

August 30th, 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 (Referred to as 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 consulting company 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 production facilities to ensure compliance under federal regulations. EcoEngineers also performs Life Cycle Analysis (Referred to as LCA hereafter) modeling and regulatory consulting for participants in California's LCFS. We currently provide RIN QAP, compliance management, LCA modeling, and other consulting and auditing services to California biofuel producers and the greater biofuels industry.

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 90 pathways using the CA-GREET model (1.8b & 2.0). We have also submitted over 90 applications to CARB for registration under the LCFS. EcoEngineers has supported the development of the biodiesel, renewable diesel, ethanol and biogas industries in California.

We believe CARB plays a leadership role in guiding global low-carbon fuel policies, and a successful LCFS 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.

Temporary Pathways

Section §95488.9(b)(4) creates uncertainty for producers whose fuel pathways are not listed in Table 8 because these producers have the potential to lose substantial revenue for up to 2 calendar quarters while they create and submit their full pathway application. It is essential to have a clear Temporary Pathway application process for new feedstock-fuel combinations to apply to CARB for consideration.

Recommended Actions:

1. Provide a process for producers to create a new temporary pathway and CI to be added to Table 8. Also, provide a process for an entity to create a new temporary CI value for a temporary pathway that is currently listed in Table 8.

Avoided Methane Compliance

Section §95488.9(f)(3)(B) states that the passage of “a law, regulation, or legally binding mandate requiring either greenhouse gas emission reductions from manure methane emissions from livestock and dairy projects or diversion of organic material from landfill disposal, comes into effect in California during a project’s crediting period, then the project is only eligible to continue to receive LCFS credits for those greenhouse gas emission reductions for the remainder of the project’s current crediting period. The project may not request any subsequent crediting periods.” It appears to establish additionality requirements for projects and limits a project’s crediting period.

We believe that it is in the best interest of the LCFS program to minimize regulatory uncertainty and allow projects that are built the full benefit of the regulations as they are today. The potential for future laws to destabilize project revenues disincentivizes project development.

Recommended Action:

1. Allow registered projects to be grandfathered and claim credits for the three 10-year crediting periods allowed during time of registration if a future law raises the baseline for additionality.

Verification Program

We still believe some of the definitions of activities that trigger high conflict of interest are too vague and could benefit from revision. Below are some specific examples:

1. 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 “conduit” that transports producers’ data directly from the producers’ servers to EPA databases with no interference from EcoEngineers staff or agents. The system also 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. Section §95503(b)(2)(A) currently offers an explicit exception to accounting software. We believe EcoEngineers’ RIN platform deserves a similar exception.
2. In §95503(b)(2)(C), “Designing or providing consultative engineering or technical services in the development and construction of a fuel production facility; or energy efficiency, renewable power, or other projects which explicitly identify greenhouse gas reductions as a benefit” is identified as triggering a high conflict. First, consultative engineering is a very broad phrase that is not clearly defined. For example, sometimes one of our engineers may be asked to provide an opinion on whether the LCFS requires the installation of a flow meter at a certain location to measure feedstock or finished fuel flows. We do not believe providing this opinion triggers a conflict of interest; however, the phrase “consultative engineering” can be interpreted to argue that it does. Second, the use of the word “development” in this context greatly broadens the scope of this conflict of interest and could include any task that ultimately helps a facility come into production. We believe that an engineer who is responsible for the design and construction of the facility should trigger a high conflict of interest; however, engineers also often provide independent, third-party opinions which ultimately assist projects make good decisions. These independent, third-party opinions should not be identified as triggering a high conflict of interest.

3. Section §95503(b)(2)(L) identifies “appraisal services of carbon or greenhouse gas liabilities or asset,” as a service that triggers a high conflict and §95503(b)(2)(C) identifies “consultative engineering” as a service that triggers a high conflict. 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 future revenues with estimated capital and operating costs at a facility. It is our unbiased, independent opinion 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 without triggering a conflict.

Recommended Action:

1. Modify §95503(b)(2)(A) to include an exception for a data transfer system that exchanges RIN data between a facility and EPA databases.
2. Modify §95503(b)(2)(C) as follows: “Designing or providing engineering or technical services in the design and construction of a fuel production facility; or energy efficiency, renewable power, or other projects which explicitly identify greenhouse gas reductions as a benefit.”
3. Modify Section §95503(b)(2)(L) to allow for independent, third-party opinions of credit values or project costs and revenues to be a medium conflict with requirements that the report clearly identify the independence of the opinions within and/or a mitigation plan.

Tier 1 Simplified CI Calculator for Biomethane from Food, Green and Other Organic Wastes

Recommended Actions:

1. Include biogenic CO₂ while calculating tailpipe emissions (Cell I102 and I103) in RNG tab. Because the fuel is taking avoided methane emission credits from landfill diversion, the tailpipe emissions calculations should be similar to those in the dairy and swine manure biomethane calculator.
2. Provide an option for user-defined moisture content. Currently, default moisture of food waste is set at 72% and no user-defined values are currently allowed; therefore, if the actual moisture content of food waste is different from 72%, the final CI will be over or under estimated.

Attachment C: Proposed Modifications to the CA- GREET 3.0 Technical Support Documentation (C-3, page 182)

Recommended Action: Please clarify how monthly weighted methane content (%) in the digester gas should be calculated for all proposed biomethane calculators and what CARB staff will need for as supporting documents.

The Tier 1 Simplified CI Calculator for Biodiesel and Renewable Diesel states that If part or all of the co-products are used as process fuel, co-product credit will not be offered.

Recommended Action: Change the above to state, “If part or all of the co-products are used as process fuel, co-product credit will not be offered for the fraction that are used as process fuel (the other fraction that is not used as process fuel should still get co-product credit).”

User-Defined Farm Practice Inputs in CA-GREET 3.0

EcoEngineers believes that having a strong verification program should allow CARB to put more user-defined fields in CA GREET 3.0. CARB should allow for a basic set of farm practices fields, including yield, nitrogen use, farming energy and transport distance of feedstock, to become user-defined fields in the

GREET model. From our estimates, the modification of the above farm practice inputs could lower the CI score up to 15 to 20 CI points for a corn ethanol facility.


These fields should be modified only when a farm practices verification plan is completed by the reporting party. This change would allow a renewable fuel producer to incentivize local farms to lower GHG emissions from agriculture and produce low carbon intensity fuel from agricultural feedstock.

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,

A handwritten signature in black ink, appearing to read "John Sens", is positioned to the left of the contact information. The signature is fluid and cursive.

John Sens
Regulatory Consultant
jsens@ecoengineers.us
300 East Locust Street, Suite 313
Des Moines, IA 50309