CALGREN
Dairy Fuels, LLC

June 28, 2020

California Air Resources Board
Fuels Evaluation Section
Attn: Mr. Anil Prabhu
P.O. Box 2815
Sacramento, CA 95812

RE: Calgren Dairy Fuels, LLC Biogas Tier 2 Pathway Application No. B0098 for California Motor Vehicle Fuel Produced by Digesting Manure at Six Local Dairies

Dear Mr. Prabhu:

Calgren Dairy Fuels, LLC (Calgren) submits this letter in response to public comments regarding the above-referenced Tier 2 pathway application submitted by Leadership Counsel for Justice and Accountability, Association of Irritated Residents and Central California Asthma Collaborative. The letter is also signed by Food and Water Watch; Central California Environmental Justice Network; Center on Race, Poverty, and the Environment; Public Justice; and Central Valley Air Quality Coalition. Submitters and signers are collectively referred to in this response as Commenters.

This response is pursuant to Section 95488.7(d)(5)(A) of the Low Carbon Fuel Standard (LCFS) regulations. As the comment letter is divided into five underlined sections, in this response each such section is summarized in *italics*, followed by Calgren's response to all potential factual or methodological errors raised in that section in compliance with the cited regulation. As explained in more detail below, Calgren believes that no revisions to its pending application are needed.

1. *The materials available for review redact or otherwise leave out critical information needed for the Commenters to adequately assess the application and thus lack transparency.*

Calgren responds that the redactions in its application are minimal compared to earlier, similar submissions by other Tier 2 applicants and comply with California Air Resources Board (CARB) guidelines regarding permissible redactions. Redacted information in the publicly posted documents contains competitive trade secret information and, as Confidential Business Information, is protected from public disclosure under California Government Code Section 6254.7.

Calgren further notes that the unredacted application was fully reviewed and approved by CARB staff. In addition, the application was also reviewed and further validated by an independent third party, Ashworth Leininger Group (H3-20-003). Finally, the carbon credits generated pursuant to this application will be subsequently verified by a CARB accredited third party auditor pursuant to a program in place as of January 1, 2020. Thus the assertion by Commenters that independent analysis is impossible is patently incorrect.

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Commenters contend that the higher carbon intensity of Legacy Dairy compared to the other five is an example supporting their contention of the lack of data. Calgren acknowledges that there are numerical differences in the carbon intensity of biogas from dairy to dairy. That is because the data for each dairy reflects the minor differences in baseline and processing from dairy to dairy. Thus the carbon intensity differences undercut rather than support Commenters' assertion that independent review is lacking.

Please note that some of Commenters' assertions in this section are incorrect or inapplicable. For example, herd sizes are not withheld but are set forth clearly, including in ARB's summary. The alleged lack of energy generation, including electricity produced, is inapplicable as the project produces renewable fuel for CNG, not electricity.

2. *The project will have adverse impacts on local air and water quality.*

With all due respect to the Commenters, assertions that this project will degrade the local community by increasing air pollution and groundwater contamination are wrongheaded. The project will greatly benefit air quality by reducing methane emissions. Methane is a short-lived climate pollutant 25 times as potent as carbon dioxide. California recognized the importance of projects that reduce such pollutants in passing SB 1383. This project responds to the imperatives set forth in that landmark legislation. Calgren captures methane that, but for the project, would have been released into the atmosphere. Calgren then cleans up that methane so that it can be used as a replacement for fossil fuels in California vehicles. We agree with the Commenters that the resulting carbon intensities are truly monumental. However they are no more monumental than the environmental benefits this project provides.

Calgren shares the concern of the Commenters that air quality in the Central Valley, where the project is located, is unacceptable. It is precisely because of that concern that this project makes sense. A Dairy Digester Emissions Matrix was recently developed by a diverse group of stakeholders including representatives from Central Valley Air Quality Coalition, Central California Asthma Collaborative (curiously, two of the Commenters here), and the American Lung Association, as well as other stakeholders. The most comprehensive current analysis developed by this group is the Dairy Digester Emissions Matrix (Matrix), a copy of which can be found at https://ww3.arb.ca.gov/cc/dairy/dsg2/dairy-emissions-matrix-113018.pdf. As reflected in the Matrix, using biomethane instead of petroleum to make vehicle fuel yields substantial net environmental benefits in NOx and PM air emissions – precisely the elements that plague Central Valley air quality. Commenters cite an unsubstantiated study suggesting that there are additional ammonia emissions from manure exiting a digester. If true, those additional emissions should be incorporated into a comprehensive, overall study such as the Matrix that weighs all pros and cons.

The Commenters' contention that digestate handling is not addressed is incorrect. The Livestock Protocol adopted by ARB takes into account emissions from digestate storage ponds in arriving at its baseline emission values.

Commenters' reference to elemental sulfur is misplaced. Commenters appear to be arguing both that removal of sulfur eliminates a valuable component from the manure that would have otherwise been land applied and, in contradistinction, that applying the sulfur back on the land might do harm. Commenters can't have it both ways. In truth, Calgren's treatment of sulfur enhances the options for the dairy farmers. Rather than being forced to accept a default amount of sulfur in the manure they land apply, Calgren's project gives them control over its application. Thus the project enhances rather than degrades healthy soil practices.

As to the question of emissions from the low pressure biogas gather pipeline system, the Livestock Protocol assumes a 2% default value. Where fugitive emissions exceed 2%, the higher value is adopted. As set forth in the response to the prior section, that value has been fully reviewed by ARB staff, independent validation of the data in the application, and will subsequently be reviewed yet again by an independent verifier.

Commenters' reference to flaring is inapplicable. There is no flaring involved in the project.

The assertion that alternative manure handling practices might avoid methane emissions from manure might be true in part. However, to Calgren's knowledge none of those alternative practices would allow manure to be used as a source of renewable fuel, replacing fossil fuels. The benefits of dairy manure digesters are well recognized, hence they are enshrined in the landmark SB 1383 legislation previously referenced. Far from conflicting with the language of AB 32 encouraging that air quality in struggling communities by targeted, this project supports it. Commenters contend this project will undermine the effort to move toward electric vehicles. As set forth in a recent blog by Sammy Roth, a noted LA Times environmental reporter (see https://www.latimes.com/environment/newsletter/2020-06-25/will-the-rich-continue-to-be-the-main-beneficiaries-of-californias-clean-energy-future-boiling-point), electric vehicles primarily help rich communities like Beverly Hills. This project, on the other hand, primarily benefits Central Valley residents. Calgren strongly believes that air emissions in the Central Valley should be addressed as soon as possible and not be held captive to the preferences of others. Where those preferred technologies are unavailable, as they are largely unavailable here, it would be unjust to ask Central Valley residents to delay their quest for cleaner air.

As for water pollution, this industrial project uses double-lined ponds, a significant upgrade from earlier agricultural manure management practices.

Finally, Commenters appear to object to dairy farms, at least large ones, though their reasoning is unclear. Calgen is proud to be working with the dairy farmers involved in this project, all of whom are well respected members of the local community. Commenters appear to view our local farmers as environmental pariahs. That is simply not true. In fact our farmers are environmental heroes, as characterized in the Podship Earth blog dated April 15, 2018 and moderated by Jared Blumenfeld, California's Secretary of Environmental Protection.

3. *The GHG emission profile from the project ignores GHG emissions from manure production.*

Commenters miss the point that methane is currently emitted into the atmosphere by traditional, legal, regulated manure handling practices. Far from ignoring those emissions, Calgren captures them and turns them into vehicle fuel, thus simultaneously reducing the need for fossil fuels.

The implication that emissions from the dairies as a whole are not considered is inaccurate. The Livestock Protocol was adopted by Climate Action Reserve in 2007 after comprehensive peer review and incorporated into the LCFS several years later by ARB. It establishes a baseline that considers all applicable dairy operations. That comprehensive analysis was applied to this project.

Calgren agrees with Commenters that manure is valuable. The nitrogen, potassium and phosphor in manure are used by dairy farmers as fertilizer. This project does not interfere with that use. In fact this project enhances the use of manure by helping to turn it into a valuable fuel source for California vehicles.

Commenters' inapplicable contentions regarding the difference in CI value for Legacy Dairy are addressed above. Similarly, Commenters' contentions regarding Calgren's renewable fuel ethanol plant are inapplicable. While Calgren does proudly use biogas as a process fuel for making fuel ethanol, that is not the subject of this application.

4. *The project incentivizes increased production of methane by ignoring alternative manure handling practices.*

Again, Commenters choose to ignore the fact that but for this project methane would be emitted into the atmosphere and fossil fuel consumption in California would be greater. As recognized by California's legislators in SB 1383, dairy cows emit methane, both from manure and as a result of enteric processes. Given the scope of the problem, digestion of manure was selected as a preferred approach and thus encouraged. As Commenters note, alternatives exist. Perhaps some of those alternatives should similarly be encouraged. However, that fact alone does not detract from the enormous environmental benefits that this project brings.

5. *The project helps SoCal Gas.*

Commenters allege that the biomethane from this project that is used to fuel CNG vehicles up to 231 miles away will help SoCal Gas meet their Cap and Trade targets and LDFC targets. That is very simply untrue. SoCal Gas' only current role in the project is to transport Calgren's biomethane to existing CNG refuelers that would otherwise have used fossil fuel. SoCal Gas does not earn any environmental credits as a result of Calgren's use of their common carrier pipeline. Commenters' contention that this project prolongs the use of fossil fuel natural gas in California and hinders California's ability to meet both short and long term GHG emission reduction goals is wholly unsupported and appears misguided. This project does just the opposite. Capturing Central Valley methane emissions and using them in California vehicles in place of fossil fuel clearly advances both short and long term GHG emission reduction goals

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As to the pipeline distance to the CNG refueling stations served by this project, as explained in the application the distance to the farthest away was chosen, even though much closer CNG refueling stations are also served. The intent was to be conservative. This approach is conservative precisely because ARB's Livestock Protocol assumes a default value for methane leaks based upon pipeline distance.

In summary, while thanking Commenters for their interest in its project, Calgren contends that no changes to the pending application are needed.

Very truly yours,

Lyle Schlyer
President

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