

FG{ID}
FLEXIBLE GROUP CONDITIONS
Major Source – Existing or New Boiler Process Heater Small Unit
(Less than 10 MMBTU/hr)

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. Delete all blue text prior to issuing the final permit or submitting it with a permit application.

If a source that is an area source for HAPs gets a PTI that makes it a major source for HAPs and if the date of installation of the boiler(s) and process heater(s) is June 4, 2010 or earlier, then this source is considered an existing source. If it was installed or reconstructed after June 4, 2010, then it is a new source. In the emission unit table in the description, Permit staff may want to note if a unit is considered new or existing if the facility has both types on site.

Existing sources have 3 years to comply with the requirements of the Boiler MACT after becoming a major source per 40 CFR 63.7495(c)(2). New sources must comply with the Boiler MACT upon startup per 40 CFR 63.7495(c)(1).

If this template is being used for an ROP Reopening or Renewal, and 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 (a/an; if only one unit) new/ existing/ new and existing (choose one) boiler(s) and process heater(s) with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn solid, liquid, or gaseous fuels. {May add specifics for the affected EU(s).}

Emission Unit: {Enter specific emission unit ID's in the table below as appropriate. Please mark any emission unit that has a continuous oxygen trim system installed with *}

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	List units this size
Greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burns gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels	List units this size

Delete the following if there are no units that have a continuous oxygen trim system installed

* - This emission unit has a continuous oxygen trim system installed

POLLUTION CONTROL EQUIPMENT

{Enter specific pollution control equipment or NA}

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

OPTIONAL – Use the following condition only for EXISTING AREA SOURCES that are NOW MAJOR. Delete if not applicable (i.e. if they have the documentation to show that this has been completed) and renumber conditions appropriately. For existing sources that are now major, the DATE will be three years from the date the source becomes major.

1. The permittee must, for all boilers and process heaters installed on or before June 4, 2010, complete an initial tune-up as specified in SC III.9 by no later than DATE. (40 CFR 63.7510(e))

OPTIONAL – Use the following condition only for NEW SOURCES that have unit(s) less than or equal to 5 MMBTU/hr that burn only gaseous or light liquid fuels. Delete if not applicable (i.e. if they have the documentation to show that this has been completed) and renumber conditions appropriately. The DATE is 61 months after startup.

2. The permittee must, for boilers or process heaters installed after June 4, 2010 with a heat input capacity of less than or equal to 5 MMBTU/hr, complete an initial tune-up as specified in SC III.9 by no later than DATE. (40 CFR 63.7510(g))

OPTIONAL – Use the following condition only for NEW SOURCES that have unit(s) without a continuous oxygen trim system that are greater than 5 MMBTU/hr but less than 10 MMBTU/hr that burn gaseous or light liquid fuels or any unit less than 10 MMBTU/hr and burn any heavy liquid or solid fuels. Delete if not applicable (i.e. if they have the documentation to show that this has been completed) and renumber conditions appropriately. The DATE is 25 months after startup.

3. The permittee must, for boilers or process heaters installed after June 4, 2010 with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr, complete an initial tune-up as specified in SC III.9 by no later than DATE. (40 CFR 63.7510(g))

OPTIONAL – Use the following condition only for NEW SOURCES that have unit(s) with a continuous oxygen trim system that are less than 10 MMBTU/hr. Delete if not applicable (i.e. if they have the documentation to show that this has been completed) and renumber conditions appropriately. The DATE is 61 months after startup.

4. The permittee must complete an initial tune-up of each emission unit installed after June 4, 2010 that has a continuous oxygen trim system as specified in SC III.9 by no later than DATE. (40 CFR 63.7510(g))

At a minimum, one OPTIONAL tune-up requirement must be selected

OPTIONAL – Use only if there is unit(s) less than or equal to 5 MMBTU/hr that burn only gaseous or light liquid fuels. Delete if not applicable and renumber conditions.

5. The permittee must, for boilers or process heaters with a heat input capacity of less than or equal to 5 MMBTU/hr, conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. (40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1)

OPTIONAL – Use only if there is unit(s) without a continuous oxygen trim system that are greater than 5 MMBTU/hr but less than 10 MMBTU/hr that burn gaseous or light liquid fuels or any unit less than 10 MMBTU/hr and burn any heavy liquid or solid fuels. Delete if not applicable and renumber conditions.

6. The permittee must, for boilers or process heaters with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr, conduct a biennial tune-up of the boiler or process heater according to 40 CFR 63.7540(a)(11) no more than 25 months after the previous tune-up. (40 CFR 63.7500(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR Part 63, Subpart DDDDD, Table 3.2)

OPTIONAL – Use only if there is a unit(s) that has a continuous oxygen trim system installed. Staff may list units with the oxygen trim in this condition if not all units listed in the emission unit description table have one. Delete if not applicable and renumber conditions.

7. The permittee must, for boilers or process heaters that has a continuous oxygen trim system installed, conduct a tune-up of the burner(s) and combustion controls, as applicable, every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi). (40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1)

- a. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. **(40 CFR 63.7515(d))**
- b. The permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. **(40 CFR 63.7540(a)(12))**
- c. The permittee shall set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. **(40 CFR 63.7540(a)(12))**
- d. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**

OPTIONAL – Use the following condition only for EXISTING AREA SOURCES that are NOW MAJOR. Delete if not applicable (i.e. if they have the documentation to show that this has been completed) and renumber conditions. The DATE will be three years from the date the source becomes major.

- 8. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than **DATE**. **(40 CFR 63.7510(e))**

ALWAYS INCLUDE

Items in red font are optional and should only be used if there are units that meet the conditions specified otherwise delete.

- 9. The permittee must conduct a tune-up of each boiler or process heater as specified in the following: **(40 CFR 63.7540(a)(11) or (12))**
 - a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. **Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.** At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
 - 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. **(40 CFR 63.7540(a)(10)(ii))**
 - c. 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 inspection until the next scheduled unit shutdown. **Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.** **(40 CFR 63.7540(a)(10)(iii))**
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
 - 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 63.7540(a)(10)(v))**
- 10. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
- 11. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. 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 procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

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 – Change above UAR to Rule 201(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 – Change above UAR to Rule 201(3) if using in a PTI.

1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or 2 or 5 year compliance report or one-time energy assessment, as applicable, that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. The permittee must keep the records in a form suitable and readily available for expeditious review. **(40 CFR 63.7560(a))**
3. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

VII. REPORTING

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))**
2. 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))**

OPTIONAL – Use only if the source was an area source and has become a major source, otherwise delete.

4. For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60th day following the completion of the initial boiler tune-up for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain all the information specified below.
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**
 - b. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**

- ii. **OPTIONAL – Only for existing units that were area sources and are now major. Delete if not applicable.**
“The facility has had an energy assessment performed according to 40 CFR 63.7530(e).” **(40 CFR 63.7540(e)(8)(ii))**
- iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.” **(40 CFR 63.7545(e)(8)(iii))**

OPTIONAL – Use only if the source was an area source and has become a major source and has existing units that must do boiler tune-ups biennially, otherwise delete and renumber as appropriate.

- 5. The permittee must submit the first compliance report for existing units and must cover the period beginning on **DATE** and ending on December 31, **YEAR (2-years after DATE)** for units greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burn gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels. The first 2-year compliance report must be submitted no later than March 15 following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**

OPTIONAL – Use only if the source was an area source and has become a major source and has existing units that must do boiler tune-ups once every 5 years, otherwise delete and renumber as appropriate.

- 6. The permittee must submit the first compliance report for existing units and must cover the period beginning on **DATE** and ending on December 31, **YEAR (5-years after DATE)** for units equal to or less than 5 MMBTU/hr and only burn gaseous or light liquid fuels. The first 5-year compliance report must be submitted no later than March 15 following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**

OPTIONAL – Use only if the source was an area source and has become a major source and has new units that must do boiler tune-ups biennially, otherwise delete and renumber as appropriate.

- 7. The permittee must submit the first compliance report for new units and must cover the period beginning on **DATE** and ending on December 31, **YEAR (2-years after DATE)** for units greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burn gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels. The first 2-year compliance report must be submitted no later than March 15 following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**

OPTIONAL – Use only if the source was an area source and has become a major source and has new units that must do boiler tune-ups once every 5 years, otherwise delete and renumber as appropriate.

- 8. The permittee must submit the first compliance report for new units and must cover the period beginning on **DATE** and ending on December 31, **YEAR (5-years after DATE)** for units equal to or less than 5 MMBTU/hr and only burn gaseous or light liquid fuels. The first 5-year compliance report must be submitted no later than March 15 following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**

ALWAYS INCLUDE – If there are only units with one-time frame for tune-ups (2-year or 5-year per the requirements in Section III), you may delete the one that is not applicable.

- 9. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be submitted by March 15 of the year following the applicable **2 or 5-year** period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. **(40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))**
- 10. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c)(1))**
 - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**

- d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
- e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

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 requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

Footnotes:

¹ This 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).