



October 25, 2017

SUBMITTAL VIA EMAIL TO: vdouglas@baaqmd.gov

Mr. Victor Douglas, BAAQMD
375 Beale Street, Suite 600
San Francisco, CA 94105

**SUBJECT: COMMENT LETTER ON THE STAFF REPORT AND SOCIO-ECONOMIC
IMPACT REPORT FOR THE PROPOSED BAAQMD REGULATION 11,
RULE 18: REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT
EXISTING FACILITIES**

Dear Mr. Douglas:

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Bay Area Air Quality Management District's (BAAQMD) Staff Report and Socio-Economic Impact Report for the proposed Regulation 11, Rule 18 (Rule 11-18). BACWA is a joint powers agency whose members own and operate publicly-owned wastewater treatment works (POTWs) that collectively provide sanitary services to over 7.1 million people in the nine-county San Francisco Bay (SF Bay) Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health. We have an active committee structure with our Air Issues and Regulations (BACWA AIR) Committee charged with working cooperatively to address air quality and climate change issues.

As you would expect from dedicated environmental stewards, BACWA members provide reliable wastewater treatment to protect public health and the environment, and strive to exceed air and solids management requirements. We are providing specific comments below describing our support for, as well as our concerns and recommendations related to, the staff report and socio-economic impact report for proposed Rule 11-18.

First, we very much appreciate the willingness of the BAAQMD staff to work collaboratively with BACWA to understand the impact of Rule 11-18 on wastewater treatment facilities and their ratepayers. We support the efforts of BAAQMD in protecting public health and the environment, and will continue to work collaboratively with staff through the implementation of Rule 11-18.

The concerns and recommendations that follow are specific to the Socioeconomic Impact Report and the Staff Report.

1. Socioeconomic Impacts NOT Assessed for Public Facilities - "Pass Any Compliance Costs To Ratepayers"

It is stated on Page 3 of the Socioeconomic Impact Report that:

"..., many of the potentially impacted facilities are public entities, and thus could not be evaluated based on impacts on rates of return. These facilities are largely public utility districts or departments, and as such should be able to pass through any compliance costs to ratepayers, so potential socioeconomic impacts on these facilities have not been further assessed."

Approximately 31% of all facilities impacted by Rule 11-18 are considered publicly owned facilities per Table 1 of the Report, this includes wastewater treatment facilities that are governed by elected or appointed officials and managed by professionals who protect the environment and public health. As a publicly owned facility, if there are any new charges and/or increases to existing charges/rates, then tax (rate) payers must be given the opportunity to vote to approve the rate increases as required by Proposition 218. **It is critical that the socioeconomic impact of implementing control technologies and the subsequent impact those projects will have on the public entity's capital improvement plan (CIP) be assessed.**

BACWA prepared a letter report delivered April 4, 2017 to BAAQMD (attached) summarizing the planning and project implementation process wastewater agencies must undertake when investing in projects, particularly with regard to schedule and unique factors public agencies must consider to satisfy stakeholders, ratepayers, and their elected (or appointed) Board or Council members. Following a one to two year planning process, POTWs begin financial planning to determine if and when to increase customer rates to support the CIP schedule. The financial planning process can take a year to complete and includes rate projections for funding the identified CIP projects. While BAAQMD is not going to assess the socioeconomic impacts of Rule 11-18 on public facilities, **BACWA appreciates the lengthened period of time provided to comply with Rule 11-18 from three to five years, with the ability to extend the period for an additional five years, if needed.** The ability to extend this period for an additional five years provides enough time to properly assess the impact, plan, design, and construct capital improvement projects to satisfy Rule 11-18 requirements.

2. The No-Cost Option Is Not An Option

The proposed no-cost option of limiting hours of operation to reduce emissions is not feasible for publicly owned (wastewater) treatment works (POTWs). POTWs must operate continuously to protect public health and the environment. Therefore, any other approach to reduce emissions - covering processes, relocating stacks, adding oxidation catalysts, etc. - will incur costs that will be borne by ratepayers.

Table 1 of the Socioeconomic Impact Report summarizes estimated annualized cost ranges for control technology/approach by source. **BACWA recommends BAAQMD revise the table to clarify and separate the one time capital costs from the on-going (annual) operations and maintenance costs.**

3. All Publicly Owned (Wastewater) Treatment Works Are Placed in Phase II

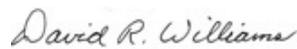
As BACWA members have been meeting with BAAQMD staff to educate them on the impact Rule 11-18 will have on POTWs and the need to build in an appropriate planning horizon for implementation, the Executive Officer decided to place all POTWs in Phase II of the implementation of Rule 11-18 (see the attached letter dated May 19, 2017 from BAAQMD

BACWA Comments on the Proposed Rule 11-18

Executive Officer, Jack Broadbent). This provides POTWs the needed time for assessing the economic impact of Rule 11-18, incorporating its requirements into their capital planning programs, as well as involving their elected boards and ratepayers in the process (which is required by law). The decision to place all POTWs in Phase II is made possible by Section III.D (Proposed Rule Requirements for Implementation) of the Staff Report. BACWA recommends documenting this decision within that section (e.g., as a footnote).

Thank you for the opportunity to comment on the proposed Rule 11-18. BACWA supports BAAQMD's intent to protect the Bay Area's air quality, and asks BAAQMD to carefully address BACWA's concerns. We would be happy to discuss any questions regarding these comments. Nohemy Revilla and Randy Schmidt, BACWA AIR Committee Co-Chairs, can be reached at NRevilla@sfwater.org and RSchmidt@centralsan.org, respectively.

Sincerely,



David R. Williams
BACWA Executive Director

Cc: BACWA Executive Board
Nohemy Revilla, BACWA AIR Committee Co-Chair
Randy Schmidt, BACWA AIR Committee Co-Chair
Courtney Mizutani, BACWA AIR Committee Project Manager
Sarah Deslauriers, BACWA AIR Committee Project Manager



April 4, 2017

Mr. Jack Broadbent
Executive Officer
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Submitted via email to: jbroadbent@baaqmd.gov

SUBJECT: LETTER REPORT SUMMARIZING THE POTW PLANNING AND PROJECT IMPLEMENTATION PROCESS WITH REGARD TO PROPOSED RULE 11-18

Dear Mr. Broadbent:

The Bay Area Clean Water Agencies Air Issues and Regulations Committee (BACWA AIR) appreciates the opportunity to provide the Bay Area Air Quality Management District (BAAQMD) a summary of the planning and implementation process wastewater agencies must undertake when investing in projects, particularly with regard to the schedule and special factors public agencies must consider to satisfy stakeholders, ratepayers, and their elected (or appointed) Board or Council members. BACWA is a joint powers agency whose 46 members own and operate publicly-owned wastewater treatment works (POTWs) that collectively provide sanitary services to over 7.1 million people in the nine-county San Francisco Bay (SF Bay) Area. BACWA members are public agencies, governed by elected or appointed officials and managed by professionals who protect the environment and public health. The AIR Committee is a coalition of SF Bay Area POTWs working cooperatively to address air quality and climate change issues, under the direction of BACWA.

POTW Planning and Implementation Process

POTWs need at least six years to plan, design, and construct capital improvement projects. Figure 1 provides a summary of the POTW planning and project implementation process, and also highlights environmental review and financial considerations. The steps provided in Figure 1 are briefly described in this section.

The planning process begins with a Facility/Master Plan (Plan). This plan develops a long-term (i.e., 20-, 30-, sometimes 50-year) financing forecast to ensure reliable public service that protects public health and the environment. The result of a Facility/Master Plan (which typically takes one year or more to complete) is a Capital Improvement Program (CIP). The CIP provides a schedule of needed repairs and rehabilitation projects, as well as new capital investments that

are to be funded over the next 10 to 20 years to achieve the objectives set out in the Plan. These CIP projects are developed with several key factors in mind: projected growth in service area, existing and potential future regulations, aging infrastructure, and new local, state, or federal policies in development (e.g., climate related goals). The CIP is typically reviewed and updated annually, as capital and operations budgets are developed each fiscal year for approval by each agency's publicly elected or appointed Board/Council.

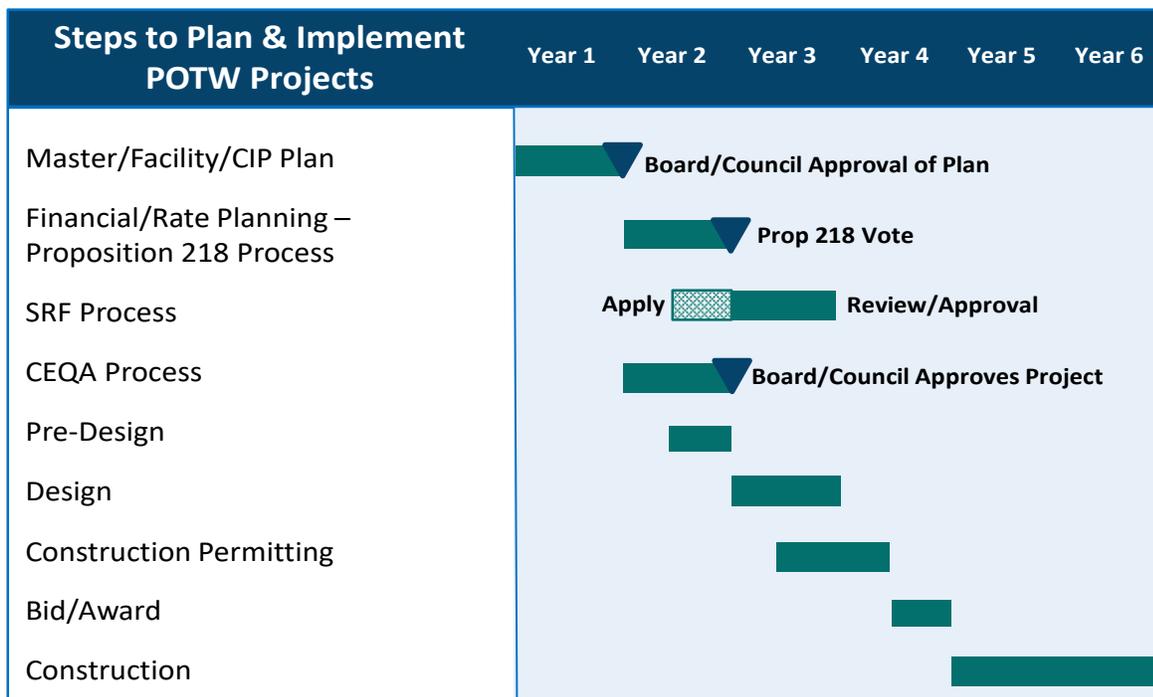


Figure 1. Timeline and Steps Necessary for Planning and Implementing POTW Projects.

Following approval of the Plan, POTWs begin financial planning to determine if and when to increase customer rates to support the CIP schedule. The financial planning process can take a year to complete and includes rate projections for funding the identified CIP projects. If there are any new charges and/or increases to existing charges/rates, then tax (rate) payers must be given the opportunity to vote to approve the rate increases as required by Proposition 218.

The environmental review process required by the California Environmental Quality Act (CEQA) can be performed concurrently with the financial planning process and typically requires up to a year to complete (may require additional time depending on the project elements). The environmental review process requires some pre-design work to provide specific information required for CEQA-Plus analysis. The pre-design work requires approximately six months and is typically undertaken toward the end of the CEQA-Plus process.

Following Board/Council approval of the Plan (within the last half of the CEQA-Plus environmental review process and concurrent with pre-design work), agencies begin the State Revolving Fund (SRF) application process. The SRF application process takes approximately six months to complete and requires CEQA-Plus documentation to be complete for submission. Once the application is submitted, the review and approval process begins and requires up to 12

BACWA Letter Report in Response to BAAQMD

months. Many POTWs apply for SRF to fund CIP projects. However, there is limited funding available through the SRF program at this time, resulting in more pressure on ratepayers to directly fund projects.

Following Board/Council approval of a project, POTWs begin the design process (approximately one year). About half way into the design, the construction permitting procedures begin (requiring up to one year depending on the project). Once the construction permitting activities are complete, the project can be opened for bid and awarded to a contractor - this process can take up to six months. Finally, project construction can begin and typically lasts approximately two years (including start-up procedures).

As Figure 1 shows, the entire process for planning and implementation of typical POTW projects takes a minimum of six years, assuming a project receives the necessary approvals at the various stages. More complex projects or controversial projects dealing with growth or environmental issues can take even longer. The implementation schedule for the Proposed Rule 11-18 is three years, with the potential to extend up to three more years. While this provides POTWs with a potential for six years for implementation, it leaves no flexibility for POTWs in the event there are issues with receiving Board/Council approval for the Plan, rate payer approval for rate increases, and Board/Council approval for the project, and assumes there are no delays with the environmental review or permitting processes.

Costs to Implement TBARCT

The draft cost estimates BAAQMD provided for the "Sewage Treatment Operations" Toxic Best Available Retrofit Control Technologies (TBARCT) are underestimating the true cost of TBARCT implementation costs (both capital and operating costs). Several BACWA member agencies have already estimated TBARCT costs for their POTW and those estimates are 2 to 10 times greater than BAAQMD estimates. BACWA members are willing to provide more detail on their cost estimates to ensure the accuracy of the costs considered by BAAQMD for satisfying TBARCT under Rule 11-18. It is important that these costs are accurate as they will be used to estimate the socio-economic impact of projects and determine the overall cost-benefit of projects. This information may reveal that projects to reduce TACs at POTWs are not as cost effective as initially estimated by BAAQMD staff.

Balancing Water Quality and Air Quality Objectives

The Regional Water Board is working to reduce nutrient loads in POTW effluent to receiving waters (specifically, the San Francisco Bay). One of the methods being considered at POTWs includes increasing aeration rates in secondary treatment to achieve additional nitrogen removal. While this process may effectively remove nitrogen to address a water quality objective, it may increase release of TACs and will increase energy demand. The BAAQMD staff should evaluate these types of competing regulatory objectives that may require additional flexibility to be built into Rule 11-18, and acknowledge existing regulatory requirements that POTWs have already taken into account in their CIP and regulatory compliance strategy.

Balancing TAC and GHG Reductions

BACWA Letter Report in Response to BAAQMD

While the intent of the proposed Rule 11-18 is to reduce TAC emissions from existing sources to protect the public, there is an urgent need to harmonize this rule with regulations targeting GHG reductions. Rule 11-18 may discourage beneficial use of renewable natural gas (biogas) for renewable energy production and result in a wasted (flared) resource. Additionally, the Draft 2017 Clean Air Plan proposes 100 percent diversion of organic waste from landfills by 2035 and promotes the increase in renewable natural gas production and use. As part of this effort, POTWs have been encouraged to accept the organic waste (specifically, food waste) to co-digest it with wastewater solids to increase generation and use of renewable natural gas and biosolids (as a soil amendment). Many facilities combust the renewable natural gas onsite to generate electricity, offsetting purchased fossil fuel based electricity and the associated GHG emissions. However, formaldehyde is released during the combustion of the renewable natural gas which may trigger noncompliance with the proposed Rule 11-18. Implementing additional controls may cause these resource recovery projects to be cost prohibitive or result in changes to existing permits (e.g., with regard to biogas production) that make it difficult to support resource recovery projects.

This type of barrier to GHG reducing projects and practices already exists. For example, there is a pilot project being considered at one of BACWA's member facilities that is partially funded by a state agency grant to receive food waste for co-digestion in their existing anaerobic digesters. The project is in direct response to, and supports, recent legislative mandates established in AB 32, SB 32, AB 341, AB 876, AB 1826, and SB 1383. The mandates require the diversion of organics from landfills to reduce methane emissions and anaerobic digestion of organics to generate renewable natural gas, and support the Governor's push to produce at least 50 percent of our energy needs from renewable sources and reduce the carbon content of transportation fuel, to mitigate climate change.

The project is also consistent with the 2017 Draft Clean Air Plan, the ARB 2030 Target Scoping Plan January Draft, and the Revised Proposed Short-Lived Climate Pollutant (SLCP) Reduction Strategy. Each document explicitly supports using existing infrastructure such as digesters at POTWs as part of the overall solution to mitigate climate change. However, the project is at a standstill while BAAQMD re-evaluates the permit limits initially recommended.

An example practice that may be at risk under the proposed Rule 11-18 is landfill gas use at Central Contra Costa Sanitary District (Central San). Central San treats an average of 32 million gallons of wastewater per day for discharge into Suisun Bay, and serves nearly 482,000 residents and 3,000 businesses in central Contra Costa County. Currently, Central San uses landfill gas from the nearby Acme Landfill to supplement the combustion of sewage sludge and generate steam through heat recovery. The steam drives the aeration turbine that supplies air to support the secondary wastewater treatment process. This practice minimizes the treatment plant's dependence on fossil fuels, in turn reducing the resulting anthropogenic GHG emissions from combustion. The proposed Rule 11-18 may restrict landfill gas (renewable natural gas) combustion since it may contribute additional TAC emissions, potentially forcing Central San to condition the landfill gas to pipeline quality before use, or abandon landfill gas use completely (flaring a renewable resource), and resort to using natural gas in the sewage sludge combustion

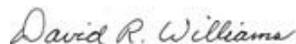
BACWA Letter Report in Response to BAAQMD

process. Unfortunately, the use of natural gas contributes to anthropogenic GHG emissions and is in direct contradiction with the Governor's climate goals for 2020, 2030, and beyond. Without the use of landfill gas to supplement sewage sludge combustion, Central San will be required to participate in the Cap-and-Trade Program and incur a minimum annual cost of \$250,000 in Cap-and-Trade allowances. Projects like these, which contribute toward achieving state and Bay Area climate goals, need flexibility built into Rule 11-18.

Additionally, because implementation of a rule like Rule 11-18 may discourage projects and practices that mitigate GHG emissions, staff must ensure the calculations of TAC emissions (used to estimate the prioritization scores) are based on realistic assumptions using current data. Gathering these data may take time, but is a critical step to ensure the balance between GHG and TAC reductions.

Thank you for the opportunity to provide information on POTWs that is crucial to the successful implementation of Rule 11-18. BACWA supports BAAQMD's goal to protect the Bay Area's air quality, and asks staff to work in conjunction with BACWA to address the stated concerns. We would be happy to discuss any questions regarding these comments. Nohemy Revilla and Randy Schmidt, BACWA AIR Committee Co-Chairs, can be reached at NRevilla@sfgwater.org and RSchmidt@centralsan.org, respectively.

Sincerely,



David R. Williams
BACWA Executive Director

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May 19, 2017

**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

David R. Williams, Executive Director
Bay Area Clean Water Agencies
P.O. Box 24055, MS59
Oakland, CA 94623

Re: Summary of the BACWA-BAAQMD Rule 11-18 Meeting

Dear Mr. Williams:

As discussed during the meeting on March 23, 2017, between the Bay Area Clean Water Agencies (BACWA) membership and the Bay Area Air Quality Management District's (BAAQMD), all Publicly Owned Treatment Works (POTWs) would be placed in the second phase of facilities required to perform Health Risk Assessments (HRAs) as specified in proposed Regulation 11, Rule 18. This would allow these critical public entities appropriate time to refine emission factors and develop funding sources to address health risks. BAAQMD is committed to working with POTWs to better address identified health risks while realizing the need for the POTWs to obtain appropriate funding sources to maintain critical health-protective water treatment services.

If you have any questions or concerns, please contact either, Eric Stevenson, Director of Meterology, Measurement, and Rules at (415) 748-4685 or Jaime Williams, Information Technology Officer and Director, Engineering Division at (415) 749-4904.

Sincerely,

Jack P. Broadbent
Executive Officer / APCO

JPB:ES/kf

cc: Eric Stevenson, BAAQMD
Jaime Williams, BAAQMD

- ALAMEDA COUNTY**
Pauline Russo Cutter
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Jack P. Broadbent
EXECUTIVE OFFICER/APCO

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