FG{ID}
FLEXIBLE GROUP CONDITIONS
Major Source – New or Existing Metal Process Furnace (Greater 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.

This template applies to both new and existing metal process furnaces, as defined below. 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, this source is considered an existing source. If it was installed or reconstructed after June 4, 2010, then it is a new source.

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).

This template applies to metal process furnaces with a heat input capacity greater than 10 MMBTU/hr. Units with a heat input capacity less than 10 MMBTU/hr should use the template for small units. Staff may create separate tables for new and existing units (ex. some units may need to do initial tune-ups while other units have already done it) or combine into one table (ex. all units have done their initial tune-up).

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) metal process furnace(s) that are designed with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Metal process furnaces are a subcategory of process heaters, as defined in the Boiler MACT, which include natural gas-fired annealing furnaces, preheat furnaces, reheat furnaces, aging furnaces, heat treat furnaces, and homogenizing furnaces. {May add specifics for the affected EU(s).}

Emission Units: {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)

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 (3) years from the date the source becomes major.

1. The permittee must, for all metal process furnaces installed on or before June 4, 2010, complete an initial tune-up as specified in SC III.5 by no later than DATE. **(40 CFR 63.7510(e))**

OPTIONAL – Use the following condition only for NEW SOURCES that have unit(s) that are not equipped with a continuous oxygen trim system. 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 13 months after startup.

2. The permittee must, for metal process furnaces installed after June 4, 2010, complete an initial tune-up as specified in SC III.5 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. 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.

3. 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.5 by no later than DATE. **(40 CFR 63.7510(g))**

OPTIONAL – Use the following condition only for EXISTING AREA SOURCES that are NOW MAJOR. Delete if not applicable and renumber conditions appropriately. The DATE will be three years from the date the source becomes major.

4. 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

5. The permittee shall conduct a tune up of each metal process furnaces as specified below. For each emission unit that does not have an oxygen trim system installed, the annual tune-up shall be no more than 13 months after the previous tune-up. **(40 CFR 63.7500(a)(1), 40 CFR 63.7515(d), Table 3 of 40 CFR Part 63, Subpart DDDDD)**

    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 delay the burner inspection until the next scheduled unit shutdown. 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). **(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 NOx 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))**

OPTIONAL – Use only if there are unit(s) that have an oxygen trim system installed. Delete if not applicable.

6. The permittee shall conduct a tune-up of each emission unit that has an oxygen trim system installed in FG{ID} of the burner(s) and combustion controls, as applicable, every 5 years as specified as specified in SC III.5.a through e. **(40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3)**

    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))**

ALWAYS INCLUDE

7. If the unit is not operating 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))**

8. At all times, the permittee must operate and maintain each metal process furnace, 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.

ALWAYS INCLUDE

1. The permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or annual or 5-year compliance report, as applicable, that the permittee submitted. **(40 CFR 63.7555(a)(1))**

2. The permittee shall maintain on-site and submit, if requested by the AQD, an annual or 5-year tune-up report, as applicable, 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 the metal process furnaces. **(40 CFR 63.7540(a)(10)(vi)(A))**

   b. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**

   c. The type and amount of fuel used over the 12 months prior to the tune-up, 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 used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**

3. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**

4. As specified in 40 CFR 63.10(b)(1), 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))**

5. 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 – For new units that are beginning operation and have not yet submitted an Initial Notification. Delete if not applicable and verify final numbering.

4. The permittee must submit an Initial Notification no later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**

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

5. The permittee must submit boiler and process heater tune-up compliance reports to the AQD. The reports must be submitted by March 15 of the year following the applicable annual 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). For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). **(40 CFR 63.7550(b))**

6. The permittee must submit a compliance report containing the following information.
   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 annually 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))**

7. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically using CEDRI that is accessed through the EPA's CDX (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. **(40 CFR 63.7550(h)(3))**

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 Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as specified in 40 CFR Part 63, Subparts A and DDDDD. **(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).