

# INDUSTRIAL COMBUSTION

## EPA Emissions Rules for Boilers

*The EPA has published two new rules for boilers in an effort to reduce emissions of air pollutants. The two rules are the Major Source Rule (also known as the Boiler MACT or BMACT) and the Area Source Rule. The information, forms, and tools necessary for compliance are included in this package.*

<u>Contents</u>	<u>Page</u>
• Overview	2
• Step 1	3
• Step 2	4
• Step 3	5
• Frequently Asked Questions	6
• Definitions	10
• EPA Regional Offices	12
• Major Source – Instructions / Initial Notification Forms	14
• Area Source – Instructions / Initial Notification Forms	21
• Compliance Dates Summary	29
• Emissions Limits By Boiler	31
• Decision Tree	32
• Exclusions To The Area Source Rule	33

## EPA Emissions Rules for Boilers

On March 21, 2011, the U.S. Environmental Protection Agency (EPA) published three rules regarding air emissions standards in the Federal Register. Two of the three rules pertain to boilers and are specifically designed to reduce emissions of air pollutants. The two rules are:

- **Major Source (Boiler MACT) Rule:** Rules to reduce boiler and process heater emissions at large sources of air toxics
- **Area Source Rule:** Rules to reduce boiler emissions at small sources of air toxics

**ATTENTION:**  
Important EPA  
Air Emissions  
Rules You May  
Need To Act On  
Immediately.

The EPA is reconsidering parts of the Major Source and Area Source Rules. While it is carrying out the formal reconsideration process, the EPA announced in May 2011 that it would delay the implementation of the Major Source Rule (also known as Boiler MACT or BMACT) until further notice.

*However, the compliance requirements of the Area Source Rule, which include the majority of boilers in the United States, are in effect while the EPA is reconsidering this rule. Affected boiler owners must take immediate action to begin compliance. The first step is sending an initial notification form to the EPA. Although the rules for Major Source facilities are not yet in effect, Industrial Combustion recommends that Major Source facilities send in notification of their status as a Major Source.*

Examples of the types of requirements under these two new rules include: boiler tune-ups, emissions limit requirements, one-time energy assessments, and monthly fuel monitoring.

To determine which records and reports are required for your boiler, consult the **decision tree** on page 32.

For a summary of **compliance dates** specific to your boiler, see page 29.

For a summary of specific **emissions limits** by boiler type, see page 31.

To determine rule applicability and compliance actions required, complete the following three steps:

- **Step 1:** Determine if your facility is an Area Source or Major Source.
- **Step 2:** Determine boiler(s) subcategory for: a) Fuels Combusted; b) New vs. Existing Source; c) Size of Boiler.
- **Step 3:** Submit Initial Notification of Applicability and Determine Compliance Requirements.

**Do not delay in completing the above three steps.** Several reports are required to validate compliance with the new rules. The first report to be submitted was an Initial Notification of Applicability. It was due **September 17, 2011** if startup was before May 20, 2011. If startup was on or after May 20, 2011, the notification was due **September 17, 2011**, or **within 120 days**

**after startup for Area Source facilities, or within 15 days after startup for Major Source facilities.** If you missed the notification deadline, send in your form as soon as possible. We will continue to update information as it becomes available and upload the forms necessary for compliance. If you would like to receive notification when we post updates, please register your e-mail address below.

## Step 1

### Determine if your facility is an Area Source or Major Source.

There are two rules, the Major Source Rule (also known as the Boiler MACT or BMACT) and the Area Source Rule.

The first step is to determine if your facility is subject to the Major Source Rule (pertaining to boilers and process heaters at large sources of air toxics) or the Area Source Rule (pertaining to boilers at small sources of air toxics).



A “Major Source” facility emits 10 or more tons per year of any single air toxic or 25 tons or more per year of any combination of air toxics. A comprehensive list of the regulated air toxics can be found on the EPA website at <http://www.epa.gov/ttn/atw/188polls.html>. The majority of Major Source boilers and process heaters are generally located at very large industrial facilities, such as **refineries, chemical and large manufacturing plants, and large institutional facilities** such as **universities**.

Any facility that is not a Major Source is classified as an “Area Source.” Most boilers covered by the Area Source Rule are located at commercial and institutional facilities, with a smaller number in the industrial sector. Commercial boilers include those found in **stores/malls, laundries, apartments, restaurants, and hotels/motels**. Institutional boilers are found in many locations, including medical centers (**hospitals, clinics, nursing homes**), educational and religious facilities (**schools, churches**), **amusement parks**, and municipal buildings (**courthouses, prisons**). Many **manufacturing facilities** are also Area Sources.

To calculate how to estimate emissions from your source to determine if you are a “Major Source” or “Area Source” facility, consult the EPA Emission Inventory Improvement Program document, “Preferred and Alternative Methods for Estimating Air Emissions from Boilers” at <http://www.epa.gov/ttn/chief/eiip/techreport/volume02/ii02.pdf>. Sections 4 and 5 show emissions calculation methods.

After determining which rule is applicable to your facility:

- **Major Sources:** Skip to Step 3: Submit Initial Notification of Applicability and Determine Compliance Requirements
- **Area Sources:** Continue to Step 2: Determine Boiler(s) Subcategory

## Step 2

**Determine boiler(s) subcategory for: a) Fuels Combusted; b) New vs. Existing Source; c) Size of Boiler.**

This section applies to Area Source facilities. Major Source facilities should skip to Step 3. For Area Sources, you must determine each boiler's subcategory by answering the following questions:

1. What fuels are combusted in my boiler/burner?
2. Is my boiler a new source or an existing source?
3. What size is my boiler?

### **Determining fuel subcategory**

All Area Sources can be classified as one of the following fuel subcategories:

- **Biomass subcategory:** Includes any boiler that burns at least 15 percent biomass on an annual heat input basis.
- **Coal subcategory:** Includes any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis.
- **Oil subcategory:** Includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories.
- **Gas-fired subcategory:** Includes any boiler that burns gaseous fuels, including: natural gas, process gas, landfill gas, coal-derived gas, refinery gas, hydrogen, or biogas, not combined with any solid fuels. If a unit burns liquid fuel (e.g., oil) only during periods of gas curtailment, gas supply emergencies, or periodic testing, it may still be considered a gas-fired boiler. Periodic burning of a liquid fuel shall not exceed a combined total of 48 hours during any calendar year in order to maintain status as a gas-fired boiler. **Boilers should be individually metered for fuel quantity and run time if a liquid backup fuel is used, in order to prove applicability of the gas-fired subcategory.**

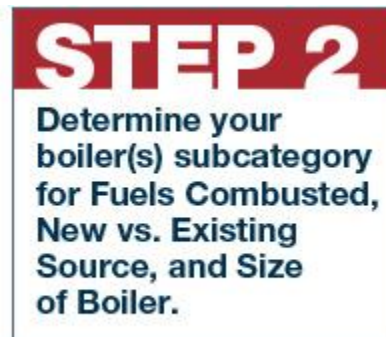
If you are not sure which fuel subcategory applies to your boiler/burner, an Annual Heat Input Fuel calculation can be completed by filling out the Fuel Subcategory Calculation Tool that can be found on the EPA's website at [http://www.epa.gov/ttn/atw/boiler/imptools/area\\_sm\\_biz\\_compli\\_guide\\_appx.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/area_sm_biz_compli_guide_appx.pdf).

### **Determining if your boiler is a new or existing source**

For Area Source boilers, you must determine if you qualify as a new or existing source.

Your boiler/burner is considered an **Existing Source** if you commenced construction or reconstruction on or before June 4, 2010. You have commenced construction or reconstruction if you have a contractual obligation to undertake and complete construction or have begun the act of construction on the boiler.

Your boiler/burner is considered a **New Source** if you have commenced construction or reconstruction of the boiler after June 4, 2010, and you met the applicability criteria



at the time you commenced construction, or you switched from firing natural gas fuel to a solid fossil fuel, biomass, or liquid fuel after June 4, 2010.

### **Determining your boiler's size**

Boiler size is expressed in terms of rated design heat input capacity and is measured in million British thermal units per hour, or MMBTU/hr.

Once you have determined your boiler's fuel subcategory, qualification as an existing or new source, and size, move on to Step 3: Submit Initial Notification of Applicability and Determine Compliance Requirements.

### **Exclusions to the Area Source Rule**

There are several types of boilers that are excluded from the Area Source Rule, including waste heat boilers and boilers used for research purposes. A list of exclusions can be found on page 33.

## **Step 3**

### **Submit Initial Notification of Applicability and Determine Compliance Requirements.**

Initial notification applies to both Major Source and Area Source facilities. The first requirement of the EPA rules is to submit an Initial Notification of Applicability. For existing boilers, the information was due **September 17, 2011**. For new boilers, the form was due **September 17, 2011, or within 120 days after startup for Area Source facilities, or within 15 days after startup for Major Source facilities**. If you missed the notification deadline, send in your form as soon as possible.



Instructions and the Initial Notification Forms for Major Source can be found on page 14.

Instructions and the Initial Notification Forms for Area Source can be found on page 21.

### **Additional Actions Required - For Area Source Facilities**

If your facility is subject to the Area Source Rule, there are required actions, ranging from regular tune-ups to emissions monitoring. Facilities also must maintain records and file periodic reports to demonstrate compliance. The extent of actions and number of reports to be filed varies depending upon: the type of fuel burned in the boiler, whether the boiler is new or existing, and the size of the boiler.

To determine which records and reports are required for your boiler, consult the **decision tree** that can be found on page 32.

For a summary of **compliance dates** specific to your boiler, see page 29.

For a summary of specific **emissions limits** by boiler type, see page 31.

The Compliance Guide for Area Source boilers can be found on the EPA website at [http://www.epa.gov/ttn/atw/boiler/imptools/area\\_sm\\_biz\\_compli\\_guide\\_appx.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/area_sm_biz_compli_guide_appx.pdf).

Industrial Combustion will continue to add forms and instructions pertinent to the Area Source Rule, including:

- Tune-up compliance form
- Record-keeping forms
- Form for signed statement of shutdown and startup compliance
- Startup compliance form
- Startup/shutdown minimization schedule for all oil boilers
- Energy assessment compliance document
- Monthly fuel analysis form
- Monthly fuel use form
- Fuel switch to 100 percent natural gas form
- Performance stack testing compliance form
- Form for site-specific emissions testing plan
- Form for site-specific emissions monitoring plan
- Emissions compliance certification report
- Notification of exceeding emissions limits
- Root cause analysis for emissions malfunction
- Form for malfunction reporting
- Form for corrective action of malfunction

In the interim, if a form is needed, please consult the EPA's Small Entity Compliance Guide for Area Source Boilers at: [http://www.epa.gov/ttn/atw/boiler/imptools/area\\_sm\\_biz\\_compli\\_guide\\_appx.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/area_sm_biz_compli_guide_appx.pdf).

## Frequently Asked Questions

If you have general questions that are not covered in this section, please email your questions to [eparegulations@ind-comb.com](mailto:eparegulations@ind-comb.com).

Contact your local Industrial Combustion distributor if you have questions specific to your facility.

### **What are the differences between the Boiler MACT (BMACT), Area Source, and Major Source Rules?**

There are two new EPA rules that apply to boilers, the Area Source Rule and the Major Source Rule. The Major Source rule is sometimes referred to as the Boiler MACT (BMACT), but it is not a separate rule. For more information about these two rules, please refer to EPA Emissions Rules for Boilers that can be found on our website under the Reference Center.

### **How do I know if the EPA Rules apply to me?**

If you operate a boiler, these rules could apply to you. The rules vary based on

a boiler's size, age, fuel type, and emissions. For specific information on determining applicability, please refer to Step 1 which is found on page 3.

**What will happen if I do not comply with the EPA Rules?**

Specific fines or actions associated with non-compliance have yet to be outlined by the EPA. Industrial Combustion strongly recommends adhering to the rules in accordance with the compliance dates.

**My state already has environmental regulations in place. How do the new federally imposed EPA rules affect state-mandated environmental regulations?**

Area Source and Major Source boilers subject to the federal rules must comply with all applicable rules, so if a state has a state boiler rule that is applicable to a source subject to a federal boiler rule, then a facility must comply with the requirements contained in both rules. If two different emission limits affect the same emission point, a facility should comply with the more stringent limit.

**If my facility is not very big, can I assume I am an Area Source?**

Most facilities will be classified as an Area Source. Some examples of Major Source facilities are: refineries, chemical and manufacturing plants, paper mills, and universities. The only way to be certain if your facility is an Area Source or Major Source is to complete the emissions calculator found in Sections 4 and 5 of the "Preferred and Alternative Methods for Estimating Air Emissions from Boilers," which can be found at <http://www.epa.gov/ttn/chiep/eiip/techreport/volume02/ii02.pdf>

**How much will it cost to comply with these rules?**

The total cost to comply will vary depending on your current boiler system. Estimates from the EPA range from \$200 for a simple boiler tune-up to more than \$2.1 million to bring a coal boiler into compliance.

**When do I have to comply by?**

Compliance dates vary based on a boiler's size, age, fuel type, and emissions. For Area Sources, a list of compliance dates can be found on page 29. For Major Sources, there are currently no effective compliance dates, due to the court stay. However, both Major Source and Area Source facilities needed to complete an Initial Notification of Applicability by September 17, 2011. If you missed the notification deadline, send in your form as soon as possible. The form for the initial notification can be found on page 21.

**I thought these rules had been postponed; why should I take action now?**

The Area Source Rule went into effect on March 21, 2011. The Major Source Rule has been postponed indefinitely. However, both Major Source and Area Source facilities needed to complete an "Initial Notification of Applicability" by September 17, 2011. The form for the initial notification for Major Source facilities can be found on page 14. The form for the initial notification for Area Source facilities can be found on page 21.

### **Can Industrial Combustion guarantee compliance?**

Industrial Combustion is an expert in manufacturing commercial and industrial burners for boiler solutions. Many of these solutions include turnkey engineered emissions reduction solutions to meet regulations, including the Major Source and Area Source Rules. We also offer local distributors at <http://www.ind-comb.com/unitedStates.htm>, who can conduct the necessary burner tune-ups required for compliance. While we can make every effort to help you navigate compliance, only you can guarantee that your facility meets all the pertinent rules and regulations.

### **Do these rules regulate NOx emissions?**

Neither the Area Source Rule nor the Major Source Rule regulates NOx emissions. A complete list of regulated emissions can be found on the EPA website at <http://www.epa.gov/ttn/atw/188polls.html>.

### **Am I exempt if I only run natural gas?**

Gas-fired boilers are exempt from the Area Source Rule (see definition of gaseous fuels that qualify on page 11). However, if you burn any non-gas backup fuel, action may be required. Use the Area Source Decision Tree found on page 32, to determine which rules apply to you. Gas-fired boilers are not exempt in the Major Source Rule; however, this rule is currently not in effect, so no action beyond initial notification is required.

### **Where can I find a list of all exempt boilers?**

The list of boilers exempt from the Area Source Rule can be found on page 33.

### **Why is my boiler considered “new” if it was built after June 4, 2010 – more than a year ago?**

Your boiler is considered a “new” source by the EPA if you contracted to have it built or reconstructed after June 4, 2010.

### **Some of my compliance dates are in the past, or I missed a compliance date; what should I do?**

Some compliance dates for “new” boilers under the Area Source Rule have passed. If you have missed a compliance date for any reason, we recommend that you develop a plan to bring your facility into compliance as quickly as possible. A complete list of compliance dates can be found on page 29.

### **Why do I need to tune-up a “new” boiler?**

Under the Area Source Rule, “new” boilers were required to complete an initial tune-up by 5/20/2011. Most boilers are tuned during their initial startup; however if your boiler was not tuned up at startup, it should be tuned as soon as possible to bring the boiler into compliance.

### **Whom should I contact to help me with compliance?**

This EPA Regulations Compliance resource features up-to-date information about both the Area Source and Major Source Rules. In addition, you can sign up to be



notified of new information by registering your e-mail on our website. For specific help with bringing your boiler's burner into compliance, please contact your local Industrial Combustion distributor at <http://www.ind-comb.com/unitedStates.htm>.

### **Are both rules currently being reconsidered?**

Both the Area Source and Major Source (BMACT) Rules are published in the Federal Register and signed into law. However, parts of both rules are being reconsidered. The Major Source Rule is currently stayed until further notice. The Area Source Rule remains in full effect during reconsideration, and facilities are required to comply with the regulations.

### **Why do I need to install fuel meters for my boilers in order to comply?**

In order to comply with the Area Source Rule, you must log fuel usage on a monthly basis. You are required to maintain records of exact run times on an hourly basis and fuel consumed by fuel type. This information is to be reported when requested. If boilers in your facility are subject to the Area Source Rule, and you do not currently meter fuels for each individual boiler, a fuel metering solution is required.

### **What if some of my boilers burn different types of fuel?**

If any of your boilers burns multiple fuels, you must determine each boiler's fuel subcategory on an annual heat input basis. A worksheet to assist with these calculations can be found on the EPA's website at

[http://www.epa.gov/ttn/atw/boiler/imptools/area\\_sm\\_biz\\_compli\\_guide\\_appx.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/area_sm_biz_compli_guide_appx.pdf)

### **I have a hot water boiler, is my boiler exempt?**

Hot water boilers are not exempt from either the Major Source or Area Source Rules. Hot water heaters with a capacity of no more than 120 gallons, a pressure of 160 psig, and controls in place to limit water temperature to no more than 210°F are exempt from the Area Source Rule. A complete list of exempt boilers for the Area Source Rule can be found on page 33.

### **Where can I find more information about these two rules?**

This EPA Regulations Compliance resource features up-to-date information about both the Area Source and Major Source Rules. For help bringing your boiler(s) into compliance, you can locate your distributor at <http://www.ind-comb.com/unitedStates.htm>.

Documents posted regarding these two rules can be found on the EPA's website at <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

### **Where can I find the necessary compliance forms?**

The "Initial Notification Form," which is the first required form, can be found on page 14 for Major Source facilities, or on page 21 for Area Source facilities. Industrial Combustion is working quickly to develop all the necessary forms for compliance, and they will be posted on our website under the EPA Compliance section.

### **Who can perform the One-Time Energy Assessment?**

Details about the energy assessment and the qualifications of the person required to perform it can be found in Section 3.4.3 of the EPA's Small Entity Compliance Guide for Area Source Boilers, found at [http://www.epa.gov/ttn/atw/boiler/imptools/area\\_sm\\_biz\\_compli\\_guide\\_appx.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/area_sm_biz_compli_guide_appx.pdf).

### **What if I conducted an Energy Assessment in the past?**

An energy assessment completed on or after January 1, 2008, that meets the energy assessment requirements of the rules may be used in lieu of conducting a new assessment.

### **What does a Tune-Up consist of?**

Information about boiler tune-ups can be found on the EPA's website at <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>. Additionally, we will post recommended tune-up procedures soon. As always, you may contact your local Industrial Combustion distributor at <http://www.ind-comb.com/unitedStates.htm> for specific tune-up information about your boiler/burner.

### **What does an Energy Assessment consist of?**

Details about the energy assessment and the qualifications of the person required to perform it can be found in Section 3.4.3 of the EPA's Small Entity Compliance Guide for Area Source Boilers, found at [http://www.epa.gov/ttn/atw/boiler/imptools/area\\_sm\\_biz\\_compli\\_guide\\_appx.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/area_sm_biz_compli_guide_appx.pdf).

### **What if I burn coal or biomass? Can Industrial Combustion help me?**

Industrial Combustion does not manufacture solid fuel or biomass boilers; however, we may still be able to help you comply with these rules. In many cases, it may be more economical to replace your solid fuel or biomass boiler with a natural gas-fired boiler rather than meet the strict emissions requirements for these fuel sources. Industrial Combustion specializes in comprehensive burner replacement projects of any size – contact your local distributor at <http://www.ind-comb.com/unitedStates.htm> to start the process. To find companies within your area that can help retrofit your current coal, solid fuel, or biomass boiler, please consult the American Boiler Manufacturers Association (ABMA) Buyer's Guide at <http://www.abma.com/BuyersGuide.pdf>, for more information.

## **Definitions**

**Area Source facility** is one that emits less than 10 tons per year of any single air toxic and less than 25 tons per year of any combination of air toxics. Most boilers covered by the Area Source Rule are located at commercial and institutional facilities, with a smaller number in the industrial sector. Commercial boilers include those found in stores/malls, laundries, apartments, restaurants, and hotels/motels. Institutional boilers are found in many locations, including medical centers (hospitals, clinics, nursing homes), educational and religious facilities (schools, churches), amusement parks, and municipal buildings (courthouses, prisons).

**Boiler** is an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled.

**Energy Assessment** is required for all existing boilers with a design heat capacity of 10 MMBTU/hr or greater and must be performed by a qualified energy assessor, such as Armstrong (<http://www.armstronginternational.com/service-solutions-needs-system-assessment>). The energy assessment includes the following: a visual inspection of the boiler system; an evaluation of operating characteristics of the facility; an inventory of major systems consuming energy away from affected boiler(s); a review of available architectural and engineering plans, facility operation, and maintenance; a list of major energy conservation measures; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency. An energy assessment conducted after January 1, 2008, that meets guidelines can be used for compliance purposes. The U.S. Department of Energy (<http://energy.gov/>) provides additional guidance on assessments.

**Notification of Applicability** is a form required by the EPA to denote if a facility is an Area Source or a Major Source. The form was due September 17, 2011, if startup was before May 20, 2011. If startup was on or after May 20, 2011, the notification was due September 17, 2011, or within 120 days after startup. If you missed the notification deadline, send in the form as soon as possible.

**Gas-fired boiler** is one that burn fuels, including: natural gas, process gas, landfill gas, coal-derived gas, refinery gas, hydrogen, or biogas, not combined with any solid fuels. If a unit burns liquid fuel (e.g., oil) only during periods of gas curtailment, gas supply emergencies, or periodic testing, it is considered a gas-fired boiler. Periodic burning of a liquid fuel shall not exceed a combined total of 48 hours during any calendar year in order to maintain status as a gas-fired boiler. A boiler must be individually metered for fuel quantity and run time if it uses a backup fuel that does not qualify as gas based on the above list.

**Notification of Compliance** is a form to be submitted to the EPA indicating that a unit is adhering to the required standards for tune-ups, emission limits, and energy audits, as required.

**Major Source facility** emits 10 or more tons per year of any single air toxic or 25 tons or more per year of any combination of air toxics. The majority of Major Source boilers and process heaters are located at industrial facilities, such as: refineries, chemical and manufacturing plants, and paper mills. They may also stand alone to provide heat for commercial facilities such as warehouses, or institutional facilities such as universities.

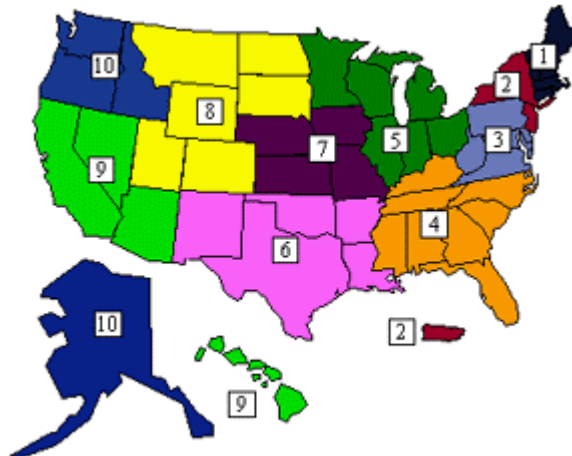
**Process heater** is an enclosed device using controlled flame, and the unit's primary purpose is to transfer the heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

**Record keeping** is required under the EPA rules. Although the type of records may vary according to the fuel type, size, and age of a boiler, most facilities will be required to maintain the following: boiler tune-up logs, records of fuel types used by boiler each month, record of fuel analysis, corrective actions associated with boiler/control equipment, performance tests, and fuel switching records.

## EPA Regional Offices

### **EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)**

U.S. Environmental Protection Agency  
5 Post Office Square, Suite 100, Mail code:  
OES04-2  
Boston, MA 02109-3912  
Attn: Air Clerk



### **EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands)**

Director, Division of Enforcement and  
Compliance Assistance  
290 Broadway  
New York, NY 10007-1866

### **EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)**

Director, Air Protection Division  
1650 Arch Street  
Philadelphia, PA 19103

### **EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)**

Director, Air, Pesticides and Toxics Management Division  
Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-3104

### **EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)**

Director, Air and Radiation Division  
77 West Jackson Blvd.  
Chicago, IL 60604-3507

### **EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas)**

Director, Air Pesticides and Toxics  
1445 Ross Ave.  
Dallas, TX 75202-2733

### **EPA Region VII (Iowa, Kansas, Missouri, Nebraska)**

Director, Air and Waste Management Division  
U.S. Environmental Protection Agency  
901 N. 5th Street  
Kansas City, KS 66101

### **EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)**

Director, Air and Toxics Technical Enforcement Program  
Office of Enforcement, Compliance and Environmental Justice

1595 Wynkoop Street  
Denver, CO 80202-1129

**EPA Region IX (Arizona, California, Hawaii, Nevada, American Samoa, Guam)**

Director, Air and Toxics Division  
75 Hawthorne Street  
San Francisco, CA 94105

**EPA Region X (Alaska, Idaho, Oregon, Washington)**

Director, Office of Air, Waste and Toxics  
1200 6th Ave., Ste. 900, AWT-107  
Seattle, WA 98101

## **Initial Notification of Applicability**

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

### **40 CFR Part 63 Subpart JJJJJJ**

#### *Example Form*

*This form contains the information that must be submitted to fulfill the Initial Notification requirement of 40 CFR part 63, subpart JJJJJJ. You may use this form submit the information or you may submit the information in another form or format.*

#### ***What is the purpose of this form?***

You may use this form to meet the requirements for submitting an initial notification under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources (40 CFR Part 63, Subpart JJJJJJ). However, you may submit the information in another form or format.

#### ***Am I required to submit an Initial Notification?***

You must submit an Initial Notification if you are subject to the Area Source Boilers NESHAP.

*Major source* means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants<sup>1</sup>, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence (§63.2).

*Area source* means any stationary source of hazardous air pollutants<sup>1</sup> that is not a major source (§63.2).

#### ***Am I subject to the Boilers Area Source NESHAP?***

You are subject to the Area Source Boilers NESHAP if you own or operate an industrial, commercial, or institutional boiler that is located at, or is part of, an area source of hazardous air pollutants (HAP). A list of the regulated hazardous air pollutants can be found at <http://www.epa.gov/ttnatw01/orig189.html>.

*Boiler* means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled (§63.11237).

- *Commercial boiler* means a boiler used in commercial establishments such as hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.
- *Industrial boiler* means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.
- *Institutional boiler* means a boiler used in institutional establishments such as medical centers, research centers, and institutions of higher education to provide electricity, steam, and/or hot water.

**Which boilers are not subject to the Area Source Boilers NESHAP rule (63.11195)?**

(1) *Gas-fired boiler.* If your boiler burns gaseous fuels (e.g., natural gas, process gas, landfill gas, coal-derived gas, refinery gas, hydrogen, or biogas) not combined with any solid fuels, or if your unit burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing it is a gas-fired boiler. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year in order to maintain your status as a gas-fired boiler (see §63.11237 Definitions and §63.11195(e)).

(2) *Hot water heater.* If you have a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 pound-force per square inch gauge (psig), including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius). For example, many hot water heaters at an affected source that are used to heat bathroom or dishwashing water have capacities no more than 120 U.S. gallons and meet the pressure requirements of this exemption (see §63.11237 Definitions and §63.11195(f)).

(3) *Waste heat boiler* means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. (see §63.11237 Definitions)

(4) *Boilers subject to other NESHAP standards.* If your boiler is specifically listed as, or included in the definition of, an affected source in another standard(s) under part 63 (see §63.11195(a)).

(5) *Boilers that are used as control devices for other NESHAP standards.* If your boiler is used as a control device for another process that is subject to part 63 and at least 50 percent of the heat input to the boiler is provided by the gas stream that is regulated under another subpart the boiler is exempt from this rule (see §63.11195(g)).

(6) *Research and Development boilers.* If your boiler is used specifically for research and development it is exempt; for example, many universities or boiler manufacturers may have test boilers to develop new designs or combustion modifications. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption

to apply (see §63.11195(d)).

(7) *Boilers subject to section 129 of the Clean Air Act.* If your boiler is specifically listed as an affected source in another standard(s) under section 129 (e.g., Hospital/Infectious Medical Waste Incinerators, Commercial/Industrial Solid Waste Incinerators, Sewage Sludge Incinerators) you are subject to a section 129 rule instead of this rule (see §63.11195(b)).

(8) *Hazardous Waste Boilers.* If your boiler is required to have a permit under section 3005 of the Solid Waste Disposal Act or if your boiler is covered by 40 CFR part 63 subpart EEE you are a hazardous waste boiler (see §63.11195(c)).

***When must I submit an Initial Notification (§63.9(b)(2))?***

*Existing sources:* No later than September 17, 2011.

*New sources:* No later than September 17, 2011, or within 120 days after startup of a new source, whichever is later.

***Is my source a new or existing source (§63.11194)?***

*New source* means that you commenced construction or reconstruction of the boiler after June 4, 2010 and you meet the applicability criteria at the time you commence construction.

*Existing source* means you commenced construction or reconstruction of the boiler on or before June 4, 2010.

***What are my compliance dates (§63.11196)?***

Existing Sources:

- Existing sources subject to a tune-up work practice or management practice standard must demonstrate compliance no later than March 21, 2012.
- Existing sources subject to an emission limit must demonstrate compliance with the emission limits no later than March 21, 2014.
- Existing sources subject to the energy assessment requirement must complete the energy assessment no later than March 21, 2014.

New sources:

- New sources must demonstrate compliance with all requirements of the rule upon startup of the affected source, or May 20, 2011 whichever is later.



## Example Initial Notification Report

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

#### SECTION I : GENERAL INFORMATION

Operating Permit Number (IF AVAILABLE)<sup>a</sup>

Facility ID Number (IF AVAILABLE)<sup>b</sup>

Responsible Official's Name

Title

Street Address

City

State

ZIP Code

<sup>a</sup> (e.g., Title V permit number)

<sup>b</sup> (e.g., Air Facility System (AFS) facility ID)

Facility Name

Facility Street Address (if different than Responsible Official's Street Address listed above)

Street Address

City

State

ZIP Code

Facility Local Contact Name

Title

Anticipated Compliance Date(s) (mm/dd/yy)

(§63.9(b)(2)(iii))<sup>c</sup>: \_\_\_\_\_

<sup>c</sup> See instructions on pg. 3 of this form to determine the compliance dates applicable to you.

## SECTION II: SOURCE DESCRIPTION

1. Please complete the table below for each affected source (boiler and/or process heaters) per §63.9(b)(2)(iv).

Emission Unit ID <sup>d</sup>	Emission Unit Name (design and manufacturer name)	Size: Rated Heat Input Capacity (mmBtu/hr) <sup>e</sup>	Fuels Used <sup>f</sup>

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

<sup>d</sup> If the source has an operating permit, use the IDs that are consistent with those reported in the permit.

<sup>e</sup> mmBtu/hr refers to million British thermal units per hour. Boilers often have a nameplate listing the rated heat input capacity on the unit. This rated capacity may have also been reported to the entity insuring the boiler or the state labor and safety inspector.

<sup>f</sup> 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.).

3. Optional: Additional notes

4. My facility is a (please choose one):  Major source  Area source  
of hazardous air pollutants.

If your facility is a major source of hazardous air pollutants (HAP), please refer to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD at <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

### SECTION III: CERTIFICATION

I hereby certify that the information presented herein is correct to the best of my knowledge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name/title

(\_\_\_\_\_)\_\_\_\_\_  
Telephone Number

*To whom do I submit the initial notification?*

a. If your State has been delegated the authority for this regulation under section 112(l) of the Clean Air Act<sup>9</sup>, submit the notification to your State agency found at the following link:

[http://www.epa.gov/ttn/atw/area/table\\_state\\_contacts.doc](http://www.epa.gov/ttn/atw/area/table_state_contacts.doc)

If your state/local contact is not listed at the above link, use this link:

<http://www.4cleanair.org/contactUsaLevel.asp>

b. If your state has not been delegated the authority for this rule, submit the notification to the appropriate EPA Regional Office, from list below:

**EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)**

US Environmental Protection Agency  
5 Post Office Square, Suite 100, Mail code: OES04-2,  
Boston MA 02109-3912 Attention: Air Clerk

**EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands)**

Director, Division of Enforcement and Compliance Assistance  
290 Broadway, New York, NY 10007-1866

**EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)**

Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103

**EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)**

Director, Air, Pesticides and Toxics Management Division  
Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303–3104

**EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)**

Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604–3507

**EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas)**

Director, Air, Pesticides and Toxics, 1445 Ross Avenue, Dallas, TX 75202–2733

**EPA Region VII (Iowa, Kansas, Missouri, Nebraska)**

Director, Air and Waste Management Division, U.S. Environmental Protection Agency  
901 N. 5th Street, Kansas City, KS 66101

**EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)**

Director, Air and Toxics Technical Enforcement Program, Office of Enforcement,  
Compliance and Environmental Justice, 1595 Wynkoop Street, Denver, CO 80202-1129

**EPA Region IX (Arizona, California, Hawaii, Nevada, American Samoa, Guam)**

Director, Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105

**EPA Region X (Alaska, Idaho, Oregon, Washington)**

Director, Office of Air, Waste and Toxics, 1200 6th Ave., Suite 900, AWT-107, Seattle,  
WA 98101

<sup>9</sup> To determine whether your State has been delegated the authority for this regulation under section 112(l) of the Clean Air Act, contact your EPA Regional Office.

## **Initial Notification of Applicability**

National Emission Standards for Hazardous Air Pollutants for Major Sources:  
Industrial, Commercial, and Institutional Boilers and Process Heaters

Text can be found at: Federal Register / Vol. 76 , No. 54 / Monday, March 21, 2011 / Rules and Regulations, Page 15608 OR <http://www.gpo.gov/fdsys/pkg/FR-2011-03-21/html/2011-4494.htm>

**NOTE: Because of the current stay of the effective date of the Boiler MACT, the initial notification and any other forms pertaining to this rule will not be due until further notice.**

### *Example Form*

*This form contains the information that must be submitted to fulfill the Initial Notification requirement of 40 CFR part 63, subpart DDDDD. You may use this form submit the information or you may submit the information in another form or format.*

#### ***What is the purpose of this form?***

You may use this form to meet the requirements for submitting an initial notification under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. However, you may also submit the information in another form or format.

#### ***Am I required to submit an Initial Notification?***

You must submit an Initial Notification if you are subject to the Major Source Boilers and Process Heaters NESHAP.

*Major source* means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants<sup>1</sup>, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence (§63.2).

*Area source* means any stationary source of hazardous air pollutants<sup>1</sup> that is not a major source (§63.2).

#### ***Am I subject to the Major Source Boilers and Process Heaters NESHAP?***

You are subject to the Major Source Boilers and Process Heaters NESHAP if you own or operate an industrial, commercial, or institutional boiler or process heater that is located at, or is part of, a major source of hazardous air pollutants (HAP).

- *Boiler* means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act.
- Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide steam and/or hot water.
- Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam and/or hot water.

*Process heater* means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act.

***Are any boilers or process heaters not subject to this subpart?***

The types of boilers and process heaters listed below are **not** subject to this NESHAP. For more information, see § 63.7575, "What definitions apply to this subpart?" at <http://www.epa.gov/ttn/atw/boiler/fr21mr11m.pdf>:

- (1) *Hot water heater.* If you have a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 pound-force per square inch gauge (psig), including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius). Many hot water heaters at an affected source that are used to heat bathroom or dishwashing water have capacities no more than 120 U.S. gallons and meet this exemption (see §63.7491(d)).
- (2) *Waste heat boiler* means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators
- (3) *Autoclaves or process heaters that are used to provide comfort heat, space heat, or food preparation for on-site consumption.*
- (4) *Electric utility steam generating unit* means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. (see §63.7491(a)).
- (5) *Boilers subject to other NESHAP standards.* If your boiler is specifically listed as, or included in the definition of, an affected source in another standard(s) under part 63 (see §63.7491(h)).

For example, a process heater used to control the temperature and humidity of the air in a paint spray booth (which is covered under subpart IIII, subpart PPPP, or subpart MMMM of part 63) would not be subject to this rule.

(6) *Boilers that are used as control devices for other NESHAP standards.* If your boiler is used as a control device for another process that is subject to part 63 and at least 50 percent of the heat input to the boiler or process heater is provided by the gas stream that is regulated under another subpart the unit is exempt from this rule (see §63.7491(i)). The HON and MON rules (subparts G and FFFF of part 63) regulate process vent streams that may be controlled by boilers or process heaters where the majority heat input is provided by these regulated process vent streams.

(7) *Research and Development boilers.* If your boiler is used specifically for research and development it is exempt; for example, many universities or boiler manufacturers may have test boilers to develop new designs or combustion modifications. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption to apply (see §63.7491(c)).

(8) *Temporary boilers.* Any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A boiler is not a temporary boiler if any one of the following conditions exists:

- a) The equipment is attached to a foundation.
- b) The boiler or a replacement remains at a location for more than 12 consecutive months. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- c) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- d) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition (see §63.7491(j)).

(9) *A recovery boiler or furnace covered by 40 CFR part 63 subpart MM (see §63.7491(b)).*

(10) *A refining kettle covered by 40 CFR part 63 subpart X (see §63.7491(e)).*

(11) *An ethylene cracking furnace covered by 40 CFR part 63 subpart YY (see §63.7491(f)).*

(12) *Blast furnace stoves* as described in the EPA document, entitled National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Plants—Background Information for Proposed Standards, Final Report, EPA-453/R-01-005, January 2001 (see: <http://www.epa.gov/ttn/oarpg/t3/reports/irnstlbid.pdf> and §63.7491(g)).

(13) *Blast furnace gas fuel-fired boilers and process heaters (see §63.7491(k)).*

(14) *Boilers subject to section 129 of the Clean Air Act.* If your boiler is specifically listed as an affected source in another standard(s) under section 129 (e.g., Hospital/Infectious

Medical Waste Incinerators, Commercial/Industrial Solid Waste Incinerators, Sewage Sludge Incinerators) (see §63.7491(l)).

(15) *Hazardous Waste Boilers.* If your boiler is required to have a permit under section 3005 of the Solid Waste Disposal Act or if your boiler is covered by 40 CFR part 63 subpart EEE (see §63.7491(m)).

***What notifications must I submit and when (§63.7545)?***

**NOTE: Because of the current stay of the effective date of the Boiler MACT, the initial notification and any other forms pertaining to this rule will not be due until further notice.**

*Existing sources:* No later than September 17, 2011<sup>1</sup>.

*New sources:* If you startup your new or reconstructed affected source on or after May 20, 2011, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

***Is my source a new or existing source (§63.7490)?***

*New source* means that you commenced construction or reconstruction of the boiler or process heater after June 4, 2010 and you meet the applicability criteria at the time you commence construction.

*Existing source* means you commenced construction or reconstruction of the boiler or process heater on or before June 4, 2010.

***What are my compliance dates (§63.7495)?***

**NOTE: Because of the current stay of the effective date of the Boiler MACT, the initial notification and any other forms pertaining to this rule will not be due until further notice.**

Existing Sources:

- Existing sources must demonstrate compliance with all requirements of the rule no later than March 21, 2014.

New sources:

- New sources must demonstrate compliance with all requirements of the rule upon startup of the affected source, or May 20, 2011 whichever is later.

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<sup>1</sup> You must submit this notification regardless of whether you submitted an initial notification for the vacated standards that were promulgated in 2004.



## Example Initial Notification Report

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

### SECTION I : GENERAL INFORMATION

1. Name and address of the owner or operator

Operating Permit Number (IF AVAILABLE)<sup>a</sup>

Facility ID Number (IF AVAILABLE)<sup>b</sup>

Responsible Official's Name

Title

Street Address

City

State

ZIP Code

<sup>a</sup> (e.g., Title V permit number)

<sup>b</sup> (e.g., Air Facility System (AFS) facility ID)

Facility Name

Facility Street Address (if different than Responsible Official's Street Address listed above)

Street Address

City

State

ZIP Code

Facility Local Contact Name

Title

2. Anticipated Compliance Date(s) (mm/dd/yy)<sup>c</sup>:

<sup>c</sup> See instructions on pg. 3 of this form to determine the compliance dates applicable to you.

## SECTION II : SOURCE DESCRIPTION

1. Please complete the table below for each affected source (boiler and/or process heaters) per §63.9(b)(2)(iv).

Emission Unit ID <sup>d</sup>	Emission Unit Name (design and manufacturer name)	Size: Rated Heat Input Capacity (mmbtu/hr) <sup>e</sup>	Fuels Used <sup>f</sup>

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

<sup>d</sup> If the source has an operating permit, use the IDs that are consistent with those reported in the permit.

<sup>e</sup> mmbtu/hr refers to million British thermal units per hour. Boilers often have a nameplate listing the rated heat input capacity on the unit. This rated capacity may have also been reported to the entity insuring the boiler or the state labor and safety inspector.

<sup>f</sup> 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.).

3. Optional: Additional notes

4. My facility is a (please choose one):  Major source  Area source  
of hazardous air pollutants.

If your facility is an area source of hazardous air pollutants (HAP), please refer to the National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers , 40 CFR Part 63 Subpart JJJJJJ at <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

### SECTION III: CERTIFICATION

I hereby certify that the information presented herein is correct to the best of my knowledge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name/title

(\_\_\_\_\_)\_\_\_\_\_  
Telephone Number

*To whom do I submit the initial notification?*

- a. Please submit the notification to your State agency found at the following link:  
[http://www.epa.gov/ttn/atw/area/table\\_state\\_contacts.doc](http://www.epa.gov/ttn/atw/area/table_state_contacts.doc)

If your state/local contact is not listed at the above link, go to:  
<http://www.4cleanair.org/contactUsaLevel.asp>

- b. Also submit the notification to the appropriate EPA Regional Office below:

**EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)**

US Environmental Protection Agency  
5 Post Office Square, Suite 100, Mail code: OES04-2,  
Boston MA 02109-3912 Attention: Air Clerk

**EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands)**

Chief, Air Compliance Branch  
290 Broadway, New York, NY 10007-1866

**EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)**

Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103

**EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)**

Air Toxics and Monitoring Branch  
Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303– 8960

**EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)**

Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604–3507

**EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas)**

US EPA Region 6, Compliance Assurance and Enforcement Division, Air/Toxics Inspection & Coordination Branch (6 EN-A), 1445 Ross Avenue, Dallas, TX 75202–2733

**EPA Region VII (Iowa, Kansas, Missouri, Nebraska)**

Director, Air and Waste Management Division, U.S. Environmental Protection Agency  
901 N. 5th Street, Kansas City, KS 66101

**EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)**

Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, 1595 Wynkoop Street, Denver, CO 80202-1129

**EPA Region IX (Arizona, California, Hawaii, Nevada, American Samoa, Guam)**

Enforcement Office Chief, Air Division, U.S. EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105

**EPA Region X (Alaska, Idaho, Oregon, Washington)**

Director, Office of Air, Waste and Toxics, 1200 6th Ave., Suite 900, AWT-107, Seattle, WA 98101

<sup>9</sup> To determine whether your State has been delegated the authority for this regulation under section 112(l) of the Clean Air Act, contact your EPA Regional Office.

## SUMMARY OF COMPLIANCE DATES

<b>▶ OIL</b> - Includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories.							
Subcategory	Submit Initial Notification of Applicability by:	Submit Initial Notification of Compliance by:	Meter and Report Fuel Usage	Complete Initial Tune-up by:	Complete Energy Assessment by:	Demonstrate Compliance w/ Emissions Limits by:	Prepare Compliance Certification Report by:
Small Existing Boiler (<10 MMBTU/hr)	9/17/11	7/19/12	Monthly	3/21/12	-	-	1st report should be prepared by 3/1/15, subsequent reports by March 1 of every second year
Small New Boiler (<10 MMBTU/hr)	9/17/11 or within 120 days of startup	9/17/11 or within 120 days of startup	Monthly	5/20/11 or upon startup of boiler, whichever is later	-	-	3/1/12 or on March 1 of the calendar year immediately following startup of the boiler, subsequent reports by March 1 of every second calendar year
Large Existing Boiler (≥10 MMBTU/hr)	9/17/11	7/19/12 for tune-up, resubmit by 7/19/14 for energy assessment	Monthly	3/21/12	3/21/14	-	1st report should be prepared by 3/1/15, subsequent reports by March 1 of every second year
Large New Boiler (≥10 MMBTU/hr)	9/17/11 or within 120 days of startup	Within 60 days of conducting performance test for PM, or no later than 7/19/14, whichever is earlier. Submit by 7/19/14 for energy assessment.	Monthly	5/20/11 or upon startup of boiler, whichever is later	-	5/20/11 or upon startup of boiler	3/1/12 or on March 1 of the calendar year immediately following startup of the boiler, subsequent reports by March 1 of each calendar year

<b>▶ BIOMASS</b> - Includes any boiler that burns at least 15 percent biomass on an annual heat input basis.							
Subcategory	Submit Initial Notification of Applicability by:	Submit Initial Notification of Compliance by:	Meter and Report Fuel Usage	Complete Initial Tune-up by:	Complete Energy Assessment by:	Demonstrate Compliance w/ Emissions Limits by:	Prepare Compliance Certification Report by:
Small Existing Boiler (<10 MMBTU/hr)	9/17/11	7/19/12	Monthly	3/21/12	-	-	1st report should be prepared by 3/1/15, subsequent reports by March 1 of every second year
Small New Boiler (<10 MMBTU/hr)	9/17/11 or within 120 days of startup	9/17/11 or within 120 days of startup	Monthly	5/20/11 or upon startup of boiler, whichever is later	-	-	3/1/12 or on March 1 of the calendar year immediately following startup of the boiler, subsequent reports by March 1 of every second calendar year
Large Existing Boiler (≥10 MMBTU/hr)	9/17/11	7/19/12 for tune-up, resubmit by 7/19/14 for energy assessment	Monthly	3/21/12	3/21/14	-	1st report should be prepared by 3/1/15, subsequent reports by March 1 of every second year
Large New Boiler (≥10 MMBTU/hr)	9/17/11 or within 120 days of startup	Within 60 days of conducting performance test for PM, or no later than 7/19/14, whichever is earlier. Submit by 7/19/14 for energy assessment.	Monthly	5/20/11 or upon startup of boiler, whichever is later	-	5/20/11 or upon startup of boiler	3/1/12 or on March 1 of the calendar year immediately following startup of the boiler, subsequent reports by March 1 of each calendar year

## SUMMARY OF COMPLIANCE DATES (cont.)

▶ <b>COAL</b> - Includes any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis.							
Subcategory	Submit Initial Notification of Applicability by:	Submit Initial Notification of Compliance by:	Meter and Report Fuel Usage	Complete Initial Tune-up by:	Complete Energy Assessment by:	Demonstrate Compliance w/ Emissions Limits by:	Prepare Compliance Certification Report by:
Small Existing Boiler (<10 MMBTU/hr)	9/17/11	7/19/12	Monthly	3/21/12	-	-	1st report should be prepared by 3/1/15, subsequent reports by March 1 of every second year
Small New Boiler (<10 MMBTU/hr)	9/17/11 or within 120 days of startup	9/17/11 or within 120 days of startup	Monthly	5/20/11 or upon startup of boiler, whichever is later	-	-	3/1/12 or on March 1 of the calendar year immediately following startup of the boiler, subsequent reports by March 1 of every second calendar year
Large Existing Boiler (≥10 MMBTU/hr)	9/17/11	Within 60 days of conducting performance test for Hg and CO, or no later than 7/19/14, whichever is earlier. Submit by 7/19/14 for energy assessment.	Monthly	-	3/21/2014	3/21/2014	1st report should be prepared by 3/1/15, subsequent reports by March 1 of each calendar year
Large New Boiler (≥10 MMBTU/hr)	9/17/11 or within 120 days of startup	Within 60 days of conducting performance test for Hg, PM or CO, or no later than 7/19/14, whichever is earlier. Submit by 7/19/14 for energy assessment.	Monthly	-	-	5/20/11 or upon startup of boiler	3/1/12 or on March 1 of the calendar year immediately following startup of the boiler, subsequent reports by March 1 of each calendar year

▶ <b>NATURAL GAS</b> - Includes any boiler that burns gaseous fuels, including: natural gas, process gas, landfill gas, coal-derived gas, refinery gas, hydrogen, or biogas, not combined with any solid fuels. If a unit burns liquid fuel (e.g., oil) only during periods of gas curtailment, gas supply emergencies, or periodic testing, it may still be considered a gas-fired boiler. Periodic burning of a liquid fuel shall not exceed a combined total of 48 hours during any calendar year in order to maintain status as a gas-fired boiler. Boilers should be individually metered for fuel quantity and run time if a liquid backup fuel is used, in order to prove applicability of the gas-fired subcategory.							
Subcategory	Submit Initial Notification of Applicability by:	Submit Initial Notification of Compliance by:	Meter and Report Fuel Usage	Complete Initial Tune-up by:	Complete Energy Assessment by:	Demonstrate Compliance w/ Emissions Limits by:	Prepare Compliance Certification Report by:
Boiler does not burn oil for backup or switching	Exempt from Area Source Rule – there are no requirements.						
Boiler burns oil ≤48 hours annually	Meter and record fuel usage monthly.						
Boiler burns oil >48 hours annually	Boiler's fuel subcategory is oil – comply with those requirements.						

### KEY

- ▶ **Boiler Size:** Boiler size is expressed in terms of rated design heat input capacity and is measured in million British thermal units per hour, or MMBTU/hr. A boiler is considered "small" if its input is <10 MMBTU/hr.
- ▶ **New vs. Existing:** A boiler is considered "New" by EPA standards if you contracted to purchase it or have it rebuilt after June 4, 2010.

For more information about Area Source Rule Requirements, including boiler classification, call your local Industrial Combustion representative at <http://www.ind-comb.com/unitedStates.htm>.

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## REQUIRED EMISSIONS LIMITS AND WORK PRACTICES FOR AREA SOURCE BOILERS

▶ <b>OIL</b> - Includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories.					
Subcategory	Hg, lb/ TBTU	CO, ppm @ 7% O <sub>2</sub>	PM lb/MMBTU	Conduct Tune-Up Every Other Year	Conduct One-Time Energy Assessment
Small Existing Boiler (<10 MMBTU/hr)	-	-	-	Yes	No
Small New Boiler (<10 MMBTU/hr)	-	-	-	Yes	No
Large Existing Boiler	-	-	-	Yes	Yes
Large New Boiler	-	-	0.03	Yes	No

▶ <b>BIOMASS</b> - Includes any boiler that burns at least 15 percent biomass on an annual heat input basis.					
Subcategory	Hg, lb/ TBTU	CO, ppm @ 7% O <sub>2</sub>	PM lb/MMBTU	Conduct Tune-Up Every Other Year	Conduct One-Time Energy Assessment
Small Existing Boiler (<10 MMBTU/hr)	-	-	-	Yes	No
Small New Boiler (<10 MMBTU/hr)	-	-	-	Yes	No
Large Existing Boiler	-	-	-	Yes	Yes
Large New Boiler	-	-	0.03 (≥30 MMBTU/hr) 0.42 (≥10 to <30 MMBTU/hr)	Yes	No

▶ <b>COAL</b> - Includes any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis.					
Subcategory	Hg, lb/ TBTU	CO, ppm @ 7% O <sub>2</sub>	PM lb/MMBTU	Conduct Tune-Up Every Other Year	Conduct One-Time Energy Assessment
Small Existing Boiler (<10 MMBTU/hr)	-	-	-	Yes	No
Small New Boiler (<10 MMBTU/hr)	-	-	-	Yes	No
Large Existing Boiler	4.8	400	-	No	Yes
Large New Boiler	4.8	400	0.03 (≥30 MMBTU/hr) 0.42 (≥10 to <30 MMBTU/hr)	No	No

▶ <b>NATURAL GAS</b> - Includes any boiler that burns gaseous fuels, including: natural gas, process gas, landfill gas, coal-derived gas, refinery gas, hydrogen, or biogas, not combined with any solid fuels. If a unit burns liquid fuel (e.g., oil) only during periods of gas curtailment, gas supply emergencies, or periodic testing, it may still be considered a gas-fired boiler. Periodic burning of a liquid fuel shall not exceed a combined total of 48 hours during any calendar year in order to maintain status as a gas-fired boiler. Boilers should be individually metered for fuel quantity and run time if a liquid backup fuel is used, in order to prove applicability of the gas-fired subcategory.					
Subcategory	Hg, lb/ TBTU	CO, ppm @ 7% O <sub>2</sub>	PM lb/MMBTU	Conduct Tune-Up Every Other Year	Conduct One-Time Energy Assessment
Small Existing Boiler (<10 MMBTU/hr)	-	-	-	No	No
Small New Boiler (<10 MMBTU/hr)	-	-	-	No	No
Large Existing Boiler	-	-	-	No	No
Large New Boiler	-	-	-	No	No

### KEY

- ▶ **Boiler Size:** Boiler size is expressed in terms of rated design heat input capacity and is measured in million British thermal units per hour, or MMBTU/hr. A boiler is considered "small" if its input is <10 MMBTU/hr.
- ▶ **New vs. Existing:** A boiler is considered "New" by EPA standards if you contracted to purchase it or have it rebuilt after June 4, 2010.

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## EXCLUSIONS TO THE AREA SOURCE RULE

There are a number of boilers excluded from the Area Source Rule, including:

- Gas-fired boilers that burn gaseous fuels, including: natural gas, process gas, landfill gas, coal-derived gas, refinery gas, hydrogen, or biogas, not combined with any solid fuels. If a unit burns liquid fuel (e.g., oil) only during periods of gas curtailment, gas supply emergencies, or periodic testing, it may still be considered a gas-fired boiler. Periodic burning of a liquid fuel shall not exceed a combined total of 48 hours during any calendar year in order to maintain status as a gas-fired boiler. Boilers must be individually metered for fuel quantity and run time if a backup fuel is used that does not qualify as gas based on the above definition.
- Hot water heaters with a capacity of no more than 120 U.S. gallons and pressures not exceeding 160 pound-force per square inch gauge (psig), and all controls necessary not to exceed a temperature of 210°F (99°C).
- Waste heat boilers, also known as heat recovery steam generators.
- Boilers that are used as control devices for other National Emission Standards for Hazardous Air Pollutants (NESHAP), where at least 50 percent of the heat input to the boiler is provided by the NESHAP regulated gas steam.
- Research and development boilers. The boilers themselves must be used for research purposes. This exclusion does not apply to boilers at Research and Development facilities. These facilities are still subject to the Area Source Rule.
- Boilers subject to other NESHAP standards or Section 129 standards of the Clean Air Act.
- Hazardous waste boilers.

*Effective as of August 11, 2011*

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