



September 29, 2020

Mary Nichols, Chairperson
California Air Resources Board
1001 I Street #2828
Sacramento, CA 95814

**Re: Comments in response to Animal Defense Legal Fund Tier 2
Pathway Application B0109**

Dear Chairperson Nichols:

Clean Energy is responding within the scope of the Low Carbon Fuel Standard ("LCFS") program §95488.7(d)(5)(A) to the commenter, Animal Defense Legal Fund, in a letter regarding the Tier 2 Pathway Application (B0109) submitted September 28, 2020.

Clean Energy will address the Commenter letter, identified by sections in **bold**, and respond to all potential factual or methodological errors raised by the Commenter. It is with all certainty that Clean Energy believes there are no further revisions be made to the existing pathway application under CARB review.

Concentrated Animal Feeding Operations (CAFO's)

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

These comments address potential effects of CAFO permits on the environment. However, this LCFS pathway application on focuses the addition of a biogas upgrading facility to collect and purify methane for beneficial use. The addition of this facility does not impact the operation of the dairy or its CAFO permits status.

The scope of this project is determined by guidance outlines in CARB's 2014 Livestock Projects Compliance Offset Protocol. The lifecycle analysis of this projects concerns the collection of manure to an anaerobic digester, the collection of methane from this dairy manure, and the upgrading and injection of Renewable Natural Gas for use as a vehicle fuel in California. The dairy farm operated under a CAFO permit prior to the installation of gas processing equipment and the registration of this fuel pathway.

That being said, the dairy farm partners in this fuel pathway is committed to the environmental and animal welfare concerns referenced by the Commenter. The dairy farm partners are extremely sensitive to the health and well being of animals, and they utilize a variety of veterinary professionals who monitor and ensure the health and comfort of their herds. Both the farm partners and the project have valid operating permits to destroy airborne pollutants in compliance with state and federal regulations. The farm partners are also operating in full compliance with its CAFO permit and all other state and local regulations. The project's application to collect dairy cow manure, digest it, and purify the collected methane creates no new water quality or pollution issues for the local community. Instead, the project provides local air quality benefits and GHG reductions to achieve environmental goals. Furthermore, anaerobic digestion of dairy manure has been shown to kill a large percentage of pathogens, thereby reducing and lowering the impact of pathogen in water sources and improving local water quality.

This project diverts manure from anaerobic lagoons and captures the resulting methane, a pollutant with 25 times more global warming potential than carbon dioxide. The project cleans up this captured methane for beneficial uses as a replacement for gasoline and diesel fuel in California. Constituency gasses referenced by the Commenter are treated in compliance with federal and state regulation. The H₂S is oxidized using our Thermal Oxidizer system and the sipped methane from our purification process is combusted in our flare and Thermal Oxidizer. In this way, the project is providing local and national environmental benefits that address many of the Commenter's concerns.

METHANE DIGESTERS ARE FALSE SOLUTIONS.

The Commentator asserts that methane digesters are as environmentally problematic as the fossil fuels being displaced. This is simply false. The Commenter claims methane digesters "do not abate the applicant's unregulated air emissions" and release other GHGs and fugitive emissions. The Commenter points out that fugitive methane escapes in the purification process. The Commenter is correct, and this fugitive methane is included in the life cycle analysis prepared for this LCFS pathway. Similarly, the life cycle analysis prepared accounts for all the energy used to operate the digester and gas

operating system. Lastly, the Commentator claims that digesters have the potential to leak and explode. The project and its farm partners operate the anaerobic digester in compliance with all federal, state, and local safety regulations and with health and safety of the employees and community as a foremost concern.

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

The fuel pathway holder has provided all information required by LCFS regulation to CARB as part of this fuel pathway application. Any redacted information reflects competitive trade secrets that is considered Confidential Business Information under California Government Code 6254.7. As a reminder, this pathway application and all of the supporting information has undergone verification from a third-party auditor and has been thoroughly reviewed by CARB staff prior to approval. In addition, the credits generated by this fuel pathway will go under an annual verification process conducted by an accredited third-party auditor.

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 has a life cycle analysis prepared according to the guidance laid out in the 2014 Livestock Projects Compliance Offset Protocol. The project establishes a baseline that considers applicable 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 the lagoon as is common practice among dairy farms. The project quantifies the avoided methane from the diversion of dairy manure from the lagoon and the purification and use of this methane as a vehicle fuel. As a result of this process, the project shows avoided methane emissions from the baseline, resulting in the generation of credits by diverting methane from these farms.

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

The primary business of these farms is the production of milk and milk byproducts. Dairy manure, and the associated methane, is a byproduct of this

process. The project has designed a system to divert this methane to the California vehicle fuel market. This results in both avoided dairy farm methane emissions and reduced emissions from vehicle fuels. The project has not taken any action to increase the amount of methane produced by the farms. The farm operations exist wholly separate from the fuel production process. Furthermore, the LCFS program awards credits based on the continued emission reduction compared to a baseline, and this is reviewed through an annual verification process to ensure projects are continually reducing GHG pollutants.

In summary, while Clean Energy is thankful for the opportunity to address Commenter for its interest in this project, we further contend that no changes to the pending application under CARB review are required.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tyler Henn', with a long horizontal line extending to the right.

Tyler Henn
VP, Renewable Fuels
Clean Energy Renewable Fuels