



February 20, 2024

Matt Botill, Division Chief
Industrial Strategies Division

Cheryl Laskowski, Branch Chief
Transportation Fuels Branch

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted electronically to:

Re: California Association of Sanitation Agencies Comments on the Low Carbon Fuel Standard
Proposed Regulatory Revisions

Dear Mr. Botill and Ms. Laskowski:

The California Association of Sanitation Agencies (CASA) appreciates this opportunity to provide comments on the proposed revisions to the Low Carbon Fuel Standard (LCFS) as published January 5, 2024. For the reasons articulated below, CASA urges CARB to carve out the wastewater sector to preserve use of our non-fossil renewable wastewater-derived biomethane (biogas) in the LCFS program indefinitely. We will continue to produce and capture the biogas, as well as strive to beneficially use (not waste) it for as long as we are performing the essential public service of wastewater and solids treatment with anaerobic digesters. We have made similar arguments during the Scoping Plan Update and the more recent development of the Advanced Clean Fleet (ACF) regulations. The CARB Board included language in the last paragraph of the adopted Resolution 23-13 (included at the end of this letter) accompanying the adoption of the ACF Regulations directing staff to work with sister regulatory agencies and CASA to ensure multiple long-term uses of our biogas.

CASA is an association of local California wastewater agencies, known as Water Resource Recovery Facilities (WRRFs), engaged in advancing the recycling of wastewater into usable water, as well as the generation and beneficial use of renewable energy, biosolids, fuel, and other valuable resources. Through these efforts we help create a clean and sustainable environment for Californians. Our members are focused on helping the State achieve its climate change mitigation mandates and goals, which include:

- Reducing short-lived climate pollutant (SLCP) emissions by accepting and co-digesting diverted organic (food) waste from landfills pursuant to SB 1383
- Reducing carbon intensity of transportation fuel by using the biogas we generate
- Providing 100 percent of the state's energy needs from clean and renewable sources
- Increasing soil carbon and carbon sequestration by land applying biosolids and supporting the Healthy Soils Initiative, Climate Smart Strategy, and Wildfire and Forest Resilience Action Plan

As we have noted in previous discussions and comment letters for both the ACF and LCFS regulations, the wastewater sector represents an important in-state partner for development of low-carbon fuels as well as for meeting SB 1383 organic waste diversion requirements. As documented in the report released in August 2020 assessing co-digestion capacity at WRRFs, the California State Water Resources Control Board (SWRCB) estimated total existing available wastewater digester capacity may be able to

receive all food waste required to be diverted from landfills in California for co-digestion. This will exponentially increase the biogas produced and captured at WRRFs.

The wastewater sector is aligned with LCFS program goals, notably to diversify transportation fuels away from fossil fuel-based sources and achieve carbon neutrality. As noted by the SWRCB, WRRFs across California have the ability to increase co-digestion in support of SB 1383 implementation but can only do so if it is cost-effective. The economic analysis performed as part of the SB 1383 process identified use of the biogas (resulting from digesting the diverted organic waste) as a low carbon transportation fuel supporting the program's feasibility.

The LCFS program should continue to provide a viable incentive for co-digestion of diverted organic waste and the conversion of WRRF renewable biogas to biomethane transportation fuel. In addition to the ACF Regulations, we are concerned CARB's proposal to phase out the use of WRRF biomethane in the LCFS program by 2040 will further inhibit SB 1383 implementation. Implementation of SB 1383 is in its very early stages – however, 75% diversion of organics away from landfills is required by January 1, 2025. With implementation at WRRFs, co-digestion will increase significantly to meet the mandate, in turn, so will diversified uses of WRRF biogas. However, CARB is proposing to phase out the avoided landfill methane credit, which disincentivizes the production and use of non-fossil renewable organic waste-derived biomethane in the LCFS program. At the same time, CalRecycle incentivizes co-digestion in their regulations to implement SB 1383 by requiring jurisdictions that must divert organic waste to procure a corollary product of that diversion, including the use of biogas as a low carbon transportation fuel. While the LCFS program has not been widely utilized at WRRFs to date, we expect that to shift as co-digestion becomes more common. The success of SB 1383 hinges on the public wastewater sector accepting diverted food waste for co-digestion but that will only occur if it is cost-effective and we are assured of the ability to beneficially use all our biogas.

We strongly urge CARB to preserve the use of our biogas as a viable low carbon fuel in perpetuity since it will always be produced and SB 1383 implementation hinges on its beneficial use. Similarly, the proposed ACF Regulations will also inhibit SB 1383 implementation by limiting the use of medium- and heavy-duty trucks using WRRF biogas-derived compressed natural gas to only those in our fleets as of January 1, 2024 – we have proposed that be extended to follow the implementation of SB 1383 and provide WRRFs a pathway for use of the increased biogas. As CASA noted in our comments on the proposed ACF Regulations (and CARB staff acknowledged this in their December 12, 2022 presentation), medium- and heavy-duty electric trucks and vehicles unique to the needs of our sector are not commercially available and we do not expect them to be for many years. Likewise, biogas-to-hydrogen as a transportation fuel for these vehicles is not yet commercially available or demonstrated, both research and demonstrations are necessary to advance that technology and we have offered to work with CARB on those efforts. In the meantime, state regulations and policy should promote biogas deployment using proven technology that most efficiently reduces GHGs to mitigate climate change while also complying with the Omnibus regulations.

CASA has previously had productive discussions with CARB where it seemed understood that multiple benefits are realized through co-digestion and that credit should be awarded for the GHG emission reductions achieved. This requires immediate further action by either developing new simplified calculators or integrating existing ones for sewage sludge digestion and diverted food waste digestion as a Tier 1 option. Rather than phasing out the use of WRRF-derived biogas from the program, prioritizing a

diverted food waste pathway within a co-digestion system at WRRFs would encourage SB 1383 organic waste diversion as well as accelerate development of low-carbon fuel production from these systems. Certification of a fuel pathway for each individual co-digestion feedstock would be onerous and we suggest that the food waste contribution to biogas production be prioritized and prorated. We strongly recommend a simplified approach assuming a baseline biogas production from sewage sludge digestion operating within defined parameters (mean cell residence time, temperature, volatile solids destruction, etc.) and assume all additional biogas is the result of the additional organic waste feedstock, eliminating the unnecessary burden of excessive testing. A similar approach has been adopted by the USEPA as part of their Renewable Fuel Standard regulatory revisions in June 2023.

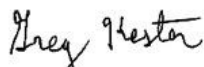
In order for the receipt of diverted food waste for co-digestion to be viable, it must be cleaned of contaminants so as not to have adverse impacts on equipment, the microbial community in the anaerobic system, nor on the biosolids which are another product of digestion. LCFS credits, particularly those with a negative carbon intensity (CI) value, could be a strong economic incentive to invest in the needed equipment and the ability to accept more food waste. To achieve the state's organic waste diversion and GHG emission reduction goals, it is critical that the appropriate pathways are established in an expeditious manner to provide this incentive. We strongly urge CARB staff to work with CASA and our members to extend and expand these pathways that can serve as a model for others.

Specific comments are as follow:

1. We support the increased reductions in carbon intensity as proposed. This includes a 25% reduction by 2025; a 30% reduction by 2030; and a 90% reduction by 2040.
2. Section 95482(g): we disagree with the proposed phase out of the use of biomethane as a transportation fuel as articulated above.
3. Section 95488.9(f)(3): we disagree with the proposed phase out of avoided methane crediting for both biomethane and hydrogen from biomethane sources. The rationale is provided above.

We appreciate this opportunity to comment and your willingness to consider our recommendations. We look forward to continued collaboration to develop pragmatic solutions to these issues. Please let me know if we can set a time to meet for discussion of our recommendations. I can be contacted at gkester@casaweb.org or at 916-844-5262.

Sincerely,



Greg Kester
Director of Renewable Resource Programs

cc: Adam Link, Executive Director, CASA
Sarah Deslauriers, Climate Change Program Manager, CASA
Rajinder Sahota, CARB
Anil Prabhu, CARB
Charlotte Ely, SWRCB
Chris Hyun, SWRCB
Mark de Bie, CalRecycle

Cara Morgan, CalRecycle

Last Paragraph of Resolution 23-13:

Be it further resolved that, consistent with the latest Scoping Plan, the Board recognizes that the successful implementation of the food waste diversion requirements and methane emissions reductions mandated by SB 1383 are critical to the State's climate goals. The Board further recognizes that multiple reliable uses for non-fossil biomethane will be needed for successful implementation. The Board recognizes the need for coordination meetings with other state agencies such as CEC, CPUC, State Water Resources Control Board, CalRecycle, CDFA, CNRA, California Division of Occupational Safety and Health, and other relevant stakeholders such as the California Association of Sanitation Agencies and the California Air Pollution Control Officers Association, to implement SB 1383 and SB 1440. As such, the Board directs staff to prioritize policy discussions related to SB 1383 and SB 1440 implementation and discussions on how to transition biomethane into hard to decarbonize sectors, or as a feedstock to produce hydrogen for FCEV fuel and to produce electricity to charge BEVs to achieve the SB 1383 target. The Board further directs staff to report to the Board by the end of 2025 on progress for alternative uses of biomethane, including identifying any appropriate regulatory actions as needed.