

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

RULE 474 - FUEL BURNING EQUIPMENT

(Adopted: 05/07/76; Amended: 10/08/76; CARB Ex. Ord. G-73: 02/01/77; Readopted: 7/25/77; Amended: 05/16/81; 01/22/96; 08/25/97)

(A) General

- (1) Purpose
 - (a) The purpose of this rule is to limit emissions of oxides of nitrogen (NO_x) from non-Mobile, Fuel Burning Equipment.
- (2) Applicability
 - (a) The rule applies to new and existing non-Mobile Fuel Burning Equipment having a rated heat input of more than 1,775 million Btu (MMBtu) per hour.
 - (b) The provisions of this rule shall not apply to Fuel Burning Equipment which is subject to a NO_x emission limit in District Rule 475, 476, 1157, 1158, 1159, 1160 or 1161.

(B) Definitions

For the purposes of this rule, the following definitions shall apply:

- (1) "Air Contaminant" - any discharge, release, or other propagation into the atmosphere directly or indirectly caused by man and includes, but is not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids or any combination thereof.
- (2) "California Air Resources Board" (CARB) - The California State Air Resources Board the powers and duties of which are described in Part 2 of Division 26 of the California Health & Safety Code (commencing with §39500).
- (3) "Emission Control System Operating Parameters" - any operating parameter(s) of installed emission control equipment that the District deems necessary to analyze for the determination of compliance. Such parameters may include, but are not limited to, the ammonia and gas flow rates, exhaust temperature, humidity, water injection rate, exhaust gas flow rate and the temperature for water injection.
- (4) "Fuel Burning Equipment" - any article, machine, equipment or contrivance which combusts any fuel. If the simultaneous operations of more than one such article, machine, equipment or contrivance are required for the production of useful heat or power, then the minimum number necessary shall be considered as one piece of Fuel Burning Equipment.

- (5) "Heat Input" - the chemical heat released due to fuel combustion in a piece of Fuel Burning Equipment, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- (6) "Mobile" - describes a device by which any person or property may be propelled, moved, or drawn upon the surface, waterways, or through the atmosphere, and which emits Air Contaminants. For the purpose of this rule, the description "Mobile" includes registered motor vehicles which are licensed and/or driven on the public roadways of the state of California.
- (7) "Monitoring Plan" - a document which specifies the parameters to be monitored and records to be kept for each piece of Fuel Burning Equipment subject to the Rule. Parameters to be monitored and/or recorded may include, but are not limited to: annual hours of operation; equipment load; the type, higher heating value and annual usage of each fuel; occurrence and duration of start-up, shut-down and breakdown periods; the results of compliance tests; monitored NO_x, Particulate Matter and stack-gas oxygen (O₂) concentrations; and Emission Control System Operating Parameters.
- (8) "Particulate Matter" - any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (9) "Rated Heat Input" - the Heat Input capacity in MMBtu per hour specified on the nameplate(s) of the Fuel Burning Equipment, unless the Fuel Burning Equipment is operated, consistent with the Permit to Operate, above the Heat Input capacity specified on the nameplate(s), in which case the maximum operated rate(s) shall be used as the Rated Heat Input.
- (10) "United States Environmental Protection Agency" (USEPA) - refers to the Administrator or the appropriate designee of the United States Environmental Protection Agency.

(C) Requirements

- (1) Fuel Burning Equipment shall not emit NO_x, referenced at dry stack-gas conditions and 3.0 percent by volume stack-gas oxygen, in excess of:
 - (a) 125 parts per million by volume (ppmv), when operated on gaseous fuel;
 - (b) 225 ppmv, when operated on liquid and/or solid fuels; or
 - (c) the heat input weighted average of the limits specified in (C)(1)(a) and (C)(1)(b) above, when operated on combinations of both gaseous and liquid and/or solid fuels.

- (d) Emission concentrations shall be corrected to 3.00 percent oxygen as follows:

$$[\text{ppm NO}_x]_{\text{corrected}} = \frac{17.95\%}{20.95\% - [\%O_2]_{\text{measured}}} \times [\text{ppm NO}_x]_{\text{measured}}$$

(E) Monitoring and Records

(1) Frequency

- (a) All Fuel Burning Equipment covered under subsection (C)(1) shall demonstrate compliance through emission compliance testing not less than once every 12 months. This 12 month period shall be measured based upon the permit renewal date.

(2) Procedures

- (a) Compliance testing required by this rule shall follow the administrative procedures outlined in the District's Compliance Test Procedural Manual. All emission determinations shall be made as stipulated in the test protocol accepted by the District.
- (b) All emission concentrations and emission rates shall be based on hourly averages.
- (c) The owners or operators of Fuel Burning Equipment subject to this rule shall submit all required compliance test reports to the District.
- (d) Any owner or operator of Fuel Burning Equipment subject to this Rule shall submit a Monitoring Plan to the District for approval. Upon approval of the Monitoring Plan, the District will notify the owner or operator in writing. The owner or operator shall keep current and on site for a minimum of two years such records as are specified in the District-approved Monitoring Plan. Records shall be updated routinely and made available to the District, CARB and USEPA upon request.

(F) Test Methods

- (1) Compliance with the NO_x emission limits in Section (C) shall be determined using one of the following test methods, as appropriate:
- (a) USEPA Method 7, 7A, 7C, or 7E.
- (2) Determination of percent by volume stack-gas oxygen shall be determined using USEPA Method 3A.

- (3) Alternative test methods may be used upon obtaining the approval of the Air Pollution Control Officer, CARB and USEPA.

[SIP Information: Approved 01/11/99, 64 FR 1517, 40 CFR 52.220(c)(254)(i)(H)(i); Submitted as amended 01/24/96 on 11/26/96; Disapproved and prior Rule 68 retained 12/21/78, 43 FR 59489, 40 CFR 52.220(c)(42)(viii)(A); 40 CFR 52.280(a)(3)(i); Approved 06/14/78, 43 FR 25684, 40 CFR 52.220(c)(37)(i)(A).]