

November 20, 2023

Submitted via ca.gov

Liane M. Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Tier 2 Pathway Application No. B0473

Dear Chair Randolph,

The 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”) write in opposition to Sunoma Renewable Biofuel, LLC’s Tier 2 pathway application. As Commenters have explained through numerous comments, the Petition for Rulemaking to Exclude All Fuels Derived from Biomethane from Dairy and Swine Manure from the Low Carbon Fuel Standard Program, and the Petition for Reconsideration (“the Petitions”),¹ the California Air Resources Board’s (“CARB”) treatment of factory farm gas under the Low Carbon Fuel Standard (“LCFS”) is flawed and staff’s assessment of this application is no different. CARB cannot certify this application.

Commenters oppose this application for several reasons. First, the application incorporates an unlawfully truncated system boundary that ignores feedstock production at the source factory farm—Paloma Dairy, which confines approximately 15,000 cows—and other emissions such as those from storage and disposal of digestate, resulting in an artificially low Carbon Intensity (CI) value and inflated credit generation. A fuel pathway life cycle analysis must take into account “feedstock production” and “waste generation, treatment and disposal.”² In addition to the evidence provided in the Petitions, more recent research indicates that emissions from factory farm gas production are significantly higher than currently appreciated, with especially high emissions from digestate storage.³ This recent study did not consider additional emissions from digestate handling and application, which is another potentially large source of emissions resulting from factory farm gas production that must be included in the pathway life cycle analysis.⁴ Yet, CARB and the pathway applicant ignore these and other emissions. In other words, this application dramatically undercounts the greenhouse gas emissions associated with this fuel by failing to apply the required “well-to-wheel” analysis.

¹ Available at <https://food.publicjustice.net/wp-content/uploads/sites/3/2021/10/Factory-Farm-Gas-Petition-FINAL.pdf>; <https://ww2.arb.ca.gov/sites/default/files/2022-04/2022-03-28%20-%20Petition%20for%20Reconsideration%20%28TOC%20Updated%29.pdf>, and incorporated herein.

² Cal. Code Regs. Tit. 17 §§ 95481(a)(66), 95488.7(a)(2)(B).

³ Semra Bakkaloglu et al., *Methane Emissions Along Biomethane and Biogas Supply Chains Are Underestimated*, 5 ONE EARTH 724–736 (June 17, 2022), <https://www.sciencedirect.com/science/article/pii/S2590332222002676>.

⁴ *Id.* at 728; Michael A. Holly et al., *Greenhouse Gas and Ammonia Emissions from Digested and Separated Dairy Manure During Storage and After Land Application*, 239 AGRIC. ECOSYSTEMS & ENV’T 410, 418 (Feb. 15, 2017), <https://doi.org/10.1016/j.agee.2017.02.007>.

At the same time, this application overcounts environmental benefits by ignoring that this is feedstock production resulting in a “significant revenue stream.”⁵ Liquefied manure rotting anaerobically in massive waste impoundments is not an unavoidable and natural consequence of dairy operations. This system and the methane emissions that it causes are the result of Paloma Dairy’s intentional management decisions designed to maximize profits and externalize pollution costs. CARB cannot ignore that the emissions the pathway applicant claims as captured from this factory farm are intentionally created in the first place.⁶ The manure handling practices at these facilities are integrated parts of producing factory farm gas. Thus, the gas generated is an intentionally produced product and cannot now be claimed as a “captured” waste product to secure a lucrative negative CI value.

Second, 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. Paloma Dairy is not a sustainable family farm; it is a mega-dairy with liquefied manure management systems that confine approximately 15,000 cows.⁷ CARB should not allow these factory farms—or the applicant—to profit from the LCFS.

Third, this application is so opaque that it is impossible for Commenters or other stakeholders to meaningfully evaluate it.⁸ The lifecycle analysis redacts information critical to understanding the CI calculation.

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.⁹

As this application highlights, CARB’s unlawful and unjust administration of the LCFS program is causing environmental and public health harms not just in California, but to communities and ecosystems across the United States—in this case Arizona—by incentivizing and rewarding some of the worst factory farm practices by turning them into a substantial

⁵ <https://americanbiogascouncil.org/opal-fuels-and-paloma-dairy-celebrate-opening-of-the-sunoma-renewable-biofuel-project/>.

⁶ See Emily Grubert, *At Scale, renewable natural gas systems could be climate intensive: the influence of methane feedstock and leakage rates*, 15 ENVTL. RES. LETTERS (Aug. 2020) (“This analysis shows that 1) RNG from intentionally produced methane, even from climate-neutral CO₂ sources, has substantial climate impacts at methane leakage levels observed in the existing, mature biogas industry; (2) for any meaningful system scale, RNG is likely to be derived from intentionally produced methane; and (3) even RNG from waste methane can have negative climate impacts relative to the most likely alternative of flaring, not venting, the methane when leakage from RNG production and use exceeds flaring loss rates.” (internal citations omitted)).

⁷ Application B0473 CARB Staff Summary at 1.

⁸ Publicly posted application materials “must provide sufficient information to allow for meaningful stakeholder review.” CAL. AIR RES. BD., LOW CARBON FUEL STANDARD (LCFS) GUIDANCE 20-051 (Apr. 2020), <https://perma.cc/856Y-CVVZ>.

⁹ See 2020 Mobile Source Strategy at 26–27, https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf.

revenue stream. If California is serious about being a climate leader, this is not the example to set.

Commenters request that CARB deny the application. To do otherwise will violate California law, further degrade the integrity of the LCFS market, undermine the state's climate change mitigation efforts, and harm communities in California and Arizona.

A handwritten signature in black ink, appearing to read "Tyler Lobdell", is centered on a light gray rectangular background. Below the signature is a thin horizontal line.

Tyler Lobdell
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