



COMPLIANCE ASSISTANCE ADVISORY

RULE 74.35, FLARES

On September 12, 2023, the Ventura County Air Pollution Control District Board adopted Rule 74.35, Flares. Rule 74.35 was adopted to reduce emissions of oxides of nitrogen (NO_x) and reactive organic compounds (ROC). The rule applies to owners and operators of flares or flare stations where the total rated heat input for the unit is 1 million (MM) BTU per hour or greater, although this advisory includes requirements for certain flares, regardless of size.

In an effort to improve facility compliance with the requirements of Rule 74.35, the Ventura County Air Pollution Control District (VCAPCD) has prepared the following guide to help owners and operators subject to the flare rule determine requirements for their specific equipment.

1. Are you operating a combustion device that oxidizes (burns) combustible gases or vapors, where the combustible gases or vapors being destroyed are routed directly into the burner without energy recovery? Note that this includes flare stations, defined as “two or more flares situated on a single pad and equipped with one common fuel meter”. This includes, but is not limited to, burners, process heaters, engines, and boilers where the energy or heat produced is not used or recovered. [74.35.G.8 & 74.35.G.10]
 - a. **NO** – You are not operating a flare and are therefore not subject to the requirements of VCAPCD Rule 74.35. Stop here.
 - b. **YES** – You are operating a flare and may be subject to additional VCAPCD requirements. Please proceed to Step 2.
2. Does your flare meet any of the following criteria?
 - The flare combusts only propane or butane or a combination of propane and butane directly into the flame burner, or
 - The flare is located at a landfill that collects less than 2,000 MMSCF of landfill gas per calendar year and has either ceased accepting waste or is classified by the California Department of Resources Recycling and Recovery as an Inert Waste Disposal Site or an Asbestos Contaminated Waste Disposal Site, or
 - The flare is only used for well testing, tank degassing, and pipeline degassing operations, or
 - The flare only combusts regeneration gas, defined as “the purge gas from a regenerative adsorption system.”
 - a. **YES** – Your flare is not subject to the requirements of VCAPCD Rule 74.35. [74.35.C.1.b-e]. Stop here.
 - b. **NO** – Please proceed to Step 3.

3. Is your flare rated at less than one (1) million (MM)BTU per hour?
- a. **YES** –
 - i. Provide VCAPCD with documentation demonstrating that your flare is rated at less than 1MMBTU per hour.
 - ii. Display the rated heat input capacity of the flare in an accessible location on the flare. [74.35.C.1.a]
 - iii. Does your flare combust produced gas, defined as “organic compounds that are both gaseous at standard temperature and pressure and are associated with the production, gathering, separation or processing of crude oil.”? [74.35.G.20]
 - 1. **NO** – Once compliance is determined with items 3.a.i-ii above, your flare is not subject to further 74.35 requirements. [74.35.C.1.a]. Stop here.
 - 2. **YES** – In addition to demonstrating compliance with items 3.a.i-ii above:
 - a. The flare stack shall be equipped with a continuous pilot light or a functional, operating pilotless electronic ignition system. [71.1.B.1.a.1]
 - b. You are required to test the flare's ignition system or pilot light monthly and maintain a record of the tests and maintenance for 5 years, including the test date and operator's initials. [71.1.B.1.a.2]
 - c. You are required to conduct monthly inspections to monitor for visible emissions using section 11 of the US EPA Method 22, “Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares,” 40 CFR Part 60 Appendix A. The observation period shall be 15 minutes and you must maintain a record of the inspections for 5 years. [71.1.B.1.a.3, 71.1.E.5, & 71.1.F.4]
 - iv. Stop here.
 - b. **NO** – Please proceed to Step 4.
4. Does your flare emit less than 30 pounds of NO_x per month AND have a permit that specifies conditions that limit the applicable NO_x emissions? [74.35.C.2]
- a. **YES** – Your flare is not subject to the requirements of VCAPCD Rule 74.35 as long as compliance is maintained with the permit conditions. If non-compliance occurs, then Rule 74.35 requirements will apply. [74.35.C.6]. Stop here.
 - b. **NO** – Please proceed to Step 5.
5. Does your flare operate 200 hours or less per calendar year or rolling 12-month period, or have an annual throughput limit equivalent to 200 hours at rated heat input capacity or less per year or rolling 12-month period (excluding emergency flaring) AND have a permit that limits the operating hours or annual throughput as such? [74.35.C.3]
- a. **YES** – For each flare, you shall install and operate a fuel meter for each gas or vapor, excluding pilot gas, and have the meter calibrated annually based on the manufacturer's recommended procedures. [74.35.D.1]. Your flare is not subject to the other requirements of VCAPCD Rule 74.35 as long as compliance is maintained with the permit conditions and 74.35.D.1 above. If non-compliance occurs, the remaining requirements of Rule 74.35 will apply. [74.35.C.6]. Stop here.
 - b. **NO** – Please proceed to Step 6.

6. Is your flare permitted to operate only during an emergency? For Rule 74.35, an emergency is defined as “Any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but not limited to, not preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not qualify as an emergency. An emergency situation requires immediate corrective action to restore safe operation. If an emergency event cannot be rectified in a reasonable amount of time, the use of the flare may be determined to be a planned flaring event. A planned flaring event shall not be considered an emergency.” [74.35.G.5]

a. **YES** – Your flare is not subject to sections B.1-B.5 of VCAPCD Rule 74.35 [74.35.C.5], though it is required to comply with the following:

i. Submit a Notification of Flare Inventory and Capacity identifying the following information for each flare or flare station [74.35.B.6]:

1. Permit number
2. Date of flare or flare station installation
3. Type of gas combusted
4. Maximum rated capacity in MMSCF or MMBTU per hour
5. Whether fuel meter is installed
6. Permitted usage limit, if any, and
7. Date of last source test, if applicable.

ii. You shall perform maintenance in accordance with the manufacturer’s schedule and specifications. If no manufacturer’s schedule and specifications are available, use applicable sections of API Standard 537, Third Edition, March 2017, “Flare Details for Petroleum, Petrochemical and Natural Gas Industries,” or an alternate APCO approved maintenance schedule and specification. [74.35.B.7]

iii. You are required to conduct monthly inspections to monitor for visible emissions using section 11 of the US EPA Method 22, “Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares,” 40 CFR Part 60 Appendix A. The observation period shall be 15 minutes and you must maintain a record of the inspections, including observation date and operator’s initials, for 5 years. [74.35.B.10, 74.35.D.3, & 74.35.E.10]

iv. You are required to test the flare’s ignition system or pilot light monthly and maintain a record of the tests and maintenance, including the test date and operator’s initials, for 5 years. [74.35.B.11 & 74.35.D.3]

v. Stop here.

b. **NO** – Please proceed to Step 7.

7. Was your flare permitted before December 31, 2023?

a. Regardless of YES or NO, the following requirements must be met:

i. You shall perform maintenance in accordance with the manufacturer’s schedule and specifications. If no manufacturer’s schedule and specifications are available, use applicable sections of API Standard 537, Third Edition, March 2017, “Flare Details for Petroleum, Petrochemical and Natural Gas Industries,” or an alternate APCO approved maintenance schedule and specification. [74.35.B.7]

ii. You are required to conduct monthly inspections to monitor for visible emissions using section 11 of the US EPA Method 22, “Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares,” 40 CFR Part 60 Appendix A. The observation period shall be 15 minutes and you must maintain a record of the inspections, including observation date and operator’s initials, for 5 years. [74.35.B.10, 74.35.D.3, & 74.35.E.10]

- iii. You are required to test the flare's ignition system or pilot light monthly and maintain a record of the tests and maintenance, including the test date and operator's initials, for 5 years. [74.35.B.11 & 74.35.D.3]
- b. **NO (or flare replaced or relocated after December 31, 2023) –**
 - i. Any flare that is installed, replaced, or relocated after December 31, 2023 shall be enclosed with sampling ports located in compliance with EPA, CARB, or SCAQMD Method 1 and 2. [74.35.B.9]
 - ii. Your flare is subject to initial and annual source testing and must comply with the emission limits set forth in Table 1 of the Rule. [74.35.B.1.a, utilizing all applicable test methods and procedures outlined in 74.35.E]
 - iii. You shall display, in an accessible location on the flare, the manufacturer, model number, and the rated heat input capacity of the flare. [74.35.B.8]
 - iv. Stop here.
- c. **YES –**
 - i. Submit a Notification of Flare Inventory and Capacity identifying the following information for each flare or flare station [74.35.B.6]:
 - 1. Permit number
 - 2. Date of flare or flare station installation
 - 3. Type of gas combusted
 - 4. Maximum rated capacity in MMSCF or MMBTU per hour
 - 5. Whether fuel meter is installed
 - 6. Permitted usage limit, if any
 - 7. Date of last source test, if applicable.
 - ii. Any flare that is installed, replaced, or relocated after December 31, 2023 shall be enclosed with sampling ports located in compliance with EPA, CARB, or SCAQMD Method 1 and 2. [74.35.B.9]. Your flare will then be subject to initial and annual source testing and must comply with the emission limits set forth in Table 1 of VCAPCD Rule 74.35. [74.35.B.1.a, utilizing all applicable test methods and procedures outlined in 74.35.E]
 - iii. Does your flare combust produced gas as defined in section 3.a.iii of this advisory?
 - 1. **NO** – Please proceed to section 7.c.iv.
 - 2. **YES** –
 - a. Does your facility have estimated annual emissions of five or more tons per year of ROCs or NO_x; or 100 tons per year or more of CO? [74.35.B.1.b]
 - i. **NO** – Please proceed to section 7.c.iv.
 - ii. **YES** – If replacing a flare previously permitted with VCAPCD, you may be able to maintain your previous throughput limit for that equipment. Please work with the VCAPCD Engineering Division during your permit application process. [74.35.B.1.b]
 - iii. Please proceed to section 7.c.iv.
 - iv. Is your flare currently subject to source testing requirements that demonstrate compliance with the emission limits set forth in Table 1 of VCAPCD Rule 74.35.B.1.a?
 - 1. **YES** –
 - a. In addition to the requirements of sections 7.a.i-iii and 7.c.i above, continue to operate the flare in compliance with the source testing and emission limits. Stop here.
 - 2. **NO** –
 - a. Determine the annual percent capacity of your flare and compare this value to the appropriate flare gas in Table 2 – Annual Capacity Threshold. [74.35.B.2, 74.35.D.2, 74.35.E.3]. Note that gas combusted or time accrued due to legitimate emergency flare events, utility pipeline curtailment, external power failure, operating the pilot light, or source testing pursuant to Section E may be omitted from the calculation of percent capacity. [74.35.C.4]

- b. Does the calculated percent capacity exceed the threshold listed for the subject flare gas?
 - i. **NO** –
 - 1. Perform this calculation annually and submit it to APCD no later than 30 days after the end of each calendar year. [74.35.B.2 & 74.35.D.2]
 - ii. **YES** –
 - 1. If the flare or flare station's annual percent capacity exceeds the applicable threshold listed in Table 2 – Annual Capacity Thresholds for two consecutive years, the owner or operator shall submit a Flare Reduction Plan with a Statement of Intent no later than 90 days after the end of the second exceeding calendar year identifying one of the following paths of compliance: [74.35.B.3]
 - a. Limit throughput for the flare or flare station according to 74.35.B.4; or
 - b. Replace or modify the flare or flare station according to 74.35.B.5 to meet the applicable emission limits in 74.35.B.1.a, Table 1; or
 - c. Demonstrate that emission limits in 74.35.B.1.a are met for an existing enclosed flare within 60 days of submitting the Flare Reduction Plan and Statement of Intent. [74.35.B.3.c]
 - d. Please contact the VCAPCD Engineering Division for additional assistance in this circumstance.

QUESTIONS?

If you have any questions regarding this advisory, please contact Supervising Air Quality Specialist Neil Hammel at neil@vcapcd.org or (805) 303-3827. The VCAPCD Engineering Division can be reached at engineering@vcapcd.org or (805) 303-3688.