

CALIFORNIA WASTEWATER CLIMATE CHANGE GROUP

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Core Steering Committee

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Submitted via electronic mail to: policy@climateregistry.org

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From: The California Wastewater Climate Change Group

Subject: Local Government Operations Protocol

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As requested, the California Wastewater Climate Change Group (CWCCG) has completed the review of the Draft Local Government Operations (LGO) Protocol, Chapter 10 Centralized Wastewater Treatment Facilities.

Steering Committee

Central Contra Costa
Sanitation District

City of Fresno

City of Los Angeles Bureau of
Sanitation

City of San Diego –
Metropolitan Wastewater
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The CWCCG is composed of wastewater agencies throughout California and member agencies of the CWCCG treat approximately 90% of municipal wastewater in the state of California. The primary purpose of the CWCCG is to respond to climate change and forthcoming regulations and to provide a unified voice for the California wastewater industry.

CWCCG first began looking at the development of a bottom-up wastewater industry specific GHG reporting protocol in May of 2007. In January 2008, CWCCG members met with CCAR to discuss how best to work together to develop a wastewater protocol that was a bottom up estimate, scientifically sound, and rigorously reviewed and acceptable not only to CCAR, but to ARB and EPA as well. Since that time, CCAR at the request of ARB has undertaken an effort to develop a LGO Protocol, which would include city operated wastewater facilities. Recognizing that CWCCG's planned efforts to develop a robust protocol would not be complete in time for ARB's LGO Protocol deadline in summer 2008, CWCCG agreed to help CCAR meet the requirement of the LGO protocol by providing a "Phase I" protocol. The "Phase I" protocol was to be based on a top-down approach and existing methodologies. Since January 2008, CWCCG has spent significant time and effort working with CCAR on the Phase I protocol to meet ARB's deadline. At the same time, CWCCG's original focus on a more refined and robust bottom-up protocol has been put on hold. At this time, CWCCG feels that their efforts, expertise, and associated cost has resulted in little to no progress towards a more refined wastewater industry GHG reporting protocol. Therefore, CWCCG would like to focus its remaining funds and any future funds solely on the Phase II protocol development. We are hopeful that future efforts and coordination with CCAR will help CWCCG focus on our end goal – an accurate emissions accounting method for the wastewater industry.

Our specific comments related to Chapter 10 of the LGO Protocol are attached. The CWCCG appreciate the opportunity to review and comment on the Draft Local Government Operations Protocol.

Please contact Helen Hu at 916-876-6098 or HuH@SacSewer.com if you have any questions concerning our comments.

Section #	Comments
Ch. 10, pg 95	General – The introductory paragraph acknowledges the existence of primary treatment (plants) but the subsequent discussions make an assumption that all wastewater treatment plants are secondary plants and that all secondary plants generate N ₂ O at the levels indicated. Some WWTPs are unique and have de minimis process N ₂ O emissions and CO ₂ emissions an order of magnitude less than standard wastewater treatment processes. These processes should be encouraged by at acknowledging that alternative processes exist.
Ch. 10, pg 95	Last sentence, 2 nd paragraph: “Table 10.1 provides... for common GHG sources related to solid waste.” Do you mean wastewater and not solid waste?
Sec. 10.1 Pg 95	Need to clarify sentence: examine your wastewater treatment activities according to the organizational boundary guidance in Chapter 3.
Sec. 10.2 Pg 95	Last sentence, 1 st paragraph, revise to read “Centralized wastewater treatment systems... for removing nutrients and providing disinfection.”
Sec. 10.2 Pg 96	Last sentence, 2 nd paragraph: This sentence is not accurate. Also, the proper word for “sludge” is “biosolids”. First 3 paragraphs on page 96: These paragraphs do not make much sense, confusing, and does not support the info provided in Table 10.2. If the intent of these paragraphs are to explain the source of CH ₄ and N ₂ O, these paragraph need to be expand to better explain the intent.
Sec. 10.2, pg 96	Clarify applicability of statements and tables: <ol style="list-style-type: none"> 1. First sentence, 3rd paragraph: after the word “wastewater” insert the words “in most secondary treatment processes” 2. Table 10.2: <ol style="list-style-type: none"> a. GHG Source Column, 4th and 5th rows down from title block, replace the words “Centralized WWTP” with “Standard Centralized Secondary WWTP” b. The “F” in this table needs to be defined since they do not mean the same thing.
Sec. 10.3 Pg 97 Box 10.1	The California Wastewater Climate Change Group. Re-write as follows: “In a proactive approach to meet potential future GHG regulatory requirements, over forty California wastewater agencies have formed the CWCCG. To that end, the CWCCG is working to develop an emissions quantification protocol for wastewater treatment plants in California that will allow an operator to estimate its GHG profile of all six major GHGs. For the more conventional GHG pollutants like CO ₂ from combustion and power importation, the document will reference and steer the operator toward a variety of existing general reporting protocols for most of the GHG pollutants. For other pollutants, like N ₂ O, the CWCCG intends to use Water Environment Research Foundation (WERF) research on N ₂ O from activated sludge plants, currently under way. The WERF research, which is focusing on a combination of direct measurements and refinement of mathematical modeling, should provide quantification tools for the industry. Other pollutants such as CH ₄ and other potential fugitive emissions release points will also be incorporated as part of later WERF study programs or other study programs, so that a complete wastewater industry emission profile can be obtained.”

Section #	Comments
	<p>3rd paragraph, revise to read: “For more information, refer to CWCCG’s <i>Discussion Paper for a Wastewater Treatment Plant Sector Greenhouse Gas Emissions Reporting Protocol</i> (April 2008).”</p> <p>Also, is the discussion paper included in the Appendix or somewhere in the LGO Protocol since this is referenced?</p>
Sec. 10.3.1.1 Pg 97	<p>Biogas is not necessarily produce during wastewater treatment. Biogas is typically a by-product of the biosolids treatment process.</p> <p>Revise 1st paragraph to read: “Many local governments... digester for biosolids stabilization. Biogas is a by-product of the digestion process which often is captured and used in energy production or is combusted. As there may be some inefficiency in ... CH₄ emissions.”</p>
Sec. 10.3.1.2 Pg 99	<p>“F removed” needs to be define as “fraction of overall BOD₅ removal performance.”</p>
Equation 10.6 Pg 101	<p>Is equation 10.6 for publicly owned/operated septic systems...or sum of all the estimated septic systems w/in a jurisdiction? If it’s the latter, then septic systems should be include in the community level protocol and not the LGO Protocol.</p>
Sec. 10.3.2 Pg. 101	<p>1st paragraph, replace the words “Centralized WWTP” with “Standard Centralized Secondary WWTP” in line 1 and line 12</p>
Sec. 10.3.2 Pg. 102	<p>Change title to read: Process emissions from “Standard Centralized Secondary” WWTP without Nitrification/Denitrification.</p>