

Revised – existing OR new; liquid fuel, biomass, or coal < 10 MMBtu/hr; OR any size “limited use” boilers

NOTE TO PERMIT ENGINEER: paragraphs (a) and (c)(i-ii) must be modified to reflect existing and/or new. New sources are those that commenced construction after June 4, 2010. (d)(ii)(B and C) can be modified to eliminate “seasonal” or “limited use” if not applicable.

1. **GENERALLY AVAILABLE CONTROL TECHNOLOGY** - For the (NO EQUIPMENT SELECTED), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, as promulgated in 40 CFR 63, Subpart JJJJJ, " National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers", including Subpart A "General Provisions."

a. **Compliance Date** (40 CFR 63.11196) -

Include this section

The owner or operator of an existing source subject to the tune-up requirements is required to comply with this final rule by March 21, 2014.

Include this section

The owner or operator of a new source subject to the tune-up requirements is required to comply with this final rule by May 20, 2011 or upon startup, whichever is later.

b. **Compliance Requirements** - As required by 15A NCAC 2D .1111, the Permittee shall comply with the following requirements:

i. **General Duty Clause** (40 CFR 63.11205(a)) - At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

ii. **Boiler Tune-up** (40 CFR 63.11223) - An initial boiler tune-up is required by March 21, 2014 for existing sources. An initial boiler tune-up is not required for new sources (construction after June 4, 2010). If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within thirty days of startup. The Permittee shall comply with the following with respect to the tune-up:

A. **Periodic tune-ups:** A biennial tune-up is required and shall be conducted no more than 25 months after the previous tune-up (or 25 months of initial startup for new sources). The following units are only required to conduct a tune-up every five years: seasonal boilers (shutdown for 7 consecutive months or 210 consecutive days each 12-month period due to seasonal conditions; only

biomass or oil), limited-use boilers, oil-fired boilers with heat input capacity of ≤ 5 MMBtu/hr, and units with oxygen trim systems, as defined in 40 CFR 63.11237. Each five-year tune-up must be conducted within 61 months of the previous tune-up (or 61 months of initial startup for new sources).

- B. Fuel required for the tune-up: The permittee shall conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
 - C. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown, but must inspect each burner at least once every 36 months (72 months for 5-year tune-ups).
 - D. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - E. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the air to fuel ratio inspection until the next scheduled unit shutdown, but must conduct the inspection at least once every 36 months (72 months for 5-year tune-ups).
 - F. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
 - G. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken with a portable CO analyzer.
- c. Notification and Reporting Requirements - In addition to the notification and reporting requirements of the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
- i. Initial Notification (per 40 CFR 63.9(b) and 40 CFR 63.11225(a)(2)) is required by January 20, 2014, or within 120 days after startup of a new source.

ii. Notification of Compliance Status (40 CFR 63.11225(a)(4))

Include this section
is required by July 19, 2014 for existing sources.

Include this section
For new sources, the Notification of Compliance Status is due no later than September 17, 2011 or 120 days after startup, whichever is later.

iii. Compliance Report must be prepared by March 1 of every other year (or every five years depending on the frequency of the tune-up requirements) starting March 1 the year following the first periodic tune-up, and submitted upon request, unless the source experiences any deviations from the applicable requirements then the report must be submitted by March 15. The report must meet the requirements of 40 CFR 63.11225(b)(1-4).

d. Recordkeeping Requirements - In addition to any other recordkeeping requirements of the EPA, the Permittee shall maintain the following records as defined under 40 CFR 63.11225(c):

i. Copies of all required notifications.

ii. Maintain the following records to document conformance with the work practices, emission reduction measures, and management practices:

A. Tune-up records - records must identify each boiler, the date of tune-up, the procedures followed for tune-up, the manufacturer's specifications to which the boiler was tuned, and the following:

I. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

II. A description of any corrective actions taken as a part of the tune-up of the boiler.

III. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

B. Seasonal boilers – For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year.

C. Limited-use boilers - For each boiler that meets the definition of limited use boiler, you must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating.

D. Records of non-waste determinations per 40 CFR 63.11225(c)(2)(ii).

- iii. Malfunction Records - Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- iv. Record Retention - You must keep each record for 5 years following the date of each recorded action.