



Helping dairies fuel a renewable future

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June 28, 2023

California Air Resources Board
Low Carbon Fuel Standard
1001 I Street
Sacramento, CA 95814

Re: CalBioGas Kern LLC Tier 2 Pathway Application No. B0403; Response to The Association of Irrigated Residents, Leadership Counsel for Justice & Accountability, Central Valley Defenders of Clean Water & Air, Animal Legal Defense Fund, Center for Food Safety, and Food & Water Watch

California Bioenergy LLC (“CalBio”) writes on behalf of CalBioGas Kern LLC (“the project”) to provide responses to the comments received in a letter dated June 27, 2023 regarding the Tier 2 Pathway Application (No. B0403) for compressed natural gas (CNG) from dairy manure at Belonave Biogas LLC in Kern County, California for use as transportation fuel in California. CalBio is responding within the scope of the Low Carbon Fuel Standard (“LCFS”) program per § 95488.7(d)(5)(A), which requires responses to comments “related to potential factual or methodological errors.”

CalBio appreciates the comments and is committed to full and accurate accounting of life cycle emissions associated with the pathway application. CalBio commends the California Air Resources Board (“CARB”) in its development of the Livestock Compliance Offset Protocol (“Protocol”) and Simplified CI Calculator for Biomethane from Anaerobic Digestion of Dairy and Swine Manure (“CI Calculator”), which have been vetted through public processes to ensure greenhouse gas (“GHG”) emission reductions are achieved beyond a business-as-usual baseline.

The coalition of groups (“Commenters”) who submitted comments contends that the application should be rejected as summarized below. As part of the comment submission, the Commenters included an attachment of a petition that was filed with CARB requesting all fuels from dairy biomethane be excluded. To this, CalBio provides CARB’s response which was to deny the petition¹.

¹ <https://ww2.arb.ca.gov/sites/default/files/2022-04/LCFS%20Reconsideration%20Petition%20Response.pdf>

As to the other statements made by the Commenters, CalBio does not believe any of these claims to be accurate and our responses are outlined below. The project has been developed entirely within the framework established by CARB to develop low carbon fuels in the transportation sector. In addition to reducing GHGs, this project generates renewable natural gas that displaces use of fossil-based fuels, improves local air quality, and creates local job opportunities on family-owned farms.

(1) LCFS System Boundary

The Commenters argue “the application applies an unlawfully truncated system boundary that ignores feedstock production at the source factory farms and other emissions such as those from storage and disposal of digestate, resulting in artificially low Carbon Intensity (CI) values and inflated credit generation.”

This statement is incorrect. The project’s pathway application utilizes the exact methodology and calculators designed for use under the LCFS regulation. The lifecycle analysis for this pathway application was conducted using a modified version of the Board-approved Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Dairy and Swine Manure, which is incorporated by reference in the LCFS regulation, § 95488.3(b). As noted in the CARB Staff Summary, “the modified calculator has been determined to be equivalent to CA-GREET3.0 pursuant to § 95488.7(a)(1) of the LCFS regulation.”

The purpose of the LCFS pathway application is to calculate the methane emissions that would have occurred in the absence of the digester project. The lifecycle emissions are calculated in part using the GHG assessment boundary defined in Chapter 4 of the Compliance Livestock Offset Protocol (“LOP”), which delineates the Sinks, Sources, and Reservoirs (“SSRs”) that must be included or excluded when quantifying the net change in emissions associated with the installation and operation of a dairy digester. The lifecycle analysis includes an assessment of the baseline manure management practices at the dairies and because methane emissions from dairy operations are not regulated, reductions from these facilities exceed regulatory requirements and are therefore additional.

(2) Additionality of Methane Reductions

The Commenters believe CARB did not consider the additionality requirements of Health and Safety Code § 38562 which requires the state to adopt greenhouse gas emissions limits and emissions reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit.²

According to CARB’s response to the petition, the Health and Safety Code § 38562 does not apply to the LCFS³. Also, as discussed above, crediting for the voluntary capture of methane is

² <https://codes.findlaw.com/ca/health-and-safety-code/hsc-sect-38562.html>

³ <https://ww2.arb.ca.gov/sites/default/files/2022-04/LCFS%20Reconsideration%20Petition%20Response.pdf>

limited to the methane that would have otherwise been vented to atmosphere in the absence of such a project. The lifecycle analysis prepared using the CA-GREET 3.0 and reviewed by CARB and an independent third-party verifier confirms that real, quantifiable, permanent, and additional emission reductions have occurred.

The Commenters also incorrectly conflate the funding the projects have received through the Dairy Digester Development and Research Program (DDRDP). This is incorrect. The DDRDP grant program⁴ was established to provide funding to help encourage the development of dairy digesters given the urgency of mitigating short-lived climate pollutants such as methane. The program has been extremely successful in helping the state achieve its methane reduction goals and participation in the program does not preclude a project from participating in the LCFS program.

(3) Incentivizing Methane Production

The Commenters speculate that the LCFS program incentivizes expansion and consolidation of dairies but fail to recognize that dairy industry consolidation is a trend that has been occurring for decades, not only in California, but all over the country. Furthermore, the project is a separate entity than the dairy operation which exists to produce widely consumed goods such as milk, butter, yogurt, ice cream, etc. where herds are managed based in response for demand for their products, not for gas production. As for enteric emissions, this is outside the scope of the LCFS program and digesters do not claim to reduce these emissions. CalBio stands ready to work with CARB once commercial solutions become available to mitigate emissions occurring from enteric sources.

(4) Pathway Application Transparency

The Commenters assert that the application is overly redacted. The information provided in the LCA document and site-specific inputs contains highly detailed descriptions and information regarding how the project is designed and operates. The information being redacted is considered to be confidential business information.

(5) Discriminatory Impact

The Commenters state that certification of this pathway would result in a discriminatory impact in conflict with CARB's obligations under California Government Code 11135, and Title VI of the Civil Rights Action. CalBio is not in a position to respond to this claim. However, it should be noted that as part of the development of our projects, CalBio engaged with environmental justice groups as well as held public meetings where we shared information about the projects we were building to members of the local community. Overall, members of the community were supportive of the technology and development we were bringing to not only provide investment and jobs but also provide significant improvements in air quality to those

⁴ https://www.cdfa.ca.gov/oefi/ddrdp/docs/2022_DDRDP_Legislative_Report.pdf

communities. By displacing fossil diesel consumption and combustion, these projects not only reduce methane but also substantially reducing diesel NOx, PM2.5 and PM10 emissions⁵.

The commenters state that the project intends to burn biogas onsite to generate electricity. This is not the case as all of the biogas produced is sent via collection pipeline to a centralized upgrading location where it is injected into the utility pipeline.

(6) Carbon Intensity Values

Lastly, the Commenters contend that the Carbon Intensity values achieved by these projects create credits that enable further deficit generation. As described above, the number of LCFS credits generated by these projects are calculated using a lifecycle approach and occur when the methane is used in a CNG vehicle as a substitute for diesel vehicle fuel. As a producer of renewable fuels, CalBio supports the transition away from fossil fuels and further action by CARB to increase its Carbon Intensity reduction targets in the LCFS program.

CalBio is appreciative of the opportunity to respond to these comments and discuss our pathway applications and the integrity of the LCFS program. We are confident our application fully complies with the requirements of the LCFS program and respectfully request CARB proceed with the certification of the pathway. CalBio is prepared to respond to any further input or inquiry from CARB should it be necessary.

Sincerely,



Andrew Craig
Vice President, Greenhouse Gas Programs
California Bioenergy LLC

⁵ <https://ww2.arb.ca.gov/sites/default/files/2020-07/dairy-emissions-matrix-113018.pdf>