**Tune-up Information**

Revised April 2013

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.
* If your boiler is subject to tune-ups, you must have it tuned-up every 2 or 5 years, as applicable.

***Boilers that are required to have a tune-up biennially (every 2 years) include***:

* New and existing coal-fired boilers having a heat input capacity of less than 10 million Btu per hour that do not meet the definition of limited-use boiler or do not use oxygen trim systems that maintain an optimum air-to-fuel ratio.
* New and existing biomass-fired boilers that do not meet the definition of seasonal boiler or limited-use boiler, or use oxygen trim systems that maintain an optimum air-to-fuel ratio.

New and existing oil-fired boilers having a heat input capacity greater than 5 million Btu per hour that do not meet the definition of seasonal boiler or limited-use boiler, or do not use oxygen trim systems that maintain an optimum air-to-fuel ratio.

***Boilers that are required to have a tune-up every 5 years include:***

* New and existing seasonal boilers.
* New and existing limited-use boilers.
* New and existing oil-fired boilers having a heat input capacity equal to or less than 5 million Btu per hour.
* New and existing boilers with oxygen trim systems that maintain an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up.

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

* *Existing Sources:* No later than March 21, 2014.
* *New Sources:*Not required to conduct an initial tune-up.

***By when must I complete subsequent tune-ups*** (§63.11223)***?***

* Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler subject to a biennial tune-up, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.
* Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler subject to a 5-year tune-up, the first 5-year tune-up must be no later than 61 months after the initial startup.
* 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 30 days of startup (§63.11223(b)(7)).

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

*For Initial Tune-up:* You must conduct a performance tune-up for each affected existing boiler according to §63.11223(b)-(f) and, by July 19, 2014, you must include a signed statement in the Notification of Compliance Status (§63.11225(a)(4)(ii)) that indicates that you conducted a tune-up of the boiler. If you already conducted your initial tune-up and submitted the Notification of Compliance Status, you do ***not*** need to resubmit the notification.

You are required to submit the Notification of Compliance Status electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) through EPA’s Central Data Exchange ([www.epa.gov/cdx](http://www.epa.gov/cdx)) (§63.11225(a)(4)(vi)). CEDRI is a web-based application for the electronic reporting of various reports required in 40 CFR Parts 60 and 63. Paper submittal of the Notification of Compliance Status will be accepted up to the time that the CEDRI form is available. After that time, the Notification of Compliance Status ***must*** be submitted electronically.

Your first Compliance Certification Report certifying that you complied with the requirements in §63.11223 to conduct a tune-up of your existing boiler must be prepared by March 1, 2015. You do ***not*** need to submit this report, but it can be requested by your delegated authority (§63.11225(b)).

New affected boilers subject only to tune-up requirements (and, therefore, not subject to initial tune-ups) are not required to prepare and submit a Notification of Compliance Status. New sources must conduct their first biennial or 5-year tune-up no later than 25 months or 61 months, respectively, after start-up, and must prepare their first Compliance Certification Report by March 1 of the year following the tune-up.

*For Subsequent Tune-up:* You must conduct a performance tune-up for each affected existing and new boiler according to §63.11223(b)-(f) every 2 years or 5 years, as applicable, and you must certify every 2 years or 5 years, as applicable, in your Compliance Certification Report that you complied with the requirements in §63.11223 to conduct a tune-up. You do ***not*** need to submit this report, but it can be requested by your delegated authority (§63.11225(b)).

For existing and new boilers that are required only to conduct a biennial or 5-year tune-up and are not subject to emission or operating limits, you may prepare only a biennial or 5-year Compliance Certification Report. Reports should be prepared by March 1 of the year after the calendar year during which a tune-up is completed.

*For All Tune-ups,* You must conduct the tune-up while burning the type of fuel (or fuels for boilers that routinely burn two fuels at the same time) that provided the majority of the heat input to the boiler for the 12 months before the tune-up (§63.11223(a)). You must keep records of the date of the tune-up, the procedures followed, and the manufacturer’s specifications to which the boiler was tuned (§63.11225(c)). Following each tune-up, you must prepare and maintain onsite a report that contains (i) the concentrations of CO and oxygen before and after the tune-up, (ii) a description of any corrective actions taken as a part of the tune-up, and (iii) the type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the boiler was physically and legally capable of using more than one type of fuel during that period (§63.11223(b)). The records must be maintained on site and submitted to the delegated authority if requested. You may use the example form to document the tune-up, keep records, and meet these reporting requirements.

***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 <http://edocket.access.gpo.gov/2011/pdf/2011-4493.pdf> (March 21, 2011 final rule) and <http://www.gpo.gov/fdsys/pkg/FR-2013-02-01/pdf/2012-31645.pdf> (February 1, 2013 amendments to final rule).

**EXAMPLE Tune-up Record and 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.

C:\Documents and Settings\ASingleton\Local Settings\Temporary Internet Files\Content.IE5\0JAXMH8Z\MC900411244[1].wmf

If you did not check the box above, do not use this example record. See <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>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, 2014. Subsequent biennial or 5-year tune-ups, as applicable, should be completed no later than 25 months or 61 months, respectively, after the previous tune-up.

The first Compliance Certification Report (Section VI of this form) must be prepared by March 1, 2015. Later certifications must be prepared by March 1 of the year following the calendar year during which a biennial or 5-year tune-up is completed.

New 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 biennial or 5-year tune-up, as applicable, must be no later than 25 months or 61 months, respectively, after the initial startup of the boiler. Subsequent biennial or 5-year tune-ups, as applicable, should be completed no later than 25 months or 61 months, respectively, after the previous tune-up.

The first Compliance Certification Report (Section VI of this form) must be prepared by March 1 of the year following the calendar year during which the first biennial or 5-year tune-up is completed. Later certifications must be prepared by March 1 of the year following the calendar year during which a biennial or 5-year tune-up is completed.

***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:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reporting Period:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Boiler Operator:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Boiler Emission Unit ID[[1]](#footnote-1):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tune-Up Conducted By:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please Print

**SECTION III: RECORD OF TUNE-UP PROCEDURES** (§63.11225(c)(2) and (§63.11223(b)(6))

***Check the applicable box when the procedure is completed. If the procedure does not apply to you, indicate ‘not applicable’ or ‘NA’ in the comments column.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Requirement** | | **Description** | | | **Inspector Comments/**  **Corrective Actions Taken** |
|  | Inspect the burner[[2]](#footnote-2) | Clean or replace any components of the burner, as necessary | | |  |
|  | 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 systemb | Ensure system is calibrated and functioning properly, if such a system is installed on the boiler | | |  |
|  | Optimize emissions of carbon monoxide (CO) | Optimize emissions consistent with the manufacturer’s specifications, if available, and with any nitrogen oxide requirement to which the boiler is subject. | | |  |
|  | Measure CO and O2 levels in exhaust, before and after tune-up[[3]](#footnote-3) | **Parameter** | **Before** | **After** |  |
| Basis  (wet or dry) |  | |
| CO (ppmv) |  |  |
| O2 (% 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 AND AMOUNT USED OVER THE 12 MONTHS PRIOR TO THE TUNE-UP, BUT ONLY IF THE BOILER WAS PHYSICALLY AND LEGALLY CAPABLE OF USING MORE THAN ONE TYPE OF FUEL DURING THAT PERIOD** (§63.11223(b)(6)(iii))

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Fuel**  **Type[[4]](#footnote-4)** | **Amount of fuel used or delivered for the 12 months preceding the tune-up[[5]](#footnote-5)** | | | | | | | **Units of measure[[6]](#footnote-6)** |
| **Delivery Date** |  |  |  |  |  |  |
| **Or Period of Consumption** |  |  |  |  |  |  |
|  | |  |  |  |  |  |  |  |
|  | |  |  |  |  |  |  |  |
|  | |  |  |  |  |  |  |  |

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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.

**SECTION VI: FACILITY INFORMATION AND CERTIFICATION** (§63.11225(b)(1) and (2))[[7]](#footnote-7)

Facility Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Facility Street Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

City State Zip

I certify that my facility has complied with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.

By my signature, I am certifying that my facility has complied with all relevant standards and other requirements of 40 CFR part 63 subpart JJJJJJ and certifying the truth, accuracy and completeness of this document.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Responsible Official (please print) Title

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone Number Email Address

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Signature of Responsible Official* Date

1. Use the boiler emission unit ID consistent with the ID provided in the Initial Notification Report. [↑](#footnote-ref-1)
2. You may delay the inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months if subject to biennial tune-ups, and at least once every 72 months if subject to 5-year tune-ups. [↑](#footnote-ref-2)
3. 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 (O2) concentration measurements must be made as percent by volume. [↑](#footnote-ref-3)
4. 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. [↑](#footnote-ref-4)
5. 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. [↑](#footnote-ref-5)
6. e.g., Gallons, tons, standard cubic feet (scf), etc. [↑](#footnote-ref-6)
7. 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. [↑](#footnote-ref-7)