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April 12, 2022

Richard Corey  
Executive Officer  
California Air Resources Board

**Re: Public Comments on Workshop on Methane, Dairies and Livestock, And Renewable Natural Gas in California**

Dear Mr. Corey and members of the California Air Resources Board,

On behalf of the Center for Biological Diversity and our more than 1.7 million members and supporters, including those who live, work, and recreate in the San Joaquin Valley and are harmed by pollution from the state's factory farming industry, I submit the following comments in support of efforts by the Association of Irrigated Residents, Leadership Counsel for Justice & Accountability, and others to seek a rulemaking by the California Air Resources Board ("CARB") to amend the Low Carbon Fuel Standard ("LCFS") to exclude all fuels derived from biomethane from industrial dairy or swine manure ("factory farm gas") or, in the alternative, to revise the LCFS to account for the full life cycle of factory farm gas emissions—including all upstream and downstream emissions from activities and inputs at dairy and swine facilities—and exclude non-additional emission reductions that occur as a result of other methane reduction programs.

California law requires that the state's dairy and livestock operations reduce their emissions of the short-lived climate pollutant methane to 40 percent below 2013 levels by 2030, or within 8 years. Indeed, such reductions must happen *now*, as the United Nation's Intergovernmental Panel on Climate Change affirmed just last week, if we wish to maintain a livable planet.<sup>1</sup> This is especially true for short-lived greenhouse gases ("GHG") such as methane because "[d]eep GHG emissions reductions by 2030 and 2040, particularly reductions of methane emissions, lower peak warming, reduce the likelihood of overshooting warming limits and lead to less reliance on net negative CO2 emissions that reverse warming in the latter half of the century."<sup>2</sup>

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<sup>1</sup> United Nations, *UN Climate Report: It's 'Now or Never' to Limit Global Warming to 1.5 Degrees* (Apr. 4, 2022), <https://news.un.org/en/story/2022/04/1115452>.

<sup>2</sup> IPCC, *Climate Change 2022: Mitigation of Climate Change, Summary for Policy Makers*, at 30-31 (2022), <https://www.ipcc.ch/report/ar6/wg3/>

But these essential reductions cannot be achieved if factory farm gas continues to be included in, and incentivized by, the LCFS. The reason for this is simple: inclusion of biomethane from these operations in the LCFS *incentivizes* industrial dairy and swine operations to expand their herd sizes and further geographically consolidate animals into mega-industrial confinement operations in order to maximize biomethane capture through waste management systems, *but does so without also addressing* (1) the significant and increasing amounts of methane produced by the animals in the confinement buildings and feedlots via enteric fermentation that is not captured through digester technologies but instead continues to be emitted directly into the environment,<sup>3</sup> and (2) increases in nitrous oxide emissions associated with composting digestate solids.<sup>4</sup> Consequently, by incentivizing sector shifts towards even larger and more consolidated livestock operations, the current status quo around the LCFS encourages increased, not decreased, emissions of greenhouse gases from this industry; such results violate the objectives of California’s climate correction laws, including AB 32 and SB 1382, and must be corrected.

Even further, if CARB’s goal is to achieve measurable reductions in methane from this industry by 2030, then to do so it must account for the full suite of upstream and downstream GHG emissions connected with the generation and capture of methane by livestock operations and build its policy decisions (and reduction mechanisms) from that foundation. Instead, CARB presently excludes emissions upstream and downstream by generating an artificial system boundary that treats manure lagoons as the baseline. But lagoons, which are the result of the industry’s deliberate choice to manage manure anaerobically in giant, insecure, environmentally destructive cesspools rather than utilizing alternative manure management techniques that more reliably reduce livestock-associated methane production, should not be assumed or rewarded.

Indeed, according to the Union of Concerned Scientists (“UCS”):

[T]he extremely large negative carbon intensity (“CI”) values for manure biomethane are the result of several assumptions and judgements made by CARB in the life-cycle analysis that bear reconsideration. In particular, CARB should revisit the assumption that the methane from manure lagoons is purely a waste product with no value that would be emitted into the atmosphere absent the LCFS support for use as a transportation fuel. In light of the large subsidies derived from the LCFS, nearly as large as the value of the milk produced at a large dairy, it is naïve to assume the policy will have no impact on the economics of the dairy industry going forward. There are any number of alternative life-cycle treatments that may be appropriate in the development of the CI score, for example treating biomethane as a coproduct rather than a waste. . . . For example, it may be

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<sup>3</sup> See CARB, Response to Animal Legal Defense Fund Public Comments, [https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/new\\_temp\\_carb\\_response.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/new_temp_carb_response.pdf) (CARB arguing that “Emissions from existing CAFO operations are accounted for, but do not include emissions associated with enteric methane and animal feed use because these emissions should more appropriately be allocated to and associated with the reexisting underlying, non-fuel product stream, and are thus excluded from the system boundary in the Board approved Tier 1 Calculator.”).

<sup>4</sup> Association of Irrigated Residents, et al., Petition for Rulemaking to Exclude all Fuel Derived from Biomethane from Dairy and Swine Manure from the Low Carbon Fuel Standard Program, at 14-15 (2021), <https://food.publicjustice.net/wp-content/uploads/sites/3/2021/10/Factory-Farm-Gas-Petition-FINAL.pdf>

appropriate to set a floor of zero on the CI scores for fuels absent compelling documentation of permanent carbon sequestration. . . . The lifecycle basis of the LCFS is supposed to ensure that support for low carbon fuels is based on a comprehensive assessment of their climate benefits.<sup>5</sup>

As UCS goes on to summarize, and as the Center agrees, “aside from methodological concerns, we question whether the current LCFS approach to manure methane is good policy. The LCFS is structured to require producers of polluting transportation fuels to bear the costs of mitigating transportation fuel pollution. However, in the case of the manure biomethane, the majority of the climate pollution at stake is methane from manure, and the fossil methane displacement in the transportation fuel market is a relatively small contribution. Thus, in this instance the largest polluter is the one receiving a large subsidy.”<sup>6</sup> In short, CARB has a legal duty to address these issues and reform the LCFS to ensure that it supports and furthers the goals and purpose of California’s critical climate correction laws rather than undermining them.

Finally, looking beyond purely GHG-based considerations, CARB’s approach to incentivizing factory farm gas through the LCFS is also concerning in that it ignores the additional harms to the environment, public health, and wildlife that accompany the factory farming industry, manure digester systems, and associated pipeline infrastructure and processing facilities, concerns that are discussed at length in the Petition for Rulemaking to Exclude all Fuel Derived from Biomethane from Dairy and Swine Manure from the Low Carbon Fuel Standard Program filed late last year by Association of Irrigated Residents, et al. and the Petition for Reconsideration on the denial of that petition—both of which are incorporated herein by reference.<sup>7</sup> This is especially true with regards to the amplified air and water pollution disparities experienced by frontline communities as a result of these policy decisions. Taking action to amend the LCFS to exclude all fuels derived from factory farm gas will refocus CARB on its goals of achieving GHG reductions from this industry, while also supporting environmental justice and environmental integrity objectives.

If, however, CARB opts not to amend the LCFS to exclude all fuels derived from biomethane from industrial dairy or swine manure, then the Center believes that at a minimum CARB should revise the LCFS to account for the full life cycle of factory farm gas emissions—including all upstream and downstream emissions from activities and inputs at dairy and swine facilities—and exclude non-additional emission reductions that occur as a result of other methane reduction programs. Such an alternative, more limited, approach will at least give the Board the ability to reliably measure associated GHG emissions.

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<sup>5</sup> Letter from Jeremy Martin, Union of Concerned Scientists, to Cheryl Laskowski, CARB, at 1-2 (Jan. 6, 2022), <https://www.arb.ca.gov/lists/com-attach/24-lcfs-wkshp-dec21-ws-AHVSNI1MhVlpXNQRI.pdf>.

<sup>6</sup> *Id.*

<sup>7</sup> Association of Irrigated Residents, et al., Petition for Rulemaking to Exclude all Fuel Derived from Biomethane from Dairy and Swine Manure from the Low Carbon Fuel Standard Program, at 7-11, 31-34 (2021), <https://food.publicjustice.net/wp-content/uploads/sites/3/2021/10/Factory-Farm-Gas-Petition-FINAL.pdf>; Association of Irrigated Residents, et al., Petition for Reconsideration of the Denial of the Petition for Rulemaking to Exclude all Fuel Derived from Biomethane from Dairy and Swine Manure from the Low Carbon Fuel Standard Program, at 10-32, 34-35 (2022).

Thank you for your consideration of these public comments.

Sincerely,

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