

MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT

RULE 404 - SULFUR COMPOUNDS AND NITROGEN OXIDES

(Adopted 9-1-1974; Revised 9-15-1993; 10-16-1996; 3-22-2000; and 12-15-2004.)

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PART 1 GENERAL

1.1 Purpose

The purpose of this Rule is to provide limits for the emissions of sulfur compounds, nitrogen oxides and nitrogen dioxide from sources within the District.

1.2 Applicability

The provisions of this Rule shall apply to sources of sulfur compounds, nitrogen oxides, nitrogen dioxide subject to District Rule 200 (Permits Required).

1.3 Exemptions

1.3.1 Electric power boilers subject to the emission limits of District Rule 431 (Emissions from Electric Power Boilers) shall not be subject to Subsection 3.1.3 of this Rule.

1.3.2 Any source subject to an emission limit imposed by the BACT requirements of Section 4.1 or 5.2 of District Rule 207 (Review of New or Modified Sources) shall not be subject to Section 3.1 of this Rule for the same pollutant.

1.3.3 The provisions of Subsection 3.1.1 of this Rule shall not apply during maintenance operations on crude oil production casing gas collection, treatment and destruction systems provided that the District is notified at least 24 hours prior to the maintenance operation(s).

Rule 404 does not apply to:

1.3.4 Fires set by or permitted by a public officer if such fire is set or permission given in the performance of the official duty of such officer, and such fire in the opinion of such officer is necessary:

1.3.4.1 for the purpose of the prevention of a fire hazard which cannot be abated by other means, or

1.3.4.2 the instruction of public employees in methods of fighting fires.

1.3.5 Fires set pursuant to a permit on property used for industrial purposes for the purpose of instruction of employees in methods of fighting fire.

1.3.6 The use of an orchard, field crop, or citrus grove heater which does not produce unconsumed solid carbonaceous material at a rate in excess of that allowed by State law, i.e., no more than 1 gram per minute of unconsumed solid carbonaceous material.
{California Health and Safety Code (HSC) Sections 41860 and 41704 (f)}

1.4 Effective Dates

This Rule as most recently revised, is effective on December 15, 2004.

1.5 References and Related Rules

- 1.5.1 The requirements of this Rule arise from the provisions of the California Clean Air Act and amendments (California Health and Safety Code Section 40910 *et seq.*) and the Federal Clean Air Act and amendments (42 U.S.C. Section 7401 *et seq.*)
- 1.5.2 Related District Rules include: 200 (Permits Required); 207 (Review of New or Modified Sources); 423 (New Source Performance Standards); 424 (National Emission Standards for Hazardous Air Pollutants); 431 (Emissions from Electric Power Boilers); and Regulation V (Orchard, Field Crop, or Citrus Grove Heaters).

PART 2 DEFINITIONS

2.1 British Thermal Unit (Btu)

The quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (°F) at or near 39.2° F.

2.2 National Ambient Air Quality Standards (NAAQS)

Air quality standards set by the Administrator of the United States Environmental Protection Agency to protect public health and welfare and, in general, consisting of primary and secondary standards. Primary standards are to protect the public health, while secondary standards are intended to protect the public welfare, *e.g.*, plants, crops, and materials.

2.3 Nitrogen Oxides

The sum of the molecular forms of nitrogen oxide and nitrogen dioxide. When measured or calculated, the total of the two molecular forms are collectively expressed as nitrogen dioxide.

2.4 Offsite Impact

The point of maximum ground level impact off the facility property at which point human exposure could occur.

2.5 State Ambient Air Quality Standards

Air quality standards set by the California Air Resources Control Board "in consideration of the public health, safety, and welfare, including, but not limited to, health, illness, irritation to the senses, aesthetic value, interference with visibility, and the effects on the economy" (California Health and Safety Code Section 39606 [b]). A distinction is not made between standards to protect public health and welfare, *i.e.*, primary and secondary standards.

PART 3 REQUIREMENTS AND STANDARDS

3.1 Emission Limits

No person shall discharge from any single emission unit any one or more of the following contaminants in any state or combination thereof, exceeding in concentration or amount at the point of discharge to the atmosphere;

- 3.1.1 sulfur compounds calculated as sulfur dioxide (SO₂), 0.2 percent by volume;
- 3.1.2 nitrogen oxides, calculated as nitrogen dioxide (NO₂), 140 pounds per hour from any new or expanded boiler, furnace, jet engine, or similar fuel burning equipment used for the production of power or heat;
- 3.1.3 from fuel burning equipment having a maximum heat input rate of more than 1-1/2 billion Btu per hour (gross), flue gas having a concentration of nitrogen oxides calculated as nitrogen dioxide (NO₂) in parts per million parts of flue gas (ppm) by volume at 3 per cent oxygen, 225 ppm with natural gas, liquid or solid fuel; or,
- 3.1.4 from sources other than combustion sources, nitrogen oxides, calculated as nitrogen dioxide (NO₂), 250 parts per million by volume.

3.2 Hydrogen Sulfide (H₂S) Limit

In no case shall H₂S emissions from any crude oil production casing gas collection, treatment and destruction systems maintenance operations as allowed for in Section 1.3.3 cause an offsite impact equal to or in excess of the REL (Reference Exposure Level) established by the California Office of Environmental Health Hazard Assessment.

3.3 Ambient Air Quality Standards

In no case shall the emissions from any single emission unit cause or contribute to the violation of a National or State ambient air quality standard.

3.4 Measurement Methods

- 3.4.1 For determination of SO₂ emissions concentrations in stack gases during stationary source tests, 40 Code of Federal Regulations (CFR) Part 60, App. A, Methods 6 or 6C (EPA Methods 6 or 6C, "Determination of Sulfur Dioxide Emissions from Stationary Sources"), or California Air Resources Board (ARB) Method 100, "Procedures for Continuous Gaseous Emission Stack Sampling", shall be performed.
- 3.4.2 For determination of NO_x emissions concentrations in stack gases during stationary source tests, 40 CFR Part 60, App. A, Method 7E (EPA Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)", or ARB Method 100, "Procedures for Continuous Gaseous Emission Stack Sampling", shall be performed.

3.5 Record-keeping Requirements

For any source subject to this Rule, permanent records, or records in a District-approved electronic format, shall be maintained for a period of five years after creation and shall be made available for inspection by the Air Pollution Control Officer upon request. The records shall include, but are not limited to, the date and time of testing, the parameters which were measured and the contaminant concentrations or emission rates in the same units as the emission limits.

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