FG{ID} FLEXIBLE GROUP CONDITIONS Area Source Boiler – Existing Large Biomass Ox Trim

Red text identifies options. Select the option that applies to the source and change the text to black. Delete red text that does not apply and renumber conditions if necessary.

Blue text is guidance or notes on the use of the template. <u>Delete all blue text prior to issuing the final permit</u> or submitting it with a permit application.

This template applies to existing large biomass-fired boilers that are equipped with an oxygen trim system at area sources of HAPs designed with a heat input capacity of equal to or greater than 10 MMBTU/hr. If the date of installation of the boiler(s) is June 4, 2010, or earlier, this source is considered an existing source. If it was installed or reconstructed after June 4, 2010, then it is a new source, and this table is not applicable.

If this template is being used for an ROP Reopening or Renewal, <u>and</u> the MACT conditions were established in a PTI, the appropriate footnotes which reference enforceability must be added to each applicable condition in the template.

DESCRIPTION

Requirements for (an) existing large (≥10 MMBTU/hr) biomass-fired industrial, commercial, or institutional boiler(s) that is equipped with an oxygen trim system and is located at an area source of hazardous air pollutants per 40 CFR Part 63, Subpart JJJJJJ.

Emission Unit: {Site Specific List of Emission Units}

POLLUTION CONTROL EQUIPMENT

{Enter site specific pollution control equipment or NA}

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- Each boiler in FG{ID} with an oxygen trim system that maintains an optimum air-to-fuel ratio must conduct a tuneup every 5 years as specified in SC III.3. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The permittee may delay the burner inspection and inspection of the system controlling the air-to-fuel ratio until the next scheduled unit shutdown, but the permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. (40 CFR 63.11223(c), 40 CFR Part 63, Subpart JJJJJJ, Table 2.14)
- For each boiler in FG{ID}, the permittee must 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))
- 3. The permittee must conduct a tune-up of each boiler in FG{ID} to demonstrate continuous compliance as specified below:

- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. (40 CFR 63.11223(b)(1))
- 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. (40 CFR 63.11223(b)(2))
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. **(40 CFR 63.11223(b)(3))**
- d. Optimize total emissions of CO. 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))
- e. Measure the concentrations in the effluent stream of CO 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 using a portable CO analyzer. **(40 CFR 63.11223(b)(5))**
- f. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. (40 CFR 63.11223(b)(7))
- 4. At all times the permittee must operate and maintain each boiler in FG{ID}, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by 40 CFR Part 63, Subpart JJJJJJ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance records, and inspection of the source. (40 CFR 63.11205(a))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii)) Permit staff – <u>Change</u> above UAR to R 336.1201(3) if using in a PTI.

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii)) Permit staff – <u>Change</u> above UAR to R 336.1201(3) if using in a PTI.

- 1. The permittee must maintain the records specified below:
 - a. The permittee must keep a copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted. (40 CFR 63.11225(c)(1))
 - b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11223, as listed below:
 - i. Records must identify each boiler in FG{ID}, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. (40 CFR 63.11225(c)(2)(i))
 - ii. For operating units that combust non-hazardous 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 under 40 CFR 241.3(d)(1). If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR

241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary material as fuel per 40 CFR 241.4, the permittee must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a). **(40 CFR 63.11225(c)(2)(ii))**

- iii. The permittee must maintain a copy of the energy assessment report for each boiler in FG{ID}. (40 CFR 63.11225(c)(2)(iii))
- c. Records of the occurrence and duration of each malfunction of the boiler. (40 CFR 63.11225(c)(4))
- d. 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), stated in SC III.4, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. (40 CFR 63.11225(c)(5))
- 2. The permittee must maintain on-site and submit, if requested by the Administrator, a report containing the information listed below.
 - 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 each boiler in FG{ID}. (40 CFR 63.11223(b)(6)(i))
 - b. A description of any corrective actions taken as a part of the tune-up of each boiler in FG{ID}. (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 each boiler in FG{ID}, 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))
- 3. The permittee must keep the records in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. **(40 CFR 63.11225(d))**

See Appendices {Enter 3, 4, and/or 7}

VII. <u>REPORTING</u>

Permit Staff – SC VII.1, 2, and 3, references to Rule 213 are ROP only. Remove before putting into a PTI. Renumber as appropriate.

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be received by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be received by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee must prepare, by March 1 of the year after the calendar year during which a tune-up is completed, and submit to the delegated authority upon request, a 5-year compliance report containing the information specified below:
 - a. Company name and address. (40 CFR 63.11225(b)(1))
 - b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJJ. The permittee's notification must include the following certifications of compliance, as applicable, and signed by a responsible official: (40 CFR 63.11225(b)(2))
 - i. "This facility complies with the requirements in 40 CFR 63.11223 to conduct 5-year tune-up, as applicable, of each boiler in FG{ID}." (40 CFR 63.11225(b)(2)(i))

ii. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." (40 CFR 63.11225(b)(2)(ii))

See Appendix 8 Permit Staff: Remove if PTI since this is ROP only.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources as specified in 40 CFR Part 63, Subparts A and JJJJJJ. **(40 CFR Part 63, Subparts, A and JJJJJJJ)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).