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September 1, 2023

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. B0422; Response to 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.

Dear Chair Randolph:

Maas Energy Works, LLC on behalf of Merced Pipeline, LLC ("Pathway Applicant") is responding within the scope of the Low Carbon Fuel Standard ("LCFS") program §95488.7(d)(5)(A) to the commenters, 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 (collectively "Commenters"), in a letter submitted August 31, 2023, regarding the Tier 2 Pathway Application (B0422) (the "Application").

The pathway Applicant will address the Commenter's statements below. Furthermore, we believe that no revisions to our pending Application are needed following sufficient review and approval of our response by the California Air Resource Board ("CARB").

"First, the application incorporates an unlawfully truncated system boundary that ignores feedstock production at the five source factory farms in Merced, California—Five H Farms, Red Rock Dairy, Vista Verde Dairy, Rockshar Dairy, Michael De Hoog Dairy, and Double Diamond Dairy—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 Carbon Intensity (CI) score for the project was determined using the approved CA-GREET3.0 model, which accounts for all emissions within the designated system boundary based on existing LCFS regulations—including emissions from storage and disposal of digestate. Both CARB and a third-party verifier have confirmed the accuracy of all inputs, the project boundary, and the CA-GREET3.0 model utilized to establish the project's CI score.

Additionally, the third-party verifier conducted a site visit to ensure that all emissions were accounted for in compliance with LCFS regulations.

To determine the project's CI score, a life cycle analysis was conducted in keeping with the 2014 California Livestock Offset Compliance Protocol, which established a baseline that considered emissions from dairy operations and calculated emissions from the capture, purification, and transport of methane for use as vehicle fuel. The baseline indicated pre-existing emissions from manure operations, which is a widespread practice among dairy farms. These dairy methane emissions pre-date the project and as such are in no way generated by or for the project. The project successfully diverted dairy manure from lagoons to an anaerobic digester, where methane is captured, purified, and utilized as vehicle fuel. This process reduces methane emissions and generates credits according to the rules of the LCFS program.

“Second, CARB has failed to ensure that the additionality requirements of Health and Safety Code section 38562 are met. If CARB had done so, it would have concluded that the methane capture at issue is patently not additional. The applicant acknowledges that the digesters at Five H Dairy, Vander Woude Dairy, and Red Rock Dairy have existed since 2021, and the digestors at Vista Verde Dairy, Rockshar Dairy, Double Diamond Dairy, and Michael De Hoog Dairy have existed since 2022, without taking advantage of the LCFS. Six out of seven of these digesters (all but the digester at Michael De Hoog Dairy) were funded by the Dairy Digester Research and Development Program, and this project also participates in the federal RFS program. As we explained in both of our petitions, both CARB and the California Department of Food and Agriculture (CDFA) have already claimed the purported methane emission reductions from these digesters. In addition, the pipeline infrastructure upon which this project relies was funded by the California Public Utility Commission (CPUC). Thus, the CPUC and investor-owned utilities associated with the investments have also claimed the purported methane emission reductions. These purported methane emission reductions would have occurred without the LCFS and are not additional. Certification of these pathways with this proposed CI value would openly violate § 38562.”

The Low Carbon Fuel Standard (LCFS) program has been designed to incentivize greenhouse gas emission reduction efforts. The expenses for installing, operating, and maintaining the equipment for dairy manure methane capture and purification are significant. But for the financial incentives made available by the LCFS program, the project owners would not have built these digesters and captured these emissions. Contrary to the statement that the digesters have not taken advantage of the LCFS program, the digesters were built and operated for the express purpose of participating in LCFS and the project applied for an LCFS pathway as soon as it was eligible under the program rules. It has never operated without the intention of generating LCFS credits. The fact that the digesters have existed since 2021

and 2022 all the while pursuing its LCFS pathways simply reflects the highly scientific and rigorous process necessary to achieve LCFS certification.

*“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. These source factory farms are not sustainable family farms—they are large industrial operations that confine a total of **46,500** cows. CARB should not allow these factory farms—or the applicant—to profit from the LCFS.”*

The above comment is addressed to CARB and does not fall within the scope of the fuel pathway application. As per sections 95488.7 and 95488.8 of the LCFS Regulation, Merced Pipeline, LLC provided all the required information and supporting documentation necessary to certify the Tier 2 fuel pathway application to both CARB staff and an approved third-party verifier.

It’s worth noting Five H Dairy, Vander Woude Dairy, Red Rock Dairy, Vista Verde Dairy, Rockshar Dairy, Double Diamond Dairy, and Michael De Hoog Dairy Farm’s primary business is the production of milk and other milk products, with dairy manure and associated methane as by-products. The LCFS program provides incentives to reduce GHG emissions from milk-producing operations. The expenses associated with installing, operating, and maintaining the technical equipment necessary to capture and purify associated methane are significant and would not be undertaken but for the financial incentives to do so. The incentives offered by the LCFS program, help capture emissions from waste that would be cost-prohibitive without the program’s incentive. The incentives thus support protecting the environment.

All the dairies involved in the application are family-owned dairies that, without the incentives of the LCFS program, would not be able to implement the environmental preservation equipment installed and run on these farms and benefitting the surrounding the communities.

“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.”

Merced Pipeline, LLC provided all the required information and supporting documentation per sections 95488.7 and 95488.8 of the LCFS Regulation to certify the Tier 2 Fuel Pathway application to CARB and a third-party verifier. The third-party verifier is selected and approved before their involvement in the process. CARB and the third-party verifier reviewed and approved the unredacted and complete fuel pathway application. CARB and the third-party verifier have examined, reviewed, and approved the complete and

unredacted fuel pathway application as well as all the necessary supporting documentation.

“Fifth, the certification of these pathways would result in a discriminatory impact, in conflict with CARB’s obligations under California Government Code 11135 and Title VI of the Civil Rights Act, which impose an affirmative duty on CARB to ensure that its policies and practices do not have a discriminatory impact on the basis of race. Additionally, Merced County has a higher poverty rate than California as a whole, and its residents have lower incomes compared to others in the state. One of the source factory farms is located in Madera County, which also has a significantly higher Latino/a/e/ population than California (60.8% versus 40.3%). It too has a higher poverty rate than California as a whole, and its residents have lower incomes compared to others in the state.”

The communities that these factory farms occupy already face substantial and disproportionate pollution burden, including extreme and disproportionate impacts from ozone, PM 2.5, drinking water contamination, and groundwater contamination,¹⁶ all of which are caused and exacerbated by dairy operations. According to a study by UC Davis, Madera County already has the highest asthma-related emergency room visit rates for children in the state, with Merced County following close behind. In addition, 11.3% of children in Madera County have been diagnosed with asthma. In Merced County, a staggering 32.5% of children—nearly one in three—have been diagnosed with asthma.

The communities that these factory farms occupy also suffer from critical groundwater overdraft and water pollution. All seven of the source factory farms are located in the Merced Subbasin or the Chowchilla Subbasin, both of which are critically overdrafted under the Sustainable Groundwater Management Act (SGMA). These subbasins face some of the most drastic groundwater over-pumping and most rapidly declining groundwater levels in California. By granting the application, CARB would further incentivize expansion and herd consolidation—as well as the production of cow manure—in an area that cannot support continued unreasonable groundwater use and abuse by the dairy industry. As explained in the Petition for Reconsideration, wells are already going dry and other adverse effects of overdraft, including further impaired water quality, are already affecting residents and communities in these areas. This is on top of the dairy industry’s dangerous nitrate loading and other water pollution, which has greatly harmed community health. Granting this application would undermine SGMA and encourage the dairy industry to continue its unreasonable use of water. The certification of these pathways would do nothing to address this disproportionate impact. Rather, it would incentivize the most polluting herd and manure management practices and incentivize the expansion of herd populations. It would also incentivize

applicants to combust the factory farm gas onsite, further degrading air local air quality. Further, it would violate section 38562 by failing to ensure that such certification would not disproportionately impact low-income communities (§ 38562(b)(2)) and by failing to ensure that it would not interfere with efforts to achieve and maintain federal and state ambient air quality standards (§ 38562(b)(4)).”

Merced Pipeline, LLC received all relevant permits for the digester and upgrading facility that were implemented by the San Joaquin Valley Air Pollution Control District (SJVAPCD). These documents were verified by both CARB and the third-party verifier. Since the startup of operations, none of the dairies or the upgrading facility have received any citations for non-compliance with any regulations or permit requirements as set out by the SJVAPCD, The LCFS program also gives CARB tools to invalidate credits in the rare case permit conditions are violated. The project reduces pre-existing air emissions in compliance with all applicable laws. The project also makes substantial economic contributions in purchases, wages, and other investments in this high-poverty community.

The Sustainable Groundwater Management Act provides new regulatory tools to the California Department of Water Resources that enable the state to require farmers to plan for and implement water for requiring farmers to control water usage. SGMA and its new Groundwater Sustainability Plans, Groundwater Sustainability Agencies, and the applicable regs will control the amount of water that participating dairy farms can use. To the extent a subbasin is critically overdrafted, SGMA requires increasing strict curtailment of groundwater use and grants the state escalating levels of intervention on farm water use. LCFS pathway approvals do not grant dairy farmers more water or allow them to avoid any SGMA or other regulations regarding groundwater sustainability. Likewise nitrate loading is closely regulated by local Regional Water Quality Control Boards with various requirements upon dairies for inspections, Waste Management Plans, Nutrient Management plans, and other compliance requirements that are in no way reduced or impacted by approval of an LCFS pathway.

“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.”

The above comment is addressed to CARB and not to the fuel pathway applicant and thus falls outside of the scope of the fuel pathway application. The dairy digesters on each farm, as well as the upgrading facility, comply with all environmental permitting and do not add to

any environmental injustice to surrounding communities or California citizens. Instead, the applicant believes the installation of manure digesters and upgrading facility have had a positive impact on the surrounding communities and ecosystems including the reduction in dairy farm emissions and the resulting economic benefits of the digester operations.

Sincerely,

A handwritten signature in cursive script, appearing to read "Daryl Maas". The signature is written in black ink and is positioned below the word "Sincerely,".

Daryl Maas CEO
Maas Energy Works, LLC