November 15, 2017

Via electronic mail to CalRecycle Docket

Re: California Association of Sanitation Agencies comments on the draft regulatory language developed by CalRecycle for the implementation of SB 1383

To Whom It May Concern:

The California Association of Sanitation Agencies (CASA) appreciates the opportunity to provide comments on the draft regulatory language developed by CalRecycle for the implementation of SB 1383.

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 CalRecycle recognizes the wastewater sector as part of the solution for organics diversion, and we appreciate the collaborative and productive relationship we have with CalRecycle. Our members are focused on helping the State achieve its 2030 mandates and goals 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

General Comments

Biosolids are a non-discretionary product of the wastewater treatment process that will only increase in volume as population increases, which must be managed on a daily basis. We strongly recommend regulatory language establishing a unified regulatory approach to biosolids management, based on the USEPA’s federal standards at part 503 of Chapter 40 of the Code of Federal Regulations (40 CFR 503), or alternatively the State Water Resources Control Board’s Statewide General Order. Both of these agencies provide effective oversight of those standards and ensure their proper enforcement and implementation. To that end, local ordinances that conflict with or are more stringent than the statewide requirements with respect to the land application of biosolids should be preempted by this statewide approach. Land application of biosolids is a critical alternative to landfill disposal or use as Alternative Daily Cover and must be supported by the state if the legislative mandates are to be met. (See also comment on section 80.1 below).

Wastewater treatment plants can utilize existing anaerobic digesters to co-digest food waste and can compost 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. However, in order for co-digestion to be a practical option, the implementation of these regulations, must consider securing markets for the products created (i.e. biosolids and biogas).

Roughly 30% of the biosolids produced across the state are currently managed at landfills, either as Alternative Daily, Intermediate, or Final Cover (ADC/AIC/FC) or via disposal. In the Bay Area, the majority of biosolids are sent to landfill as ADC during the winter months. Publicly Owned Treatment Works (POTWs) in San Jose, Monterey, San Diego, and Ventura landfill year-round under long term management plans. There is not sufficient capacity to divert all of that material today. Changes in technology or management require long term planning, permitting, design, and construction in order to meet this need and sufficient time is necessary. POTWs provide essential public services supported by ratepayers and are governed by elected or appointed officials. As a publicly owned facility if there are any new charges and/or increases to existing rates, then tax (rate) payers must be given the opportunity to vote to approve the rate increases as required by Proposition 218. This entire process requires horizons longer than are provided under this proposed regulation. As such, we strongly recommend an implementation date no sooner than 2025 for the diversion of biosolids from landfills in order to ensure effective implementation of the regulations.

Additionally, the Waste Characterization table (WCT) for the 2014 baseline must be updated to include biosolids. In 2014: 113,000 dry metric tons (DMT)/567,000 wet US Tons were used as Alternate Daily or Intermediate Cover (ADC/AIC) and 60,000 DMT/300,000 wet US tons were disposed of at landfills. We also recommend that biosolids also be included in the 2018 Waste Characterization Study.

We also recommend that a separate section be developed in the regulations for the wastewater sector and biosolids since they are dissimilar to conventional solid waste streams.

Specific Recommendations

CASA offers several specific recommendations to modify the proposed regulatory language to implement SB 1383:

1. Section 20.1(b) Recycling. – While in-vessel digestion and composting are listed as recycling options, the products of those processes are not. Both produce biosolids, when sewage sludge is a feedstock and the biosolids must be effectively managed. The land application of biosolids and compost must be included as recycling options.

2. Section 30.3 – Waivers. POTWs may occasionally experience treatment process upsets that can preclude their ability to land apply biosolids if they are unable to achieve the necessary level of pathogen or vector control as established in the federal and state requirements mentioned above. POTWs must be able to dispose of their sewage sludge in a landfill in those situations on a temporary emergency basis. We recommend adding: “Section 30.3(a)(4) Wastewater treatment plant emergency waiver. A POTW may dispose of sewage sludge in a landfill on a temporary basis should they experience process upsets that preclude them from achieving the necessary level of pathogen or vector control or other requirements which would allow them to recycle their biosolids.
3. Section 50.1 – Organic waste generators. If this section is to apply to POTWs, specific language should be added to make that clear and provisions should be specific to digestate, biosolids, and sludges since they are the byproducts of wastewater treatment, not organic wastes “generated” as a result of normal residential or commercial activity.

4. Section 50.4 State Entities and State Facilities. This section appears to apply to special districts but it is unclear whether that would include POTWs which can be formed under numerous state laws authorizing the creation of various types of special districts. Clarity is necessary in the definition of State Entity and this section on whether the requirements would apply to POTWs.

5. Add Section 60.3 Cleanliness of Organic Waste for Further Processing. As the wastewater sector increases the practice of receiving food and other organic waste for co-digestion and/or for composting, there must be assurance that the organic feedstock is appropriately cleaned such that there is no negative impact on the digestion or compost process or supporting equipment, and that end products are suitable for recycling. A section should be added with language to authorize the development of site specific specifications to achieve the necessary level of cleanliness.

6. Section 80.1 Organic Waste Recycling Standards and Policies. This section should set a statewide standard for the land application and beneficial use of biosolids. It should clearly state that biosolids can be land applied anywhere in the state as long as they are in compliance with 40 CFR 503 or the Statewide General Order. Local ordinances that ban land application or are more restrictive should be pre-empted. This section is of paramount importance since currently there are barriers to recycling biosolids imposed at some county borders throughout the state. It will be unworkable to require the diversion of biosolids from landfills if barriers to land application are not removed.

7. Section 80.1. As the wastewater sector increases the practice of receiving food and other organic waste for co-digestion, there must be assurances that markets also exist for the productive use of the biogas. In order to ensure successful implementation of SB 1383, we recommend that CalRecycle and the Air Resources Board work with the California Public Utilities Commission, the Energy Commission and other stakeholders to establish requirements that set volumes of in-state biogas from anaerobic digestion be procured by Investor and Publicly Owned Utilities (IOU/POU). We also strongly recommend that CalRecycle work with the California Air Resources Board and local Air Districts to maximize the beneficial use of biogas/biomethane which will have the added benefit of reducing the need for flaring.

8. Sections 17409.5.5, .6. & .7 and Section 17867(4) Loadchecking. It should be clarified that these sections do not apply to the wastewater sector.

Further explanation and rationale for each recommendation, and other information, is provided in the paragraphs below.

BIOSOLIDS
California currently sends roughly 30% of the biosolids produced each year to landfills, with 20% being beneficially used as ADC or AIC. Biosolids are used as ADC/AIC in much of the state for several reasons. Such use has been explicitly recognized as a beneficial use under AB 939 for many years. Many Bay Area agencies utilize this option in the winter months because area counties prohibit the land application of biosolids during what is “normally” the rainy season. Other locations in the state utilize their biosolids as ADC based on long term management agreements with local landfills and have structured their technology accordingly (e.g. Monterey, San Diego, Santa Clara, and Ventura Counties).
Any proposal to include biosolids as part of a diversion plan should comprehensively consider what alternative management options exist. While the wastewater sector and farmers recognize the inherent value of biosolids as a soil amendment or fertilizer which accounts for 62% of biosolids use. However in some cases, local jurisdictions have taken steps to limit this use. Many county ordinances restrict or limit land application of biosolids either through more expensive and energy intense treatment technology, because of the afore-mentioned rainy season (set by dates not by actual weather) or because of perceptions or rural/urban conflicts. This is despite federal and state regulations that promote and value the benefits of land application and recognition that biosolids help achieve all the objectives of the State’s Healthy Soils Initiative, based on decades of scientific research. In fact, a recent court ruling in Kern County concluded that banning the land application of biosolids violated both the Integrated Waste Management Act and local police powers, which, in conjunction with better understood benefits, should help local jurisdictions reconsider such ordinances.

Since there are a limited number of viable options for the management of biosolids (land application, landfill disposal or ADC/AIC, and potential alternatives through innovative technology), it is imperative that the state view biosolids management holistically, and clearly articulate and actively support options that are technologically and economically viable. If diversion requirements for biosolids from landfills are advanced, then unwavering support for land application will be a necessity in working with local jurisdictions to remove local restrictions. The recommendation above to preempt local ordinances from restricting land application of biosolids will be vital to assure sustainable means to recycle biosolids and allow development of other end use markets.

Furthermore, some landfill capacity must be preserved for situations in which there is no other alternative. While the wastewater sector diligently treats its solids to comply with federal and state regulations, there are occasional unforeseen treatment upsets that may result in noncompliant levels required for the beneficial agricultural use of biosolids. These instances require landfilling as a temporary option to protect public health and the environment. A provision to allow this should be added to the Waiver Section 30.3.

Wastewater treatment plants require long horizons to plan, fund, permit, construct, and operate new technology and/or management practices. Furthermore, some emerging technologies for biosolids have not yet been proven at commercial scale. Adequate time for such actions must be considered as any regulation is developed and especially when markets are uncertain.

**BIOGAS**

A 30% volumetric increase of food waste for co-digestion can result in a 100% increase in biogas production. However, projects to convert the biogas to renewable energy, whether electricity or fuel, can only move forward if there is market certainty that the biogas will be able to be productively and cost effectively used. CalRecycle can support and incentivize beneficial use of biogas, working with other agencies including the following:

- Local Air Districts: Currently, local Air Districts impose a variety of limiting requirements such as on stationary combustion generating units including turbines and internal combustion engines, and limits on biogas production over stated concerns for Hydrogen Sulfide emissions. These restrictions run counter to the state’s goals of reducing SLCPs.
• CPUC: A requirement that investor and publicly owned utilities procure a set volume of biogas from anaerobic digestion would provide a predictable market and price certainty to ensure project viability. Additionally, pipeline injection requires cost prohibitive heating value and siloxane concentration requirements of the biomethane. These standards and cost prohibitive access to the pipeline and should be revisited.

• California Air Resources Board (CARB): Price security for Low Carbon Fuel Standard (LCFS) credits would further improve the feasibility of biogas to fuel projects. This certainty could be achieved by establishing a green credit bank where the State becomes the buyer of last resort if the price of LCFS credits falls below an established floor, and/or by establishing an options market for LCFS credits that allows sellers to offer an LCFS sale at a specified strike price.

FEEDSTOCK QUALITY
Food waste and other organic feedstocks to be diverted from landfills present contamination challenges which must be overcome, whether they are destined for anaerobic digestion, compost, or innovative thermal technology. Without effective contaminant removal, any of these processes to manage food waste and extract value can be significantly impaired. It is imperative that private and public sectors collaboratively work to develop standards specific to site needs to ensure all parties’ needs are met. There are multiple areas for collaborative efforts including removal technology assessments, contaminant measurement and waste characterization methods, and source separation strategies.

In addition, CalRecycle can play a helpful role in linking the wastewater and solid waste sectors. CalRecycle’s Regulatory Capacity Planning Concepts note that counties will be expected to consult with owners and operators of existing facilities to gather information, which is a positive step. Adding explicit direction in the regulation for counties to consult with wastewater agencies in and around their jurisdictions will ensure that potential for use of existing infrastructure is fully exploited, and counties do not simply rely on private waste haulers and project developers to address all capacity needs when publicly owned infrastructure may be able to address some of that need.

WASTE CHARACTERIZATION TABLE
Given that the draft definition of "organic waste" includes biosolids and sludges, we are concerned that the 2014 WCT does not include any data on landfill use of biosolids nor are they included in the list of material types.

CASA has previously provided CalRecycle with data from USEPA on biosolids use in California landfills in 2014, which we believe should be included in the 2014 WCT. Since 2014 is the baseline for verifying compliance with SB 1383, it is critical that biosolids be included. This significant quantity of biosolids taken to landfills is relevant to an accurate waste characterization assessment. We are concerned that if biosolids are not included in the baseline, any diversion of biosolids away from landfills in the future will not be properly credited or taken into account. Locating and including this data should not be difficult, as wastewater agencies in California report the data to USEPA each year, and USEPA in turn provides the data to the State Water Board. We also strongly urge that biosolids be included in the upcoming 2018 Waste Characterization Study.
INNOVATIVE TECHNOLOGY

Collaborative efforts are underway to develop innovative technology which may extract energy from biosolids and greatly reduce the quantity of biosolids that must be managed. These technologies should be considered as alternatives that reduce landfill disposal and when demonstrated to work, be identified as recycling technologies that may be used in California, pursuant to Section 20.2. CalRecycle should support incentives for such research through demonstration and pilot projects and facilitate project development through streamlined permitting where appropriate. It would be extremely helpful for CalRecycle to include these points in its recommendations to the California Energy Commission for inclusion in the 2017 Integrated Energy Policy Report.

In summary, the wastewater sector recognizes the many opportunities available to help the state achieve its ambitious mandates and we stand ready to work together to ensure that the many challenges which must be overcome to be successful in these efforts are understood and addressed in regulation and policy.

Please feel free to 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

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