ECOENGINEERS
People Driven Solutions

300 E. Locust St., Suite 313
Des Moines, Iowa 50309
Phone: 515-309-1279
www.ecoengineers.us

June 16th, 2016

Cal/EPA Headquarters Building
1001 "I" Street
Sacramento, California 95814

RE: Comments Regarding Proposed Regulatory Changes to the Low Carbon Fuel Standard

To Whom It May Concern,

EcoEngineers would like to thank the California Air Resources Board (Referred to as CARB hereafter) for the opportunity to provide feedback on the Low Carbon Fuel Standard (LCFS hereafter) verification program and regulatory changes being developed. We are excited to be a part of the process and have prepared the following comments for your consideration.

Background & Qualifications
EcoEngineers is an EPA approved Q-RIN Quality Assurance Program provider under the Renewable Fuel Standard program and conducts quarterly audits of over 40 domestic and international renewable fuel producers to ensure compliance under federal regulations. In California, we currently provide RIN QAP and LCFS services to several biodiesel producers and compliance management services, pathway petitions, and other services to the ethanol 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 45 pathways using the CA-GREET model (1.8b & 2.0) and submitted over 60 applications to ARB for registration under the LCFS. EcoEngineers has supported the efforts of biodiesel, ethanol and biogas industries in California under the LCFS.

The following suggestions for the verification program come from our auditing experience under the federal Renewable Fuel Standards (referred to as RFS hereafter) program, our experience with GREET modeling and pathway registration and verification under LCFS, and input we received from speaking with several California renewable fuel producers.

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.

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Downstream market participants should not have the responsibility of further authenticating a verified credit, and they should not suffer consequences if a verified credit they purchase is found to be invalid at a future date due to no fault of theirs. 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. Alternatively, it could 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 having a common, reliable, mandated verification system: To create market confidence, liquidity and a level playing field for all fuel pathways.

Clear Protocol & Definitions

CARB should clearly define the boundaries and requirements of the verification and monitoring plan for fuel pathway holders to ensure that third party verifiers can implement the program effectively. These include identification of program high-risk areas, establishing document sampling methodologies, defining acceptable variance tolerances for audit findings and setting parameters for scheduling site visits. The proposed regulations leave too much of the monitoring and verification plan to the discretion of the verification body. The more room there is for interpretation by verification bodies, the more variance there will be across verification bodies' perceptions of risk and monitoring requirements for otherwise uniform fuel types and production processes. This will create unnecessary confusion in the marketplace regarding the appropriate level of monitoring that is required. Therefore, CARB should provide as much clarity and guidance as possible for verification and monitoring plans.

Since the majority of the low carbon fuels commercially available in California is probably ethanol from corn starch or cane sugar and biodiesel / renewable diesel from a relatively small group of feedstock (soybean oil, used cooking oils, corn oil, etc.), CARB should be very prescriptive in its requirements for monitoring these pathways. Furthermore, for newer and more specialized pathways, CARB should commit to working with verification bodies to jointly develop monitoring and verification plans, which will then become the minimum standard for all future facilities that apply under the same pathway. A high level of clarity and guidance from CARB on the level of monitoring to be put in place will also give it confidence in being able to guarantee the verified credits for compliance purposes.

Integration with QAP

CARB's LCFS verification program should leverage everything done for EPA's QAP program so that the LCFS verification is a small incremental cost. In other words, if most or all of the verification and monitoring plans are similar to those required by the EPA's QAP program, then there will be minimal incremental cost to the regulated party to comply with these new requirements.

The practical way to incorporate this would be to establish the EPA's QAP program as a baseline monitoring program and then attach CARB specific requirements, such as CI verification, on top of it. Then the producers who are already in the Q-RIN program will have a relatively easier time adding on the new LCFS verification requirements. Those producers who are not in the Q-RIN program will also benefit. If CARB's LCFS verification program consists of the entire QAP protocol with some additional features such as CI verification, then by participating in the LCFS verification program, they will

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automatically have the ability to take the necessary steps to claim a Q-RIN status, if they chose to do so. This will be a win for all concerned.

Verification body requirements

We strongly believe it is very important to have a robust training, qualification and conflict of interest standards for verification bodies. However, we disagree with CARB's approach of borrowing the standards for qualification, training and conflict of interest as-is from another program without reviewing its utility and practicality for LCFS. We believe there should be a review of specific components of the requirements for verification bodies and the conflict of interest provisions (17CCR 95132 and 95133) for their applicability to LCFS verification services.

For example, some of the requirements for the lead verifier are irrelevant to current practices in the U.S. biofuels industry, which supplies the majority of the fuel into California. Providers of Q-RIN services and 3rd party RFS engineering review services are the most knowledgeable set of people when it comes to verifying the operational practices at ethanol and biodiesel plants in the U.S. Under current rules, someone who has worked as a Q-RIN verifier and a project manager for less than four years could not qualify as a lead verifier under 95132(b)(2). Since the Q-RIN program has been in place less than four years, it automatically eliminates the set of people with the greatest knowledge about verifications in the U.S. biofuel industry. However, the rules allow someone who is a "lead verifier in good standing for the United Kingdom Accreditation System, having performed at least three verifications by December 31, 2007" to be a lead verifier for the LCFS program. This is an example of where all parties will benefit from a re-examination of the rules in 95132 and 95133 for their applicability to LCFS.

Furthermore, the proposed rules prohibit Responsible parties from using the same verification body or verifier(s) for more than six consecutive years. The six-year period begins on the date the responsible party first contracts for any independent third-party verification services from the verification body. We feel this is unnecessarily restrictive. As much as there is value in a fresh set of eyes reviewing the data, it should be sufficient for a verification body to rotate individual auditors every six years or even sooner without forcing the Responsible parties from seeking new vendors to perform verification services. The more limited the pool of available verification bodies and verifiers, the less the ability for Responsible parties to control costs.

Under the proposed regulations, "long-term professional relationships and personal relationships" are identified as a potential conflict of interest. We believe this is too broad and needs to be further clarified. Conflict of interest provisions should be easily understood and quantified to the greatest extent possible. Verification bodies for Q-RINs sometimes perform other services for fuel producers, distributers and refiners, and this is allowed to a limited extent by the EPA. There should be some allowance for these type of relationships to continue without automatically triggering a conflict of interest under the LCFS verification program. If all the provisions of 17CCR 95132 and 95133 are automatically imported into the LCFS verification protocol, it could result in needless disruptions in existing relationships and restrict the ability of Q-RIN providers to seamlessly offer LCFS verification services.

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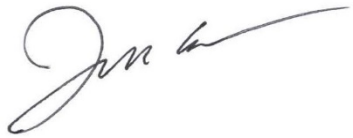
Some effort on the part of CARB to examine the applicability of each individual provisions of 17CCR 95132 and 95133 to LCFS, will go a long way towards increasing the ease of implementation of the LCFS verification program and helping cost sensitive producers adopt the new requirements.

We would like to thank CARB again for the opportunity to provide comments; we look forward to working with staff to support their efforts as the LCFS verification program is designed and implemented. Please let us know if you have any questions about our comments.

Sincerely,



John Sens
LCFS Program Manager
jsens@ecoengineers.us
300 East Locust Street, Suite 313
Des Moines, IA 50309