# **Tune-up Information**

National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers

## 40 CFR Part 63 Subpart JJJJJJ

## Who must conduct a tune-up (§63.11214)?

- Owners and operators of new and existing coal-fired area source boilers having a heat input capacity of less than 10 million Btu per hour.
- Owners and operators of all biomass-fired and oil-fired area source boilers.

## By when must I complete the initial tune-up (§63.11196)?

- Existing Sources: No later than March 21, 2012.
- New Sources: No later than May 20, 2011 or upon start-up of the boiler, whichever is later.

If the unit is not operating on the required date for a tune-up (because it is a seasonal boiler, or because it is down for maintenance, for example), the tune-up must be conducted within one week of startup (§63.11223(b)(7)).

Each subsequent biennial tune-up must be conducted no more than 25 months after the previous tune-up (§63.11223(a)).

#### How do I meet the tune-up requirements?

<u>For Initial Tune-up:</u> You must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report (§63.11225(a)(4)(i)) that indicates that you conducted a tune-up of the boiler.<sup>a</sup>

<u>For Subsequent Tune-up</u>: You must conduct a performance tune-up according to §63.11223(b) and you must prepare a biennial compliance certification that indicates you complied with all the relevant standards and requirements of this subpart. You do **not** need to submit this report, but it can be requested by your delegated authority (§63.11225(b)).

<u>For All Tune-ups</u>, you must keep records of the dates and procedures of each boiler tune-up, and the fuel used by the boiler. You should begin keeping fuel records on May 20, 2011. The record must be maintained on site and submitted to the delegated authority if requested (§63.11225(c)(2)(i)). You may use the enclosed forms to document the tune-up, keep records, and meet the reporting requirement.

<sup>&</sup>lt;sup>a</sup> An example Notification of Compliance form for boilers subject to tune-ups is available at <a href="http://www.epa.gov/ttn/atw/boiler/boilerpg.html">http://www.epa.gov/ttn/atw/boiler/boilerpg.html</a> under Implementation Tools.

The biennial reports are for area source boilers subject only to the biennial tune-up requirement. The time period for each biennial report only covers the 12 months prior to the tune-up, and the tune-up can be conducted any time in that two year period, but within 25 months of the previous tune-up.

Note that the fuel records must be maintained for every month during the two year reporting period.

**For More Information:** The complete regulatory text for the National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers final rule, 40 CFR part 63, subpart JJJJJJ, can be found at <a href="http://edocket.access.gpo.gov/2011/pdf/2011-4493.pdf">http://edocket.access.gpo.gov/2011/pdf/2011-4493.pdf</a>.

# **EXAMPLE Tune-up Record and Biennial Compliance Certification**

National Emission Standards for Hazardous Air Pollutants for Area Sources:
Industrial, Commercial, and Institutional Boilers
40 CFR Part 63 Subpart JJJJJJ

This form shows examples of what on site records should be maintained to document your tune-up. Your regulated boiler may require additional detail, depending on your boiler design. This list is not all-inclusive, because it is not modeled after a particular system, but instead gives only general information that is applicable to most systems.

## What is the purpose of this form?

You may use this form to meet the requirements for completing and documenting a tune-up under the National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers. However, you may also record the information in another form or format.

#### **SECTION I: INSTRUCTIONS**

#### Check the applicable box below:

My boiler is subject to a tune-up requirement.



If you did not check the box above, do not use this example record. There is a separate set of records and compliance certification form that may apply to you. See <a href="http://www.epa.gov/ttn/atw/boiler/boilerpg.html">http://www.epa.gov/ttn/atw/boiler/boilerpg.html</a> for additional implementation tools.

## When is this form due (§63.11225(b))?

Existing Sources: For each tune-up conducted, Sections I-V of this form are records that you

should keep to demonstrate compliance with this rule. The first tune-up should be completed by March 21, 2012. The next biennial tune-up should be completed no

later than 25 months after the initial tune-up. The first biennial compliance certification (Section VI of this form) must be prepared by March 1, 2015. Later

certifications must be prepared every other year by March 1.

New Sources: The first biennial compliance certification must be prepared by March 1, 2012 or

on March 1 of the year immediately following start up of the new or reconstructed boiler, whichever is later. Later certifications must be prepared every other year

by March 1.

#### Where do I send this form (§63.11225(b))?

This certification does *not* need to be submitted, but it must be maintained on site as a record and may be requested by the delegated authority.

#### **SECTION II: RECORD OF GENERAL BOILER INFORMATION**

Date:\_\_\_\_\_

| Repo        | orting Period:                                  |   |                  |               |  |
|-------------|---|---|------------------|---------------|--|
| •           |   |   |                  |               | <del></del>                                  |
| Rolle       | r Operator:                                     |   |                  |               |  |
| Boile       | r Emission Unit ID <sup>b</sup> :               |   |                  |               | <u></u>                                      |
| Tune        | -Up Conducted By:                               |   |                  |               |  |
|             |   | Please  | Print            |               |  |
| SEC         | TION III: RECORD OF T                           | UNE-UP PROCED   | <b>URES</b> (§63 | 3.11225(c)(2) | and (§63.11223(b)(6)(i) and (ii))            |
|             | ck the applicable box windicate 'not applicable | -   | •                |               | procedure does not apply to                  |
| Requirement |   | Description   |                  |               | Inspector Comments/ Corrective Actions Taken |
|             | Inspect the burner <sup>c</sup>                 | Clean or replace ar<br>burner, as necessa   |                  | nts of the    |  |
|             | Inspect the flame pattern                       | Adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. |                  |               |  |
|             | Inspect air-to-fuel ratio control system        | Ensure system is ca<br>functioning properly<br>installed on the boil  |                  |               |  |
|             | Optimize emissions of carbon monoxide (CO)      | Optimize emissions manufacturer's spe   |                  |               |  |
|             | Measure CO and O <sub>2</sub>                   | Parameter   | Before           | After         |  |

**Basis** 

(wet or dry) CO (ppmv)

O<sub>2</sub> (% by volume)

levels in exhaust, before

and after tune-upd

<sup>&</sup>lt;sup>b</sup> Use the boiler emission unit ID consistent with the ID provided in the Initial Notification Report.

<sup>&</sup>lt;sup>c</sup> You may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months.

<sup>&</sup>lt;sup>d</sup> Measurements may be made on either a dry or wet basis, as long as it is the same basis before and after the tune-up adjustments are made. CO concentration measurements must be made in units of parts per million by volume (ppmv). Oxygen  $(O_2)$  concentration measurements must be made as percent by volume.

## **SECTION IV: RECORD OF MANUFACTURER SPECIFICATIONS** (§63.11225(c)(2))

If your boiler has manufacturer specifications for adjusting the flame patterns or optimizing total emissions of carbon monoxide, maintain a copy of these specifications in your records.

## SECTION V: RECORD OF FUEL TYPE (§63.11223(b)(6)(iii))

|                           | Amount of fuel used or delivered for the 12 months <sup>f</sup> preceding the tune-up <sup>g</sup> |                                   |  |  |  |  | ) <sup>g</sup> |                               |  |
|---------------------------|--|-----------------------------------|--|--|--|--|----------------|-------------------------------|--|
| Fuel<br>Type <sup>e</sup> | Delivery Date  | Example: 5/20/2011                |  |  |  |  |                |                               |  |
| Type <sup>e</sup>         | Or Period of Consumption   | Example:<br>5/20/2011 – 8/31/2011 |  |  |  |  |                | Units of measure <sup>h</sup> |  |
|                           |  |                                   |  |  |  |  |                |                               |  |
|                           |  |                                   |  |  |  |  |                |                               |  |
|                           |  |                                   |  |  |  |  |                |                               |  |
|                           |  |                                   |  |  |  |  |                |                               |  |
|                           |  |                                   |  |  |  |  |                |                               |  |
|                           |  |                                   |  |  |  |  |                |                               |  |

## [Add rows to the table for additional fuels, as necessary.]



If you have more than one boiler that must conduct a tune-up, please repeat Sections II, III, IV, and V for each boiler. Otherwise, proceed to Section VI below. Keep Sections II through V in your records for 5 years. You do not submit this information unless requested by your delegated authority.

e Report all fuels used in each of the units subject to the standard (e.g., bituminous coal, #6 fuel oil, #2 fuel oil, natural gas, bark, lumber, etc.). See the definition of fuel type in §63.11237.

f For the first tune-up, this fuel consumption record begins on May 20, 2011, the effective date of the rule. Thus, the first tune-up record will not reflect an entire 12 months of consumption data.

<sup>&</sup>lt;sup>8</sup> EPA recognizes that not all facilities have fuel metering capabilities. Records of fuel delivery- instead of fuel consumption- will also meet the rule requirements. Affected sources have discretion on the periods of fuel records maintained on-site. The records may be annual, monthly, or periodic, depending on fuel delivery frequencies.

<sup>h</sup> e.g., Gallons, tons, standard cubic feet (scf), etc.

# SECTION VI: FACILITY INFORMATION AND CERTIFICATION (§63.11225(b)(1) and (2))

While the sections I-V records are required for ALL tune-ups, this section is only required for the biennial compliance report.

| Facility Name:  |                            |                      |                          |  |  |  |  |  |
|---|----------------------------|----------------------|--------------------------|--|--|--|--|--|
| Facility Street Address:  |                            |                      |                          |  |  |  |  |  |
| City  | State                      | Zip                  |                          |  |  |  |  |  |
| ☐ I certify that my facility has con CFR part 63, subpart JJJJJJ. | mplied with the tune up re | equirement for boile | r(s) per §63.11123 of 40 |  |  |  |  |  |
| Name (please print)   | Ti                         | tle                  |                          |  |  |  |  |  |
| Phone Number  |                            | mail Address         |                          |  |  |  |  |  |
| Signature   |                            | Date:                |                          |  |  |  |  |  |