## TIP SHEET: January 2014





The Area Source Rule requires that a tune-up be conducted every two or five years depending on the boiler and fuel type.

## SUMMARY

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## **Tune-up Requirements for Area Source Boilers**

Under the EPA's Area Source Rule, most existing boilers are subject to an initial tune-up, which must be completed by March 21, 2014. Facilities that are required by law to meet this mandate include:

- Owners and operators of coal-fired area source boilers that have a heat input capacity <10 MMBtu/hr and were constructed or reconstructed on or before June 10, 2010.
- Owners and operators of all biomass-fired area source boilers that were constructed or reconstructed on or before June 10, 2010.
- Owners and operators of all oil-fired area source boilers that were constructed or reconstructed on or before June 10, 2010.

It is important to note that **most gas-fired boilers are not subject to the Area Source Rule**, and therefore no action is required. The EPA defines a gas-fired boiler as one that burns gaseous fuel not combined with any solid fuel. The boiler can burn liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing of liquid fuel. Periodic testing of liquid fuel cannot exceed a combined total of 48 hours during any calendar year.

Owners of new boilers (defined as those that were constructed or reconstructed after June 10, 2010) are not subject to an initial tune-up, but tune-ups are required on either a biennial basis or five-year basis, beginning either two or five years after initial startup, depending on the boiler and fuel type.

**Click <u>here</u> to watch a video of a tune-up being conducted** by Joe Hodges, a professional service technician at C&C Boiler Sales & Service Inc., an authorized Cleaver-Brooks representative headquartered in Charlotte, N.C. In the video, Joe explains the tune-up requirements under the Area Source Rule. Following is a summary of the steps:

- 1. As applicable, inspect the burner, and clean or replace any components of the burner as necessary.\*
- 2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.\*
- 4. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement.
- 5. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
- 6. Maintain records onsite and submit, if requested by the Administrator, biennial or five-year reports containing the following information:
  - The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in



volume percent, measured before and after the tune-up of the boiler.

- A description of any tune-up corrective actions taken.
- The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit is physically and legally capable of burning more than one fuel.
- 7. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.

\*You may delay the inspection until the next scheduled unit shutdown, not to exceed: 36 months from previous inspection for sources requiring a biennial tune-up, or 72 months from previous inspection for sources requiring a five-year tune-up.

The tune-up has to be conducted while the boiler burns the type of fuel that provided the majority of the heat input to the boiler in the 12 months prior to the tune-up (or both fuels if the boiler routinely burns two types of fuel at the same time).

To read more about tune-ups and see an example of a record-keeping form, visit <u>1.usa.gov/1k9ntc3</u>. EPA requires that a Compliance Certification Report be prepared following each tune-up. It is not required to be submitted unless it is specifically requested by the delegated authority. More details about this form and an example can be found at <u>1.usa.gov/18MooHB</u>.

Under the Area Source Rule, a tune-up must be conducted biennially for area source boilers, except for the following types, where the requirement is every five years: limited-use boilers, seasonal boilers, oil-fired boilers with heat input capacity <5 MMBtu/hr, and boilers with an oxygen trim system that would otherwise be subject to a biennial tune-up. To learn more about the requirements for your facility's boiler, visit <u>epa.gov/boilercompliance</u>.

For help conducting a tune-up that will keep your boiler system running efficiently and fulfill the requirements of the Area Source Rule, contact your local Cleaver-Brooks representative, or visit <u>cleaverbrooks.com/reps</u> to locate a professional service technician in your area.

To learn more about tune-up requirements for the Area Source Rule go to www.cleaverbrooks.com/epa.