Las Gallinas
VALLEY SANITARY DISTRICT

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April 25, 2014

The Honorable Mary Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

The Honorable Richard Corey
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: <u>Re-Adoption of Low Carbon Fuel Standard</u>

Dear Chair Nichols and Mr. Corey:

I am writing on behalf of the Las Gallinas Valley Sanitary District (LGVSD) to offer its strong support for re-adoption of the Low Carbon Fuel Standard (LCFS) by the California Air Resources Board (CARB), with two additions that will help to achieve the goals of the standard and other state policies. LGVSD greatly appreciates the efforts extended by CARB in developing draft low carbon fuel standards for the conversion of biomethane produced at wastewater treatment plants. We now urge CARB to finalize those protocols, but also include in them the added benefit derived from the land application of the treated digestate (biosolids). We also urge CARB to provide long term certainty for the value of low carbon fuel credits through a price floor and support for a Green Credit Reserve (AB 2390, Muratsuchi), which will enable public agencies, and private partners where appropriate, to finance projects to produce low carbon fuels.

Anaerobic digestion (AD) is a part of our wastewater treatment process. Combined power from our biomethane cogeneration system and photovoltaic system provide the majority of our treatment plants energy needs. The District will be modifying our treatment plant to increase biogas production which will include feeding on sight fats, oils and grease removed from our wastewater treatment process.

We are also considering utilizing a portion of our biogas as a low carbon intensity transportation fuel for District vehicles. This may especially be attractive due to the potential of reducing ground level ozone. The continued use of internal combustion engines to generate power at wastewater facilities is in jeopardy. This could make the transformation to LCFS compliant transportation fuel an attractive alternative. Using very conservative assumptions from the United States Environmental Protection Agency (US EPA) Combined Heat and Power Partnership

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program, the California Association of Sanitation Agencies (CASA) estimates that POTWs in California are currently producing more than 611,000 megawatt-hours per year (MWh/year) of electricity or more than 2,350,000 million British thermal units per year (MMBtu/year) of thermal energy. If converted to low carbon transportation fuel, 611,000 MWh/year would produce 18 million gasoline gallon equivalents (gge) or 16.2 million diesel gallon equivalents (dge). Similarly 2,350,000 MMBtu/year thermal energy would produce 20.2 million gge or 18.3 million dge. This does not take into account any additional methane produced from co-digesting solids with FOG or food waste. If all POTWs currently producing methane were to utilize all of that methane, then using those same conservative assumptions we could produce an additional 300,000 MWh/year of electricity or an additional 1,150,000 MMBtu/year of thermal energy.

The draft LCFS protocols under consideration by CARB predict a carbon intensity (CI) of negative 65.3 g carbon dioxide equivalent per megajoule (CO_2e/MJ) for POTWs treating more than 100 million gallons per day of wastewater and a CI of 11.5 g CO_2e/MJ for POTWs treating between 5 and 20 million gallons per day of wastewater. The CI could be further lowered if the land application or composting of biosolids were included in the protocol system boundary, as most biosolids in the state are managed in this way. Biosolids used in agricultural or horticultural settings mitigate climate change by avoiding the use of fossil fuel intense inorganic fertilizer and by improving long-term sequestration of carbon in soil. Roughly 0.22 gallons of fossil fuel is required to produce every pound of inorganic nitrogen fertilizer, illustrating the tremendous offset gained by using biosolids for land application, because they are rich in organic nitrogen and other valuable micro and macro nutrients.

LGVSD is considering becoming a member of the Bioenergy Association of California (BAC), and supports BAC's efforts urging CARB to include measures that provide long-term certainty with respect to the value of LCFS credits, thereby facilitating project financing. Since the obligated parties only enter into short-term contracts to buy LCFS credits, public agencies and private investors necessarily discount or ignore the value of those credits when assessing their return on investment. This discourages or impedes infrastructure investments needed to convert biomethane to low carbon fuels. To provide greater certainty and sustainability for the long-term value of LCFS credits, CASA supports the inclusion of a price floor in the cost-containment mechanism. LGVSD also urges CARB to support the establishment of a Green Credit Reserve (AB 2390, Muratsuchi) to provide not just price certainty but a guaranteed market for LCFS credits at the time a project is being developed. This type of credit value stability mechanism is crucial to promoting the LCFS, particularly at wastewater facilities.

The Green Credit Reserve would authorize the state to enter into long-term contracts to purchase LCFS credits. The contracts would be executed before a project is developed, giving public and private investors the long-term certainty needed to make major infrastructure investments, but the state would not actually buy the credits until the developer begins producing fuels and generating the credits, removing the risk of project failures or delays. The state could then resell the credits or retain them, depending on market conditions. The mechanisms of this Reserve are further articulated in comments submitted by BAC, which LGVSD fully supports.

In summary, LGVSD strongly supports re-adoption of the Low Carbon Fuel Standard and urges CARB to adopt and modify draft protocols for wastewater treatment plant methane as stated above and to support the establishment of a Green Credit Reserve.

Thank you for your consideration of these comments.

Sincerely,

Craig K. Murray
LGVSD, Board President

cc: LGVSD Board