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Submitted electronically to <u>lcfs-wkshp-oct20-ws</u>

Rajinder Sahota, Division Chief, Industrial Strategies Division Anil Prabhu, Manager, Fuels Evaluation Section California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: East Bay Municipal Utility District Comments on the Low-Carbon Fuel Standard Potential Regulation Revisions as presented during the Workshop on October 14, 2020

Dear Sir and Madam:

The East Bay Municipal Utility District (EBMUD) appreciates this opportunity to comment on the potential revisions to the Low-Carbon Fuel Standard (LCFS) as presented during the October 14<sup>th</sup> workshop hosted by the California Air Resources Board (CARB). The wastewater sector represents an important in-state partner for development of low-carbon fuels as well as for meeting Senate Bill (SB) 1383 waste diversion goals. The California State Water Resources Control Board recently reported in the Co-Digestion Capacity Analysis (June 2019) that the estimated total existing excess wastewater digester capacity may divert up to 7 million wet tons per year of food waste from landfills in California. Using the Tier 1 model for organic wastes provided by CARB, this is equivalent to 89,000 tons per year of avoided methane.

EBMUD supplies water and provides wastewater treatment for parts of Alameda and Contra Costa counties in California. EBMUD's Strategic Plan includes goals that are aligned with goals of the LCFS program, notably to increase cost-effective use of renewable energy and to reduce greenhouse gas (GHG) emissions. At EBMUD, these energy goals are implemented by the Resource Recovery (R2) program, which has been co-digesting organic waste since 2002. The R2 program receives multiple organic feedstocks for anaerobic digestion, including up to 3,500 wet tons per year of post-consumer food waste from Contra Costa County. EBMUD has the ability to increase co-digestion as SB 1383 is implemented but can only do so if it is cost-effective. The LCFS should provide a viable incentive for wastewater agencies like EBMUD to increase food waste diversion and to convert this excess energy to transportation fuel. However, we remain concerned that the simplified calculators adopted in 2018 do not provide the wastewater sector the credit for avoided methane emissions achieved by co-digesting diverted food waste. As a net energy producer, renewable electricity from the R2 program powers the entire wastewater treatment plant operations, including fueling an increasing number of onsite electric vehicles.

While EBMUD has had success in converting food waste into renewable energy, the accompanying contamination makes this material challenging to work with, requiring additional

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specialized equipment for handling. LCFS credits, in particular those with a negative carbon intensity (CI) value, could be a strong economic incentive for the wastewater sector to invest in the needed equipment and accept more food waste. To achieve the state's organic diversion and GHG reduction goals, it is critical that the appropriate pathway is established in an expeditious manner to provide this incentive. We strongly urge CARB staff to work with utilities like EBMUD to establish the food waste to low-carbon fuel pathway that can serve as a model for others.

This letter conveys recommendations to the proposed LCFS revisions which would encourage waste and methane diversion by wastewater co-digestion as currently practiced in EBMUD, as follows:

- To achieve California's waste diversion goals, food waste projects based in California should be prioritized for LCFS pathway development to provide that incentive.
- As proposed for dairy manure digestion, CARB should extend the electricity endpoint option to the Tier 1 Simplified CI calculator for organic waste and wastewater sludge digestion. Consistent with the Governor's executive order that requires zero-emissions vehicles by 2035, this enhancement to the CI toolkit would aid in development of lowcarbon electricity projects.
- As discussed during the workshop, CARB should address pathway certification for digesters with multiple feedstocks, sometimes referred to as co-digestion. Prioritizing a food waste pathway within a co-digestion system 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 should be prioritized and prorated. We support the recommendation being submitted by the California Association of Sanitation Agencies which is to assume a baseline biogas production from sewage sludge digestion of 15 scf/lb of volatile solids destroyed and assume all additional biogas is the result of the additional organic feedstock.

We appreciate this opportunity to comment and your willingness to consider our recommendations. Additionally, we wish to continue with development of the food waste to biogas-derived electricity pathway and are available to collaborate on issues regarding electricity as an energy endpoint and multiple feedstocks. Please contact Eva Agus at (510) 287-2124 or eva.agus@ebmud.com with any questions.

Sincerely,

Eileen M. White

Eileen M. White, P.E. Director of Wastewater

cc: Greg Kester, Director of Renewable Resources, California Association of Sanitation Agencies