

December 9, 2022

Ms. Cheryl Laskowski
Chief, Transportation Fuels Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: CR&R Environmental Services Comments on the Public Workshop to Discuss LCFS Concepts and Tools for Compliance Target Modeling

Dear Ms. Laskowski:

On behalf of CR&R Environmental Services (CR&R), we appreciate the opportunity to comment on the public workshop to discuss concepts and tools for compliance target modeling related to the Low Carbon Fuel Standard (LCFS) on November 9, 2022. As the California Air Resources Board (CARB) looks to update its LCFS regulation, we urge CARB to consider the following requests:

- 1. In anticipation of the upcoming Advanced Clean Fleet rule, create viable markets outside of the transportation sector for organic-waste-produced renewable natural gas (RNG) to provide implementers of SB 1383 market certainty for their organic waste processing infrastructure investments;**
- 2. Avoided methane emissions should continue to be included in the life cycle analysis and credits to incentivize the most climate-smart and near-term SB 1383 investments;**
- 3. Increase the carbon intensity reduction required by 2030 to at least 35 or 40 percent to begin to align the LCFS targets with SB 32, the RPS and other climate policies.**

Founded in 1963, CR&R is a Southern California-based waste and recycling collection company, serving more than 3 million people and over 25,000 businesses through Orange, Los Angeles, San Bernardino, Imperial, and Riverside counties. We are contracted with approximately 53 cities and counties to provide waste and recycling services to support compliance with state laws. We operate one of the largest anaerobic digestion (AD) facilities in North America, and the services we provide are critical for meeting the organics diversion and short-lived climate pollutant reduction requirements of SB 1383 (Lara, 2016).

1. In anticipation of the upcoming Advanced Clean Fleet rule, create viable markets outside of the transportation sector for organic-waste-produced RNG to

provide implementers of SB 1383 market certainty for their organic waste processing infrastructure investments.

CR&R was an early implementer of the state's organic waste diversion and short-lived climate pollutant goals (SB 1383). Since 2014, CR&R has invested hundreds of millions of both private and public dollars into a state-of-the-art AD facility and associated infrastructure. When making these initial investments, CR&R planned to support the state's climate targets while recouping capital in the long-term by creating a closed loop, circular economy system that processes organic waste diverted from landfills and uses the resulting RNG to fuel our fleet of solid waste collection vehicles.

Since our initial investment, California has shifted towards the strategy of mass zero-emission vehicle adoption to address the climate crisis. While CR&R recognizes the climate crisis calls for ambitious, zero-emission strategies, CARB is removing the only currently cost-effective, viable market for the RNG byproduct of our facility and the basis for our multimillion dollar climate investment. Without market clarity, there is little incentive for new investments in and continued operations of our organic waste processing infrastructure.

While CARB winds down the use of RNG in the transportation sector through the Advanced Clean Fleet regulation, we urge CARB to simultaneously build a roadmap to develop incentives and markets for RNG produced from organic waste that are proven and have price parity to those that currently exist for the transportation sector. The state is already struggling to meet its ambitious SB 1383 climate targets and long-term markets for RNG are critical to support existing operators and to encourage new investors to build out organic waste processing capacity. The state needs to clearly define what "hard to electrify" sectors are most viable for RNG, how the markets will transition over between now and 2040, and how this new pathway coordinates with the existing SB 1383 organic waste product procurement requirements for local jurisdictions.

Without this market certainty, CR&R is leaning towards not expanding our AD facility despite the state's need for nearly 8 million tons of additional processing capacity because we fear there will be no markets in the long-term for RNG to justify and support our investments. CR&R urges CARB to work with SB 1383 implementers like CR&R to create alternative markets for RNG that offer the same incentive that our current economics are based on and further encourage new investments.

2. Avoided methane emissions should continue to be included in the life cycle analysis and credits to incentivize the most climate-smart and near-term SB 1383 investments.

One of the biggest strengths of the LCFS program has been its focus on life cycle carbon intensity analyses as the most scientific and comprehensive assessment of carbon emissions (and reductions) from participating fuels. In the GREET model and lifecycle analyses in general, avoided emissions are included when they are not otherwise required by law or when there are higher carbon options to comply with a law or regulation. Those are important qualifications to ensure that participating fuels – and their associated carbon reductions – are providing “additionality” through LCFS.

Currently, to comply with SB 1383, cities and counties can choose to process organic waste with either higher-emitting but less expensive organic recycling methods such as composting and mulch production, or the far lower carbon pathway of converting that organic waste to bioenergy. A comprehensive literature review conducted for the State of Oregon Department of Environmental Quality found that converting organic waste to bioenergy provides 3.5 times greater carbon reductions than converting it to compost. Additionally, monitoring done by NASA’s Jet Propulsion Lab found that compost production produces a similar level of methane emissions to all but the leakiest 12 landfills in California.

In an effort to continue to incentivize local jurisdictions to invest in more expensive, but climate-smart organic waste recycling infrastructure, CARB should not phase out the credit for avoided methane emissions from biomethane before there is a viable alternative market to ensure that California’s progress on SLCP near-term reductions does not slow down or reverse. Until California establishes a strategy to transition RNG to hard to electrify or other end uses, the LCFS program should not begin to phase out biomethane pathways. Proposing that change now, when there is no comparable market for biomethane will jeopardize California’s progress in meeting the requirements of SB 1383 to reduce methane emissions and provide no incentive for local jurisdictions to invest in more expensive, but lower-emitting organic waste recycling pathways.

3. Increase the carbon intensity reduction required by 2030 to at least 35 or 40 percent to begin to align the LCFS targets with SB 32, the RPS and other climate policies.

The transportation sector continues to be California’s largest source of emissions, so it is critical to align the carbon intensity targets in the LCFS program with the state’s overall climate goals. Since SB 32 requires a 40 percent reduction in overall carbon

emissions by 2030, CARB should require the same reduction in the transportation sector. Not only will this help align reductions in the transportation sector with the state's overall climate targets, but it will provide greater carbon reductions sooner, which is a significant benefit to California residents. Earlier carbon reductions are much more valuable to help to stabilize the climate and begin to reverse climate change.

Alternatives A and B only propose a 30 percent reduction by 2030, which is well behind the requirements of SB 32 and the state's RPS, which requires that 60 percent of California's electricity be renewable by 2030. CR&R urges CARB to adopt at least a 35 percent reduction target and, preferably, a 40 percent reduction by 2030 to begin to align the LCFS targets with the requirements of SB 32.

We appreciate the opportunity to comment on this important program, and we look forward to working with CARB to find a path forward that balances both the short-lived climate pollutant and transportation emission reduction strategies.

Sincerely,

A handwritten signature in blue ink, appearing to read "JRM", with a long horizontal flourish extending to the right.

John McNamara
Vice President of Environmental Compliance
CR&R Environmental Services