

The EPA's First Ever Standards for Mercury and Air Toxics Emissions from Power Plants

On March 16, 2011, the U.S. Environmental Protection Agency (EPA) issued a proposed rule under the Clean Air Act to reduce emissions of toxic air pollutants from power plants. Specifically, the rule would reduce emissions from new and existing coal- and oil-fired electric utility steam generating units (EGUs). The rule does not apply to natural gas powered EGUs.

The final rule will be finalized in November 2011 after a public comment period. EPA will hold three public hearings in Atlanta, GA; Chicago, IL; and Philadelphia, PA on dates to be announced.

I. What is the Mercury Rule?

The proposed rule establishes technology based emissions standards for mercury, acid gases (hydrochloric acid and hydrogen fluorides), and non-mercury metallic toxic pollutants, such as arsenic, chromium, and nickel.

II. What is the Harm of these Pollutants?

- Known as hazardous air pollutants, these pollutants are known to cause, or suspected of causing cancer and other serious health effects.
- Uncontrolled releases of toxic air pollutants, like mercury, damage children's developing brains, reducing their IQ and ability to learn.
- 689,000, or 16.8%, of the 4.1 million babies born in the United States each year may be exposed to dangerous levels of mercury pollution.
- These pollutants cause a range of dangerous health problems in adults as well, including cancer, heart disease, and premature death.
- Each year Americans lose 850,000 "sick" days related to these pollutants.
- Lakes, streams, and rivers become polluted by these emissions, causing contamination in fish. Fish consumption advisories have been issued across the United States as a result of mercury contamination.

III. Why is there a Need to Reduce Emissions from Power Plants?

- The EPA estimates that there are approximately 1,350 coal- and oil-fired units in the United States.
- Approximately half of the EGUs in the United States do not have advanced pollution control equipment.
- Power plants are the dominant source of mercury (50%), acid gases (over 50%), and other toxic metals (over 25%) pollution in the U.S.
- Coal plants are responsible for 99% of this mercury pollution and the bulk of the other pollutants.
- To achieve the desired reduction in emissions, power plants will be required to use existing technology (used currently by the best-performing sources in the industry) within four years (for existing sources).

IV. Estimated Benefits by Implementing this Rule.

- Prevent 91% of the mercury emissions from coal fired power plants.
- Reduce acid gas emissions by 91%.

- Reduce sulfur dioxide emissions by 55%.
- Annually prevent: 17,000 premature deaths; 11,000 heart attacks; 120,000 asthma attacks; 12,200 hospital and emergency room visits; 4,500 cases of chronic bronchitis; and 5.1 million restricted activity days.
- These benefits are especially important to minority and low income populations who are disproportionately impacted by asthma and other debilitating health conditions.
- EPA estimates air quality improvements of \$59 to \$140 billion each year; including an estimated \$5-13 in health benefits for every dollar spent to reduce toxic air pollution.
- EPA estimates this rule will provide 31,000 short-term construction jobs and 9,000 long-term utility jobs.

V. Effects of this Rule.

- Coal-fired generation becomes cleaner with little effect on its role as the major generator of U.S. electric power.
- This rule will level the playing field across the United States, so that all power plants will have to limit their emissions of mercury as plants in some states already require.
- By using these widely-available controls it will assist older plants in modernizing, most of which are over 30 years old and many of which are over 50 years old.
- EPA estimates this rule will result in relatively small changes in the average retail price of electricity.

VI. How Can You Become Involved?

- Read the complete rules posted at: <http://epa.gov/airquality/powerplanttoxics/actions.html>.
- Examine the public docket at: <http://www.regulations.gov> (Docket ID No. EPA-HQ-OAR-2009-0234).
- Submit comments to the EPA.
- Attend a public hearing held by the EPA on this proposal in Atlanta, GA, Chicago, IL, and **Philadelphia, PA**.
- Watch out for the Clean Air Council Action Alert on this issue.