



# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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January 11, 2010

Mr. Kevin Kennedy, Assistant Executive Officer  
California Air Resources Board  
1001 I Street, 6<sup>th</sup> Floor  
Sacramento, California 95814

Dear Mr. Kennedy:

## **Preliminary Draft Regulation for a California Cap and Trade Program**

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate this opportunity to comment on CARB's Preliminary Draft Regulation for a California Cap and Trade Program (PDR). The Sanitation Districts provide environmentally sound, cost-effective wastewater and solid waste management for about 5.7 million people in Los Angeles County and, in the process, convert wastes into resources such as reclaimed water, energy, and usable recycled materials. The Sanitation Districts' service area covers approximately 800 square miles and encompasses 78 cities and unincorporated territory within the County through a partnership agreement with 24 independent special districts. The Sanitation Districts have also played a significant role over the years reducing air emissions and developing many state-of-the-art emissions controls and programs for our solid waste management and wastewater treatment operations that are now industry standards.

The Sanitation Districts appreciate CARB's efforts continuing efforts to meet with our staff and various associations. Our meetings have always been productive and we believe CARB fully appreciates the unique issues municipal essential public services face if our sector were fully subject to the Cap and Trade program proposed by your staff. The unique aspect of the approved AB32 Scoping Plan is the multi-faceted approach to reducing greenhouse gases (GHG) with cap and trade only a portion of the overall reduction strategy. With this approach, sectors such as ours that we believe do not fit in a Cap and Trade program are able to contribute to the overall program reduction goals by other more effective means. An example is the already adopted early reduction strategy to reduce methane emissions from landfills. The end result of this regulation is to make landfills operated in the State of California, such as the landfills operated by the Sanitation Districts, the lowest emitting landfills in the world. We were an active participant in the development of the regulation and are fully prepared to work with all landfill operators in the state through our active associations, to ensure a smooth implementation of the regulation's challenging requirements.

Many other examples of our potential contribution to GHG reduction goals can be cited, such as the yet to be implemented water measures in the Scoping Plan that will reduce GHG at POTWs, and the extremely low carbon footprint biofuels our sector can provide to the transportation sector in support of the Low Carbon Fuel Standard (LCFS). It is important to provide this perspective to remind CARB that request we have made for exclusion of our municipal essential public services do not reduce in any way our commitment to be a partner with CARB in reducing GHG.

Focusing on the PDR, we also want to express our appreciation to the CARB staff for hearing our request to exclude the carbon dioxide emission from the stationary combustion of biomass fuels and municipal solid waste landfills, from any surrender obligation. We believe this decision is consistent with other GHG reduction programs here in the United States and around the world. While this is a major step towards alleviating the concerns of our agency and partners that also provide similar services, we still have five key concerns with the PDR, as outlined below:

1. CARB should allow additional exclusions from the Cap and Trade Program for other processes and other facility-types in the waste sector. This would include –
  - In addition to carbon dioxide from stationary biomass combustion, fugitive emissions, such as from various processes at POTWs
  - Mobile carbon dioxide emissions from the use of biofuels with very low carbon footprints, such as LNG produced from landfill gas
  - The municipal wastewater sector (a permanent exclusion), and
  - Municipal waste-to-energy facilities, including carbon dioxide emissions from the combustion of municipal solid waste derived from fossil products, such as plastics.
2. CARB has inputted “placeholders” where they are suggesting there may be exceptions to the exclusions from surrender obligations granted to biomass combustion.
3. A definition of “*biomass*” needs to be broad in order to encompass as many sources as possible to be considered a “renewable energy”, and available for RES compliance.
4. The definition of “*renewable energy*” should be broadened to include waste-to-energy facilities that manage municipal solid waste.
5. The development, certification and use of offsets are too restrictive which could lead to a shortfall of credits in the market impacting the integrity of the Cap and Trade Program

We expand on each of these key points below.

1. **Additional Exclusions from Surrender Obligations of the Cap and Trade Program**

**Fugitive Emissions Exclusion**

We fully support the exclusion from the calculation of a surrender obligation for carbon dioxide generated during the stationary combustion of biomass, however, we believe CARB intended to also exclude fugitive emissions, but does not provide consistent language to support this assertion.

The summary of § 95950 on page 15 of the PDR states that “*most fugitive emissions*” would not create a surrender obligation, however, this concept is not discussed in the detailed section that starts on page 38. The nature of our sector is that many of the processes generate fugitive emissions that are difficult to accurately monitor or quantify, so it is important that CARB recognize this and expand the exclusion from surrender obligations to include both carbon dioxide from the combustion of stationary biomass and fugitive emissions.

**Exclusion from Surrender Obligations for Mobile Carbon Dioxide from the Combustion of Biofuels**

Biofuels, such as LNG produced from landfill gas, have the lowest carbon footprint of all fuels evaluated in the LCFS. CARB is considering several options for calculating the surrender obligations for transportation fuels. Whether CARB decides to regulate these fuels on the delivery side or combustion side, the Sanitation Districts recommend that biofuels derived from very low carbon sources such as landfill or digester gas should have no surrender obligation. As CARB points out, this approach would be consistent with the emissions accounting framework proposed for biomass derived fuels combusted at stationary sources, but also, this approach would encourage the production of these extremely low carbon footprint biofuels, a much needed commodity for industries with compliance obligations under the LCFS.

**Municipal Wastewater Sector Exclusion**

Under the existing 25,000 MTY CO<sub>2</sub>e Cap and Trade threshold very few municipal wastewater facilities would be included in the AB32 Cap and Trade Program. Facilities that would typically be captured are those that operate large fossil-fueled cogeneration facilities on-site. However, the Sanitation Districts are very concerned that in a later phase of the program, this threshold could be substantially lowered causing many more wastewater facilities to inappropriately enter the program. In these cases, the trigger could be exceeded due to the normal and typical operation of the wastewater treatment plant, not by the discretionary operation of large co-generation facilities. As we have discussed with your staff on many

occasions, and outlined in the attached White Paper<sup>1</sup> prepared by the California Wastewater Climate Change Group, of which we are a member, inclusion of wastewater under the Cap and Trade Program could have significant negative impacts on the protection of public health in the communities we serve. It is vital to our industry that we have certainty with regard to our regulatory status as we weigh our ability to generate future offsets, and we participate in future rulemaking to implement the Scoping Plan water measures. Therefore, the Sanitation Districts request that the wastewater sector (excluding fossil-based GHG emissions that trigger the 25,000 MTY CO<sub>2</sub>e) be specifically listed as having an exclusion from current and future calculation of surrender obligations. Finally, it should be noted that EPA's final Mandatory Reporting Rule has excluded municipal wastewater facilities (non-combustion processes) from any reporting obligations. In comparison, our request is consistent with EPA's approach.

### **Exclusion of Municipal Waste-to-Energy Facilities**

Under the PDR, municipal waste-to-energy facilities that exceed the 25,000 MTY CO<sub>2</sub>e threshold would have surrender obligations. Currently there are three waste-to-energy facilities in the State of California, all of which according to the 2008 CARB mandatory reporting inventory, would exceed this trigger and be regulated under the AB32 Cap and Trade Program.

Municipal solid waste is a mix of primarily biomass-derived waste, but also a smaller portion of the waste derived from fossil-based products such as plastics. This portion of the waste would generate anthropogenic CO<sub>2</sub> in sufficient quantities to trigger the 25,000 MTY Cap and Trade threshold. The Sanitation Districts believe it is inappropriate to regulate waste-to-energy facilities under a cap for several reasons. **First**, waste, such as plastics are not traditional fossil fuels that are typically the target of GHG reduction programs, but simply waste products originally produced from fossil-based materials. As an operator of the Commerce Waste-to-Energy Facility we have no control of the waste that is brought to our facility (this conclusion is consistent with the other two waste-to-facilities located in California). Control is a function of the diversion rates for recyclable material that are determined by the State of California in the AB939 program, and source reduction programs that are dictated by both regulation and economics; all of which we have no control over. However, it is accurate to say that the three waste-to-energy facilities are fully consistent with the existing recycling and reduction programs mandated by the State of California and those undertaken voluntarily by the commercial sector, by receiving waste after it has been subject to re-use and recycle, consistent with the goals set forth by the Integrated Waste Management Board. Every bit of waste that we receive has either been subject to source reduction, passed through a materials recycling facility, or subject to a curb-side recycling program. Therefore, fossil-derived products we receive, such as plastics, textiles, etc., that have not been removed from the waste stream, are truly end-of-the line waste products. The three waste-to-energy facilities operating in California are mass burn facilities providing no opportunity for additional sorting of these materials that are brought to the facility

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<sup>1</sup> Municipal Wastewater Perspective on a California Greenhouse Gas Cap and Trade Program

since they would have been removed already if it was practical to do, so we cannot readily remove these remaining waste materials to reduce anthropogenic CO<sub>2</sub><sup>2</sup>. Therefore, we have no choice but to manage these materials through the combustion process. If the state were to increase the current diversion rates currently prescribed under AB939, or require additional commercial recycling, we would once again fully compliment these new recycling and re-use goals.

**Second**, the municipal solid waste that is delivered to the three waste-to-energy facilities operating in California is a “must manage” waste, as just described. If the waste were not delivered to these facilities, it would be managed in a landfill instead. Once again, waste-to-energy facilities receive waste after re-use and recycling, so this end-of-the-line material would either be combusted or managed in a landfill. Combusting municipal solid waste in a waste-to-energy facility avoids the methane generation that would result if the material were landfilled and the uncontrolled methane (a potent GHG) were to become a fugitive emission. In addition, the energy produced from this renewable fuel offsets fossil-fueled electrical generation, although generally not counted because it would be considered “double counting” of the credits utilities take.

It is common in waste management to perform lifecycle assessments to determine the most appropriate waste management approach. EPA and the California Integrated Waste Management Board have developed detailed, peer-reviewed models to perform these assessments. Using these approved approaches, the avoided methane emissions from landfilling would far exceed the fossil emissions from a waste-to-energy facility combusting the same amount of waste material. The Sanitation Districts working with the operator of the two other waste-to-energy facilities in California are currently preparing detailed lifecycle analyses that we will share with CARB staff when finalized. However, the analyses performed to date (some of which we have already shared with your staff) indicate that under a lifecycle approach, the CO<sub>2</sub>e emissions from the waste-to-energy facilities would be negative when compared to landfilling. This analysis used the typical default assumptions that CARB and others have indicated they would accept, however, the conclusion holds even with the assumption of higher landfill gas collection efficiencies that would be more typical here in California given the more stringent regulations controlling landfill emissions. Once again, the procedures and conclusions are consistent with assessments performed by EPA and the California Integrated Waste Management Board. To be clear, we are not recommending that CARB perform individual life cycle assessment for each of the three waste-to-energy facilities on a regular basis, but accept our assessment as a demonstration that the conclusion that waste-to-energy facilities result in enough avoidance of landfill generated methane, that the overall emissions from the facilities, from a lifecycle basis, are well under a 25,000 MTY CO<sub>2</sub>e Cap and Trade threshold, is a fact.

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<sup>2</sup>After combustion, ferrous and non-ferrous metals are sorted for further recycling, where practical.

**Third**, excluding waste-to-energy from a Cap and Trade Program, as well as recognizing the technology, and municipal solid waste as renewable, is consistent with other national and international regulatory schemes. Under the European Union Emissions Trading Scheme (EU-ETS), waste-to-energy facilities are specifically exempted due to their ability to reduce GHG emissions from waste management. Under the Regional Greenhouse Gas Initiative (RGGI), which regulates fossil fuel-fired utilities only, waste-to-energy facilities are specifically exempted because they burn primarily municipal solid waste. Further, the U.S. House-passed Waxman-Markey, federal cap and trade bill (HR2454), while capping fossil-fuel fired utilities, among other sources, specifically excludes waste-to-energy facilities which burn five percent or less of supplemental fossil fuel (e.g., natural gas or fuel oil as a supplemental fuel). The U.S. Senate Environment and Public Works Committee approved the same exclusion in the Boxer-Kerry (S 1733) bill. Both Congressional bills also establish a federal Renewable Portfolio Standard that recognizes waste-to-energy as a renewable energy source, joining twenty four states and the District of Columbia that also define waste-to-energy as renewable. In addition, policy-makers have recognized municipal solid waste as a renewable fuel, including in the American Recovery and Reinvestment Act of 2009, and as contained in Section 203 of The Energy Policy Act of 2005. Finally, the net reductions achieved by waste-to-energy have been recognized internationally under the Clean Development Mechanism, as part of the Kyoto Protocol, where waste-to-energy projects can generate credits through the approved methodology AM0025, "Avoided emissions from organic waste through alternative waste treatment processes."

If CARB is to pursue future linkage with other programs in the United States or internationally, the PDR should be consistent with the above-cited programs and regulatory policies, and fully exclude waste-to-energy from surrender obligations in the AB32 Cap and Trade Program. This approach is not only consistent with these programs, but also the lifecycle assessments described above that demonstrate the negative GHG emissions when compared to the landfilling alternative.

## 2. **"Exceptions" from Surrender Obligation Exclusions for Biomass Combustion**

In both § 95950 (a)(2) and (b)(2) CARB indicates that there will be exceptions to the exclusion of carbon dioxide from the calculations of surrender obligations for stationary biomass combustion, but leaves these as placeholders. The Sanitation Districts are very concerned that CARB may be contemplating exceptions that could lead to negative impacts to our sectors. We request that CARB "fill in" these gaps as soon as possible and share with us prior to the release of the second draft.

## 3. **Definition of "Biomass"**

The Sanitation Districts support a definition of "biomass" that would reference the "Renewable Energy Program: Overall Program Guidebook," 2<sup>nd</sup> Ed., California Energy Commission, Report No. CEC-300-2007-003-ED2-CMF, January 2008. This definition broadly

covers our industry and provides sufficient opportunity for production of renewable fuels that are very much needed in the implementation of AB32 and in programs such as the 33% RES goal. In addition, this definition does not include biogas, therefore, we recommend that CARB include a definition of biogas to explicitly include landfill and digester gas.

4. **Definition of “Renewable Energy” Should Include Waste-to-Energy**

Consistent with major federal policies that recognize municipal solid waste as a renewable fuel and a broader array of federal and state policies (discussed above) that recognized waste-to-energy as a renewable energy, the definition of “Renewable Energy” in the PDR, should include waste-to-energy facilities that manage municipal solid waste. Once again, it is critical to the success of programs such as the 33% RES for a broad array of renewable energy sources be available to include in utility portfolios.

5. **The Restrictive Policies for Generation of Offsets**

The PDR requirements for generation, certification and use of offsets, are extremely regressive. CARB should be incentivizing all sources in California to contribute to greenhouse reductions goals. Also, offset opportunities result in creative development of technologies that ultimately benefit all sources and create new industries and job opportunities.

As a starting point, CARB should develop definitions supportive of usable offset programs. As an example, the definition of “Additional” is too broad and could be read to exclude most projects. As defined, it even extends to projects “*resulting from public grants or government grants*”<sup>3</sup>. CARB should back off on these general prohibitions and allow these concepts to be developed in the individual project protocols.

In addition, CARB should not be so restrictive on how much offsets can be used. CARB has been very careful in constructing a Cap and Trade Program in the PDR that does not place a cap on individual facilities, but over the entire program, yet CARB is proposing to place an offset cap of 4% on individual facilities. We believe that the two programs should be consistent and only an overall program offset cap should be established. In a true market system, offset credits should be able to be bought and sold as freely as allowances.

Finally, CARB should rely on several means of developing offset protocols to include not only CARB staff, but staff of other regulatory agencies and the use of third-party contractors. Also, to speed things along, sources should be encouraged to develop offset protocols for their sector that can be submitted and reviewed by third parties.

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<sup>3</sup> PDR § 96240 (c)(5)

If you have any questions regarding this transmittal, please contact Mr. Frank Caponi at (562) 908-4288, extension 2460.

Very truly yours,

Stephen R. Maguin

A handwritten signature in black ink that reads "Frank Caponi" followed by "SOR" in a smaller, more casual script. The signature is written over a horizontal line.

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cc: Lucille Van Ommering, CARB  
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## **Municipal Wastewater Perspective on a California Greenhouse Gas Cap and Trade Program**

The California Wastewater Climate Change Group (CWCCG) is a statewide coalition of wastewater treatment agencies. Together, we treat approximately 90% of the municipal wastewater in California. The mission of the CWCCG is to address climate change policies, initiatives, and challenges through a unified voice advocating for California wastewater community perspectives.

**The CWCCG believes that the wastewater management sector should not be included as a capped sector under a declining cap and trade program. We would welcome the opportunity to provide offset credits for use by others in capped sectors.**

### **EXCLUSION FROM CAPPED SECTORS**

It is prudent to exclude essential public services such as wastewater agencies from the capped sectors under the cap and trade program for the following reasons:

- 1) **Wastewater is a “must manage” product of society that, for public health and safety reasons, has long been considered an essential public service.** Essential public services should be insulated from marketplace uncertainties and not be forced to compete for allowance credits for non-discretionary, health-protective infrastructure and services. When facility changes consistent with approved regional plans or changes in regulations are needed, the need is within a strict time horizon and should not be delayed by the lack of credits nor excessive costs associated with scarce credits. SCAQMD’s Rule 1302 provides a definition of “essential public services” that may be considered for cap and trade rulemaking.<sup>1</sup>
- 2) **Essential public services such as wastewater agencies have limited ability to curtail their operations (in terms of volume or quality) due to the health and safety services they provide and the strict water quality regulations under which they operate.** Under a declining cap scenario, as proposed, or with growth of population and increasingly stringent water regulations – both of which are out of the agency’s control and evolve over time – meeting targets would likely be impossible without the purchase of credits. Wastewater agencies faced with increasing the level of treatment and volume of wastewater processed would therefore be forced to acquire credits to offset their emissions<sup>2</sup> at any cost or face failure in the delivery of services. These

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<sup>1</sup> From SCAQMD Rule 1302, “essential public services” include (1) sewage treatment facilities, which are publicly owned or operated, and consistent with an approved regional growth plan; 2) prisons; 3) police facilities; 4) fire fighting facilities; 5) schools; 6) hospitals; 7) construction and operation of a landfill gas control or processing facility; 8) water delivery operations; and 9) public transit.

<sup>2</sup> In addition, the majority of emissions from wastewater treatment systems are biogenic. Biogenic emissions have been excluded from regulation in all major GHG regulatory programs implemented to date around the world. For example, the USEPA’s Proposed Mandatory Reporting Rule states, “The calculation of total emissions for the purposes of determining whether a facility exceeds the threshold should not include biogenic CO<sub>2</sub> emissions (e.g.,

agencies would not only be at a distinct disadvantage in the marketplace and incur added costs, but would be forced to choose between meeting water quality and GHG reduction requirements.

3) **Essential public services have budget cycles, purchasing processes, and related limitations that are incompatible with market-based compliance systems.** Essential public services such as wastewater agencies cannot accommodate volatile price increases for allowance credits. By way of example, in the 2000-2001 timeframe, credit prices in SCAQMD's RECLAIM program jumped from cents per pound to over \$60 per pound in a very short period of time - a two order-of-magnitude change. Public wastewater agencies simply cannot adjust to such extreme price swings in such a short timeframe. In addition, government competitive bidding requirements can slow down the trading process as a result of more formalized procedures and the need for transparency, thus putting essential public services at a distinct disadvantage in a market-based system.

If deemed absolutely necessary to regulate the wastewater sector's GHG emissions, we would welcome the opportunity to work with CARB on the development of an effective and appropriate regime through a public process.

#### INCENTIVIZING GHG REDUCTIONS THROUGH OFFSET OPPORTUNITIES

**Reducing GHG emissions is an important goal that essential public services can best support by providing offsets to capped sectors in the cap and trade program.**

Innovative opportunities for generation of offsets and use of renewable fuels exist within essential public service sectors such as municipal wastewater. These include projects such as energy recovery from biosolids, soil carbon sequestration and reduction of fossil fuel derived inorganic fertilizer use through land application of biosolids, and combined heat and power fueled by digester gas. The offset credits generated would be additional to any regulatory requirements that may be developed for the wastewater sector.

#### SUMMARY

The CWCCG believes that the wastewater management sector should not be included as a capped sector under a cap and trade program because it is an essential public service. We believe there are many opportunities to assist in providing overall GHG reductions and would welcome the opportunity to provide offset credits to the capped sectors.

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those resulting from combustion of biofuels)." Moreover, Chapter 6, page 6.6 of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories contains the statement, "Carbon dioxide emissions from wastewater are not considered in the IPCC Guidelines because these are of biogenic origin and should not be included in national total emissions."