BRIGHTMARK

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August 27, 2024

The Honorable Liane Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on Proposed Low Carbon Fuel Standard Amendments (15-Day Notice), released on August 12, 2024

Dear Chair Randolph:

Brightmark LLC ("Brightmark") appreciates the opportunity to submit comments on the Proposed Low Carbon Fuel Standard Amendments (15-Day Notice) posted on August 12, 2024 ("Proposed LCFS Amendments"). We appreciate the California Air Resources Board (CARB) engaging with stakeholders regarding changes and updates to the Low Carbon Fuel Standard (LCFS) program.

California's leadership in climate action through aggressive reduction targets and corresponding programs, like the LCFS, accomplishes actual pollution reduction and public health benefit outcomes by establishing market certainty to drive private investment. The State's leadership and programs provide key solutions to the global climate challenge, however, more needs to be done.

Establishing and maintaining market certainty has been a hallmark of the LCFS program. While the most recent Proposed LCFS Amendments acknowledge the need to be more aggressive with the step-down target, the changes to avoided methane crediting undermine investment expectations and threaten to create more market uncertainty for certain low carbon fuel projects.

The Proposed LCFS Amendments introduction of new parameters for avoided methane crediting periods and lower-than-needed CI targets **erode confidence and increase investment uncertainty** in the LCFS program and **risk stranding existing assets** that have relied on the program.

California has a long history of supporting aggressive actions to address environmental challenges, like climate change. Governor Newsom has called for an even more aggressive approach to achieve climate neutrality. As CARB has stated, "[s]ignificant reductions in transportation emissions are needed to achieve state's air quality and climate goals."

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The success and market certainty of the LCFS program should be based on increasing the demand for credits, not limiting fuels and credit generation. Increasing demand for credits will result in greater overall emission reductions and a more diverse and stable credit pool.

Brightmark Overview

Brightmark was founded in 2016 with the mission of solving some of the greatest environmental challenges facing the United States. One of these solutions is capturing methane emissions from organic waste and producing biogas and digestate through the natural process of anaerobic digestion. Agricultural activities contribute approximately 30% to total U.S. greenhouse gas (GHG) emissions, a significant portion attributable to methane emissions from animal waste.[1]

Brightmark operates over 30 net-negative carbon intensity projects on dairy farms across the U.S., including in California. Through these projects, Brightmark derives RNG from biogas captured from organic waste streams, cleaned, and conditioned to achieve the quality standards necessary to blend with or substitute for geologic natural gas. We work with dairy farmers to harness the energy potential of their dairy manure, provide them with solutions to meet their greenhouse gas reduction goals and enhance farm profitability. We are committed to reimagining waste and building projects that benefit farms, their dairy, their communities, and the planet.

These facilities provide a win/win scenario for farmers and local communities; they help address methane emissions from organic waste produced locally and turn that waste into renewable energy and fertilizers. To date, our projects have offset over 1,100,000 metric tons of CO2eq.

The LCFS program, and the certainty it provides to the market, is a key factor in the long-term success of projects like these in addressing environmental challenges. The CARB LCFS workshops throughout 2022 and 2023 highlighted the success of the LCFS, showing that the program is over-performing and helping California meet its reduction goals sooner than originally targeted.

Proposed LCFS Amendments

In the Proposed LCFS Amendments, a new concept was introduced to reduce the number of 10-year crediting periods from three to two related to avoided methane crediting. This is extremely problematic for projects that secured feedstock and financing agreements relying on an LCFS program that allowed for three 10-year crediting periods. Even more problematic, this change will impact projects originally granted pathways through the cap-and-trade program and not allow those projects enough time in the LCFS program, risking the viability of legacy projects. This sudden change at the 11th hour of rulemaking threatens future projects and risks stranding existing assets.

[1] U.S. Department of Agriculture Economic Research Service, citing the U.S. Environmental Protection Agency *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021*, April 2023 (EPA 2023).

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To address the current uncertainty in market pricing, we support CARB using the three main levers: (1) Carbon Intensity (CI) targets, (2) CI step-down, and (3) Auto Acceleration Mechanism (AAM) in the Proposed LCFS Amendments. To maintain existing investments, encourage future investments to meet long-term climate goals, and provide a stable credit market, CARB should develop a mix of percentage decreases based on an outcome that stabilizes the credit bank. CARB should also maintain the current regulatory structure for avoided methane crediting and deliverability of low carbon fuels.

The credit bank is projected to reach 30-35 million credits through the end of 2024 reporting, with the bank projected to increase in size by up to 7-12 million credits in 2024 alone. Increases of credits in the bank in 2024due to delayed rule implementation are causing downward price pressure needing immediate attention.

While we appreciate CARB adjusting the step-down target to 9% in the Proposed LCFS Amendments, a step-down target of 9%, coupled with a 2030 CI target of 30%, will not adequately address the credit bank oversupply. To account for the credit oversupply, Brightmark supports more aggressive CI targets and allowing the AAM to be triggered as early as possible.

The delays in the regulatory amendment process have prevented the implementation of the amendments in the first quarter of 2024. It is imperative that CARB implements a steep CI step-down to ensure that the bank returns to post 2023 levels (a reduction of approximately 23 million credits) by the end of 2025. This will help stabilize credit prices to maintain existing investments and increase future investment.

To address credit oversupply, research by ICF supports a reduction target of 40% by 2030, combined with a step-down of 10-12% in 2025, and an AAM triggered much earlier. Because of the delay in LCFS rule implementation, the credit bank increases through 2024 are not addressed in the CI targets and step-down proposals. As with California's Renewable Portfolio Standard program, the industry rises to the occasion with aggressive targets and the LCFS program's lack of aggressive targets is eroding confidence and increasing investment uncertainty.

Focusing on Solving the Problem

The goal of the LCFS is to reduce the carbon intensity of transportation fuels through greenhouse gas emission reductions. The LCFS is currently the only market with the economic incentive to develop carbon negative projects, including dairy biomethane. Due to the low energy density feedstock and higher required residence time, dairy digester projects result in higher costs per MMBtu produced.

As was stated above, the success and market certainty of the LCFS program should be based on increasing the demand for credits, not limiting fuels and credit generation. Avoided methane crediting, at three 10-year crediting periods, should continue in the LCFS program until a realistic and proven replacement policy is implemented. Significant investments have been made in existing and future projects based on the current rules and trust in the LCFS program that emission reductions from these projects would be valued for delivering positive outcomes.

Brightmark supports the continued alignment of RNG deliverability requirements with those of the federal Renewable Fuel Standard program. Biomethane projects that can theoretically deliver to California should be included, as the program currently operates. Current rules require that a project's CI score measure the additional carbon impact of traveling further in the CI calculation.

Brightmark also supports more efficient program operations and appreciates the inclusion of a full credit true-up, during the temporary pathway and annual true-up process, in the Proposed LCFS Amendments. However, we encourage changes to the "4-to-1" penalty for the case where a verified CI is higher than the certified CI. A more symmetric rule is needed for over and under performance, which can be impacted by a variety of external factors separate and apart from the facility itself. We recommend that, if the verified CI is higher than the certified CI, the project should simply repay CARB for any excess credits claimed, and not be subject to any further enforcement liability (unless there is malfeasance or other such cause). Projects should not be penalized unfairly and ensure that quarters while generating credits under the temporary pathway are exempt from the Verified CI Exceeded in Section 95486.1(g). In addition, more efficient program operations could benefit from allowing dairy RNG projects to account for actual lagoon cleanouts instead of imposing a required cleanout in the CI pathway calculations.

Market and Regulatory Certainty

The success of the LCFS to date shows the market's ability to deliver together in partnership with CARB. At its core, the LCFS is a market-based, fuel-agnostic regulation that does not pick winners and allows all fuels to compete.

Market and regulatory certainty are based on trust in California as a reliable place to sell low-carbon fuel and credits to meet and exceed climate goals. Markets with wide fluctuations between high and low prices are not sustainable. Sustained low price environments damage industries and erode confidence, and incent investment in other markets. For CARB to promote a long-term, stable environment that encourages investment in new, and maintain existing, CI-reducing projects more aggressive targets are needed. CI targets need to support credit prices to maintain a level for capital recovery of previous and future investments.

The ultimate goal of California and the market participants, like Brightmark, is decarbonization and eventual carbon neutrality of not only transportation, but all sectors of the economy. To reach this goal, California needs negative CI fuels for transportation and negative CI biogas for other uses (power, thermal, etc.). In-state and out-of-state RNG production are connected, the same developers that develop instate projects develop out-of-state projects. The current RNG

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production's success will lead to the development of additional RNG projects necessary to decarbonize the non-transportation sectors to achieve long-term goals.

Negative CI fuels require significant economic incentives and market certainty, which has eroded with current LCFS prices. Long-term depression of credit prices will lead to stranded assets and a lack of private investment in decarbonizing California's economy. CARB should send a strong signal by dramatically increasing the LCFS reduction targets and helping return certainty to the market.

We appreciate the opportunity to provide comments. Please do not hesitate to reach out with any questions.

Respectfully Submitted,

Bob Powell,
Founder & CEO