



December 22, 2025

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

Re: Tier 2 Pathway Application Nos. B0884; Response to Leadership Counsel for Justice & Accountability, Central Valley Defenders of Clean Water & Air, Food & Water Watch, and Animal Legal Defense Fund

Dear Chair Sanchez:

U.S. Venture, Inc. ("Pathway Applicant") is responding within the scope of the Low Carbon Fuel Standard ("LCFS") program §95488.7(d)(5)(A) to the commenters, Leadership Counsel for Justice & Accountability, Central Valley Defenders of Clean Water & Air, Food & Water Watch, and Animal Legal Defense Fund (collectively "Commenters"), in a letter submitted December 19, 2025 regarding the Tier 2 Pathway Application (B0884) (the "Application").

Pursuant to §95488.7(d)(5)(A), "only comments related to potential factual or methodological errors will require responses from the fuel pathway applicant." While many of the public comments received on the Application raise broader policy concerns beyond the scope of the Tier 2 pathway review, Pathway Applicant addresses the points raised below to assist CARB's evaluation of any potential factual or methodological issues. Pathway Applicant maintains that, as implemented and verified under CARB requirements, the dairy manure project is expected to result in long-term air quality improvements and greenhouse gas emission reductions.

Notwithstanding the foregoing, Pathway Applicant will address the Commenters' letter, identified by sections in **bold**, and respond to the comments raised by the Commenters to the extent relevant to potential factual or methodological issues within the LCFS Tier 2 pathway review. Pathway Applicant believes the pending Application can be certified as submitted, subject to CARB's review and any clarifications CARB may request based on the information provided in this response.

First, the application incorporates an unlawfully truncated system boundary that ignores feedstock production at the source factory farm—Butterfield Dairy, LLC in Gila Bend, Arizona, which confines a total of 23,720 cows—and other emissions such as those from storage and disposal of digestate, resulting in artificially low Carbon Intensity (CI) values and inflated credit generation. A fuel pathway life cycle analysis must take into account "feedstock production" and "waste generation, treatment and disposal." In addition to the evidence provided in Exhibits A and B, more recent research indicates that emissions from factory farm gas production are significantly higher than currently appreciated, with especially high emissions from digestate storage. This recent study did not consider additional emissions from digestate handling and application, which is another potentially large source of emissions resulting from factory farm gas production that must be included in the pathway life cycle analysis. Yet, CARB and the pathway applicant ignore these and other emissions. In other words, this application dramatically undercounts the greenhouse gas emissions associated with this fuel by failing to apply the required "well-to-wheel" analysis.

Concurrently, this application overcounts environmental benefits by ignoring that this is, in one factory farm owner's words, "lucrative" feedstock production. Liquified manure rotting anaerobically in massive waste "lagoons" that are never completely emptied is not an unavoidable and natural consequence of animal agriculture operations. This system and the methane emissions that it causes are the result of the source factory farm's intentional management decisions designed to maximize profits and externalize pollution costs. CARB cannot ignore that the emissions the pathway applicant claims as captured from the factory farm's lagoons are intentionally created in the first place. The manure handling practices at this factory farm are an integrated part of generating and using factory farm gas. Thus,

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the gas generated at this facility is an intentionally produced product and cannot now be claimed as “captured” to secure a lucrative negative CI value.

Certification of this pathway would not violate the LCFS regulation or compromise the integrity of the LCFS program, provided CARB confirms that the pathway’s lifecycle analysis and system boundary conform to CARB requirements and that all claimed reductions are supported by monitoring, reporting, and verification. The project within this Application has had a life cycle analysis prepared consistent with CARB guidance, including the 2014 California Livestock Projects Compliance Offset Protocol as applicable, and establishes a baseline that considers the applicable dairy operation and quantifies the incremental emissions associated with capture, upgrading, and delivery of methane for beneficial use. The baseline assumes that, absent the project, manure would be managed in lagoons consistent with the Farm’s baseline practice and common practice for comparable operations; the project quantifies avoided methane from diversion and control of methane that would otherwise be emitted, and the purification and use of this methane as a vehicle fuel. As a result, the project shows avoided methane emissions relative to the baseline, supporting LCFS credit generation based on verified reductions. Methane would be emitted with or without the implementation of the LCFS program because the primary business of Butterfield Dairy, LLC (the “Farm”) is the production of milk and milk products, and dairy manure (and associated methane) is a byproduct of that process. The LCFS incentive relevant to this project is to achieve verified reductions in lifecycle GHG emissions relative to the baseline through methane capture and control; it does not provide an incentive to increase methane generation, and the project is not intended to change herd management or manure generation practices. Furthermore, the costs associated with implementing and operating methane capture and upgrading technologies are significant, and LCFS crediting can help make continued operation of these controls economically viable, subject to CARB’s ongoing oversight.

Second, CARB has failed to ensure that the additionality requirements of Health and Safety Code section 38562 are met. Indeed, there is no evidence that CARB has investigated whether these purported emission reductions otherwise would occur. It does not appear that CARB has made any effort whatsoever to verify that these environmental attributes have not already been used elsewhere, such as in utility/consumer promotional programs in Arizona, other state low carbon fuels programs, or product marketing. CARB cannot certify this pathway without conducting this analysis

Certification of these pathways would not violate the LCFS regulation or Health and Safety Code¹. Per California Code, Health and Safety Code - HSC § 38562 (b)(3), it is noted that the State Board will “Ensure that entities that have voluntarily reduced their greenhouse gas emissions prior to the implementation of this section receive appropriate credit for early voluntary reductions.” The LCFS program was not designed to punish those that were already voluntarily reducing emissions but to incentivize reductions so others would also begin to participate in these efforts. Further, Commenters suggest that the emission reductions associated with the digester systems would have otherwise occurred outside of the LCFS. Commenters fail to acknowledge that operating a digester system is expensive and requires ongoing capital expenditures and operating costs that are necessary in order to continue its operation. Without the LCFS program and the associated avoided methane crediting to assist in subsidizing such expense, it is more likely that the Farm’s methane mitigation techniques from the use of the digester system would stop, and emissions would continue as if no digester existed. Without incentive programs like the LCFS, mitigation of emissions would backslide.

Third, this application is a good example of how CARB’s flawed approach is rewarding the biggest factory farm polluters and incentivizing further expansion and herd consolidation, which does more climate harm than good. The source factory farm is not a sustainable family farm—it is a large industrial operation that confines 23,720 cows. CARB should not allow this factory farm—or the applicant—to profit from the LCFS.

¹See CARB’s statement issued at footnote 4 of its April 25, 2022, LCFS Reconsideration Petition Response.

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Butterfield Dairy, LLC is owned and operated by Thomas De Jong and his three sons. They bought land in 2003, finished their first dairy in 2008 and their second in 2018. While Commenters characterize the Farm as an industrial operation, Butterfield Dairy is a family-owned business, and the Farm's primary business is the production of milk and milk products. The de Jong family has a history rooted in dairy farming dating back to 1620 in Holland, and the Farm has pursued sustainability measures, including methane capture and control, to reduce emissions associated with manure management.

The Commenters speculate and imply that participation in the LCFS has incentivized expansion and herd consolidation. The LCFS program and market demand for low carbon fuels, like RNG, have facilitated resources and support for dairy farms to implement additional measures to enhance environmental quality and sustainability, including methane capture and control from manure management. Improvements to the Farm as a result of the Pathway Applicant's facility have helped further its environmental and sustainability commitments. Pathway Applicant states that the primary business of the Farm is the production of milk and milk products, not gas production, and herds and herd sizes are managed based on demand for those products. Dairy manure, and the methane associated with its decomposition, is a byproduct of the dairy farming process; the project controls and diverts this methane for use in the California vehicle fuel market, resulting in both avoided dairy farm emissions and reduced emissions from vehicle fuels relative to other vehicle fuel alternatives. The project has not taken any action to increase the amount of methane produced by the Farm for the purpose of generating LCFS credits, and the Farm's milk production operations are managed independently from the fuel production process. Furthermore, the LCFS program awards credits based on continued, verified emissions reductions compared to a baseline, and this is reviewed annually through an independently verified process to ensure projects are continually reducing GHG pollutants and that operational changes are appropriately reflected in reporting and verification.

Fourth, this application is so opaque that it is impossible for Commenters or other stakeholders to meaningfully evaluate it. The lifecycle analysis redacts information critical to understanding the CI calculation.

Pathway Applicant's redactions were within CARB's guidance, approved by CARB, and limited to confidential business information. See attached CARB-approved redacted Life Cycle Analysis. The redactions are limited to specific volumes and certain calculated values.

Fifth, the inflated CI values CARB proposes here work an additional environmental injustice on California citizens who will be exposed to higher levels of pollution from fossil transportation fuel and dirty vehicles made possible by excessive credit generation at factory farms. CARB has acknowledged that pollution from transportation fuels inflicts a racially disparate impact, so this continued certification of fuel pathways with extreme negative CI values to allow more pollution from deficit holders contributes to this injustice.

The Pathway Applicant believes this pathway benefits communities and ecosystems in California through reduced lifecycle greenhouse gas emissions from vehicle fuels and through the capture and control of methane that would otherwise be emitted. The Carbon Intensity (CI) score is determined through a rigorous calculation under CARB's LCFS regulations and guidance. The LCFS ultimately seeks to achieve a 20% reduction in the CI of California's transportation fuels by 2030, with increasingly stringent target reductions. The Pathway Applicant follows all CARB guidance while performing these calculations and works with CARB and a third-party validator throughout the entire application process to ensure accuracy, including review of key inputs, assumptions, and supporting documentation. A negative CI score is achieved only where the pathway demonstrates, through CARB's approved methodology and verification, substantial lifecycle emission reductions relative to the applicable baseline.

As this application highlights, CARB's unlawful and unjust administration of the LCFS program is causing environmental and public health harms in California and elsewhere—in this case Arizona—by incentivizing and

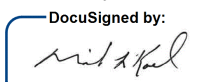
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rewarding some of the worst factory farm practices by making them more “lucrative.” If California is serious about being a climate leader, this is not the example to set.

This Application focuses exclusively on the addition of a biogas upgrading facility to collect and purify methane for beneficial use. As stated previously, the addition of this facility is not intended to change the Farm’s milk-producing operations, herd management, or manure generation practices, and the Pathway Applicant is not seeking LCFS credit for any expansion or increased production at the Farm. The Pathway Applicant believes this pathway benefits communities and ecosystems in both California and, in this case, Arizona by capturing and controlling methane that would otherwise be emitted from manure management, supporting compliance with applicable environmental and public health requirements, and reducing lifecycle emissions from transportation fuels used in California. The LCFS incentive relevant to this project is to achieve verified, additional reductions in lifecycle GHG emissions (including avoided methane emissions) relative to an established baseline, subject to CARB’s monitoring, reporting, and third-party verification requirements to ensure reductions are real and not overstated or double-counted.

In summary, U.S. Venture, Inc. appreciates the opportunity to respond to the Commenters and to provide additional information for CARB’s consideration. Based on the information provided in the Application and this response, U.S. Venture, Inc. respectfully requests that CARB continue its review and, if CARB determines the pathway meets all applicable LCFS requirements, proceed with certification without denial or stay.

Sincerely,

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Michael L. Koel
President – U.S. Energy
U.S. Venture, Inc.