CWCCG
California Wastewater Climate Change Group

c/o California Association of Sanitation Agencies
1225 Eighth Street, Suite 595
Sacramento, CA 95814

October 14, 2013

Mary Nichols, Chairman
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Re: California Wastewater Climate Change Group Comments Regarding the Potential Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

Dear Chairman Nichols and Board Members:

The California Wastewater Climate Change Group (CWCCG) appreciates the opportunity to comment on the Potential Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions and we appreciate the leadership of the California Air Resources Board (CARB) on climate change issues. The CWCCG is a statewide group of municipalities that collect and treat over 90 percent of municipal wastewater in California, many of whom also provide recycled water services and actively participate in the beneficial use of biosolids and biogas. The CWCCG's mission is to address climate change policies, initiatives, and challenges through a unified voice advocating for wastewater community perspectives. CWCCG members are focused on helping the State achieve its multiple mandates and goals by 2020. These include: (1) providing 33 percent of the State's energy needs from renewable sources; (2) reducing carbon dioxide equivalent (CO_2e) emissions to 1990 levels; (3) reducing the carbon intensity of transportation fuel used in the State by 10 percent; and (4) recycling 75 percent of the solid waste generated in the State.

The focus of this comment letter is the amended language in § 95101(b)(2), specifically the addition of the following language:

> "…if all the emissions captured within the reporting entity's facility boundary, **including vented and fugitive emissions**, exceed the 25,000 metric ton CO_2e threshold specified in sections 95103(a) and 95103(f), the reporting entity is not eligible for the abbreviated reporting option provided in section 95103(a) and must submit a GHG report pursuant to the full requirements of this Article, including obtaining verification services pursuant to section 95103(f)."

Impact of including vented and fugitive emissions in § 95101(b)(2)

This language unintentionally requires the estimation of fugitive carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) emissions from municipal wastewater treatment plants (WWTPs).[i] Reporting of these constituents, especially fugitive N_2O, will significantly increase the number of WWTPs that will no longer qualify for the abbreviated reporting allowed by being under the 25,000 metric ton CO_2e emissions threshold, and could also bring many municipal WWTPs into the cap-and-trade program. The latter consequence will occur because an exemption for fugitive and process CH_4 and N_2O emissions from municipal WWTPs was removed from § 95852.2 in a 2011 revision to the cap-and-trade regulation.

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The following discussion expands on these issues.

Overview and background of issues

In general, wastewater treatment relies on aerobic biological processes to break down organic matter in wastewater. One byproduct of this natural process could be fugitive N_2O emissions. Currently, the EPA Mandatory Reporting Program does not require the estimation of these fugitive emissions due to the lack of a standardized estimation protocol. In general, these fugitive emissions from municipal WWTPs are difficult to quantify because of significant variation in the types of aerobic processes at WWTPs and other local factors (e.g., biological oxygen demand loading). In fact, as reported by EPA, N_2O emissions from internal WWTP processes are dwarfed by those occurring off-site in the treated effluent receiving waters due to downstream natural biological processes.

In 2010, the County Sanitation Districts of Los Angeles County (LACSD) met with CARB staff, followed by a letter (see attachment) requesting that fugitive emissions of CH_4 and N_2O from municipal WWTPs be explicitly excluded from a compliance obligation to avoid a situation that occurred with landfills when the State Mandatory Reporting Program was merged with the EPA Mandatory Reporting Program. The EPA requires reporting of fugitive landfill emissions in its program. The aligned reporting programs inadvertently brought landfills into the cap-and-trade program due to their fugitive CH_4 emissions. Language had to be added to § 95852.2 excluding fugitive landfill CH_4 emissions from a compliance obligation to avoid this unintended complication. To avoid the same situation with WWTPs if EPA were to require reporting of fugitive CH_4 and N_2O emissions in its Mandatory Reporting Program (which is being studied), CARB staff agreed with LACSD's recommendation and inserted language in the July 2011 draft cap-and-trade regulation to exclude this source. However, despite full agreement on this language between the wastewater industry and the CARB regulatory staff, and no comments in opposition from the public during the 15-day public review period, the language was removed in a later draft. In the "Supplement to the Final Statement of Reasons" dated December 2011, staff stated (see link - http://www.arb.ca.gov/regact/2010/capandtrade10/suppfsor.pdf - page 46) that the language was removed as a "general cleanup." Staff later clarified that the reasoning behind the draft exclusion was lost in the final cleanup.

Conclusion

To eliminate the problems that will result from the proposed amended language, **CWCCG recommends that two amendments be considered.**

- First, an exclusion should be added to § 95101(f-Exclusions)(7) for "fugitive and process emissions of CH_4 and N_2O from municipal WWTPs." This language will resolve the reporting issue described above.
- Second, language should be re-inserted in § 95852.2, excluding "fugitive and process emissions of CH_4 and N_2O from municipal WWTPs" from a compliance obligation. This language will prevent any unintended consequences from EPA potentially requiring reporting of these fugitive emissions in its Mandatory Reporting Program.

Bear in mind that many of the WWTPs currently in the State's Mandatory Reporting Program are there entirely because of biogenic CO_2 emissions from the combustion of digester gas, an essentially carbon-neutral, renewable fuel. Bringing any new source, especially those that provide an essential public service into the cap-and-trade program should be preceded by careful evaluation of CARB staff and the impacted industry, as well as thorough public review. We appreciate this opportunity to work with CARB

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staff to improve the Mandatory Reporting Program and further appreciate your willingness to consider our recommendations.

Please contact me if you have any questions at (925) 705-6404 or sdeslauriers@carollo.com. We welcome the opportunity to further discuss the wastewater community's position.

Sincerely,

Sarah A. Deslauriers
Program Manager
California Wastewater Climate Change Group

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[i] ***A municipal wastewater treatment plant (WWTP) is a facility consisting of devices and systems used to meet existing and anticipated demands for the storage, conveyance, collection, treatment, monitoring, recycling, and reclamation of municipal sewage and any by-products of these devices or systems. These devices and systems include: intercepting sewers, outfall sewers, sewage collection systems (including combined storm water and sanitary sewer systems), pumps, power generation, power transmission, and power metering, and other equipment, and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land to host the treatment process (including storage basins for treated wastewater in land treatment systems prior to land application and/or wetlands) or is land used for ultimate disposal of residues resulting from such treatment. A municipal WWTP is often categorized as primary, secondary, tertiary or advanced according to the pollutant removal demands and the mechanisms (physical, biological, or chemical) by which pollutants are removed. Septic tank systems not owned or operated by municipalities are not considered WWTPs under this definition.***

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

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STEPHEN R. MAGUIN
Chief Engineer and General Manager

December 15, 2010
File No.: 31-380.10

Clerk of the Board
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, California 95812

Dear Ladies and Gentlemen:

Comments on the Proposed Regulation to Implement the California Cap-and-Trade Program

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate the opportunity to comment on the Proposed Regulation to Implement the California Cap-and-Trade Program, referred to hereinafter as the proposed "program." 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 focus on two major areas: 1) the direct negative impact the proposed program will have on waste-to-energy facilities; and 2) overarching comments about the program's implementation and mechanics.

Our waste-to-energy concerns first. The Sanitation Districts waste management facilities emit largely biogenic CO2 because of the combustion of biogases (landfill and digester gas). One of our facilities however, the Commerce Refuse-to-Energy Facility (CREF), also emits anthropogenic CO2 due to the combustion of fossil-derived consumer end products in the waste stream, consisting largely of plastics. CREF is one of three waste-to-energy facilities in California, all built in the 1980's with the support of the California legislature that established laws to encourage these renewable energy facilities. Even though the *biogenic* fraction makes up the *majority* of the emissions (approximately 60%), the anthropogenic CO2 emissions are sufficiently large to trigger the cap and trade threshold. For the reasons that follow in greater detail, **we request that these facilities be removed from the proposed program because of the severe financial burden that would be placed on them, and on the local governments under which they operate.**

Our second set of comments focus primarily on the proposed program's implementation and mechanics. The Sanitation Districts are very concerned that implementation of the proposed

program is proceeding at too rapid a pace which could lead to higher than anticipated allowance prices. The trickle-down effect of this will negatively impact California's downturned economy further. The Sanitation Districts suggest that CARB take a slower, more modest initial approach to implementing a cap and trade program, allowing time for beta testing the market mechanisms, allowing time for learning from mistakes, building in more frequent overall program evaluation, creating dispute resolution procedures outside of the court system, allowing the development of a robust offset market and establishing the necessary linkages to allow for a healthy trading market.

The following expands on these two comment areas:

1) MUNICIPAL WASTE-TO-ENERGY CONCERNS

Overview:

CREF consists of a single municipal solid waste (MSW) fired boiler operated at a nominal charging rate of 300-350 tons per day of post-recycled refuse. The facility utilizes a state-of-the-art air pollution control system to control emissions. Steam produced by the facility is used to generate 11.5 MW (gross) of electricity, enough electricity to power up to 20,000 homes. This facility is owned by the Commerce Refuse-to-Energy Authority, which is a joint venture between the City of Commerce and the Sanitation Districts, and has been operated by the Sanitation Districts since 1987.

During the 1980's when three waste-to-energy facilities were built and operated in California, several state laws were enacted to support these facilities, the most important of which is contained in §41516 of the Health and Safety Code, which reads in part:

> "*...the construction of resource recovery projects can help alleviate the environmental and economic problems associated with municipal waste disposal, while at the same time producing additional supplies of energy and raw materials, and (d) that such projects should therefore be encouraged as a matter of state policy.*"

We believe that CARB's proposal is not consistent with this provision of state law and the intent of the Legislature to encourage operation of these three waste-to-energy facilities. Specifically, inclusion in the cap-and-trade program could cause the shutdown of these facilities causing greater amounts of greenhouse gas emissions in California given the likelihood that the waste stream would instead be discarded in landfills. We see no logic in this endpoint and, in fact, no other cap-and-trade program in the United States, or the world includes waste-to-energy facilities.

CARB is proposing only a partial exclusion of waste-to-energy from compliance obligations of the cap and trade program based upon their biogenic portion of the waste stream; the fossil-based components of municipal solid waste (MSW) such as plastics is treated very differently. It is this fossil-based portion of the waste stream that ultimately causes the CO2 threshold to be triggered placing waste-to-energy facilities into the proposed program. We believe this conclusion is inappropriate for the following reasons:

1. USEPA, under its Mandatory Greenhouse Gas Reporting Program, has recently changed the definition of "fossil fuel" by eliminating the language, "consumer products that are derived from such materials and are combusted." EPA admitted that there was "no precedent for this wording", and did not intend to indicate that MSW combustion was not a renewable energy, taken as a whole.

2. Consumer products that were originally derived from fossil materials (largely plastics) and which cannot be further recycled, should not be considered a traditional, discretionary fossil fuel; they are societal waste products that must be managed. Waste-to-energy facilities have as their primary purpose the management of MSW and they should not be treated as traditional fossil fuel-fired electricity generators who can pick and choose their fuel supply.

3. Components of post-recycled MSW, such as contaminated plastics, do not currently have recycle markets and must be managed either in a waste-to-energy facility or landfill. Life cycle analyses, using methods developed by EPA and approved by CARB, demonstrate that if one counts the avoided methane from not landfilling this waste, the anthropogenic CO2 generated from the waste-to-energy facilities that now count towards the cap and trade threshold would instead become negative (i.e., there would be a net greenhouse gas benefit).

We believe these facts argue for CARB to fully exclude waste-to-energy facilities from any compliance obligations under the proposed program.

Impact of Including Waste-to-Energy Facilities in the Proposed Cap and Trade Program:

Under the current CARB proposed program, waste-to-energy facilities will not enjoy the benefits of free allocations that are being offered to electric, gas and oil utilities, as well as other industries. CREF, like other waste-to-energy facilities that operate in California, receive post-recycled waste, and have no control over the incoming waste stream or practicable means to reduce the fossil-based components of the MSW (largely plastics). Thus, no options are available to meet the facilities compliance obligations except via purchasing allowances. As the price of allowances inevitably increases, in time this amount could easily exceed a million dollars per year.

CREF, like other waste-to-energy facilities, has no ability to pass this allowance cost through, contrary to a critical but incorrect assumption that CARB has made about these facilities. Two main reasons exist that prevent passing costs through to haulers. First, CREF has fixed-rate electrical contracts that do not allow for any cost recovery of allowances. Second, if CREF raises its tipping fees, haulers using the facility would simply take the waste to local,

cheaper landfills, resulting in an increase in greenhouse gas emissions due to increase methane emissions at the landfill. The overall impact to the City of Commerce, as well as its operating partner, the Sanitation Districts, would be the need to absorb the allowance cost, a cost which would recur each compliance period at an ever-increasing dollar amount, every year into the foreseeable future. **Local governments that are already severely impacted financially by the economic downturn cannot afford to absorb the cost of emissions allowances or their administrative costs.**

Conclusion:

CARB is taking the unprecedented step of requiring waste-to-energy facilities to be part of the proposed program. Throughout the world these facilities are treated as sources of renewable energy. However, in the proposed program, these facilities are treated as electrical generators (without the concomitant benefits of free allowances) rather than as waste management facilities. We are requesting that CARB fully exclude waste-to-energy facilities from any compliance obligation under the cap and trade program recognizing three factors:

1. Not doing so will have a severe financial impact on the facilities and the local governments they serve, potentially forcing them to shut down and making them stranded infrastructure, unable to continue because of their inability to meet their bond payments.

2. It has been shown, and verified by CARB, that operating these facilities avoids methane emissions at the local landfill, resulting in a net benefit (reduction) in greenhouse gases.

3. State law clearly states that these renewable energy facilities should be encouraged "as a matter of state policy".

2) PROPOSED PROGRAM IMPLEMENTATION ISSUES AND MINOR COMMENTS

Revision of the BAU Projections:

CARB has performed extensive re-analysis of the business as usual projection for 2020 taking into account the downturn in the economy, reduction measures that are now moving forward, as well as those reduction measures expected to occur in the future. This new projection leaves 18 MMTCO2e that must be reduced, presumably by the cap and trade program; however, CARB is continuing to design a cap and trade program to reduce approximately 30 MMTCO2e.

The Sanitation Districts recommend that CARB take advantage of the smaller reductions needed in the proposed program to design a more modest cap and trade program that can be ramped up in the future after CARB gains experience in operating such a program. Also, the

new projections indicate a reduced urgency in getting a market up and running, so there is more time for staff training, establishing the necessary tools to run the program, beta testing and market simulations. We believe that taking this approach will ultimately lead to a more certain market that will serve as a solid foundation when more sectors are brought into the program in the future, as well as allowing more time to work out linkages to other cap and trade programs. Our fear is that proceeding too rapidly without a proper foundation will lead to an unstable market and inflated allowance prices, with their negative "trickle-down" effect.

Offset Usage and Creation:

Offsets are vital to a healthy market to ensure allowance availability and price control. Offset creation in the proposed program is hampered by many hurdles. Development of protocols is a difficult process in itself; there is too little reliance on existing offsets protocols developed in other programs and registries. Also, the retirees of offsets are saddled with too many responsibilities regarding the validity of the underlying credit project. The Sanitation Districts believe that if there is offset reversal, the offset developer should bear the burden of making the system whole. Within California, GHG offsets will become more difficult to generate because of their indirect connection with the upcoming stricter ozone standards that focus on the criteria co-pollutants. As a result, GHG offset projects will be counted against needed NOx and VOC reductions and will be incorporated into the SIP, thereby creating an impossible additionality test. Finally, while it is an improvement that CARB has increased the allowable level of offsets that can be used in a compliance period, we believe that this level should be even higher, if not unlimited, at least at the beginning of the program, to spur the development of offsets and ensure allowance availability.

Conflict Resolution, Variances and Market Oversight:

The complexities of the proposed program will likely result in the need for regulatory interpretation and conflict resolution for differing opinions between CARB staff and regulated entities. Also, instances of unanticipated long-term deviations from regulatory requirements will likely occur because of breakdowns or other circumstances beyond the control of the facility. During these events an opportunity to obtain "variances" should be available to avoid unnecessary or misguided enforcement action. The Sanitation Districts recommend that CARB establish both an independent body for dispute resolution, as well as a Hearing Board, similar to the SCAQMD Hearing Board, where variances from the cap and trade regulation can be obtained.

Finally, independent market monitoring and at least *annual* internal program evaluation by CARB should be accomplished to look for and fix program weaknesses and to ensure reasonable market behavior.

MISCELLANEOUS BUT IMPORTANT COMMENTS

§ 95852.2. Emissions without a Compliance Obligation:

(a) – It is critical to potential wastewater credit generation that the wording "except biogas from digesters" should be removed. We believe this was unintended and only confuses this subsection with manure digesters. The wastewater industry in California has many digesters that would be very negatively impacted by this provision.

(a)(1) – "Solid waste materials" should be defined.

(e) – As written, raw landfill, digester, as well as other biogases would not be covered in this section, which is not the intention of staff, we have been told. The following changes are suggested:

Biomethane or biogas from the following sources:

(2) Landfills ~~gas~~ and wastewater treatment plants

(f) – Merging the Federal Mandatory Reporting Program into the California program could have the unintended consequence of requiring fugitive emissions from landfills to count towards the thresholds for the cap and trade program. This is because the federal reporting program requires the calculation of fugitive emissions from landfills, which is not required in the California program. This outcome is not intended by CARB staff. To avoid this situation, we recommend adding the following:

(6) CH4 from landfills.

In addition, using the same line of reasoning, if EPA requires similar calculations from POTWs, we suggested the following language be added:

(7) CH4 and N2O from POTWs.

§ 95857. Untimely Surrender of Compliance Instruments by a Covered Entity. (b)(3):

The Sanitation Districts recommend that offsets be allowed to cover an entity's compliance obligations in situations of excess emission, in addition to allowances. Such a restriction on the use of offsets is extremely punitive for the entity with a compliance obligation and is another barrier against creating offsets.

The Sanitation Districts appreciate 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,

Stephen R. Maguin

Frank R. Caponi

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

FRC:bb

cc: Steve Cliff – CARB
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