



September 4, 2009

Renee Lawver  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**RE: Comments on ARB Mandatory Greenhouse Gas Emissions Reporting**

Dear Ms. Lawver:

The Air Issues and Regulations (AIR) Committee is a coalition of San Francisco Bay Area Publicly Owned Treatment Works (POTWs) working cooperatively to address air quality issues, under the guidance of the Bay Area Clean Water Agencies (BACWA). Many of our member agencies also manage potable water treatment, distribution systems, wastewater treatment, and biosolids residual programs. The AIR Committee has 18 member agencies, including large metropolitan facilities such as East Bay Municipal Utility District, the City and County of San Francisco, Central Contra Costa Sanitary District, and the City of San Jose. Together, AIR Committee member agencies treat over ninety percent of the municipal wastewater in the Bay Area.

On April 28, 2009, you assisted Amy Clymo and Jim Sandoval of CH2M HILL in leading a workshop sponsored by BACWA on AB 32 Mandatory Reporting of Greenhouse Gases (GHGs) for POTWs. The workshop was attended by many of our member POTW agencies, and a number of other POTWs from other areas of California. We received positive feedback from attendees about the meeting. We appreciate your strong support of our industry at this workshop and throughout the year through numerous telephone calls and ARB hosted webinars. Your contributions at the workshop were invaluable to those in attendance.

At the workshop, you welcomed and requested feedback from the attendees on ways that the ARB could enhance the Mandatory GHG Reporting program to streamline and clarify the process for reporting agencies and to minimize redundancy and unnecessary costs, specifically for GHG reporting POTWs. Now that the reporting process has been completed, the AIR Committee has gathered comments from BACWA members and other POTWs regarding the reporting process, including the online reporting tool and requirements in the regulation. The following sections summarize the comments gathered for your consideration.

Reporting Tool

A number of agencies found the ARB online reporting tool process hard to understand and navigation within the tool was ultimately not intuitive. In addition, as it was being used by

reporting agencies, several programming bugs were encountered in the reporting tool. However, agencies did recognize that ARB's programming consultant worked to fix bugs in a timely manner. Also, agencies found ARB staff was very helpful and patient throughout the process of helping reporters use the reporting tool.

More specifically, problems were experienced in deleting information such as incorrect report submissions, incorrectly entered devices, and incorrectly entered emitting activities. In addition, problems were encountered when trying to save information in the corrected report submissions. For example, if a facility type was chosen incorrectly, the error would not become apparent until data entry had already begun. Also, dialog boxes and buttons appeared and disappeared based on the input. These problems resulted in disruptions during data entry that made troubleshooting and completing the submission in a timely manner very difficult.

The emission report from the reporting tool does not disclose to the user the GHG emissions that are a result of the indirect electricity consumption. While the utility and region are identified, emission factors for the GHG emission calculations are not disclosed to the reporter. It would be helpful to the reporter to have this information for planning efforts to reduce GHG emissions.

A flow chart providing an overall view of what information would be required based upon specific entry choices would be very helpful in understanding the reporting tool process and expediting data entry into the reporting tool. It would enable proper facility set-up within the tool, which would ensure that information would not be inadvertently misinterpreted or unreported.

Additionally, a number of agencies that qualified for the cogeneration abbreviated report had trouble navigating the size and complexity of the reporting tool to enter a very small amount of data. A flowchart and a simplified set of instructions focusing on requirements for reporting and submitting an abbreviated report in the reporting tool would be ideal.

### Reporting Units

Please consider changing the reporting units for natural gas use from million standard cubic feet (MMscf) to therms or offering therms as an additional reporting option. Many reporting facilities receive natural gas use from the supplier in units of therms. This option would eliminate having to calculate an annual average high heat value (HHV) and back-calculating to MMscf units for reporting purposes.

### Regulation Terminology

In the regulation text, consider changing the term "biogas" to "digester gas" to differentiate between landfill and POTW gas emissions. This distinction could address how to modify the HHV measurement requirements in the regulation specifically for digester gas discussed below.

### Testing and Sampling Requirements

Please consider reducing the HHV sampling and testing required of POTWs to a semi-annual or annual basis once a set of HHV data has been established over a pre-determined period of monthly sampling and testing. Specifically for digester gas, monthly variances in HHV have a negligible impact on the total GHG emissions once emissions are converted to metric tons of

CO<sub>2</sub>-e. Reducing the amount of HHV sampling and testing would also save POTWs hundreds of dollars per month.

Also, consider adding other established sampling or testing methods for HHV which currently are not referenced in 17 CCR §95100-95133. Digester gas is generated from wastewater treatment processes via chemical reactions and biological processes and is not delivered as a refined fuel like natural gas may be for other reporting entities. For example, testing methods approved by Air Pollution Control Districts and Air Quality Management Districts in California are not listed as acceptable in 17 CCR §95125(c)(1)(B). Please consider adding methods to the regulation such as:

- ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels as listed in the Bay Area Air Quality Management District's Regulation 9, Rule 11 Nitrogen Oxides and Carbon Monoxide from Electric Power Generating Steam Boilers and in the San Joaquin Valley Air Pollution Control District Rules 4305 and 4306 Boilers, Steam Generators, and Process Heaters,
- ASTM D1826-94 or ASTM D1945-96 in conjunction with ASTM D3588-89 for gaseous fuels as listed in the Sacramento Metropolitan Air Quality Management Rule 411 NO<sub>x</sub> from Boilers, Process Heaters, and Steam Generators,
- ASTM D 3588-91,
- Standard method 2720C (gas chromatography),

or add language to the regulation that any Air District's previously approved methods for HHV testing would be acceptable.

If the language in the regulation stands as it is currently written, it may require double sampling and testing since the laboratories used to meet the Air District requirements may not have the ARB required methods as part of their testing procedures. Including alternate sampling and testing methods in the regulation would potentially provide more accurate information and simplify the process for POTWs.

Please clarify if biogas source testing results are allowed for calculating CO<sub>2</sub> emissions. According to 17 CCR §95125(b)(4), CH<sub>4</sub> and N<sub>2</sub>O emissions may be calculated using ARB approved source specific emission factors from source tests.

Please clarify how often gas meters need to be calibrated. According to 17 CCR §95103(a)(9), "All fuel use measurement devices shall be maintained and calibrated in a manner and at a frequency required to maintain this level of accuracy (±5%)." This clarification would help ensure compliance with the regulation and that proper documentation is available for verification purposes.

Please consider revising the requirement that thermal output be reported for POTWs reporting in the cogeneration sector. Requiring small power producers, such as POTWs, to install expensive meters to measure the amount of heat recovered from waste heat recovery systems seems to be an unnecessary cost. Bio-methane power plants usually use reciprocating engines, and as a result,

their heat recovery systems use low temperature water, with high flow rates and large diameter pipes. Therefore, installing the required heat metering systems could have such a significant financial and logistical burden on these small power producers.

#### Reporting after Reduced Emissions

When an entity or facility reduces emissions and no longer meets the reporting requirements, the defined process is to continue to file three additional annual reports to ARB demonstrating reduced emissions. Please consider allowing facilities to submit a petition to cease reporting after one year of reduced emissions provided the facility makes a quantifiable and permanent change in their process or equipment. For example, if a facility reporting in the cogeneration sector removed all their cogeneration engines, the cost of preparing and verifying reports for three additional years would seem unwarranted.

#### Reporting of Biogenic CO<sub>2</sub>

Please consider eliminating the requirement that biogenic CO<sub>2</sub> emissions from the combustion of biogas be counted against a facility's reporting threshold. Generally speaking, the public wastewater industry understands the benefit of estimating biogenic emissions at wastewater treatment plants (i.e., emissions from the combustion of digester gas). However, including biogenic CO<sub>2</sub> emissions in the 2,500 metric ton reporting threshold for electricity generation and cogeneration seems to penalize POTWs for offsetting fossil fuel emissions.

Thank you for your consideration of our comments regarding the ARB Mandatory GHG Reporting process and regulation. Please contact Stephanie Cheng at (510) 287-1337 or [scheng@ebmud.com](mailto:scheng@ebmud.com) with any questions or comments.

Sincerely,



Randy Schmidt on behalf of Stephanie Cheng  
AIR Committee Chair  
Bay Area Clean Water Agencies