GACT Subpart JJJJJJ, Part 63 (Uncontrolled, new liquid fuel ≥10 MMBtu/hr using 0.5% sulfur content limitation, non-limited use boilers)

Note to engineer – if there is no gas capability, items b.v and c.iv can be removed. If the boiler will meet the definition of "seasonal", remove items b.i, d.ii.

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 JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers," including Subpart A "General Provisions." This permit condition contains requirements for new sources in the oil subcategory.

a. Compliance Dates – The source must achieve compliance with this final rule upon startup of the source. [40 CFR 63.11196(b)(c)]

b. Compliance Requirements

   i. The Permittee shall combust only fuel oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a particulate matter (PM) emissions limit. [40 CFR 63.11210(e)]

   ii. 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. [40 CFR 63.11205(a)]

   iii. An initial boiler tune-up is not required. [40 CFR 63.11210(f)]

   iv. A biennial tune-up is required and shall be conducted no more than 25 months after the initial startup of the affected source. [40 CFR 63.11223(b)]

   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) and units with oxygen trim systems, as defined in 40 CFR 63.11237. Each five-year tune-up must be conducted within 61 months after the initial startup of the affected source. The tune-up shall include the following:

      A. 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. [40 CFR 63.11223(b)(7)]

      B. 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. [40 CFR 63.11223(a)]

      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). [40 CFR 63.11223(b)(1)]

D. As applicable, inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. [40 CFR 63.11223(b)(2)]

E. As applicable, inspect the system controlling the air-to-fuel ratio 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). [40 CFR 63.11223(b)(3)]

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. [40 CFR 63.11223(b)(4)]

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. [40 CFR 63.11223(b)(5)]

v. **If you switch to the gas-fired boiler category, the requirements of this permit condition (applicable to the oil subcategory) no longer apply.**

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. An Initial Notification is required within 120 days after startup of each affected source. [40 CFR 63.9(b) and 40 CFR 63.11225(a)(2)]

ii. A Notification of Compliance Status is required within 120 days after startup of each affected source. [40 CFR 63.9(h) and 40 CFR 63.11225(a)(4)]

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).

iv. Within 30 days of switching fuels, the Permittee shall submit a notification. [40 CFR 63.11225(g)] The notification must identify the following:

A. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels and the date of the notice. [40 CFR 63.11225(g)(1)]

B. The date upon which the fuel switch occurred. [40 CFR 63.11225(g)(2)]

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. [40 CFR 63.11225(c)(1)]

ii. Record on a monthly basis the type of each fuel combusted for each boiler. [40 CFR 63.11210(e)]

iii. Tune-up records - records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. Maintain the following records to document conformance with the work practices, emission reduction measures, and management practices:

A. 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. [40 CFR 63.11223(b)(6)(i)]

B. A description of any corrective actions taken as a part of the tune-up of the boiler. [40 CFR 63.11223(b)(6)(ii)]

C. 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. [40 CFR 63.11223(b)(6)(iii)]

iv. Seasonal boilers – For each boiler that meets the definition of seasonal boiler, the Permittee must keep records of days of operation per year. [40 CFR 63.11223(d)]

v. Records shall be kept of non-waste determinations per 40 CFR 63.11225(c)(2)(ii).

vi. Records shall be kept of the occurrence and duration of each malfunction of the boiler. These records shall include the 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 to its normal or usual manner of operation. [40 CFR 63.11225(c)(4)(iv)]

vii. Keep each record for 5 years following the date of each recorded action. [40 CFR 63.11225(d)]