



October 16, 2017

SUBMITTAL VIA EMAIL TO: [vdouglas@baaqmd.gov](mailto:vdouglas@baaqmd.gov)

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

SUBJECT: COMMENT LETTER ON 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) 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 proposed Rule 11-18 and the Draft Environmental Impact Report (EIR) for your consideration.

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 rate payers, as well as update the data serving as the basis for the emissions inventory and draft preliminary prioritization scores. 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 draft Rule and EIR.

***1. Sewage Treatment Facilities Are Inaccurately Described and Referenced in the EIR***

BACWA proposes the following editorial changes to the text to accurately depict and reference sewage treatment facilities and operations:

## BACWA Comments on the Proposed Rule 11-18

- a) In Table 2.5-1, the primary risk drivers listed for Sewage Treatment Facilities in general (including cadmium and mercury) are incorrect. After a preliminary look at BAAQMD's data, the primary drivers appear to be hydrogen sulfide, formaldehyde, diesel particulate matter, and perchloroethylene. This short list of drivers may change when updates to the BAAQMD data are complete.
- b) The description of "Sewage Treatment Facilities" (Section 2.5.1.8, beginning on page 2-16) is inaccurate and needs to be corrected. For your reference in updating the text in this proposed Rule and for future documents, we have attached the abridged edition of the "Layperson's Guide to California Wastewater" prepared by the Water Education Foundation for use as a public information tool. We will deliver hard copies of the full document to your staff to be used as a resource going forward.

We recommend the following edits in this section:

- The text under Tertiary Treatment references disinfection. Disinfection is a separate treatment process. That text should be split, starting a new bullet dedicated to disinfection.
  - Under "Fugitive Emissions," equalization basins are referenced and assumed to be used as part of the typical treatment train, which is not accurate. These basins are used during wet weather when the influent flow is too large for the plant to process, so the plant can "equalize" the flow going into headworks using these basins. They are used as-needed primarily during the wet weather season, and in some locations only several days each year. "Lift stations" are also referenced in this section and are typically used to convey flows in the collection system versus from one unit process to the next. In general, lift stations are not used as most wastewater treatment facilities make use of gravity flow. Additionally, both lift stations and pumps within a treatment facility are not typically open to the air and therefore do not contribute to fugitive emissions.
  - Under "Stack Emissions," reference is made to aerobic digesters. No wastewater treatment facility in the Bay Area uses an aerobic digester, only anaerobic digesters are in use. Also, anaerobic digesters are described as "open aerated processes" which is the opposite of what anaerobic digestion is. Anaerobic digesters are fully enclosed vessels and digester gas is collected from the vessel. Finally, dryers are not used to dewater digested sludge - typically, belt filter presses, screw presses, or centrifuges are used for dewatering.
- c) The second sentence and its footnote in Section 3.2.4.1.3 need to be deleted, as it is outdated information and no longer represents the full scope of wastewater treatment facilities in the Bay Area:

~~*A survey of wastewater treatment facilities in the Bay Area indicated that there are at least 20 facilities ranging in size from a discharge rate of 0.1 to greater 30 million-gallons per day (Pacific Institute, 2009)<sup>2</sup>.*~~

- d) BACWA proposes the following addition to Section 3.2.4.1.3, page 3.2-30:

*If it is determined that affected facilities, primarily sewage treatment facilities, exceed the health risk requirements in Rule 11-18 and a decision is made to install a carbon*

## BACWA Comments on the Proposed Rule 11-18

*adsorption unit or thermal oxidizer, then it would likely take months, possibly years, to provide engineering specifications, acquire financing, purchase and deliver the necessary equipment, complete Air District permit evaluations, and undergo any necessary environmental analyses, as well as obtain local Board and rate payer approvals.*

It is critical to acknowledge that the planning process for implementation of reduction measures to include communication with a wastewater treatment facility's Board and rate payers.

- e) Under Section 3.5.2.2.5 (Wastewater Treatment Regulations), delete the following text, as the Regional Water Quality Control Board is the entity that issues discharge permits to municipal wastewater treatment facilities:

~~*In addition to federal and state restrictions on wastewater discharges, most incorporated cities in California have adopted local ordinances for wastewater treatment facilities. Local ordinances generally require treatment system designs to be reviewed and approved by the local agency prior to construction."*~~

- f) Biosolids are regulated under the Clean Water Act via Title 40 of the Code of Federal Regulations [CFR], Part 503. A description of Rule 503 should be added to Section 3.5.2.1.1.

### **2. Proposed Rule Discourages Biogas Production (Rule)**

While the purpose of the proposed Rule 11-18 is to reduce toxic air contaminants and protect public health, it may discourage the production and beneficial use of biogas for the generation of renewable energy or fuel, resulting in a wasted (flared) resource. Most BACWA members already beneficially use biogas generated from anaerobic digestion of sewage sludge or from nearby landfills to generate renewable electricity. Not only does this practice offset the treatment plant's dependence on fossil fuel based energy, it reduces the resulting anthropogenic greenhouse gas emissions.

The production of biogas, production of renewable energy, and the reduction of greenhouse gas emissions support statewide greenhouse gas reduction goals set under Assembly Bill 32 and Senate Bill 32, as well as BAAQMD's Clean Air Plan. Furthermore, the State Air Resources Board would like to see wastewater treatment facilities accept additional organic waste streams (specifically, diverted food waste and fats, oils, and grease from landfills) for co-digestion with sewage sludge to increase generation of biogas, in turn increasing renewable energy/fuel production in support of newly adopted mandates under Senate Bill 1383 (reducing methane emissions across the state). However, the proposed Rule 11-18 restricts the beneficial use of biogas since its combustion contributes to a slight increase in toxic air contaminants, potentially forcing wastewater treatment facilities to flare the biogas (wasting a resource and still combusting it) and purchase fossil fuel based electricity or natural gas. This would result in an increase in fossil fuel based greenhouse gas emissions statewide and is in direct contradiction with the Governor's goals for 2020, 2030, and beyond.

**BACWA recommends BAAQMD consider providing exceptions in Rule 11-18 for projects that contribute toward achieving state goals for reductions in greenhouse gas emissions through the diversion of organic waste from landfills, and increased production of biogas**

**for the generation of renewable energy or transportation fuel.**

**3. Cross-Media Impacts Must Be Considered (EIR)**

Wastewater treatment facilities are regulated by multiple governmental agencies whose goals can result in contradictory impacts to the municipal wastewater sector. While regulatory actions may be seen as effective when each media (air, water, land) is addressed separately, the deficiencies become evident when the regulations are viewed holistically for protecting the environment and public health. BACWA submitted a letter to BAAQMD in June of 2014 detailing the impact cross-media issues can have on wastewater treatment facilities.<sup>1</sup> There are increasing concerns about cross-media impacts and the potential operational and financial effects they will have on facilities that are trying to provide an essential public service while maintaining compliance with regulations supporting contradictory goals.

BACWA appreciates the reference in Section 3.5.4.3 (Conclusion, page 3.5-22) considering the impacts to water quality from the installation of air pollution control equipment:

*"Based upon the above considerations, water quality impacts from installing most types of air pollution control equipment that use water as part of the control process would not exceed applicable water quality significance thresholds and, therefore, are concluded to be less than significant."*

**BACWA recommends BAAQMD further address cross-media impacts (considering impacts of this rule on the use of biogas from the anaerobic digestion of sewage sludge and food waste, as well as impacts to the use of digested sludge or biosolids) in the proposed Rule 11-18, as well as in future proposed regulations.**

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](mailto:NRevilla@sfwater.org) and [RSchmidt@centralsan.org](mailto: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  
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<sup>1</sup> See [http://bacwa.org/wp-content/uploads/2014/06/BACWA\\_Cross-Media-Letter.pdf](http://bacwa.org/wp-content/uploads/2014/06/BACWA_Cross-Media-Letter.pdf)