IOGEN®
CORPORATION

November 5, 2020

Rajinder Sahota
Chief, Industrial Strategies Division
California Air Resources Board
1001 I St.
Sacramento, CA 95814

RE: Comments on LCFS Potential Regulatory Amendments Workshops, October 14-15, 2020

Dear Ms. Sahota,

Iogen Corporation appreciates the opportunity to provide comments regarding the potential regulation revisions to the LCFS as discussed at the public workshops on October 14 & 15, 2020.

Iogen is a leading developer of cellulosic biofuels including cellulosic ethanol, biomethane, and refinery renewable hydrogen. Our cellulosic ethanol technology has been successfully deployed in Brazil in Raizen's Costa Pinto mill, we are currently one of the top four registered producers of D3 RINs under the EPA's Renewable Fuel Standard Program, and Iogen is a significant LCFS credit generator for biomethane-based fuels, generating approximately 13% of all biomethane-related LCFS credits in Q2 2020. We have been actively working with California refiners for the implementation of refinery renewable hydrogen. In addition, we have a continuing interest in using carbon capture and storage as a means of reducing the CI of California fuels.

The LCFS continues to be a successful policy that is driving innovation in commercially viable low-carbon transportation fuels, diversifying California's fuels, and is critical in implementing California's long-term climate goals. We encourage approaches that strengthen the program in ways that will accelerate sector development and innovation in this market for years to come.

For your consideration, we offer comments relating to proposed rule changes:

1) We support allowing credit true-up mechanism for Tier 1/ Tier 2 pathway holders.

We believe that there should be a mechanism for capturing "lost" credits that arise from the use of conservative Temporary CI values. We believe it is a flaw that CARB does not have a mechanism to provide economic value for parties who deliver validated carbon emissions savings when they use artificially conservative Temporary CI values. Iogen would support a mechanism to capture losses incurred prior to a new rulemaking.

2) We support expanded flexibility for joint applicants to be designated for LCFS credits under Provisions for Petroleum Based Fuels, §953489

We support program flexibility in credit generation. In the specific case of refinery renewable hydrogen, the generation of credits could be performed by a party in the value chain without compromising the integrity of the LCFS credits.

3) We support third party validation for Petroleum Projects

Third party validation is particularly important in the situation where several parties are involved in the supply chain, and where there is designation of the opt-in project operator. We believe it is an omission to not have such verification as mandatory.

4) As a technical amendment, we believe CARB should review the formula for the generation of LCFS credits for refinery renewable hydrogen derived fuels

In 2015, CARB adopted a provision within the LCFS that enabled carbon intensity (CI) reductions achieved by refineries that were partially derived from renewable hydrogen to generate LCFS credits. Under this formula, the amount of credits generated was based upon the amount of low CI hydrogen used to make CARBOB or diesel fuel that is partially derived from renewable hydrogen. Since hydrogen was a feedstock to the fuel, this formula considered all hydrogen as eligible for credit generation and is consistent with the treatment of feedstocks under the LCFS.

In the 2018 updates to the LCFS, the credit generation formulas for fuel that were partially derived from renewable hydrogen were separated into two formulas; hydrogen produced from biomethane or hydrogen produced from other sources, for example electrolysis, as described in §95489(f)(2)[1]. In this new formula, credit generation for hydrogen produced from biomethane is discounted based on the percentage of finished fuel sold in rather than the CI difference between the low-CI hydrogen and fossil derived natural gas. Other refinery feedstocks, such as used cooking oil, are eligible to generate credits based on CI reductions up to the maximum volume of feedstock incorporation possible in the volume of fuel sold in California.

This latter approach maximizes the economic signal of the LCFS to refiners to invest in decarbonizing strategies. We believe CARB should revert to its position before the 2018 regulatory update and encourage incorporation of low CI hydrogen as a fuel feedstock. This change would return CARB policy to treating low CI refinery feedstocks equally, and could contribute an additional three to four percent decarbonization to fossil fuels that continue to be used on California's roads.

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[1] https://ww2.arb.ca.gov/sites/default/files/2020-07/2020_lcfs_fro_oal-approved_unofficial_06302020.pdf

5) We support a separate rulemaking process for technical amendments and policy changes.

We believe CARB should consider separating technical amendments from policy changes and proceeding with the technical amendments on a different timeline. In many cases, technical amendments are not controversial, rather they are corrections to flaws identified through the everyday practice of adopted rules. Delaying technical amendments by bundling them with policy amendments defers correction of issues, and ultimately hurts program participants.

Thank you for the consideration of our comments, and we look forward to working with CARB staff to address this matter.

Sincerely,

Brian Foody
Iogen Corporation
President and CEO