GACT 6J - Condition #4 – Liquid Fuel ≥10 MMbtu/hr (Existing Oil Sources with Natural Gas as Primary Fuel Using the NCDAQ Curtailment Option)

Permit Condition (GACT 6J) for 40 CFR 63, Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers"

1. GENERALLY AVAILABLE CONTROL TECHNOLOGY - For the (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."

    a. Primary Operating Scenario (Natural Gas Firing) - The Permittee has indicated the primary operating scenario (POS) for the affected source is firing natural gas. Under the POS, oil shall be fired only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel (≤48 hours of testing during any calendar year). Periods of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption**. The Permittee is not required to comply with items b. through d. of this permit condition until such time oil is initially fired outside periods of gas curtailment, gas supply emergencies, or periodic testing**. After this initial firing, the POS requirements of item a. will no longer apply.

        i. POS Recordkeeping Requirement - The Permittee shall keep records of fuel oil purchases and the time and reason for oil firing for each affected source.

        ii. POS Reporting Requirement – The Permittee shall notify the Regional Supervisor, DAQ within 30 days of firing oil outside periods of gas curtailment, gas supply emergencies, or periodic testing.

        iii. General Duty Clause (40 CFR 63.11205(a)) – At all times you must operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions.

    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 you must operate and maintain any affected source 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, 2012 or within one week of firing oil outside periods of gas curtailment, gas supply emergencies, or periodic testing, <u>whichever is later</u>. A biennial tune-up is also required and shall be conducted no more than 25 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup. The tune-up shall include the following:

A. 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).

B. 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.

C. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

D. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

E. 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).

F. Maintain onsite a biennial report (see item c. below) containing:

I. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured 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 biennial tune-up of the boiler.

iii. Energy Assessment (40 CFR 63.11214(c)) – A one-time initial energy assessment is required by March 21, 2014 or within 180 days of firing oil

outside periods of gas curtailment, gas supply emergencies, or periodic testing, whichever is later. 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. 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.

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.

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. Notification of Compliance Status (40 CFR 63.11225(a)(4)) is required by the later of:

A. July 19, 2012; or

B. Within 120 days of the one-week tune-up deadline after firing oil outside periods of gas curtailment, gas supply emergencies, or periodic testing.

If the compliance status notification for the energy assessment is not included in the above notification, a separate notification for this requirement is required by the later of:

C. July 19, 2014, or

D. Within 120 days after the 180 day energy assessment deadline of firing oil outside periods of gas curtailment, gas supply emergencies, or periodic testing.

ii. Biennial Compliance Report must be prepared by March 1 of every other year starting March 1, 2015 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 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, and the manufacturer's specifications to which the boiler was tuned.

B. A copy the Energy Assessment required by 40 CFR 63.11214(c).

C. Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel, including whether the fuel has received a nonwaste determination by the Permittee or EPA, and the total fuel usage amount with units of measure. If the Permittee combusts nonhazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the Permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria. The records may be annual, monthly, or periodic, depending on fuel delivery frequencies.

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.