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September 24, 2024

Liane M. Randolph, Chair  
California Air Resources Board  
Low Carbon Fuel Standard  
1001 I St #2828,  
Sacramento, CA 95814

**Re: Tier 2 Pathway Application No. B0603; Response to Leadership Counsel for Justice & Accountability, Central Valley Defenders of Clean Water & Air (Defensores), Animal Legal Defense Fund, and Food & Water Watch (collectively, "Commenters").**

Dear Chair Randolph:

Maas Energy Works, LLC on behalf of Greengasco, LLC ("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 (Defensores), Animal Legal Defense Fund, and Food & Water Watch (collectively, "Commenters"), in a letter submitted September 20, 2024, regarding the Tier 2 Pathway Application (B0603) (the "Application").

Regulation §95488.7(d)(5)(A) states, "Only comments pertaining to potential factual or methodological errors will require responses from the fuel pathway applicant." We have conducted a careful review of the public comments submitted regarding the Application and have determined that none pertain to factual or methodological errors.

However, the Pathway Applicant will address the remarks made by the commenter below. Furthermore, we are confident that, following a thorough review of our response by the California Air Resources Board (CARB), there will be no need to amend our pending application.

***“First, the application incorporates an unlawfully truncated system boundary that ignores feedstock production at the source factory farms—Hartley Farms in Dalhart, Texas, that confines a total of 35,400 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.”***

The project's Carbon Intensity (CI) score was calculated using the CA-GREET3.0 model, which complies with current LCFS regulations and includes all relevant emissions, such as those from digestate storage and disposal. Both the California Air Resources Board (CARB) and an independent third-party verifier have rigorously reviewed the model's methodology and inputs. A site visit further confirmed adherence to LCFS reporting requirements.

Additionally, following the 2014 California Livestock Offset Compliance Protocol, a comprehensive life cycle analysis was performed to evaluate emissions from the capture, processing, and transportation of methane as vehicle fuel. This analysis accounted for pre-existing emissions from standard manure management practices, which are not attributable to the project. By diverting manure from lagoons to anaerobic digesters, this initiative captures methane for conversion into renewable fuel, effectively reducing emissions and generating environmental credit under LCFS regulations, thereby promoting sustainable dairy practices.

***“Recent estimates have found that Hartley Farms, which was not constructed until 2016, produces the third-most methane of any factory farm in the state, at approximately 13,681 metric tons per year. It should not be rewarded for intentionally creating vast quantities of climate pollution.”***

Hartley Farms's primary focus remains on milk and dairy production, with methane from manure being a by-product. The LCFS program offers critical incentives for dairy producers to invest in technologies that effectively reduce greenhouse gas emissions, significantly mitigating the costs of implementing and maintaining methane capture systems. The financial support from the LCFS program has been vital in enabling Hartley Farm to adopt sustainable practices.

***“Second, CARB has failed to ensure that the additionality requirements of Health and Safety Code section 38562 or that the terms of Operating Condition 3 are met. It appears that CARB has no idea if these are emission reductions that “otherwise would occur”<sup>11</sup> or whether Hartley Farms, GREENGASCO, LLC, or other another entity is claiming these environmental attributes elsewhere for “any other purpose” such as utility/consumer promotional programs in Idaho, other state low carbon fuels programs, product marketing, et cetera. Thus, CARB is potentially allowing this applicant to generate illegitimate LCFS credits. CARB cannot certify this pathway without making this assessment.”***

Section 95488.8(i)(2) of the Low Carbon Fuel Standard (LCFS) regulations contains provisions to prevent the double claiming of credits, ensuring that the program effectively incentivizes greenhouse gas emissions reductions without allowing applicants to simultaneously create credits or market the same reductions in alternative programs.

Furthermore, the operational integrity of the project is regularly monitored to ensure compliance with all applicable regulations, thus safeguarding against any illegitimate credit generation. The pathway certification process includes thorough evaluations by CARB, ensuring that all emissions reductions are legitimate and contribute positively to California's environmental goals.

***“Third, this application is a good example of how CARB’s flawed approach is rewarding the biggest factory farms and incentivizing further expansion and herd consolidation, which does more climate harm than good. Hartley Farms is not a sustainable family farm—it is a large industrial operation that confines 35,400 cows. CARB should not allow this factory farm—or the applicant—to profit from the LCFS for intentionally operating an intensely polluting facility.”***

This comment addresses regulatory concerns related to CARB rather than the specifics of the fuel pathway application. Greengasco, LLC has submitted all necessary documentation to CARB and an approved third-party verifier in accordance with sections 95488.7 and 95488.8 of the LCFS Regulation.

A complete life-cycle analysis was performed for this pathway. The pre-existing manure management practices and the herd counts were accounted for to evaluate pre-existing emissions. Both CARB and an independent third-party verifier have conducted thorough reviews of the application – ensuring its accuracy. The commenters also suggest that the LCFS program promotes the expansion and consolidation of dairies, but they do not recognize that this has been a nationwide trend for decades.

As mentioned above, Hartley Farms primarily focuses on milk and dairy production, with methane being a byproduct. The LCFS program provides essential incentives, helping offset the costs of methane capture systems. This financial support has enabled Hartley Farms to adopt more sustainable practices and reduce greenhouse gas emissions.

By participating in the LCFS program, Hartley Farms not only contributes to substantial emissions reductions but also exemplifies how farm operations can effectively balance productivity with environmental responsibility. The farm’s participation in this program is in line with the program’s goal of promoting sustainability in the agricultural sector and achieving meaningful greenhouse gas reductions.

***“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.”***

In alignment with sections 95488.7 and 95488.8 of the LCFS Regulation, Greengasco, LLC has provided comprehensive information and supporting documentation required for the certification of the Tier 2 Fuel Pathway application. Both CARB and an independent third-party verifier have conducted thorough reviews of the complete and unredacted application, ensuring transparency and adherence to regulatory standards.

Furthermore, the lifecycle analysis was conducted following established methodologies, and all pertinent data has been made available on the CARB website to ensure the public can assess the Carbon Intensity (CI) calculation and related supporting materials. We are committed to transparency and are open to addressing any specific questions or concerns raised by commenters to enhance understanding of our application.

***“Finally, 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.”***

This comment appears to extend beyond the relevant scope of the fuel pathway application, primarily commenting on CARB rather than focusing on the applicant's actions. Additionally, the assertion regarding local environmental impacts on California residents is not applicable. It is important to note that the project is located outside California, and the facility operates in accordance with all relevant environmental regulations, ensuring no local environmental injustice because of this project. Methane capture technology not only reduces harmful emissions but also contributes positively to the surrounding community and environment where the facility is based by preventing methane

from escaping into the atmosphere.

Moreover, the implementation of the manure digester and upgrading facility has yielded significant benefits for the local community. By capturing and processing methane emissions, these operations contribute to lower overall greenhouse gas emissions, enhancing air quality and public health in the surrounding area. Furthermore, the project supports local economic development and promotes sustainable agricultural practices. By capturing methane emissions from dairy manure, this project plays a crucial role in reducing the overall carbon footprint of the transportation sector, contributing to statewide greenhouse gas reduction efforts.

Sincerely,

A handwritten signature in cursive script, appearing to read "Daryl Maas".

Daryl Maas

CEO

Maas Energy Works, LLC