



November 13, 2018

SUBMITTAL VIA EMAIL TO: wsaltz@baaqmd.gov

Mr. William Saltz, BAAQMD
375 Beale Street, Suite 600
San Francisco, CA 94105

SUBJECT: COMMENT LETTER ON THE PROPOSED BAAQMD REGULATION 13,
RULE 1 (SIGNIFICANT METHANE RELEASES) AND DRAFT WORKSHOP
REPORT

Dear Mr. Saltz:

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Bay Area Air Quality Management District's (BAAQMD) proposed Regulation 13, Rule 1 (Rule 13-1) and the Draft Workshop Report. 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, not only do BACWA members provide reliable wastewater treatment to protect public health and the environment, they strive to exceed air and solids management requirements, as well as maximize the beneficial use of products (including biogas). We are providing specific comments below related to the proposed Rule 13-1 (regarding significant methane releases) and the Draft Workshop Report for your consideration.

1. 13-1-104 Limited Exemption, Maintenance or Repairs

We recommend more specific language than "pipeline repairs". We suggest replacing it with "pipeline construction/alteration/installation." Per comment no. 6 below, we recommend replacing "sphere" with "anaerobic digester."

2. 13-1-209 Significant Methane Release (definition)

At the November 1st workshop the BAAQMD staff stated they were working on definitions that would govern Regulation 13. It is unclear how terms that are yet to be defined can/will be used in this Rule. In the meantime, we recommend considering the addition of a mass limitation (e.g., "AND greater than or equal to 10 pounds per day") to rule out releases resulting in a small mass. Digester gas is concentrated, thus the release of small amounts due to routine maintenance

operations (which are exempted 13-1-104) will require a substantial number of staff hours to report in accordance with the regulation. For example, cleaning a digester gas flame arrester may result in the release of a few cubic feet of digester gas producing a small mass (less than 10 pounds). However, under 13-1-401, reporting is required within 48 hours for this level of a release. Since this regulation is focused on “significant methane releases,” we recommend amending the definition to exempt small releases of digester gas (less than 10 pounds per day).

3. *13-1-302 Recurrent Methane Releases*

Upon the third significant methane release, the draft regulation states that the source shall be shut down within seven calendar days. Some equipment cannot be shut down within seven days. For example, an unexpected leak in the digester tank or hood would require draining the digester, which in some cases requires a contractor’s assistance. Shutting down the process takes about six weeks to remove the actively digesting sludge. We recommend adding a definition for “shut down” which includes a requirement to contain or abate emissions to the extent possible, perhaps by closing liquid and gas inlets and outlets, or other appropriate equipment specific action.

4. *13-1-401 Release Reporting Requirements*

As discussed in comment no. 2, wastewater treatment plant staff and BAAQMD staff will spend an inordinate amount of time processing release reports for very small releases exempt under 13-1-104. This can be mitigated by either amending the definition of significant methane release as described in comment no. 2 or exempting these incidents of small mass releases from reporting requirements. Also, 48 hours to determine whether an emission is “significant” may not be sufficient time based on staffing availability. We recommend requiring 30-day written reports consistent with what is currently required under Breakdown Reporting.

5. *13-1-602 Determination of Mass Emissions*

It appears the document referenced in Section 602.1 is the EPA-453/R-95-017, circa November 1995. The accurate title is, “Protocol for Equipment Leak Emission Estimates.” Please confirm this is the correct document, update the title referenced in the regulation, and insert a citation for reference to the original resource.

6. *Draft Workshop Report, Regarding Use of “Spheres” at Wastewater Treatment Plants*

Use of the term “sphere” to reference a storage unit or anaerobic digester at a municipal wastewater treatment plant is not common practice. We recommend deleting that term from the Draft Workshop Report and replacing it with the accurate term (e.g., anaerobic digester) where appropriate. Specifically, delete it from page 10, replace it with “anaerobic digesters” on page 14, and replace it with “anaerobic digesters” on page 15, of the Draft Workshop Report.

Thank you for the opportunity to comment on the proposed Rule 13-1. We very much appreciate the willingness of the BAAQMD staff to work collaboratively with BACWA in the development of the Rules supporting Regulation 13. 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@sfgwater.org and RSchmidt@centralsan.org, respectively.

BACWA Comments on the Proposed Rule 13-1

Sincerely,

David R. Williams

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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**REGULATION 13
CLIMATE POLLUTANTS
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**REGULATION 13
CLIMATE POLLUTANTS
RULE 1
SIGNIFICANT METHANE RELEASES**

(Adopted ____, 2018__)

13-1-100 GENERAL

13-1-101 Description: The purpose of this Rule is to limit significant methane emissions from all regulated sources throughout the District unless such sources are subject to more stringent methane emission requirements in Regulation 8 or Regulation 13 Rules.

13-1-102 Limited Exemption, Methane Releases Emitting Less Than 10 Pounds per Day: Any significant methane release from a source with a methane mass emission rate of less than 10 lbs per day for a minimum of three consecutive days from initial detection as measured pursuant to Section 13-1-602, may be exempt from the requirements of Sections 13-1-301, 13-1-302, 13-1-502.2, and 13-1-502.3. To qualify for this limited exemption, the owner/operator of the source must submit a petition to and receive approval from the APCO pursuant to Section 13-1-402.

13-1-103 Limited Exemption, Petroleum Refinery Flares: Any petroleum refinery flare that complies with the requirements of the federal Environmental Protection Agency's control requirements for flares, 40 CFR § 63.670, is exempt from the requirements of Sections 13-1-301, 13-1-302, 13-1-502.2 and 13-1-502.3.

13-1-104 Limited Exemption, Maintenance or Repairs: Significant Methane releases from maintenance or repair operations shall be exempt from the requirements in Sections 13-1-301, 13-1-302, 13-1-502.2 and 13-1-502.3 provided mass emissions do not exceed 100 lbs per day and the release is abated to less than 500 ppm within three days of the initiation of the release. Maintenance or repairs include, but are not limited to, pipeline repairs; wastewater treatment plant digester sphere venting prior to maintenance; and landfill gas well venting during alteration projects.

13-1-105 Limited Exemption, Solid Waste Disposal Site Working Face: Significant Methane releases from a working face at solid waste disposal sites shall be exempt from the requirements in Sections 13-1-301 and 13-1-302 provided mass emissions do not exceed 100 lbs per day and the release is abated to less than 500 ppm within three days of the initiation of the release.

13-1-200 DEFINITIONS

13-1-201 Abate: Reducing a significant methane release to a methane emission concentration of less than 500 ppm by using best modern practices, including but not limited to the repairing, tightening, adjustment, addition of material to, or replacement of equipment; or the combustion of the release; grout injection or the potting in of grout or cement; or the installation of hot tap equipment to stem a release.

13-1-202 APCO: The Air Pollution Control Officer of the Bay Area Air Quality Management District or the designee thereof.

13-1-203 Methane: A hydrocarbon molecule consisting of a single carbon atom bound to four hydrogen atoms, denoted with the chemical formula "CH₄".

- 13-1-204 Methane Release:** Any gaseous release from a Type A Source or a Type B Source that contains methane, including but not limited to venting, leaks, blowdowns and incomplete combustion emissions.
- 13-1-205 Methane Release Emission Concentration:** The amount of methane released into the atmosphere on a parts per million (ppm) basis, as determined per Section 13-1-601.
- 13-1-206 Methane Release Mass Emission Rate:** The rate at which methane is released into the atmosphere on a pounds-per-day (lbs/day) or mass/unit of time basis, determined pursuant to Section 13-1-602.
- 13-1-207 Minimization:** An attempt to reduce a significant methane release to the lowest achievable level using best modern practices. Minimization includes but is not limited to combustion of the gasses prior to release, tightening of equipment, installing plugs or caps. Shutting down the processes that directly depend upon the source of the methane release is not required.
- 13-1-208 Recurrent Methane Releases:** Two or more discrete significant methane releases, as defined in Section 13-1-209, from the same source. Any continued release within 15 days of the initial release shall be considered a continuation of the initial release.
- 13-1-209 Significant Methane Release:** Any gaseous release with a methane emission concentration greater than 10,000 ppm, when detected, as measured pursuant to Sections 13-1-501 and 13-1-601.
- 13-1-210 Solid Waste Disposal Site:** A Waste Management Facility, as defined by California Code of Regulations Title 27 § 20164, or a Municipal Solid Waste Landfill as defined in 40 CFR § 60.31c or § 60.751.
- 13-1-211 Type A Source:** A source with sufficiently regular geometry, such as a stack, whereby emissions can be quantified via traditional source test techniques.
- 13-1-212 Type B Source:** A source that is not a Type A source whereby emissions can be quantified via flux methods.
- 13-1-213 Working Face:** The open area where daily waste is deposited and compacted with landfill equipment at solid waste disposal sites.
- 13-1-300 STANDARDS**
- 13-1-301 Significant Release Requirements:** Effective six months after the adoption of this Rule, when a significant methane release is detected, the facility owner/operator shall minimize the release as soon as possible and no later than 72 hours from initial detection of the release or notification of the release by the APCO, and shall abate or repair the release within 14 calendar days of initial detection of the release or notification of the release by the APCO.
- 13-1-302 Recurrent Methane Releases:** Effective six months after the adoption of this Rule, the owner/operator shall abate or repair a second significant methane release from the same source within seven calendar days of detection or notification of the release by the APCO. A source with a significant methane release for a third time shall be shut down within seven calendar days of detection or notification of the release by the APCO and shall be replaced prior to re-commencing operation.
- 13-1-400 ADMINISTRATIVE REQUIREMENTS**

13-1-401 Release Reporting Requirements: Effective six months after the adoption of this Rule, the owner/operator of a source of a significant methane release, including those sources that qualify for any of the limited exemptions in Sections 13-1-102 through 13-1-105, shall notify the APCO within 48 hours of initial detection of the significant methane release. The owner/operator of a petroleum refinery flare that qualifies for the limited exemption in Section 13-1-103 shall report total methane mass emissions for each flaring event to the APCO on a quarterly basis. Operations that qualify for limited exemptions in Sections 13-1-104 and 13-1-105 shall report daily methane mass emissions to the APCO for the duration of the release and shall submit reports within two business days upon abating the release as defined in Section 13-1-201.

13-1-402 Limited Exemption Petition: Effective six months after the adoption of this Rule, any person petitioning for relief from the requirements of Sections 13-1-301 and 13-1-302 pursuant to Section 13-1-102 shall comply with the following requirements:

402.1 Within 96 hours of the initial measurement of a significant methane release, submit a written petition request to the APCO that demonstrates methane mass emission rates are less than 10 lbs/day for three consecutive days from detection of the release as required per Section 13-1-102.

402.2 When an owner/operator is granted a Section 13-1-102 limited exemption pursuant to a petition request, the owner/operator shall determine methane release mass emission rates at least once every 60 days from the emission source. If the methane release occurs continuously beyond 365 days, the owner/operator of the facility shall re-apply for the limited exemption on an annual basis. Should the owner/operator elect to abate the release to less than 500 ppm, the requirements of this section shall cease.

402.3 In the event the APCO denies a petition request, the owner/operator shall abate the release within 72 hours of notification of the petition denial and comply with the release monitoring requirements in Sections 13-1-502.1 and 13-1-502.2.

13-1-500 MONITORING AND RECORDS

13-1-501 Methane Concentration Measurement: Effective six months after the adoption of this Rule, the owner/operator of a facility subject to this Rule shall use a portable methane gas detector that meets the following parameters to determine methane emission concentrations:

501.1 For significant methane release detection purposes, a device capable of measuring concentrations as low as 10,000 ppm, with a maximum error of ± 10 percent.

501.2 For compliance purposes, a methane detection device capable of measuring concentrations as low as 100 ppm, with a maximum error of ± 10 percent.

13-1-502 Release Monitoring Requirements: Effective six months after the adoption of this Rule, after initial detection or notification by the APCO of a significant methane release, the owner/operator of the source releasing methane shall monitor the source as follows:

502.1 Following a significant methane release, the owner/operator shall re-measure the concentration of the source's emissions at least once daily until the release is abated as defined in Section 13-1-201.

502.2 After abatement, the owner/operator shall re-measure the source at least once every 90 consecutive days for a period of one calendar year. When the owner/operator can demonstrate that the source has not released methane concentrations that exceed 500 ppm for one calendar year, re-measurement requirements shall cease.

502.3 Following a recurrent methane release, the owner/operator shall re-measure the concentration of the source's emissions at least once daily until the release is abated as defined in Section 13-1-201. After abatement, the owner/operator shall re-measure the source at least once every 30 days for a period of 180 consecutive days. Thereafter, the owner/operator shall re-measure the source at least once every 90 days during the following 180 days. When it has been

demonstrated that the source has not released methane concentrations that exceed 500 ppm for 360 consecutive days, re-measurement requirements shall cease.

13-1-503 Recordkeeping Requirements: Effective six months after the adoption of this Rule, the owner/operator responsible for a source subject to the requirements of this Rule shall record the following information for all significant methane release measurements including follow-up measurements of an abated release, if required, as well as releases that qualify for limited exemptions: date and time span of the release, description and location of the source where the release originated, measurement equipment used and the methane concentration measured (in ppm) from the release source. All records and summaries subject to this provision shall be retained for five years and shall be submitted to the APCO upon request including any mass emission calculations and measurement methodology used if the owner/operator petitioned for a limited exemption pursuant to Section 13-1-402.

13-1-600 MANUAL OF PROCEDURES

13-1-601 Determination of Concentration: [Method under development]

13-1-602 Determination of Mass Emissions: Effective six months after the adoption of this Rule, the owner/operator of a source subject to this Rule shall determine methane mass emission rates in accordance with the following:

602.1 For any A Type source subject to this Rule, the methane mass emission rates shall be determined by using any of the following methods:

- 1.1 EPA Protocol for Equipment Release Emission Estimates, Chapter 4, Mass Emission Sampling; or
- 1.2 An alternate methane mass emission rate estimation method approved by the APCO.

602.2 For any B Type source subject to this Rule, the owner/operator shall submit a methane mass emission rate estimation method to the APCO for approval.