

## FACT SHEET

### PROPOSED AMENDMENTS TO THE AIR TOXICS STANDARDS FOR INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AT MAJOR SOURCE FACILITIES

#### ACTION

- On December 2, 2011, the Environmental Protection Agency (EPA) issued proposed amendments to the rule “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers.” The amendments are part of EPA’s reconsideration of the final air toxics rule for these boilers, which the Agency published on March 21, 2011.
- Boilers burn fuels, including natural gas, fuel oil, coal, biomass (e.g., wood), refinery gas, or other gas to produce steam. The steam is used to produce electricity or provide heat. Process heaters heat raw or intermediate materials during an industrial process. The boilers and process heaters that would be covered by these standards do not burn solid waste unless they are exempt under the Clean Air Act from standards for incinerators.
- Boilers and process heaters are used at industrial facilities, and boilers are used to provide heat for commercial facilities and institutions. The majority of major source boilers and process heaters are located at industrial facilities.
- There are approximately 14,000 major source boilers in the US. 88% percent of those would be required to conduct periodic tune-ups. 12% would be required to take steps to meet emissions limits if they do not already meet them.
- The EPA will accept comment on these proposed amendments for 60 days following publication in the Federal Register.

#### PROPOSED CHANGES TO FINAL RULE

- EPA is proposing the following changes based on additional data provided after the agency issued final standards and after conducting additional analyses. The Agency is proposing to:
  - **Create new subcategories for light and heavy industrial liquids** to reflect design differences in the boilers that burn these fuels. This change would improve the standards’ achievability.
  - **Set new emissions limits for PM** that are different for each solid fuel subcategory (e.g., biomass, coal) to better reflect real-world operating conditions.
  - **Set new emissions limits for carbon monoxide** based on newly submitted data that shows CO emissions from boilers vary greatly. EPA is proposing to set new

limits to more adequately capture that variability.

- **Allow alternative total selective metals emission limits** to regulate metallic air toxics instead of using a PM as a surrogate, allowing more flexibility and decreasing compliance costs for units that emit low levels of HAP metals.
  - **Replace numeric dioxin emissions limits with work practice standards** to reflect a more robust analysis that shows dioxin emission are below levels that can be accurately measured.
  - **Increase flexibility in compliance monitoring** to remove continuous emissions monitoring requirements for particle pollution for biomass units and to propose carbon monoxide limits that are based on either stack testing or continuous monitoring.
  - **Revise emissions limits for units located outside the continental United States** to reflect new data and to better reflect the unique operating conditions associated with operating these units.
  - **Continue to allow units burning clean gases** to qualify for work practice standards instead of numeric emissions limits, maintaining flexibility and achievability. EPA is proposing to remove the hydrogen sulfide fuel specification from the rule. An H<sub>2</sub>S fuel specification does not provide a direct indication of potential HAP from combustion of gaseous fuel. Units would need to prove gas is clean by considering mercury only.
- As a result of the proposed amendments, emission reductions of some pollutants (mercury, hydrogen chloride (HCl), and sulfur dioxides (SO<sub>2</sub>)) will be greater than estimated for the final rule, while emission reductions of other pollutants (non-mercury metals, particulate matter (PM), and volatile organic compounds (VOCs)) will be lower.
  - Changes in emission reductions in the reconsideration proposal:
    - 1.4 tons per year (tpy) of mercury would change to be in the range of 0.5-1.8 tpy for the reconsideration proposal;
    - 2,700 tpy of non-mercury metals would decrease to 2,200 tpy;
    - 30,000 tpy of HCl would increase to 37,000 tpy;
    - 47,000 tpy of PM would decrease to 41,200 tpy;
    - 440,000 tpy of SO<sub>2</sub> would increase to 560,000 tpy; and,
    - 7,000 tpy of VOCs would decrease to 4,700 tpy.
  - The estimated annualized cost of the rule, as amended based on the reconsideration proposal, would be \$1.49 billion, compared with \$1.40 billion for the final rule. The estimated annualized cost would increase by about \$90 million due to the addition of approximately 300 affected units to the revised inventory of units. This is the case even with a decrease in the stringency of some emission limits and less stringent PM control requirements for biomass units in the proposal.

- The value of the benefits would increase by about 23% based on greater reductions of SO<sub>2</sub>; estimated benefits associated with reduced exposure to fine particles would be \$27 to \$67 billion in the year 2015.

### **SEPARATE BUT RELATED ACTIONS**

- EPA has proposed amendments to the rule to reduce emissions of toxic air pollutants from new and existing industrial, commercial, and institutional boilers and process heaters located at *area* source facilities. An area source facility has the potential to emit less than 10 tpy of any single air toxic or less than 25 tpy of any combination of air toxics.
- EPA has also proposed amendments to the rule to reduce air toxics from Commercial and Industrial Solid Waste Incinerators (CISWI). This proposed rule reflects the Agency's proposed definition of *non-hazardous secondary materials* (NHSM).
- EPA is proposing to revise the definition of NHSM. The definition clarifies the status of particular materials and amends the process for determining whether other materials are NHSM.

### **BACKGROUND**

- On March 21, 2011, the EPA published in the Federal Register national air toxics standards for major source industrial, commercial, and institutional boilers. On the same day, the EPA also promulgated national air toxics standards for area source industrial, commercial, and institutional boilers and for commercial and industrial solid waste incinerators (CISWI).
- On March 21, 2011, the EPA also published a notice initiating the reconsideration of certain aspects of the final rule for major source industrial, commercial, and institutional boilers, as well as the final rules for area source industrial, commercial, and institutional boilers and for CISWI. The final rules reflect reasonable approaches consistent with the requirements of the Clean Air Act. However, some of the issues identified in comments on the 2010 proposed rules raised difficult technical issues that the agency believes would benefit from additional public involvement. In addition, the agency wants to ensure that the public has ample opportunity to comment on changes in the final rule that were not in the proposal.
- In the March 21, 2011 notice, the EPA identified six issues for the major source boilers rule for which reconsideration and additional opportunity or public review and comment should be given:
  - revisions to the proposed subcategories;
  - establishment of a fuel specification through which gas-fired boilers that use a fuel other than natural gas may be considered Gas 1 units;
  - establishment of work practice standards for limited use major source boilers;
  - revisions to the proposed monitoring requirements for carbon monoxide;

- revisions to the proposed dioxin emission limit and testing requirement; and,
  - establishment of a full-load stack test requirement for carbon monoxide coupled with continuous oxygen monitoring.
- Following promulgation, the EPA received 29 petitions for reconsideration filed by 22 industry groups, five industrial efficiency groups, one State agency, and one environmental group. In response to those petitions, we are granting reconsideration of many aspects of the final rule.

## HOW TO COMMENT

- The EPA will accept comment on the proposal for 60 days after publication in the Federal Register. Comments, identified by Docket ID Number EPA-HQ-OAR-2002-0058 may be submitted by one of the following methods:
  - [www.regulations.gov](http://www.regulations.gov): follow the on-line instructions for submitting comments.
  - E-mail: Comments may be sent by electronic mail (e-mail) to [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov).
  - Fax: Fax your comments to: (202) 566-9744.
  - Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail Code: 2822T, 1200 Pennsylvania Ave., NW, Washington, DC 20460.
  - Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

## FOR MORE INFORMATION

- To download this reconsideration notice from EPA's Web site, go to: <http://www.epa.gov/airquality/combustion/actions.html>.
- Today's action and other background information are also available either electronically at <http://www.regulations.gov>, EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center's Public Reading Room.
  - The Public Reading Room is located at EPA Headquarters, room number 3334 in the EPA West Building, 1301 Constitution Avenue, NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern standard time, Monday through Friday, excluding Federal holidays.
  - Visitors are required to show photographic identification, pass through a metal detector and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.

- Materials for this proposed action can be accessed using Docket ID No. EPA-HQ-OAR-2002-0058.
- For further information about the proposal, contact Mr. Brian Shrager of EPA's Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Energy Strategies Group at (919) 541-7689 or by e-mail at [shrager.brian@epa.gov](mailto:shrager.brian@epa.gov).