB’s review and approval plan for each will be useful. For example, will CA-GREET 2.0 pathway applications pending as of 1/1/2019 continue to be reviewed and certified into 2019, or will applications in the queue be rejected?

§ 95488.6. (b)(2)

- We support CARB’s efforts to implement a robust verification program for fuel pathways. However, requiring that an initial validation be completed before an application can be reviewed and certified by CARB could delay the generation of credits.
- We recommend that CARB allow validation to be completed before or after the application has been reviewed and certified by CARB staff. LCFS credits generated post certification but prior to validation can be locked and held in the pathway holder’s LRT account if quarterly reporting must be completed during the validation. This will allow applicants to begin fuel sales into California sooner and prevent potential delays that can be caused by 3rd party validators.

§ 95488.9. (b)(4)

- EcoEngineers supports CARB’s efforts to offer fuel pathway applicants a temporary fuel pathway carbon intensity value that they can use for reporting purposes. However, we request the following additional clarifications on the temporary pathway application process:

- What is the application process and method of submission to CARB staff? What data is required?
- Will CA-GREET 3.0 modelling be required for temporary pathway applications?
- Will an approved temporary pathway be posted on the CARB website and made available to any applicant meeting same process requirements, or will it be exclusive to the company or facility that applied?

§ 95486 Table 4

- In Table 4, “Energy Densities and Conversion Factors for LCFS Fuels and Blendstocks,” the unit for the energy density of CNG is currently represented as MJ/Therm, both of which are energy units. Table 4 provides the default value for the amount of energy in a unit mass or unit volume for all other fuels, and it may be clearer if CNG followed the same logic.

Equal value for all verified credits

We believe it is important to provide a program that creates a level playing field for market participants. A verified LCFS credit should have equal value regardless of its originating facility. This can only happen if CARB offers a guarantee of authenticity for all verified LCFS credits. LCFS credits function as the currency for trading emissions reductions, and there cannot be any doubt in the marketplace of the validity of the currency. CARB, being the regulatory body issuing the currency, should stand behind it as a guarantor. The mandatory verification program developed, implemented and monitored by CARB should provide CARB the confidence to guarantee the validity of the credits.

The absence of such a guarantee will lead to buyers of credits giving preferential treatment to established counterparties with larger balance sheets to mitigate any potential invalidity in the credit generation or verification process or it will lead to buyers implementing their own verification systems over and above the mandated one. Both of these consequences will defeat one of the main purposes of a mandated verification system: to create market confidence, liquidity, and a level playing field for all fuel pathways.

Downstream market participants should not have the responsibility of further authenticating a verified credit, and they should not suffer consequences of any verified credit they purchase being found invalid at a future date due to no fault of theirs. This does not mean that downstream buyers and regulated entities will have the license to practice reckless behavior and ignore obvious misrepresentations by suppliers. CARB should explore ways to balance a credit guarantee with other controls, so the market bears the cost of credit invalidation.

Demonstrating Compliance for RNG from Dairy Methane

EcoEngineers commends CARB on its vision to incentivize avoided methane emissions for RNG from dairy digesters, and we have seen a great deal of interest in the industry on this subject. However, we would like greater clarity on the requirements for the fuel pathway. To the extent CARB can offer clear directions, we expect to see more projects coming online. Some of the common questions include:

- If the dairy has a spill event, will it impact the carbon intensity score?
- Do these projects need to be enrolled in the California cap-trade program in order to participate in LCFS?
- Projects in the cap and trade program are verified annually for the previous year and credits are issued subsequently. How does this match up against a quarterly LCFS reporting schedule?

Upstream emissions for corn ethanol

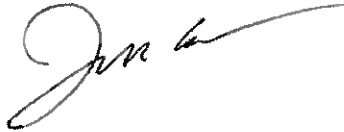
EcoEngineers commends CARB on allowing low-carbon crude to participate in the LCFS program. We urge CARB to take a similar view for corn ethanol and allow practices that reduce GHG emissions from corn farming to reduce the CI of the ethanol produced from the corn starch. We recommend that CARB allow farming inputs to be calculated and provided for applicants that wish to determine the actual carbon intensity score for feedstock used at their facility.

Conclusion

We would like to thank CARB again for the opportunity to provide comments and applaud your efforts to implement the LCFS program. We look forward to working with staff to finalize the proposed regulation.

Please let us know if you have any questions about our comments.

Sincerely,



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