

September 25, 2020

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

Attention: Mr. Anil Prabhu

Re: Tier 2 Pathway Application: Application No. B0072; Response to Stand Up to Factory Farms

Dear Mr. Prabhu,

logen D3 Biofuels Partners II LLC ("logen") writes on behalf of WOF PNW ThreeMile Project ("The Project") to provide responses to the comments received in a letter dated September 24, 2020 from Stand Up to Factory Farms (the "Commenter") regarding the Tier 2 Pathway Application (No. B0072) for Compressed Natural Gas ("CNG") from Dairy Manure.

logen is responding within the scope of the Low Carbon Fuel Standard ("LCFS") program as per § 95488.7(d)(5)(A). The Commenter letter contains three main sections. This response is also divided into these three sections with bolded headings listing each concern, followed by logen'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, logen believes that no revisions to its pending application are needed.

## **Concentrated Animal Feeding Operations (CAFOs)**

- 1. CAFO emissions are claimed to spur climate change, degrade air quality, and harm human health.
- 2. CAFOs are claimed to degrade water quantity and quality, which harms human health.
- 3. CAFOs are claimed to disproportionately harm communities of color and low-income communities.
- 4. CAFOs are claimed to harm animals, including those who are members of endangered and threatened species.

The assertion that The Project will degrade the local community by increasing air pollution and harming human health is incorrect. All of the Commenter's statements regarding CAFOs are not applicable to this Project, because a CAFO is already permitted and operating on this site. The Project is merely the addition of a facility to collect and purify methane and inject into the pipeline. It does not impact the operation of the dairy of the CAFO.

The Commenter describes emissions from the lagoons which can impact air quality. In fact, The Project will divert manure from the lagoons to the digesters and capture the resulting methane, a greenhouse gas with a global warming potential 25 times worse than carbon dioxide. The Project cleans up the captured methane so that it can be used as a replacement for fossil fuels in California vehicles, thereby reducing the rate of climate change. Furthermore, by significantly reducing the amount of manure which enters the lagoon and diverting it for use as vehicle fuel, the Project will reduce the overall emissions from the lagoons and thereby avoid the deleterious effects the Commenter describes.

Once digestion is complete, the digestate is separated and the liquids are applied to crop land to recycle nutrients, which reduces the demand for chemical fertilizers that are more likely to create adverse environmental impacts. Additionally, when applied to fields, post-digester nitrogen is easier for plants to absorb, thereby reducing field run-off and improving local water quality.

The Commenter identified animal welfare and endangered species concerns which are shared by the farm. Threemile Canyon Farm puts animal's health and well-being first, and their team includes veterinary professionals who monitor and ensure the health and comfort of the herd. The farm's animal welfare program is third party verified annually and Threemile Canyon's dairy was the first to receive a 100% score in the nation and consistently receives 95% or greater on all livestock operations. To help protect endangered species, the farm partnered with The Nature Conservancy and state and federal wildlife officials in 2000, to create a voluntary wildlife conservation area. The Conservation agreement secures 25 years of wildlife conservation area benefits on 23,000 acres, or nearly 25% of the site. This agreement has kept four threatened species off the federal endangered species list, and the conservation area benefits a wide range of local wildlife.

The Project has a valid Title V Operating permit and CAFO permit and operates in compliance with local regulations. The Threemile team, led by a fifth-generation Oregonian, carries on its Oregon heritage culminating in 300 plus team members and their families who proudly live and work beside their fellow rural Oregon residents. The Project's application to collect dairy cow manure, digest it, and purify the collected methane for use as vehicle fuel in California creates no new water quality issues or new issues for the local community. Instead, the Project provides great benefit to the local area in addressing air quality and GHG emission issues and helping to achieve not only climate and environmental but also equity goals.

## **Threemile Canyon Farms**

As the Commenter notes, Threemile Canyon farms has a valid Title V permit and a valid CAFO permit, both of which were submitted as a part of this application. As outlined in the previous section, the addition of a facility to collect and purify methane for use as vehicle fuel in California does not impact the local air and water quality at the site. Thus, any implications that this application adversely impacts local air or water quality are incorrect.

The Commenter's assertions that the digesters at Threemile Canyon Farms are ineffective, inefficient and dirty energy sources are false. The Commenter references the fugitive methane emissions in the process. These do indeed exist and are taken into account in the GHG calculation. The Livestock Protocol assumes a 2% default value, and where fugitive emissions exceed 2%, the higher value is adopted, as was described in the LCA Report. The Commenters also describe emissions from the burning of methane; however, this is not a normal practice. Under regular operations all methane produced from the digesters is collected, purified, and injected into the pipeline. There is no regular burning of methane, and thus the additional emissions the Commenters describe do not exist.

The claim that the digesters require half the energy they produce to operate is not correct. At TMF there is no trucking of manure, and water used to flush the manure is recycled onsite to minimize usage. Energy used to heat the digesters is collected from waste energy onsite which would have otherwise gone unused, minimizing net energy usage at the site.

## Granting the Application Which is Fatally Flawed Because it is Factually Incomplete and Methodologically Unsound Would Undermine the Purpose of the LCFS Program

1. Important factual information is omitted, redacted, or labeled "confidential" in the application, rendering meaningful stakeholder review of its claims impossible

The Commenters indicate that the number of cows and amount of manure was not included in the application, however the cow population whose manure is collected and sent to the digesters was included in the California Air Resources Board (CARB) Summary document. The amount of manure generated is not measured but estimated from the size of the cow population.

The Commenter claim that the applicant withheld information describing the modifications made to the Tier 1 Calculator is incorrect. All modifications made were clearly described in section IV of the LCA Report, and also in the CA-GREET Model in Support file.

With respect to the comments about data used for the calculation of GHG emissions and the Carbon Intensity ("CI") score, logen provided all information required by the LCFS regulation in its full, un-redacted pathway application to CARB. Any redacted information in the publicly posted application package contains competitive trade secret information and is considered Confidential Business Information which is protected from public disclosure under California Government Code

6254.7. Further, the redactions included were minor compared to earlier Tier 2 submissions and comply with CARB guidelines regarding permissible redactions.

logen's application underwent two phases of review with CARB staff and was also scrutinized during the validation process. In validation, logen engaged an independent accredited third-party who thoroughly reviewed the application, including a site visit and review of all site-specific inputs used to determine the CI score. They issued a positive statement, confirming the application is reasonably assured to be free from material misstatement and in conformance with the LCFS regulations. The verification body conducted a conflict of interest review which was reviewed by CARB to ensure impartiality.

Finally, as per the LCFS regulations, the credits generated using to this application will undergo a verification process which is in place starting January 1, 2020 and includes review by a CARB accredited third party auditor. Thus, the assertion by the Commenter that independent analysis is impossible is incorrect.

2. The application fails to employ a methodologically sound life cycle analysis that accounts for the GHG emissions that result from the applicant's production of biomethane

The Project's GHG calculations do not ignore GHG emissions from dairy operations. The LCFS incorporates the Livestock Protocol and establishes a baseline that considers all applicable dairy operations. The basis of the Project's CI score is baseline GHG emissions. Without the digester, the dairy would emit methane from the lagoons into the atmosphere. The Project diverts manure to the digesters and captures the generated methane, thereby avoiding those emissions. The CI calculation clearly accounts for GHG capture and destruction. The Project's digester uses no feedstock other than the dairy manure that would otherwise have been sent to the lagoon. Also note that credits generated by the Project are based on the methane emissions that are avoided, and not what is produced.

3. Granting the application would incentivize the applicant to expand, which would increase air pollution, accelerate climate change, further degrade water quality and quantity, and harm community health.

As the Commenter describes, the main purpose of Threemile Farm is to produce widely consumed goods such as milk for cheese and whey protein production, potatoes, and organic vegetables and grains. Production of manure by the dairy cows, and the methane associated with its decomposition, is an inevitable consequence of that production. The Project has not taken any action which would cause more methane to be produced compared to the baseline scenario, as the herd size is managed based on demand for the dairy products, not for manure or methane production. The LCFS program requires that dairies improve emissions compared to baseline of emissions, and the program provides credits based on how much methane is avoided rather than on how much methane is produced – methane that would have been vented to atmosphere in the absence of the Project.

In summary, while thanking Commenter for its interest in the Project, logen contends that no changes to the pending application are needed. As demonstrated through the third-party validation and CARB review, as well as the application material and responses to public comments herein, all requirements of the LCFS Regulation for certifying this pathway have been met. logen respectfully requests that the Executive Officer certify this pathway.

Sincerely,

Patrick Foody

Executive Vice President, Advanced Biofuels