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April 12, 2022

Liane M. Randolph, Chair

California Air Resources Board

P.O. Box 2815

Sacramento, CA 95814

Dear Chair Randolph,

I’m writing today in response to the *Methane, Dairies and Livestock, and Renewable Natural Gas in California* workshop held by the CARB on March 29, 2022, to address issues relating to the anaerobic digestion (AD) of dairy manure in California.

First, I would like to express my gratitude to CARB for the great amount of data and scientific information presented at the workshop, as well as the evenhandedness with which Dr. Qian Mitloehner conducted it.

I write these comments as a long-time California resident, member of the California bar and Low Carbon Fuel Standard (LCFS) verifier certified by CARB. As a consultant to companies seeking to have their fuel pathways certified to generate LCFS credits, one of my areas of specialization is fuel pathway applications involving the production of RNG from organic material, including dairy and swine manure. I am also a member of the Board of Directors of the American Biogas Council and Co-Chair of its Agriculture Committee. Therefore, I have closely studied the subject of the AD of dairy manure in our state, as well as issues surrounding it.

Following are my specific comments to some of the ideas shared during the workshop.

1. I’d like to address the idea expressed by some in the environmental justice (EJ) community that LCFS credits are a subsidy. However, they are not, and in fact, are the opposite of a subsidy.

A subsidy is a direct (like cash) or indirect (like a tax break) benefit **given** to someone by a government whether they change their behavior in a beneficial way or not. A market-based incentive like an LCFS credit is **earned** by the recipient when behavior is changed in a socially desirable fashion to do something not required by law.

As discussed during the workshop, transportation fuels are the biggest source of GHG emissions in California. By far one of the most dangerous of the GHGs is methane - it’s far more potent than carbon dioxide.[[1]](#footnote-1) Methane emissions from uncovered dairy manure lagoons are one of the largest sources of methane in California.

California law does not require dairy farmers to cover their lagoons. But dairy manure AD projects are capital intensive, require extensive executive time and a long time to permit and construct, and engender ongoing expensive administrative costs, which would leave many of the family dairy farms across California unable to afford covering their lagoons. Though a dairy may be chosen to receive financial assistance from the California Department of Food & Agriculture (CDFA) Dairy Digester Research and Development Program (DDRDP) to install an AD, it must invest at least 50% of the cost in matching funds. Therefore, CARB developed the LCFS regulation as a means of incentivizing dairy farmers to cover their lagoons by allowing them to generate LCFS credits.

To do so, verified operational data must demonstrate that the AD project resulted in the reduction of methane claimed that would otherwise escape into the atmosphere. The greater the reduction, the more LCFS credits are received. Furthermore, the LCFS incentivizes ongoing reduction in an alternative transportation fuel’s carbon intensity - to continue to earn the same number of credits received in the prior year, the owner of a project must continue to innovate and drive down emissions year after year.

And, better than and different from other non-RNG alternative transportation fuels on California roads, RNG from the AD of dairy manure results in the reduction of two GHG’s: (a) methane emissions from the dairy manure and (b) carbon dioxide emissions from diesel when the RNG is consumed in the vehicle’s tank.

In closing, contrary to the case where a government gives a subsidy to a taxpayer, no government pays LCFS credit money to the dairy farmer; the credits are the financial obligation of the companies whose transportation fuel products emit GHG on California roads.

1. For as long as we have dairy cattle, we will have dairy manure in California. If, as some commenters advocated, we shouldn’t anaerobically digest dairy manure, how can we avoid the GHG damage caused by it? Are they advocating the wholesale slaughter of our almost 2 million dairy cows?
2. Apparently as a means of prejudicing members of the CARB Board, CARB staff and members of the public, some in the EJ community called California dairy farms “factory farms” in their October 2021 petition against dairy manure as a feedstock for RNG and continue to use the term at every other opportunity they get, including during the workshop.

However, California dairy farmer after dairy farmer speaking at the workshop made it clear that they are not “factory farmers”. To the contrary, they explained that they are multi-generational **family** farmers. In fact, of California’s 1200+ dairies, over 99% are family owned.[[2]](#footnote-2)

1. Finally, to address concerns raised by some who attended the workshop from out-of-state, I’d like to point out to them that just because they do not live within California’s borders, that does not mean that they are unaffected by methane emissions from our state’s agricultural sector - methane does not respect state boundary lines.

Sincerely,

Nathalie Hoffman

CEO, LCFS Consulting Services, Inc.

1. As the UN concluded in its GLOBAL METHANE ASSESSMENT of May 2021, “[r]educing human-caused methane emissions is one of the most cost-effective strategies to rapidly reduce the rate of warming and contribute significantly to global efforts to limit temperature rise to 1.5°C.” <https://www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions> [↑](#footnote-ref-1)
2. <https://www.realcaliforniamilk.com/dairy-farms/> [↑](#footnote-ref-2)