



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON CHAN
Chief Engineer and General Manager

July 12, 2013

Mary Nichols, Chair
California Air Resources Board
1001 I Street - P.O. Box 2815
Sacramento, CA 95812

Caroll Mortensen, Director
CalRecycle
1001 I Street - P.O. Box 4025
Sacramento, CA 95812

Via Email:

Subject: Comments - Waste Management Sector Plan for the 2013 Scoping Plan Update

Dear Ms. Mortensen and Ms. Nichols:

The Sanitation Districts of Los Angeles County (LACSD) appreciate the opportunity to comment on the Waste Management Sector Plan (Plan) and technical papers. The Sanitation Districts provide essential wastewater and solid waste management services for about 5.7 million people in Los Angeles County while minimizing harmful emissions and maximizing renewable energy. Our comments are generally focused on the purpose statement of the Plan with some specific comments on technical papers. LACSD were also signatories to letters that were submitted under the Solid Waste Industry for Climate Solutions/Solid Waste Industry Group (SWICS/SWIG) and the California Wastewater Climate Change Group (CWCCG). We fully support those comments and will try where possible to not repeat the contents of those letters

Plan Purpose

LACSD generally supports the concepts provided under Section 1 (*Background – What is the purpose of the overview*). It is correctly stated as a general purpose that:

“... we will be evaluating net environmental impacts throughout the entire life cycle for these waste materials.”



This is consistent with Scoping Plan Resolution 11-32 language that directs the Executive Officer to:

“... characterize lifecycle emissions reduction opportunities for different options for handling solid waste, including recycling, remanufacturing of recovered materials in state, composting and anaerobic digestion, waste-to-energy facilities, landfilling, and treatment of biomass.”, but also, *“... so that AB 32 implementation ... provides equitable treatment to all sectors involved in waste handling, and considers the best available information.”*

What is unique about the waste sector is the very strong regulatory climate that has been developed here in California and in some cases nationally, that has resulted in policies that already have worked to achieve the purpose and goals of the Plan. Examples of the existing regulations include:

- NSPS for landfills
- Early Action Landfill Methane Reduction
- Mandatory Commercial Recycling
- AB 939
- AB 341

As a result of these regulations, we have the most stringent control of landfill methane emissions in the world and recycling/diversion that has exceeded 50%, and is likely beyond 60%, with a goal of 75%.

Where the Plan falls short is the development of an “integrated vision” with associated priorities that are not a result of life cycle analysis and do not provide for “equitable treatment” to all sectors in waste handling, as required under Resolution 11-32. Because CalRecycle is developing a path to achieving the AB 341 goals and align those goals with AB 32, life cycle approaches need to be incorporated to establish a path that reduces greenhouse gases (GHG) to the fullest extent. The results of this assessment may show a path that is at cross purposes with each other, in which case, policy objectives need to be established carefully with stakeholders. The Plan also establishes 2035 and 2050 goals, but does this in a vacuum because no baseline has been established.

As a first step, LACSD recommends that a comprehensive life cycle study be performed that establishes the existing net GHG emissions for the waste sector. This study needs to be performed with stakeholders to determine the many factors that feed into a life cycle assessment, including the boundaries of the assessment. An important aspect of establishing boundaries is

determining what sector to assign GHG savings or emissions. As an example, one of the key benefits of recycling is the energy saving of not having to use and process virgin materials, however, an important question is who gets credit for those energy savings (e.g., energy sector, industrial/manufacturing sector, or waste sector).

Establishing goals and setting priorities on how much waste should be diverted from landfills, as well as what technologies (e.g., composting vs. anaerobic digestion vs. thermal processing) can be used to process this diverted material, can only be developed **after** an initial life cycle assessment is completed. The results of this assessment will not only ensure an “equitable treatment” of all sectors in waste handling, but help generate a more realistic value for the potential GHG reductions that can be achieved (e.g., is the 20 to 30 MMtCO₂e estimate realistic?).

Cap-and-Trade

Both CARB Board Resolutions 11-32 and 12-33 direct evaluation of an appropriate way to treat the waste sector under the cap-and-trade program. The Plan does not evaluate the issues of placing the waste sector under the cap-and-trade program, but only suggest this a mechanism to achieve waste diversion GHG emission reduction goals, that, as discussed previously, have not been properly evaluated.

ARB and CalRecycle should recognize that the cap-and-trade program under AB 32 is in place to develop a market price for fossil carbon, as well as establish a trading system to reduce CO₂e. Waste management is not a fit under this program because carbon flows from other sectors (e.g., energy sector) into products that, following the product’s useful life, are recycled into new products, utilized back into energy or become waste carbon. In all cases, different entities are responsible for their respective aspect of carbon, so then an issue of who would be responsible for establishing compliance obligations under cap-and-trade would result.. If only specific sectors of waste handling are placed under cap-and-trade, then leakage into other sectors will occur. This was acknowledged by CARB and CalRecycle in the *Municipal Solid Waste Thermal Technologies* technical paper life cycle presentation.

Also, one of the requirements of participating in cap-and-trade is accuracy in GHG measurements. The interdependent relationship of carbon flowing in this system coupled with difficulties in accurate direct measurements (e.g., measuring emissions from landfills) further argue for not including waste management facilities in the cap-and-trade program. With a strong partnership and guided by tools such as life cycle analysis, further reductions in GHG emissions can be accomplished more effectively in a targeted fashion, while achieving the waste diversion and recycling goals of the state.

Finally, it is suggested in the Plan and Recycling, Reuse, and Remanufacturing Technical Paper that if progress is not made towards the goals set forth in AB 341, CARB would consider placing the sector under the cap-and-trade program. First, as discussed above, CARB has not performed any analysis of the feasibility of placing the waste sector under a cap-and-trade program; we outlined previously why it is appropriate to do so. Second, as discussed in the SWICS/SWIG letter, meeting the AB 341 goals by 2020 is going to be extremely costly and difficult. There are daunting complexities and hurdles posed by inadequate organics management programs and infrastructure, insufficient recycling and recycling market infrastructure, chronically unpredictable recycling markets, permitting limitations, undefined capital financing capacity and slowly emerging recycling technologies. It is not clear this can be solved by placing the sector in a cap-and-trade program, as discussed, due to the flow of carbon in all sectors, all the players involved and many other issues. Most important is that the individual players within the waste sector have no control over most of these issues.

Even though AB 341 has established a goal of 2020 to achieve the 75% recycling rate, there is no substantive reason why that date is absolutely necessary, especially from a GHG perspective. AB 341 was not a component of the original Scoping Plan, so any GHG reductions it produces can apply to the long-range goals, especially since CARB staff has stated that they are on-track to meet the AB 32 2020 goals. Therefore, given the challenges of meeting AB 341, and the fact that any GHG reductions it achieves are not needed to meet the AB32 2020 goals, LACSD does not think it necessary to use cap-and-trade as a mechanism to move AB 341 along a pace that is not reasonable. The SWICS/SWIG letter goes into greater detail on this, but an important point discussed in that correspondence is the waste industry is a willing partner in achieving the AB 341 goals in a timely manner. As long as reasonable progress is made, the goals of AB 341 will be achieved to meet the long range goals of AB 32.

GHG Reduction from AB 341

CalRecycle and CARB estimate that implementing AB 341 will result in 20 to 30 MMTCO_{2e} reduction. This is discussed in more detail in the SWICS/SWIG letter, but worth repeating here that we have not seen any backup for this very substantial estimated GHG reduction. We have concerns not only how this was calculated, but if the waste sector can take credit for all of these reductions (see the previous discussion on life cycle boundaries). We are requesting that these estimated do not be included in 2013 Scoping Plan update until industry has the opportunity to fully review the calculations and discuss with CARB and CalRecycle.

Composting and Anaerobic Digestion Technical Paper (Digestion Paper)

To support the goals of AB 341 substantial levels of organic waste will need to be diverted from landfills. As discussed previously, CARB and CalRecycle should make use of life cycle assessment to help determine the appropriate waste handling of this waste. LACSD also believes that a general policy should be established that management of waste that results in energy generation should be promoted over technologies that don't (e.g., composting).

LACSD supports the general statement in the Plan that the most *“beneficial use of waste material based upon California’s economic, energy, waste and environmental goals”* should be incentivized. To that end, we believe that the Plan does not fully recognize the role Municipal Waste Water Treatment Plants (WWTP) in handling diverted landfill organics through anaerobic digestion. The digestion paper minimizes WWTP’s role because they are *“not processing municipal solid waste”*.

It is irrelevant whether a WWTP receives waste pre-processed or processes at the site, the key point is WWTPs are well positioned to provide in-place capacity to digest organics diverted from landfills. WWTPs, or POTWs across the State have significant existing available capacity in their anaerobic digestion facilities for receiving organic waste right now, making immediate use of the waste while supporting multiple State energy goals for renewable energy. The Digestion Paper and Plan should emphasize the existing anaerobic digestion capacity available at POTWs as a means of meeting State waste diversion goals. The wastewater industry would like to work with CalRecycle and CARB to estimate and include substantial existing anaerobic digestion capacity available at POTWs as it is available for immediate use to receive hauled-in organic waste streams. Preliminary data suggests that the vast majority of POTWs with anaerobic digestion have some level of excess capacity that can be leveraged. We suggest conducting a study to determine the existing and future available anaerobic digestion capacity.

In addition to existing available anaerobic digestion capacity at POTWs, these facilities have infrastructure in place to handle wastewater from the digestate dewatering and the processing of digested solids including the effective management of biosolids, as well as the biogas management facilities for generation of heat and power. Finally, operators at these facilities are trained to operate anaerobic digestion facilities ensuring little disruption in operations and a quality product.

The wastewater industry, as more fully outlined in the CWCCG letter, would like to work with CalRecycle and CARB on developing the necessary incentives, addressing long-term risks, and reducing cost and regulatory (including permitting) barriers to get the necessary infrastructure for both compost and anaerobic digestion in place.

Municipal Solid Waste (MSW) Thermal Technologies Technical Paper (TT Paper)

LACSD generally supports the discussion contained in the TT Paper, especially the discussion surround the net GHG benefits of waste-to-energy compared to landfilling. For many of the reasons described above, we support the exclusion of the waste-to-energy facilities from the cap-and-trade program as the entire waste sector is being addressed in the Plan, and would further support a full exclusion for similar reasons.

Under the subsection *Potential Conflict with Recycling Goals*, it is indicated that incentives for Thermal Processing facilities could attract feedstocks with recyclables. LACSD disagrees with this conclusion. As previously discussed, the State of California has well established regulations for recycling/diversion, leading to greater rates of each over time. MSW Thermal Technologies will always receive post-recycled waste streams, so as rates or recycling increase, or regulations to recycle become more stringent, these facilities will always receive post-recycled material. So we believe that it can be concluded that MSW Thermal Technologies compliment recycling programs.

Landfilling of Waste Technical Paper (Waste Paper)

The Waste Paper automatically assumes that emission from landfills must be further reduced in California. We disagree with this conclusion and believe that no further landfill regulations should be included as part of the 2013 Scoping Plan Update until certain actions are completed, as follows. The Scoping Plan should call for restarting the working group that developed the CARB landfill gas rule to review the data CARB has collected and report on the performance of landfills under the new rule and consider rule changes or developing best management practices, based upon that. In addition, CalRecycle and CARB should study better methodologies for measuring fugitive landfill emissions in order to support its goals and more accurately characterize the industry emissions.

It is stated in the Waste Paper that “*Recent direct measurement studies and modeling methods (CALMIM) indicate that landfill methane emissions may be higher than previously thought.*” We know of no such study to indicate this conclusion; and exact citation should be referenced.

Ms. Mary Nichols
Ms. Carol Mortensen

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It is also stated in the Waste Paper that CARB regulations should be considered to require phasing organics out of landfills, and to consider placing landfills in the cap-and-trade program. We refer you to the earlier discussions that the waste industry is willing to partner with CARB and CalRecycle to implement AB 341 in a reasonable time frame bearing in mind that the GHG emission reductions resulting from its implementation are needed for the Scoping Plan long-range goals. Implementing this regulation is better left the industry and CalRecycle considering the long history we have in meeting these types of goals or mandates. We refer you to the early discussion regarding our thoughts on including the waste sector in the cap-and-trade program.

Also with regard to reducing organics in landfills, while recognize that this will be necessary to meet the goals of AB 341, we are also aware that the Plan seeks to maximize GHG reductions. To this end, life cycle assessments should be conducted on organic diversion from landfills because based upon our internal assessments and papers (we would be glad to share upon request), in some cases, landfilling of organics can result in lower GHG emissions than other options, such as composting. As part of this assessment, CARB and CalEPA should also consider the energy potential of landfills, especially in light of the AB 1900 effort to allow landfill gas to be injected in natural gas pipelines.

LACSD appreciates the opportunity to provide comment on the proposed program. If you have any questions or comments regarding this submittal, please contact the undersigned of this office.

Very truly yours,
Grace Robinson Chan



Frank R. Caponi
Division Engineer
Air Quality Engineering
Technical Services Department

FRC:bb

cc: Howard Levenson, CalRecycle
Scott Smithline, CalRecycle
Eddie Chang, ARB
Mike Tollstrup, ARB