

July 12, 2023

Cheryl Laskowski California Air Resources Board 1001 I Street Sacramento, California 95814

Re: Proposed New Tier 1 Simplified Calculators - Biomethane from Anaerobic Digestion of Dairy and Swine Manure

Dear Dr. Laskowski:

Brightmark LLC (Brightmark) appreciates the opportunity to submit comments on the proposed new 'Tier 1 Simplified Calculator for Biomethane from Anaerobic Digestion of Dairy and Swine Manure (DSM)'. We appreciate the California Air Resources Board (CARB) engaging with stakeholders regarding potential changes to the Low Carbon Fuel Standard (LCFS) program.

California's leadership in climate action through aggressive carbon reduction targets and corresponding programs like the LCFS accomplish actual pollution reduction outcomes by establishing market certainty and driving private investment. The state's leadership and programs provide key solutions to the global climate challenge.

Based on the Tier 1 Calculator posted on the CARB website, Brightmark supports the adjustments CARB has made, with the following exceptions (bullets are presented immediately below with the broader explanations to follow):

- Brightmark does not support requiring an annual lagoon clean out for the Tier 1 calculator. If CARB does choose to move forward with this proposal, Brightmark requests that the Tier 2 process can be utilized to exclude lagoon clean outs from the carbon intensity pathway application and ultimately the certified carbon intensity.
- Brightmark recommends the calculator be updated so additional fuels, such as propane, can be input into the calculator for digester heating without having to make modifications and going the Tier 2 application process. CARB has done this already in the calculator for energy use during upgrading and compression, and Brightmark requests this is extended to digester heating as well.

In addition to the above, Brightmark respectfully recommends the following related to LCFS pathways and the calculators generally (similar to above, bullets are presented immediately below with the broader explanations to follow):

• A full credit true-up to verified actual CI performance to recognize the actual greenhouse gas (GHG) benefits of DSM facilities.



• Clarify the timing for when the new calculators are expected to be formally effective.

Brightmark Overview

Brightmark is a circular innovation company with a mission to Reimagine Waste, developing solutions that make a positive environmental impact on the world and communities where it operates. One of these solutions is capturing methane emissions from organic waste, and through the process of anaerobic digestion produce biogas and digestate.

Brightmark has low carbon intensity (CI) projects on dairy farms across the U.S., including in California. We work with dairy farmers to harness the energy potential of dairy manure, provide solutions to meet 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 environment.

These projects provide a win/win scenario for farmers and local communities. They capturemethane emissions from organic waste and producerenewable energy and fertilizers. To date, Brightmark's projects have offset over 550,000 metric tons of CO2e.

The LCFS program, and the certainty it provides to the market, is a key factor in the long-term success of projects like these to address environmental challenges. The *May 23 Workshop* presentation highlighted the success of the LCFS, showing that the program is overperforming and helping California meet its reduction goals sooner than originally targeted.

Detailed comments on DSM Calculator

Requiring an Annual Lagoon Clean Out in the Tier 1 Model

While Brightmark recognizes that the current proposed model does provide simplicity with one lagoon clean out for each pathway, it does not recognize the actual emission reductions of most dairy projects nor is aligned with the approved Livestock Offset Protocol under the existing California Cap and Trade Program. Many projects currently in development and/or construction were funded based on the parameters of the models implemented in 2019 and this significant change will severely impact the financials of many projects that have attracted private investment, possibly resulting in investment instability moving forward. If CARB does keep this requirement in the Tier 1 Calculator, Brightmark recommends that the Tier 2 process can be utilized to exclude lagoon clean outs from the carbon intensity pathway application and ultimately the certified carbon intensity.

Additional Fuels Available for Digester Heating

Brightmark has multiple facilities across the country that utilize propane to heat the manure digesters. All of these facilities would need to go through the Tier 2 application process, that being said, if the 'digester energy use' section of the calculator were modified similar to the 'upgrading and compression section', many more facilities would be able to utilize the Tier 1



calculator without modifications, thus resulting in a greater number of applications being processed utilizing less CARB resources.

A Credit True-up Remains Necessary to Properly Recognize the True Environmental Performance of All Biomethane Pathways

True-up crediting should be offered to improve clean fuel economics and help the program correctly account for the full greenhouse gas (GHG) benefits of RNG production. AD facilities are biological systems in which gas yields and CI can be unexpectedly impacted by issues outside of the control of even the most prudent facility operator. Looking backward at actual CI performance is much easier than forecasting possible future CI performance for these systems. We continue to support a full true-up to verified actual CI performance to recognize the actual GHG benefits of these facilities.

Clarify Timing of New Calculators Applicability

We request that CARB staff clarify when the new calculators are expected to be formally effective. We assume that this would occur with the effective date of the new LCFS regulation amendment but would appreciate confirmation of that approach from CARB staff; again, predictability is a cornerstone to attracting private investment, which then helps drive innovation and scalability.

Understanding the effective date of the new Tier 1 calculators is important to applicants that have currently submitted provisional CI applications and are waiting for review/approval. We recommend that if projects submit their provisional CI applications before the new calculator takes effect, that they should not be required to transition the application to the new calculator. The timing of having a provisional application deemed complete, validated, engineering review completed and application provisionally approved is outside the applicant's control, the current pathway application queue is quite long, and switching to the new calculator will create additional procedural iterations and increased approval lag times—the opposite goal of the streamlining envisioned for the Tier 1 framework in this rulemaking. That said, if CARB chooses to require any projects awaiting provisional approval to update to the new Tier 1 calculator, it would be helpful for CARB to articulate this planned approach sooner rather than later.

Further, we request additional clarity on how existing pathways will be treated. We recommend that pathways with existing certified CI scores (including provisional scores) be able to continue to use the previous CI models for the remainder of their initial crediting period. Allowing existing projects to continue to follow the CI framework in place as they commit capital, make contractual commitments, and incur liabilities is sound policy and intellectually consistent with the crediting period concept found in the current rule.



Conclusion

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.). Similar to other, more established renewable energy sources, RNG requires economic incentives and market certainty to drive innovation and investment; which has slowed with the erosion of the LCFS prices. Providing strong and streamlined CI calculators improves the investment certainty for RNG projects. If CARB provides clarity through Tier 1 calculators that work well for RNG applications, the production of renewable gas will help to reduce methane emissions, improve manure management, and decarbonize California's transportation sector—or any other sector that CARB deems appropriate.

These simplified Tier 1 calculators also provide critical leadership that will allow other jurisdictions to follow California's example and adopt LCFS-style programs. We thank CARB for continued development of these topics and look forward to the upcoming LCFS rulemaking.

Respectfully Submitted,

Gerrud Wallasrt

Gerrud Wallaert, Chief Operating Officer of RNG