



March 27, 2025

10 Tara Blvd., Suite 501
Nashua, NH 03062

Dear Chair Randolph:

NLC Energy LLC ("Pathway Applicant") is responding per Low Carbon Fuel Standard ("LCFS") program §95488.7(d)(5)(A) to the Leadership Counsel for Justice & Accountability, Central Valley Defenders of Clean Water & Air ("Defensores"), Food & Water Watch, and Animal Legal Defense Fund (collectively, "Commenters"), in Commenters letter submitted March 21, 2025 ("Comments") regarding the Pathway Applicant's Tier 2 Pathway Application (B0722) (the "B0722 Pathway Application").

Per §95488.7(d)(5)(A), commentors may provide, and CARB should accept "only [C]omments related to potential factual or methodological errors . . . requir[ing] responses from the fuel pathway applicant." The Comments are not related to factual or methodological errors and incorrectly claim adverse environmental damage results from the B0722 Pathway Application dairy manure project ("Project"). To the contrary, the Project results in long-term air quality improvements and greenhouse gas ("GHG") emission reduction.

While the Comments are false, inconsistent, and unactionable per CARB regulation, Pathway Applicant nonetheless addresses and dispels the Comments, below.

1) To Comment assertions that B0722 Pathway Application:

- a. **" . . . incorporates 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 . . ."**
- b. **" . . . overcounts environmental benefits . . . [because] "lagoons" [are] not an unavoidable and natural consequence of animal agriculture operations."**

Pathway Applicant Response:

Pathway Applicant demonstrates the B0722 Pathway Application to be complete, accurate and consistent to all LCFS requirements as published, without revisions.

Certification of the B0722 Pathway Application will not violate the LCFS regulation or corrupt the integrity of the LCFS program. Rather, the Project achieves the beneficial outcomes for which the LCFS program was designed. The Project life cycle analysis is prepared and presented directly to the 2014 California Livestock Projects Compliance Offset Protocol ("LCOP").

The Project establishes a "baseline" that considers the dairy operation and quantifies the additive emissions from the capture and purification of methane for beneficial use. The baseline assumes that without the use of an anaerobic digester, the project would deposit dairy manure into lagoons as is common (and then existing) dairy farm practice. The Project quantifies the avoided methane from the diversion of dairy manure from lagoons, anaerobic digestion, biogas capture, biogas refinement into renewable natural gas ("RNG"), and use of this RNG as a transportation fuel.

As demonstrated in the B0722 Pathway Application process, the Project achieves methane emissions avoidance from the baseline and associated generation of LCFS credits. Absent the Project, methane would be emitted with or without the implementation of the LCFS program, as the primary business of the supplying dairies is the production of milk and milk products of which manure, and associated methane release is a byproduct. All source farms are otherwise permitted to store manure in lagoons in full compliance with all applicable state and local waste management requirements.

LCFS program incentives to dairy farms and RNG producers are exclusively to reduce methane, one of the most potent GHGs, emissions that dairy operations otherwise result in. Credits generated (and monetized) under the LCFS program enable dairy farmers and RNG producers to cover costs associated with technologies, facilities and processes to capture and provide for beneficial use, the otherwise inevitable methane emissions from preexisting dairy operations. The Project captures and refines dairy waste methane into RNG, which would otherwise be emitted.

- 2) To Comment assertions that “CARB has failed to ensure that the additionality requirements of Health and Safety Code section 38562 are met. . . [B0722] participates in the federal Renewable Fuel Standard [and incorrectly concludes that]... methane emissions reductions would have occurred without the LCFS and are not additional. Moreover, without an additionality analysis, it is unclear whether these digesters would have been built regardless of the LCFS incentives.”**

Pathway Applicant Response:

The B0722 Pathway Application is consistent with, and demonstrates compliance to, all applicable sections of the LCFS regulation and Health and Safety Code. California Code HSC § 38562 (b)(3) provides that the 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.” Consistently, the LCFS program incentivizes reductions (and does *not* punish preexisting emissions mitigation efforts).

Commenters falsely assert that emission reductions associated with the Project “will continue with or without being subsidized by the LCFS program.” The Project, participating in the LCFS incentive programs, is the only practical means for smaller dairy operators (family owned, some having less than 1000 head herd counts) to avoid GHG emissions and provide a beneficial purpose for waste. Collecting manure, operating a digester system, operating a gas clean up skid, maintaining pipelines are prohibitively expensive with large ongoing operations expenses, capital expenditures and financing costs. Absent the LCFS participating Project, the individual farms in the B0722 Pathway Application would immediately revert to baseline operating and emissions profiles.

- 3) To Comment assertions that B0722 Pathway Application “. . . is rewarding the biggest factory farm polluters and incentivizing further expansion and herd consolidation. . . The source factory farms are not sustainable family farms . . .”**

Pathway Applicant Response:

All B0722 Pathway Application source farms are multi-generational family-owned dairy operations, whose expertise, personal effort, dedicated staff, animal care and management practices enable them to survive difficult economic conditions.

As Commenter alludes to, all B0722 Pathway Application source farms are regulated by, and exert efforts to meet local regulatory and legal requirements. The Project provides not only GHG related benefits but further mitigates potential runoff and water contamination harms. Manure returned from the Project to the source farms has a much lower contamination potential as volatile organics are consumed in the Project process before returning digestate.

The primary business of all source farms is the production of milk and milk products, not methane emissions avoidance or RNG production. Source farms manage herds and herd sizes to dairy product market demand and regulatory allowances. Dairy manure, and the associated methane associated with its decomposition, is a byproduct of milk production. The Project provides systems to divert otherwise released methane to the California vehicle fuel market. The Project has not taken any action to increase the amount of source farms methane releases. The source farm dairy operations exist wholly separate from the Project fuel production process. Furthermore, the LCFS program awards credits on the continued emissions reduction compared to a baseline, reviewed annually through independent verification to ensure that no false benefit is conferred to Pathway Applicant.

- 4) To Comment assertions that B0722 Pathway Application “. . . it is impossible for Commenters or other stakeholders to meaningfully evaluate this application. . .”**

Pathway Applicant Response:

CARB staff and independent verifiers have validated the unredacted B0722 Pathway Application. Notably, Pathway Applicant relied on factors and conservative default values as provided by LCFS regulation, CARB staff, and the LCOP. The Lifecycle Analysis is provided in its entirety, unredacted.

- 5) **To Comment assertions that B0722 Pathway Application “CARB’s unlawful and unjust administration of the LCFS program is causing environmental and public health harms in California and elsewhere. . . applicant intends to put between 1,110 and 1,300 truckloads of manure on the roads every month, increasing local traffic and air pollution”**

Pathway Applicant Response:

The Project benefits communities and ecosystems in California, Wisconsin, and beyond through reduced emissions from dairy operations and vehicle operation. Notably, B0722 Pathway Application RNG fuel use displaces diesel truck fueling in California. Further, the Carbon Intensity (CI) score, the bedrock of the LCFS, is a rigorous calculation. The B0722 Pathway Application follows all CARB algorithms to establish the CI score, as reviewed by CARB and validated by an independent third-party validator.

The Project and CI score as demonstrated in the B0722 Pathway Application is a real, substantial, and sustainable contributor to California’s GHG reduction goals. The exclusive LCFS program incentive to these family-owned source farms is to reduce the GHG emissions from milk producing operations. The Project (and all efforts to extend LCFS participation and benefits to small source farms, which are too low throughput and insufficiently funded for on-site digestion, biogas capture, RNG refinement, and pipeline injection) inherently requires manure and digestate transport. Pathway Applicant is incentivized and aligned to minimize transportation as each mile costs money and introduces delay. Pathway Applicant does not suggest that the Project delivers pure benefit without cost, travel, or workload but does work to minimize such burden while extending the LCFS program benefits to all parties involved.

B0722 Pathway Application trucking is regulated by State (Wisconsin), Federal, and local regulations and limits. Pathway Applicant works closely with its own, and supply farm municipalities to ensure that truck traffic volume, operating hours, and practices not only meet the regulatory and legal requirements but also, minimize impact on local populations.

NLC Energy LLC appreciates Commenters interest in the B0722 Pathway Application and maintains that no changes to the pending B0722 Pathway Application under CARB review are required and there is no reason to deny or stay B0722 Pathway Application certification.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Major".

Michael Major

Vice President – NLC Energy LLC