

June 22, 2022

Laine M. Randolph, Chair  
California Air Resources Board  
1001 "T" Street  
Sacramento, CA 95814

*Via Electronic Mail*

**RE: Comments on the 2022 Draft Scoping Plan**

Dear Chair Randolph and Board Members of the California Air Resources Board:

We the undersigned organizations submit these comments on the *Draft 2022 Scoping Plan Update*. Specifically, we provide comments on CARB's proposed strategy to reduce livestock methane emissions. We are alarmed and gravely concerned that the strategies proposed in the draft will lock in false solutions to the climate crisis. If adopted, these strategies will result in methane emissions in excess of the 2030 targets and disproportionate impacts on low income communities and communities of color in the San Joaquin Valley.

Livestock Methane Emissions

CARB's proposed strategies to reduce livestock methane will not put California on course to effectively address methane derived from livestock operations, instead they will undermine California's efforts to achieve the 40% methane emission reduction target set forth in SB 1383.<sup>1</sup> The Draft Scoping Plan fails to lay out an effective or equitable plan to address livestock emissions. In short, the strategies rely on commodification of methane-producing manure which actually incentivizes production of manure and its environmental impacts, unproven technologies to address enteric emissions, an anticipated continuation of a reduction in cow population which subsidies designed to create a market for manure may reverse, and programs and policies that perpetuate and increase pollution in already overburdened communities.

The Draft Scoping Plan fails to lay out an effective or equitable plan to address livestock emissions by relying on development of pollution-inducing dairy digesters and dairy biomethane (more accurately, factory farm gas) to address emissions from manure, unproven food additives to address methane from enteric emissions, and an anticipated decline in the state's aggregate herd size while CARB's own policies incentivize increased herd sizes through lucrative subsidies.<sup>2,3</sup>

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<sup>1</sup> Short-lived climate pollutants: methane emissions: dairy and livestock: organic waste: landfills. S.B. 1383 (2015-2016) Chapter 395 (Cal. Stats. 2016); Cal. Health and Safety Code Section 39730.5

<sup>2</sup> See Draft Scoping Plan at 186-88; Appendix H at 21-28

<sup>3</sup> What's Worth More: A Cow's Milk or its Poop? <https://asmith.ucdavis.edu/news/cow-power-rising>; UNION OF CONCERNED SCIENTISTS, QUANTIFICATION OF DAIRY FARM SUBSIDIES UNDER CALIFORNIA'S LOW CARBON FUEL STANDARD (Sep. 2021)

CARB staff's proposal to build 380 new dairy digesters<sup>4</sup> to reduce GHG emissions is not an effective, efficient, nor equitable means of achieving methane reductions from the livestock industry. Rather than reducing methane emissions *at the source*, dairy digesters function only to capture and commodify methane intentionally generated from manure by liquifying and storing it in anaerobic conditions and, perversely, incentivize the *creation of methane*. Not only do they favor production of manure and the practices that generate methane from that manure, but they do nothing to address methane from enteric emissions. Stacking on top of subsidies for the development of Dairy Digesters, CARB's Low Carbon Fuel Standard (LCFS) allows owners of dairy digesters and dairies to sell dairy-derived biomethane and low carbon credits, with the amount of credits inflated by inappropriately negative carbon intensity values, thus powerfully incentivizing herd expansions, herd consolidations, and enteric methane emissions. Research shows that revenue from LCFS credit sales can even rival revenues from milk, ranging from one-third to half of total dairy revenues.<sup>5</sup> Trade representatives have confirmed that California's subsidies and policies have created a lucrative market for manure.<sup>6</sup> Dairy digesters capitalize on, and thus encourage, the creation and accumulation of massive amounts of manure. Residents in the San Joaquin Valley are seeing dairy herd sizes increase as much as two-fold, and at least one large facility has expanded with a herd into the *tens of thousands*.<sup>7</sup> Several of these expansions are already tied to the expansion of the factory farm gas industry.<sup>8</sup>

These massive herds are causing myriad harms to local communities and the environment. In particular, water and air pollution. In a dairy-industry sponsored study, every dairy (42 facilities) assessed by the groundwater monitoring program were found to have caused nitrate contamination. Incentivizing more manure in an already polluting industry will only lead to more groundwater pollution.<sup>9</sup> Much of the nitrogen loading from dairy waste, if not the majority, comes from the land application of manure, and digestion of manure for methane production does nothing to address this issue. Nitrates in drinking water can cause serious illness and death in infants ("blue baby syndrome") and are linked to pregnancy complications and birth defects, Sudden Infant Death Syndrome, and respiratory tract infections and a number of different cancers in adults and children.<sup>10</sup> The San Joaquin Valley, where most of these dairies are located, is infamously known as the most PM2.5-polluted and the second most ozone-polluted air basin in the country, with air pollution from feed, manure, and cow burps as leading sources of the volatile organic compounds and ammonia that form all that air pollution.<sup>11</sup> Factory farm

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<sup>4</sup> Appendix H at 21-28

<sup>5</sup> What's Worth More: A Cow's Milk or its Poop? <https://asmith.ucdavis.edu/news/cow-power-rising>; UNION OF CONCERNED SCIENTISTS, QUANTIFICATION OF DAIRY FARM SUBSIDIES UNDER CALIFORNIA'S LOW CARBON FUEL STANDARD (Sep. 2021).

<sup>6</sup> McCully, Michael. Energy Revenue Could Be a Game Changer for Dairy Farms. *Hoard's Dairyman*. September 23, 2021

<sup>7</sup> E.g. Bar 20 Dairy in Fresno, Hillcrest Dairy in Merced, Borba Family Farms in Merced, Melo Dairy in Merced

<sup>8</sup> Given how opaque data on dairy herd sizes is, we assume there are several expansions that are not or have not been documented.

<sup>9</sup> Summary Representative Monitoring Report (Revised), Central Valley Dairy Representative Monitoring Program, April 1, 2019. Pages 6-10

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/confined\\_animal\\_facilities/groundwater\\_monitoring/srmr\\_20190419.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/confined_animal_facilities/groundwater_monitoring/srmr_20190419.pdf).

<sup>10</sup> WIS. DEP'T OF HEALTH SERV., *Infant Methemoglobinemia (Blue Baby Syndrome)*, <https://www.dhs.wisconsin.gov/water/blue-baby-syndrome.htm> (last updated Mar. 12, 2021).

<sup>11</sup> Rory Carroll, Life in San Joaquin valley, the place with the worst air pollution in America, *The Guardian* (May

gas will actually increase ammonia emissions.<sup>12</sup> These impacts of dairy methane and digesters are not fully accounted for in CARB’s health analysis or environmental analysis for the draft Scoping Plan.

CARB’s focus in this Scoping Plan must instead be on setting regulatory caps on the amount of methane that farms and the industry as a whole are allowed to emit.<sup>13</sup> Although CARB is legally mandated to prioritize direct emissions reductions under AB 197, direct regulation and reduction of emissions—as is standard for other highly emitting sectors—is currently absent for the livestock methane sector in the Proposed Scenario and the modeling. CARB must act on its ability and mandate to directly regulate methane in the modeling and recommendations of the Proposed Scenario if the state hopes to attain its short lived climate pollutant targets set forth in SB 1383 and comply with its environmental justice obligations. Such direct regulation must include mandatory methane reductions based on well-established practices that avoid emissions in the first place, such as responsible herd management and alternative manure management practices.

### The Low Carbon Fuel Standard

The Proposed Scenario indicates that CARB should consider increasing the stringency of Carbon Intensity (CI) targets by conducting a public process.<sup>14</sup> Although increasing the stringency of CI targets appears to further the goal of reducing GHG emissions from transportation fuels, in practice, it is unlikely to achieve that goal. Instead, this narrow change could perversely *increase* real GHG emissions from factory farm gas fuels as the industry seeks to monetize as much methane as possible to accommodate deficit holders’ deepening deficits. CARB’s reliance on more stringent CI targets incorrectly presumes that the methodology used to calculate CI of alternative fuels reflects reductions in GHG emissions in the real world. In fact, the calculation of CI for livestock biomethane excludes upstream and downstream emissions, leaving enteric emissions and emissions from feed production, digestate composting, and digestate land application out entirely. This openly contradicts CARB’s “well to wheel” approach that it has adopted and applies to other alternative fuels.

The obvious result of increased CI stringency paired with artificially carbon negative factory farm gas credits is that deficit holders are incentivized to purchase even more credits, and factory farm gas is an industry already starting to expand manure methane generation to make up the difference. This is happening and will continue to happen via factory farm herd expansions and consolidation (to maximize the quantity of manure available for methane production) as well as manure management practices that deliberately create the methane that factory farm gas projects then “capture.” This is ostensibly CARB staff’s intent, given the recommendation to develop 380 additional dairy digesters in the Proposed Scenario.<sup>15</sup>

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13, 2016),  
<https://www.theguardian.com/us-news/2016/may/13/california-san-joaquin-valley-porterville-pollutionpoverty>.

<sup>12</sup> See Michael A. Holly et al., *Greenhouse gas and ammonia emissions from digested and separated dairy manure during storage and after land application Agriculture*, 239 AGRIC., ECOSYSTEMS & ENV’T 410, 418 (Feb. 15, 2017), <https://doi.org/10.1016/j.agee.2017.02.007>.

<sup>13</sup> CARB has the ability to directly regulate livestock methane starting in 2024, per SB 1383.

<sup>14</sup> See Draft Scoping Plan, pages 145 and 154.

<sup>15</sup> See Draft Scoping Plan, page 187; Draft Scoping Plan, Appendix H at 21-28.

The Scoping Plan must be revised to set a rulemaking to amend the LCFS beyond the narrow issue proposed in the draft, but rather to provide a public process to assess whether factory farm gas is properly receiving its significantly negative CI scores and whether factory farm gas should be an eligible source of credits under the LCFS at all given the dire public health and environmental justice problems associated with this fuel.<sup>16</sup> The Proposed Scenario must recommend LCFS amendments that ensure that methane emissions reductions generating LCFS credits are additional and that the Scoping Plan does not double count emissions reductions. The Scoping Plan describes how factory farm gas projects receive massive subsidies aside from the LCFS, CARB credits their methane reductions to SB 1383 compliance, and at the same time describes how the LCFS reduces greenhouse gas emissions. The Scoping Plan fails to discuss how CARB has authorized many factory farm gas projects to sell the same methane reductions to deficit holders in the LCFS market as CARB takes credit towards the SB 1383 goal. The Scoping Plan cannot double-count the same methane reductions in multiple programs, including SB 1383 and the LCFS. Such a rulemaking is essential to ensure integrity of the Scoping Plan, the LCFS program, and the real world GHG reductions that California is banking on.

## Conclusion

CARB must revise these sections of the *Draft 2022 Scoping Plan Update* to include strategies that will, in fact, result in methane emissions to reach the 2030 target. This must include modeling the direct regulation of livestock methane emissions. CARB must also revise the scope of the proposed LCFS public process to include developing a complete life cycle analysis, ensuring additionality, and considering whether livestock-derived methane should remain part of the LCFS given its disproportionate impact on low income communities and communities of color in the San Joaquin Valley.

Moreover, the inadequacies identified herein render the Scoping Plan's Draft Environmental Analysis ("Draft EA") deficient pursuant to the California Environmental Quality Act, Public Resources Code, section 21000, *et seq.*. The Draft EA fails to adequately disclose, analyze, and mitigate impacts to, among other resource areas, air quality, greenhouse gas emissions, water quality, biological resources, and agriculture and forest resources, from the Scoping Plan's incentivization of factory farm gas. Promoting factory farm gas with windfall financial rewards has the perverse effect of actually *increasing* methane generation and entrenching the myriad co-pollutants and nuisances associated with ever larger dairies that would be producing this alternative fuel. CARB cannot ignore these serious environmental impacts.

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<sup>16</sup> See Petition for Reconsideration of the Denial of the Petition for Rulemaking to Exclude all fuels derived from biomethane from dairy and swine manure from the Low Carbon Fuel Standard, available at: <https://www.foodandwaterwatch.org/wp-content/uploads/2022/03/2022-03-28-Petition-for-Reconsideration-TOC-Updated.pdf>

Respectfully Submitted,

Leadership Counsel for Justice and Accountability  
Animal Legal Defense Fund  
Food & Water Watch  
Association of Irrigated Residents  
Center for Food Safety

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