March 25, 2019

Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Administrator Wheeler:

The California Association of Sanitation Agencies (CASA) and the co-signatories to this letter are seeking your assistance in addressing an issue relating to the Renewable Fuel Standard (RFS) Program. We hope that with your help we can achieve a mutually beneficial resolution that advances the objectives of the RFS.

CASA is an association of local California wastewater agencies engaged in advancing the recycling of wastewater into usable water, as well as the generation and beneficial reuse of renewable energy, biosolids, renewable fuel, and other valuable resources. All signatories are introduced, and the issue further explained, in the attached issue paper.

CASA understands that USEPA considers the receipt of organic waste for co-digestion at wastewater treatment plants (and dairies) differently than the base feedstock normally treated in these digesters (i.e., sewage sludge, animal and vegetative waste) for the purposes of the RFS. Based upon the 2014 updated “Regulation of Fuels and Fuel Additives: RFS Pathways II, Technical Amendments to the RFS Standards and E15 Mis-fueling Mitigation Requirements,” transportation fuel produced from biogas generated in anaerobic digesters at wastewater treatment plants and dairies is deemed to be cellulosic in nature and awarded the highest fuel value under the program (Cellulosic D3 Renewable Information Number, RIN). Our concerns center on USEPA’s interpretation that if food waste or other organic waste is hauled in and introduced directly into digesters for co-digestion, the waste is administratively redefined as non-cellulosic and, therefore, all fuel produced in that digester is awarded the lower valued “Advanced Biomass” D5 RIN. This redefinition establishes an unwarranted economic disincentive to either convert biogas into renewable transportation fuel or to recycle organic wastes through co-digestion because of the devalued RIN.

We believe this interpretation is incorrect because food waste is an inherent component of all sewage sludge. It enters our sewage systems through drains of residential, commercial, industrial, and other establishments, then goes through the wastewater treatment process, including anaerobic digestion. However, it is far more efficient to introduce food waste directly prior to anaerobic digestion so all of its energy content is conserved for the production of biogas, which can then be converted to renewable transportation fuel. Introduction at the digester avoids expending its energy potential in aerobic secondary treatment through which roughly 60% of it can be wasted. Therefore, it is far more expedient and advantageous to accept food waste at the digester rather than at the headworks or through the sewerage system. Many states in the nation have or are considering bans on organic waste at landfills.
Existing infrastructure at public wastewater treatment plants offers a logical and expedient means to manage food waste and other anaerobically digestible waste streams. A 10-30% volumetric increase of food waste to digestion can double the volume of biogas produced. Indeed, two recent initiatives undertaken at USEPA - the joint challenge with the Department of Energy to expand renewable resources at publicly owned treatment works (POTWs) and the “Winning with Food Waste” initiative - both seem to favor co-digestion of food waste at wastewater treatment plants.

The signatories to this letter initiated dialogue with USEPA to seek clarity on the basis of USEPA’s actions. Our efforts culminated in a meeting in Washington DC on July 20, 2017, and we have had ongoing discussions with the Office of Transportation and Air Quality (OTAQ). Unfortunately, OTAQ staff were given a new set of priorities which precluded them from further discussion on this issue for 12 to 24 months.

We would welcome the opportunity to further discuss this issue with you or your designee to explore whether a change in the current approach may be possible to allow for the most efficient energy generation from food waste at POTWs. We welcome any questions or feedback. CASA’s Greg Kester is our key contact and can be reached at gkester@casaweb.org or (916) 844-5262.

Sincerely,

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    Greg Kester – Director of Renewable Resource Programs, CASA
    Cynthia Finley – Director of Regulatory Affairs, NACWA
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Background Information & Further explanation of RINs Issue

Who We Are

• The California Association of Sanitation Agencies (CASA) is an association of local agencies representing more than 90% of the sewered population of California, engaged in advancing the recycling of wastewater into usable water, maximizing beneficial use of biosolids, generating renewable energy, and producing other valuable resources.

• The National Association of Clean Water Agencies (NACWA) represents public wastewater and stormwater agencies of all sizes nationwide in legislative, regulatory and legal advocacy on clean water issues, as well as a top technical resource for water management, sustainability and ecosystem protection interests.

• The East Bay Municipal Utility District (EBMUD) is a pioneer in the field of transforming various types of organic waste into renewable biogas for electricity production. EBMUD first began accepting high-strength wastes for anaerobic digestion in 2002 and in 2012 became the first net energy producing wastewater treatment plant in North America. EBMUD currently produces approximately 130 percent of its electricity demand and has long considered upgrading a portion of this biogas into renewable natural gas for transportation fuel. The EPA’s determination that biogas from codigestion only qualifies for D5 RINs is one of the significant obstacles to making such a project financially viable for EBMUD.

• The Sanitation Districts of Los Angeles County (Sanitation Districts) provide solid waste and wastewater management services for 78 cities and unincorporated areas in Los Angeles County. The Sanitation Districts own and operate 11 wastewater treatment plants that serve over half of the County’s population (about 5.6 million people), and accommodate about one-fourth of the county-wide solid waste management needs at a variety of recycling and disposal facilities. The Sanitation Districts are implementing an organics recycling program that diverts food waste from landfills and, using existing wastewater infrastructure, converts this waste into renewable energy, including combined heat and power, and in the future, renewable natural gas for transportation fuel. The Sanitation Districts have converted over 23,400 tons of food waste into energy since the project’s inception in 2014.

Our Interest in the Renewable Fuel Standard & Co-Digestion

• Many wastewater utilities use anaerobic digestion to process the biological material (sewage sludge) in wastewater. Anaerobic digestion results in the production of digester gas, also known as biogas, which can be used to produce renewable power, biomethane (a renewable natural gas product that can replace fossil-based natural gas), and biofuel. The byproduct of anaerobic digestion, known as biosolids, can be recycled directly to land, turned into compost, or further processed to generate renewable energy products, such as fuel.

• Using very conservative assumptions from EPA’s Combined Heat and Power Partnership program, CASA estimates that wastewater utilities 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.

- Since public wastewater treatment plants are principally tasked with producing clean water and high quality biosolids, projects producing renewable energy and transportation fuel must be cost-effective (i.e. revenue neutral) and sustainable to gain approval from their public ratepayers. The federal Renewable Fuel Standard (RFS) Program offers critical financial incentives for the production of renewable transportation fuels, in addition to the value of the fuel, providing for viability of these programs.

- Food waste is the largest component of municipal solid waste (MSW) entering landfills in the U.S. In 2013, EPA reports that 37.1 tons of residential and commercial food waste was generated, representing 14.6 percent of MSW. Only 5% of food waste is currently diverted to recovery, either by compost or anaerobic digestion facilities. Substantial potential exists to achieve broad economic, environmental, and community benefits by diverting food waste from landfills to anaerobic digesters to produce renewable biogas. For example, California is accelerating its organic diversion from landfills program to achieve significant greenhouse gas reductions by avoiding landfill methane emissions. In EPA’s newly released New Source Performance Standards (NSPS) for landfills (currently under reconsideration), organic diversion from landfills is strongly encouraged as a means to reduce methane. Anaerobic digesters at wastewater utilities can be used for this and other important purposes.

- Diversion of food waste disposal from landfills is gaining momentum throughout the U.S. In 2016, five states (California, Vermont, Massachusetts, Connecticut, Rhode Island) and several cities (Austin, TX and Seattle, WA) had landfill bans or restrictions on landfilling some portion of food waste (e.g. commercial generators). State plans and policies developed during the legislation of the food waste landfill restrictions relied on the utilization of excess capacity available at wastewater utilities with anaerobic digestion.

- Hauling food waste to wastewater utilities for co-digestion typically adds less than 30% to the volume of waste, but can increase the biogas production by 100%. CASA estimates that up to 3,825,000 wet tons (75%) of the food waste, as well as fats, oil and grease (FOG) currently landfilled in California could be received and processed by wastewater agencies through anaerobic digestion. Utilizing this capacity is crucial to meet California mandates that require that 75% of organics be diverted from landfills by 2025, with the added benefit of significantly increased biogas production at wastewater utilities.

**Questions & Issues to Discuss**
The following questions and issues refer to the final rule published by EPA on July 18, 2014 (79 FR 42127), *Regulation of Fuels and Fuel Additives: RFS Pathways II, Technical Amendments to the RFS Standards and E15 Misfueling Mitigation Requirements.*

- EPA determined with this rule that gas resulting from sewage sludge digested alone is considered cellulosic and therefore eligible for D3 Renewable Identification Numbers (RINs). We believe that USEPA should also allocate D3 RINs to fuel produced from co-digestion of sewage sludge with food waste. Food waste introduced at the digester and avoiding secondary treatment is much more efficient
and should not be treated differently than food waste entering the system via pipes or otherwise at the headworks.

- EPA’s analysis of landfill biogas could be extended to anaerobic digestion at wastewater utilities. EPA has determined that landfill biogas is all cellulosic, stating in the rule, “...Furthermore, many of the non-cellulosic components of food waste are oxidized in the early stages of waste decomposition... and released as CO₂ instead of CH₄. Therefore, a greater proportion of the biogas produced from anaerobic digestion (and subsequently used as a transportation fuel) comes from the remaining cellulosic components.” The preamble of the rule also states, “Since separated MSW digesters would use the same biogenic materials that are present in landfills, and generate biogas by the same anaerobic process, a logical extension of the reasoning and data described above justifies treating the biogas generated by digesters processing separated MSW as cellulosic as well ...”. Since the non-cellulosic components of food waste would also break down rapidly in a wastewater utility’s digester, producing CO₂ as it does in a landfill or MSW digester, we believe EPA should use this same reasoning for assigning a D3 RIN eligibility to the co-digested sewage sludge and food waste.

- The preamble of this rule restates the Clean Air Act definition of “cellulosic biofuel” as having “.... lifecycle greenhouse gas emissions, as determined by the Administrator, that are at least 60 percent less than the baseline lifecycle greenhouse gas emissions.” California’s Low Carbon Fuel Standard (LCFS) program shows the carbon intensity of transportation fuel produced from biogas generated through the mesophilic anaerobic digestion of sewage sludge is 70 to 90% less than the baseline fuels of gasoline or diesel fuel. This provides further evidence that sewage sludge co-digested with food waste should be eligible for D3 RINs.