

# Area Source Boiler Rule

## 40 CFR 63 Subpart JJJJJJ A Maine DEP Fact Sheet

September 25, 2013

### Why did EPA write this rule?

To help protect public health by reducing the amount of pollutants, such as mercury, carbon monoxide, particulate matter (dust), and other toxics that come from fuel burning. This rule promotes increased boiler efficiency through tune-ups and, in some cases, energy assessments saving the boiler owner fuel and money.

### What is an area source?

Simply put, if you do not have a Title V air emission license, you are probably an area source. An area source has the potential to emit hazardous air pollutants (HAP) in quantities less than 10 tons per year of a single HAP or 25 tpy of a combination of HAP. Examples of hazardous air pollutants include mercury, lead, manganese, benzene, toluene, etc.

### What boilers are subject to the area source boiler rule (also known as the Area Source Boiler MACT)?

Industrial, commercial or institutional boilers that burn coal, wood, or fuel oil are subject to the area source boiler rule. A *Boiler* is an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Hot air furnaces are not subject to this rule.

The area source boiler MACT **exempts** several types of boilers including:

- Natural gas or propane fired boilers,
- Hot water heaters with tank capacities less than 120 gallons. Most households have hot water heaters with capacities less than 120 gallons.
- Hot water boilers (not generating steam) with a capacity less than 1.6 MMBtu/hr,
- Temporary boilers which are movable and do not remain in the same place longer than 12 months,
- Residential boilers,
- Electric boilers, which are boilers in which electricity serves as the source of heat. This also includes electric boilers that burn gaseous or liquid fuel during periods of electrical power curtailment or failure.
- Process heaters, such as asphalt plant oil heaters, are not subject to this rule.

### If I believe I am subject, where do I start?

Gather data on the capacity of your unit in MMBtu/hr, when the unit was installed, and the fuel(s) fired in your unit, and then notify EPA that you are subject to this rule by filling out and submitting an initial notification form, due by **January 20, 2014**. You can find an example notification on the left hand side of EPA's boiler website: <http://www.epa.gov/boilercompliance/>.

If you have already submitted your initial notification, you do not have to submit it again.



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### What is the compliance date for initial Tune-ups?

Tune-ups for existing sources must be completed by **March 21, 2014**.

### How often do subsequent tune-ups need to be performed?

It depends on the boiler category. For instance, an oil fired boiler with a design capacity of 6 MMBtu/hr used for heating a building in the winter would require a tune up every two years, while a smaller oil-fired boiler (<5MMbtu/hr) is only required to be tuned up every 5 years.

<b>Boiler Category</b>	<b>Tune-Up Frequency</b>
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years
<i>New and Existing Oil, Biomass, and Coal-fired Boilers with less frequent tune up requirements</i>	
Seasonal (see definition at 40 CFR §63.11237)	Every 5 years
Limited use (see definition at 40 CFR §63.11237)	Every 5 years
Oil-fired boilers with a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

### Who may conduct a Tune-up?

A boiler technician who is registered with the Maine Office of Professional and Occupational Regulation, Maine Fuel Board, the licensed Station Steam Engineer employed by the facility with a high pressure boiler with stream pressure above 15 psi, or a person under the supervision of the facility's High Pressure Boiler Engineer in charge.

### What is required in the Tune-up for oil fired units?

Tune-ups consist of the following activities:

- Conduct a pre tune-up O<sub>2</sub>/CO test,
- Inspect and clean the boiler,
- Check and optimize flame pattern,
- Inspect and calibrate air/fuel ratio,
- Adjust and optimize CO emissions to meet manufacturer's specifications,
- Conduct a post tune-up O<sub>2</sub>/CO test and document actions.

### The tune-up requirements don't seem to fit for biomass units. What do I do?

The Maine DEP recommends you do the following:

- Conduct a pre tune-up O<sub>2</sub>/CO test,
- Inspect and clean the boiler,
- Document annual maintenance and operation that meets manufacturer's specifications,
- Conduct a post tune-up O<sub>2</sub>/CO test,
- Document actions.



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### **Where do I send my notification(s)?**

Submit the Notification of Compliance Status (NOCS) to the EPA stating that you have conducted your tune-up (or energy assessment):

U.S. EPA Region 1	State of Maine – DEP*
Attn: Air Clerk	Attn: Lisa Higgins
5 Post Office Square, Suite 100	Bureau of Air Quality Control
Mail code: OES04-2	State House, Station # 17
Boston MA 02109-3912	Augusta, ME 04333-0017

\*Please send a copy to the State of Maine – DEP if you have an air emission license.

**Electronic Reporting:** Once EPA has completed its electronic reporting template (estimated to be completed in October 2013), you will be required to submit your NOCS electronically through EPA's central data exchange at [www.epa.gov/cdx](http://www.epa.gov/cdx). EPA is accepting paper NOCS reports only until its electronic reporting template is available.

Documentation of subsequent tune-ups must be kept on file at your facility.

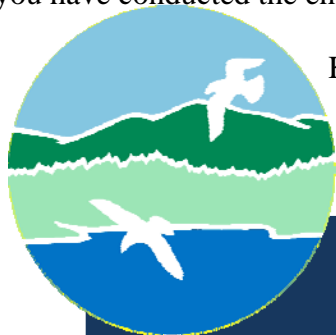
### **What is required in the one time Energy Assessment?**

It is required for all existing boilers with a design heat input capacity of 10 MMBtu/hr or greater and subject to this rule that a one-time energy assessment be conducted by **March 21, 2014**.

The energy assessment must include the following:

1. A visual inspection of the boiler system (e.g. cracks, corrosion, leaks).
2. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints.
3. Inventory of major energy use systems consuming energy from affected boiler(s) and which are under the control of the boiler owner or operator.
4. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
5. A list of major energy conservation measures that are within the facility's control.
6. A list of the energy savings potential of the energy conservation measures identified.
7. A comprehensive report detailing ways to improve efficiency, the costs of specific improvements, benefits, and time frames for recouping those investments.

Once the Energy Assessment and report are complete, send the Notification of Compliance Status indicating you have conducted the energy assessment to the to the EPA and to the DEP.



Keep a copy of the assessment in your files at your facility.

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## Where do I find more information?

The EPA website at:

<http://www.epa.gov/boilercompliance/>

EPA's Question and Answer Document:

<http://www.epa.gov/ttn/atw/boiler/boilermactqanda.pdf>

OR

Contact: Lisa Higgins at 207-287-7023, email – [Lisa.Higgins@Maine.gov](mailto:Lisa.Higgins@Maine.gov) or  
Susan Lancey at 617-918-1656 email – [Lancey.Susan@epamail.epa.gov](mailto:Lancey.Susan@epamail.epa.gov)

**This document is for informational purposes only.**

**Please refer to EPA's website, the Rule, and/or your state or federal regulatory contact for information on requirements specific to your facility.**

