# REGULATION 13 CLIMATE POLLUTANTS RULE 1 SIGNIFICANT METHANE RELEASES

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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 "CH<sub>4</sub>".

- **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.