October 6, 2017

Mr. Sam Wade, Branch Chief
California Air Resources Board
1001 I Street
Sacramento, CA  95814

Re:  Comments on Proposed Changes to LCFS Regulations

Dear Mr. Wade:

The California Association of Sanitation Agencies (CASA) appreciates the opportunity to comment on proposed changes to the Low Carbon Fuel Standard Regulations. CASA is an association of local agencies, engaged in advancing the recycling of wastewater into usable water, as well as the generation and reuse of renewable energy, biosolids, and other valuable resources. Through these efforts, we help create a clean and sustainable environment for Californians. CASA is pleased that CARB recognizes, in their Short Lived Climate Pollutant (SLCP) reduction strategy and economic analysis, the wastewater sector as part of the solution for organics diversion. Our members are focused on helping the State achieve its 2030 mandates and goals (also referred to as the Governor's Five Pillars), which include:

- Reducing short-lived climate pollutant (SLCP) emissions
- Effectively diverting organic waste from landfills
- Providing 50 percent of the State's energy needs from renewable sources
- Reducing carbon intensity of transportation fuel used in the State
- Increasing soil carbon and carbon sequestration under the Healthy Soils Initiative and Forest Carbon Plan

In fact, we estimate that the wastewater sector can accept at least 75% of the food waste currently landfilled in California for co-digestion. Wastewater plants can utilize existing infrastructure in the form of anaerobic digesters to co-digest food waste and other organic waste, thereby diverting it from landfills. Significant increases in renewable energy production result from co-digestion at much lower costs than building new infrastructure. A 30% volumetric increase in organic waste for co-digestion can double the amount of biogas produced.

CASA has several concerns about the proposed changes to the LCFS program and believes that, if adopted, the changes would seriously undermine the state’s efforts to reduce Short-Lived Climate Pollutants as well as the LCFS program itself. CASA also fully supports the comments submitted by the Bioenergy Association of California, of which we are a member. Our concerns are described below.
1. **Biogas from Publicly Owned Treatment Works (POTWs) and Other Sources is Essential to LCFS, SLCP and Air Quality Programs.**

It appears that the LCFS pathways for mesophilic anaerobic digestion at POTWs are no longer going to be available in the program. This appears to be in direct conflict with legislative directives as noted below as well as the Agency’s own strategic plan and economic analysis. As the public wastewater sector is looked upon to provide a solution for diverting organics from landfills and a commensurate increase in biogas, we are working collaboratively with the State to ensure markets exist for the biogas, biomethane, and biosolids. Transportation fuel is increasingly looked at as a viable alternative. However, in order for POTWs to accept diverted food and other organic waste for co-digestion, it is necessary that it be cost neutral so as not to adversely impact our ratepayers. The LCFS program offers a means to make it cost neutral, in combination with the Federal Renewable Fuel Standard credits (RINs), and the use of the fuel. The CI of mesophilic digestion was among the lowest viable alternatives developed under the LCFS and no explanation is given for its deletion. While co-digestion was not considered in the pathway, it appears there is no longer a possibility to modify the pathway to allow demonstration that the CI would further be lowered through acceptance of organic waste. Additionally, we believe the CI would be even lower if the benefits of carbon sequestration and avoidance of fossil fuel based fertilizer were taken into account through the land application of biosolids, but it is very unclear whether this demonstration would even be allowed in the future.

CASA strongly urges the Air Board to reinstate the pathway for mesophilic anaerobic digestion at POTWs and to facilitate the ability to further lower the CI through co-digestion and the land application of biosolids. CASA also notes that the SLCP economic analysis must be completely reworked if this pathway is eliminated.

Biofuels are essential to the success of the LCFS program. Currently, they provide 89 percent of the total LCFS credits. Biogas is the lowest carbon of all biofuels and of all LCFS certified fuels. In addition to providing a growing share of LCFS compliance, the Air Board’s *Short-Lived Climate Pollutant Reduction Strategy* makes clear that reducing methane emissions from diverted organic waste and dairy waste will require putting that organic waste to beneficial use, including as a transportation fuel.¹ As the SLCP Strategy says:

> “Utilizing clean technologies to put organic waste streams to a beneficial use can also serve to improve regional air and water quality and support economic growth in agricultural and other communities throughout the State.”²

California has adopted many policies over the past decade to promote biogas use for transportation, including:

- **SB 1505** (Lowenthal, 2006) requires one-third of all hydrogen at publicly funded hydrogen fueling stations to be renewable.

---

² SLCP Strategy at page 28.
• AB 1900 (Gatto, 2012) calls on the CPUC to adopt policies to promote the instate production and distribution of biomethane for transportation fuel and energy production.
• SB 840 (2016, Section 10) states that biomethane provides a clean and sustainable fuel that can protect air and water quality, create jobs, and reduce greenhouse gas emissions by tens of millions of metric tons per year.
• SB 1383 (Lara, 2016) requires state agencies to adopt policies and incentives to significantly increase renewable gas, including biogas and biomethane, production and use to further the state’s short-lived climate pollutant goals, including the diversion of 75% of organics from landfills by 2025 (from 2014 levels) and a 40% reduction in methane emissions (from 2013 levels) by 2030.
• The Sustainable Freight Action Plan (2016) calls for maximizing near-zero emission vehicles powered by renewable fuels wherever zero-emission vehicles are not available.

Biogas is essential to reduce SLCP emissions, to provide renewable fuel for near-zero emission trucks, and to provide immediate reductions in toxic air contaminants from diesel powered trucks where there is no electric option. Despite the many policies calling for increased biogas production and use, the proposed changes to the LCFS program would do the opposite. As noted above, for the wastewater sector to be fully engaged in co-digestion of organics and the productive use of biogas and biosolids from digestion, projects must be cost neutral. The LCFS is one mechanism which helps achieve that neutrality but the proposed changes could eliminate that benefit.

2. The LCFS Proposal Increases the Carbon Intensity for Biomethane without Data or Explanation

The staff presentation proposes to significantly increase the default values for biomethane (both BioCNG and BioLNG), and to eliminate the mesophilic digestion at POTWs pathway without providing the supporting documentation, data or explanation to justify these changes. The proposed default values are several times higher than the current values for biomethane from diverted organic waste and dairy waste. If the default values are applied to biomethane from these sources, and the pathways eliminated for POTWs, they will severely hamper the development of the biogas market that is called for in SB 1383 and the Short-Lived Climate Pollutant Reduction Strategy.

3. Several of the Proposed Changes are Not Fuel Neutral and Disproportionately Hurt Biogas Production and Use.

One of the biggest strengths of the LCFS program is that it is fuel neutral and based on lifecycle analyses of each fuel’s carbon intensity. This puts science before dogma and protects both the program itself and consumers by promoting fuels based on their carbon intensity, an objective standard that promotes the lowest carbon fuels in a competitive market. Unfortunately, several of the proposed changes to the LCFS would move away from
fuel neutrality and set punitive requirements for biogas producers that would not be applied to electricity or other fuel providers.

Another concerning proposal is the creation of a Buffer Account that allows ARB to keep LCFS credits even after a biogas producer has verified that the fuel has a lower carbon intensity than the default pathway. This is particularly alarming since the LCFS proposal also proposes to increase the default values for biogas, in some cases by orders of magnitude. It may make sense for ARB to hold LCFS credits while a particular fuel pathway is verified, but there is no rationale for ARB to keep the credits if the pathway is ultimately verified as being lower than the default value. This is highly problematic for several reasons:

a. The LCFS credits have value and allowing ARB to keep them even if the biogas producer verifies a lower carbon intensity would constitute a taking of real property in violation of the Takings Clause of the U.S. Constitution.

b. Biogas producers would have little incentive to continue to reduce the carbon intensity of the fuels they produce if they lose the benefit of reducing the carbon intensity for the first two years of the fuel’s production.

c. This “taking” is only applied to biofuels that must verify their carbon intensity. Since it is not applied to electric vehicles – whose carbon intensity can also vary significantly depending on the electricity source – it creates a huge barrier to one group of fuels rather than treating all fuels equally.

4. The Process and Timeline to Adopt these Changes is Insufficient.

The changes proposed to the LCFS are very serious and will have significant effects on the program itself and the state’s ability to meet the requirements of SB 1383. Requiring public comments on the proposed changes before the public has been given the opportunity to review the full proposal and supporting documentation means that the public – and key stakeholders – will not have adequate opportunity for public comment.

CASA urges ARB to extend the public comment to at least two weeks and preferably 30 days after ARB releases the full text of the proposed changes and all supporting documentation. To limit public comment to the staff presentation, rather than the complete proposal, is to deny full public participation and to invite unintended consequences later.

For all these reasons, we urge ARB to revise the proposed changes to the LCFS and to release the full, revised proposal with all supporting documentation for a second round of public comment. Please contact me at gkester@casaweb.org or at 916-844-5262 with any questions or for further clarification.

Sincerely,

Greg Kester
Director of Renewable Resource Programs
cc: Mary Nichols – CARB
    Ryan McCarthy – CARB
    Edie Chang – CARB
    Steve Cliff – CARB
    Tung Le - CARB
    Wes Ingram – CARB
    Scott Smithline – CalRecycle
    Felicia Marcus – SWRCB
    Bobbi Larson - CASA