Sept 28, 2021

California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Tier 2 Pathway Application: Application No. B0198

To Whom It May Concern,

Leadership Counsel for Justice and Accountability, Public Justice, and the Animal Legal Defense Fund write in opposition to this application from California Bioenergy LLC for the following reasons: (1) there is a lack of available data (2) the lifecycle analysis is incomplete (3) the project will increase air pollution and threatens water quality in the locality and region, thus undermining the state's climate, environmental justice, and equity goals, (4) the project will contribute to methane leakage from transport of gas, (5) this project will incentivize the production of methane, and (6) the reductions from the five dairies in this application are not additional and CARB should disallow LCFS credits.

Lack of Available Information and Data Transparency

The applicants and/or the California Air Resources Control Board (CARB) withheld and redacted information regarding calculations related to Life Cycle Results for Carbon Intensity such that it is impossible to determine the air quality and water quality impacts and the carbon intensity value:

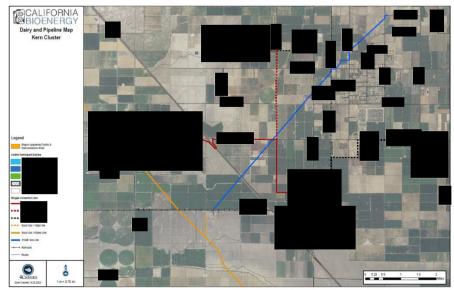


Exhibit 4. Aerial Map of Kern Cluster

1.1 Dairy Farm Details

ABEC #5 LLC dba Trilogy Dairy Biogas

Trilogy Dairy, which is part of the CalBioGas Kern LLC cluster, is located in Bakersfield, California. Trilogy Dairy became operational in 2005 and the digester became operational in June 2020. There are three freestalls on the farm, which house approximately **became** milking cows. Each of the freestalls have a flush system installed. Given that both the freestalls and the milking parlor both have flush systems installed and milking cows are housed in freestalls the entire year, all the manure dropped by the milking cows in the freestalls, including their bedding material, is collected in the flush system in a liquid form. Thus, **be** percent of the manure and associated volatile solids (VS) are collected in in the flush water.

There are **milking** cows located in the open lot corrals, which contain a shaded feed lane on a flush system. The milking parlor is also on a flush system. It is estimated that **m** percent of the VS goes to flush with the remaining **m** percent of the VS left on the open lot, where the VS is dried. Approximately **m** dry cows are housed in open lot corrals with a shaded feed lane on a flush system. It is estimated that **m** percent of the VS produced by the dry cows is flushed directly to the anaerobic lagoons without going through the solids separators.

Approximately heifers are housed in open lot corrals with an unshaded feed lane on a flush system and soakers at the feed lane which turn on when the ambient temperature reaches **Inter**. It is estimated that percent of the VS is flushed directly to the anaerobic lagoons without going through the solids separators. The remaining percent of the uncaptured VS is left on the dirt.

It is assumed that cows stay in the feed lane longer during hot weather when environmental modifications such as shades and/or soakers are present. Therefore, it is estimated that **solution** of the VS is collected in open lots which have shades and/or soakers and **solution** is collected when these modifications are not present. Milk cows housed in open lots are estimated to have an additional **solution** manure capture rate due to the additional time spent on flushed surfaces queuing in the milk barn. The manure capture assumptions are based on observations from farm managers and the VS collection estimates have been validated by an ARB accredited third-party LCFS verification body.

Flush water from the milking cows in the freestalls and the milking cows in the open lots is directed into a central reception pit. It is estimated that percent of the VS from the reception pit bypass the solids separator and goes straight to the anaerobic lagoon based on the flow of the VS to the reception pit and the operational time of the pump to the solids separator. Flush

Such data must be available in order to transparently access the potential harms and supposed benefits of this proposed pathway.

Application presents an incomplete lifecycle analysis

Application presents the calculation of the carbon intensity of the pathway based on the premise that the manure is generated without any additional GHG emissions. In truth, CAFO operations generate tremendous GHG emissions at every stage, from diesel-powered on-farm machinery, the transportation of feed onto the farm, and enteric emissions. These emissions do not disappear when they are left out of an application. They continue to undermine California's climate mandates and accelerate the climate crisis. This incomplete lifecycle analysis presents this pathway as carbon negative and therefore creates a windfall for the applicants in the form of LCFS credits. CARB must conduct a complete lifecycle analysis that accounts for all emissions.

Environmental Issues with these Dairy CAFOs are Unaddressed

With a combined herd size of almost 50,000 animals, each of the 5 dairies in the CalBioGas Kern LLC cluster are concentrated animal feeding operations, or CAFOs. CAFOs contribute to both local and regional environmental problems, including but not limited to: local air quality problems, discharge of nitrate to groundwater, and nutrient runoff that pollutes local streams and rivers. CARB must verify that each applicant is conforming with all mandated environmental requirements, and that the applicant is not polluting local air and water quality, prior to approving any application and must incorporate reporting procedures that ensure ongoing compliance with legal mandates.

Climate Impacts of Methane Leaks

The analysis fails to take into consideration the climate impacts of methane leaks, including the cataclysmic impacts of methane blowouts involving gas infrastructure that have taken place throughout the country.

Incentivized Production of Methane

This project and similar projects do not just undermine California's climate and environmental justice goals, but actually incentivize increased production of methane (and the concomitant pollution that accompanies methane production). For example, a CAFO in Merced County is planning to more than double its herd size after public investment in its digester project.¹ It is

¹ Leadership Counsel for Justice and Accountability, Food & Water Watch, and Central California Asthma Collaborative, Comments in Response to Administrative Law Judge's Ruling Directing Parties to File Comments on Phase 4A Staff Proposal and Related Questions 17–18 (June 30, 2021) (citing Cal. Dep't of Food and Agric., Report to the Joint Legislative Budget Committee: Dairy Digester Research and Development Program Report of Funded Program

foreseeable that, as a result of LCFS incentives, profits from manure could exceed those from milk. "At that point, milk has become the by-product of manure production."²

To the extent that the 5 clustered dairies make manure and waste management decisions to increase methane production – such as increasing herd size to increase, in whole or in part, manure production, opting out of solid separation to increase methane, sometimes taking in food wastes for digestion, and even opting for liquefied manure management instead of methods that prevent production of methane in the first place – they should not reap the benefits of the LFCS program which is intended to reduce greenhouse gases rather than incentivize production thereof.

Any Methane Reductions are not Additional and LCFS Credits Should not be Authorized

CARB may not authorize LCFS credits for this application because the methane reductions are not additional when the five dairies in this project have received funding to reduce methane emissions from the Dairy Digester Development and Research Program (DDRDP) and the Aliso Canyon Litigation Mitigation Settlement. AB 32, as amended by SB 32 and AB 197, requires market-based compliance mechanisms such as the LCFS program to ensure such reductions are additional. In other words, double-counting and credit stacking are prohibited. The methane reductions from this project must be "in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur." Health & Safety Code §§ 38562(d)(1).

The Trilogy, Maple, T&W, BV Dairy, and Western Sky dairies have received \$2,250,000, \$3,000,000, \$2,600,000, \$1,749,596, and \$2,820,762, respectively, in funding from the DDRDP for methane reductions.³ As a result of this grant award, the California Department of Food & Agriculture claims annual reductions of 25,458, 34,259, 29,498, 20,584, and 35,260 MMTCO₂e, respectively.⁴ The CARB's 2021 California Climate Investments report claims cumulative reductions from the entire DDRDP program of 19,379,000 MMTCO₂e.⁵

The Trilogy, Maple, T&W, BV Dairy, and Western Sky dairies have also received funding from the Aliso Canyon settlement. CARB reports that these five projects are part of that settlement

(2015-2020), https://www.cdfa.ca.gov/oefi/ddrdp/docs/DDRDP_Report_March2021.pdf; Merced County, Contract Board Agenda Item (July 13, 2021), https://web2.co.merced.ca.us/boardagenda/2021/20210713Board/271687/271692/271744/271832/ITEM%2032271832.pdf). ² Michael McCully, *Energy revenue could be a game changer for dairy farms*, Hoard's Dairyman (Sep. 23, 2021),

https://hoards.com/article-30925-energy-revenue-could-be-a-game-changer-for-dairy-farms.html.

³ See California Department of Food and Agriculture, Dairy Digester Research and Development Program Project-Level Data, Updated 9/17/2021, available at

https://www.cdfa.ca.gov/oefi/DDRDP/docs/DDRDP_Project_Level_Data.pdf. ⁴ /d.

⁵ 2021 California Climate Investments Annual Report at Table 2, available at http://ww2.arb.ca.gov/sites/default/files/cap-and-trade/auctionproceeds/2021_cci_annual_report.pdf.

agreement and attributes a total of 55,793 metric tons (10-year) of methane reductions from that agreement to the three projects.⁶

The CARB Staff Summary and other materials in this application do not reference or otherwise acknowledge the fact that California Bioenergy and/or these three dairies have claimed reductions as a result of the DDRDP and Aliso Canyon settlement. Because methane reductions here are required by law or otherwise occurring as a result of the DDRDP and Aliso Canyon settlement, any reductions claimed here are not additional and CARB should not approve this application.

Conclusion

In conclusion, this project should be denied because it will harm air quality, threaten water quality, and fails to consider the full lifecycle emissions of methane production. Approving this application will directly subsidize the ongoing pollution of low income communities and communities of color in Kern County and throughout the San Joaquin Valley. Furthermore, there is inadequate data to determine the extent to which the project will reduce greenhouse gas emissions and fails to take into consideration how the project will incentivize production and emission of greenhouse gases.

Unless and until there is publicly available and verifiable data demonstrating that this project will not produce negative local air and water impacts, and the extent to which this project will actually reduce greenhouse gas emissions that could not otherwise be reduced by other means, CARB must deny this application.

Sincerely,

Jamie Katz, Leadership Counsel for Justice and Accountability

Brent Newell, Public Justice

Christine Ball-Blakely, Animal Legal Defense Fund

⁶ See Aliso Canyon Mitigation Agreement, First Project - Dairy Projects, available at <u>https://www.arb.ca.gov/html/aliso-canyon/aliso-canyon-mitigation-project-dairy-sites.pdf</u>; see also Responses to Frequently Asked Question, Aliso Canyon Litigation Mitigation Settlement, available at <u>https://www.arb.ca.gov/html/aliso-canyon/aliso-canyon-faqs.pdf</u>.