

Revised - existing liquid fuel or biomass (including “seasonal”) >= 10 MMBtu/hr; Does not include “limited use” boilers.

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) - The owner or operator of an existing source is required to comply with the tune-up and the energy assessment requirements no later than March 21, 2014.
- 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. 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. 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, 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.
 - 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.
- iii. Energy Assessment (40 CFR 63.11214(c)) - A one-time initial energy assessment is required by March 21, 2014. The energy assessment must be performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets, or is amended to meet, the energy assessment requirements in this section satisfies the energy assessment requirement. This energy assessment requirement does not apply to limited use boilers as defined in 40 CFR 63.11237. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units satisfies the energy assessment requirement. The energy assessment must include:
- A. A visual inspection of the boiler system.
 - B. An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
 - C. Inventory of major systems consuming energy from affected boilers and which are under control of the boiler owner or operator.
 - D. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
 - E. A list of major energy conservation measures that are within the facility's control.
 - F. A list of the energy savings potential of the energy conservation measures identified.

- G. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
- 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.
 - ii. Notification of Compliance Status (40 CFR 63.11225(a)(4)) is required by July 19, 2014.
 - 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. If 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. A copy of the Energy Assessment Report required by 40 CFR 63.11214(c).
 - C. Seasonal boilers – For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year.
 - 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 - Keep each record for 5 years following the date of each recorded action.