



GAO

Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

B-321733

March 31, 2011

The Honorable Barbara Boxer
Chairman
The Honorable James M. Inhofe
Ranking Member
Committee on Environment and Public Works
United States Senate

The Honorable Fred Upton
Chairman
The Honorable Henry A. Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives

Subject: *Environmental Protection Agency: National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers*

Pursuant to section 801(a)(2)(A) of title 5, United States Code, this is our report on a major rule promulgated by the Environmental Protection Agency (EPA), entitled “Environmental Protection Agency: National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers” (RIN: 2060-AM44). We received the rule on February 25, 2011. It was published in the *Federal Register* as a final rule on March 21, 2011. 76 Fed. Reg. 15,554.

The final rule promulgates national emission standards for control of hazardous air pollutants from two area source categories: industrial boilers and commercial and institutional boilers. According to EPA, the final emission standards for control of mercury and polycyclic organic matter emissions from coal-fired area source boilers are based on the maximum achievable control technology. The final emission standards for control of hazardous air pollutants emissions from biomass-fired and oil-fired area source boilers are based on EPA’s determination as to what constitutes the generally available control technology or management practice. The final rule is effective May 20, 2011.

Enclosed is our assessment of EPA's compliance with the procedural steps required by section 801(a)(1)(B)(i) through (iv) of title 5 with respect to the rule. Our review of the procedural steps taken indicates that EPA complied with the applicable requirements.

If you have any questions about this report or wish to contact GAO officials responsible for the evaluation work relating to the subject matter of the rule, please contact Shirley A. Jones, Assistant General Counsel, at (202) 512-8156.

signed

Robert J. Cramer
Managing Associate General Counsel

Enclosure

cc: Nicole Owens
Director, Regulatory Management Division
Environmental Protection Agency

REPORT UNDER 5 U.S.C. § 801(a)(2)(A) ON A MAJOR RULE
ISSUED BY THE
ENVIRONMENTAL PROTECTION AGENCY
ENTITLED
"NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
FOR AREA SOURCES: INDUSTRIAL, COMMERCIAL,
AND INSTITUTIONAL BOILERS"
(RIN: 2060-AM44)

(i) Cost-benefit analysis

EPA performed a cost-benefit analysis in conjunction with the final rule. EPA estimated the total annual monetized benefits in 2014 to be \$210 million to \$520 million, using a 3-percent discount rate, or \$190 million to \$470 million, using a 7-percent discount rate. EPA estimated the total social costs at \$490 million. EPA described the net benefits as including a reduction of 1,100 tons of carbon monoxide, 340 tons of hydrogen chloride, 8 tons of hafnium, and 90 pounds of mercury. EPA stated that the final rule will also have non-monetized benefits including a reduction of 320 tons of other metals, less than 1 gram of dioxins/furans (TEQ), reduced health effects from sulfur dioxide exposure, and decreases in ecosystem effects and visibility impairment.

(ii) Agency actions relevant to the Regulatory Flexibility Act, 5 U.S.C. §§ 603-605, 607, and 609

EPA prepared an initial regulatory flexibility analysis for the proposed rule and convened a Small Business Advocacy Review Panel to obtain advice and recommendations of representatives of the regulated small entities. EPA stated that the proposed rule contained provisions consistent with four of the Panel's recommendations. In response to the initial regulatory flexibility analysis, EPA received comments provided by the Small Business Administration (SBA) and other comments generally supporting SBA's comments. The comments included the following: EPA should have adopted additional subcategories; EPA should have minimized facility monitoring and reporting requirements; EPA should not have proposed the energy audit requirement; and EPA's proposed emissions standards are too stringent.

EPA also prepared a final regulatory flexibility analysis in conjunction with the final rule. In response to the comments, EPA made the following changes to the final rule: EPA is promulgating management practice standards requiring the implementation of a boiler tune-up program for area source boilers in the biomass and oil subcategories instead of the proposed carbon monoxide emission limits; EPA decreased monitoring and testing costs for coal-fired area source boilers by

eliminating the carbon monoxide continuing emission monitoring system requirement for boilers greater than 100 MMBtu/h; and EPA finalized emission limits that are less stringent than the proposed limits. EPA stated in the final rule that it does not have sufficient information to estimate the number of small entities expected to be covered by the area source rule. EPA is preparing a Small Entity Compliance Guide to help small entities comply with the final rule.

(iii) Agency actions relevant to sections 202-205 of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. §§ 1532-1535

EPA determined that the final rule contains a federal mandate that may result in the expenditure of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. EPA incorporated the cost-benefit analysis discussed above as part of the Unfunded Mandates Reform Act analysis. EPA stated in the final rule that it does not believe that there will be any disproportionate budgetary effects of this final rule on any particular areas of the country, state or local governments, types of communities (e.g., urban, rural), or particular industry segments. EPA did an analysis to determine the effects on the national economy and determined that there would be a small impact on prices and outputs (less than 0.01 percent), and that there would be little impact on energy markets for coal, natural gas, petroleum products, and electricity. EPA met with 10 organizations of elected state and local officials in Washington, D.C., on March 24, 2010, and has not received additional questions or requests from state or local officials. Finally, EPA determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments.

(iv) Other relevant information or requirements under acts and executive orders

Administrative Procedure Act, 5 U.S.C. §§ 551 et seq.

EPA published a notice of proposed rulemaking in the *Federal Register* on June 4, 2010. 75 Fed. Reg. 31,895. EPA received comments and responded to those comments in the final rule. 76 Fed. Reg. 15,554.

Paperwork Reduction Act, 44 U.S.C. §§ 3501-3520

The final rule contains information collection requirements (ICR) which EPA has submitted to the Office of Management and Budget (OMB) for approval. The ICR document prepared by EPA has been assigned EPA ICR number 2253.01. The information requirements are based on notification, recordkeeping, and requirements in the National Emissions Standards for Hazardous Air Pollutants (NESHAP) General Provisions, which are mandatory for all operators subject to national emission standards. The final rule requires applicable one-time notifications according to the NESHAP General Provisions. Sources must report malfunctions when they occur according to the applicable reporting requirements. An affirmative defense to civil penalties for exceedances of emission limits that are

caused by malfunctions if available to a source if it can demonstrate that certain criteria and requirements are satisfied. EPA's estimate for the required notification, reports and records, including the root cause analysis, totals \$3,141 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit, and also to produce and retain the record and reports for submission to EPA. EPA provided this illustrative estimate of the burden because the costs are only incurred if there has been a violation and a source chooses to take advantage of the affirmative defense.

EPA estimates that the annual monitoring, reporting, and recordkeeping for this collection, averaged over the first 3 years after the effective date of the standards, is \$407 million. This includes 2.7 million labor hours per year at a total labor cost of \$254 million per year, and total non-labor capital costs of \$153 million per year. This estimate includes initial and triennial performance tests, conducting and documenting an energy assessment, conducting and documenting a tune-up, semiannual excess emissions reports, maintenance inspections, developing a monitoring plan, notifications, and recordkeeping. The total burden for the federal government, averaged over the first 3 years after the effective date of the standard, is estimated to be 286,000 hours per year at a total labor cost of \$13 million per year.

Statutory authorization for the rule

The final rule is authorized by section 112 of the Clean Air Act.

Executive Order No. 12,866 (Regulatory Planning and Review)

The final rule was determined to be economically significant under the Order. EPA submitted the rule to OMB for review.

Executive Order No. 13,132 (Federalism)

EPA concluded that this action may have federalism implications, because it may impose substantial direct compliance costs on state or local governments, and the federal government will not provide the funds necessary to pay those costs. EPA provided a federalism summary impact as required by the Executive Order. EPA estimates that the final rule may impose \$276 million in annual direct compliance costs on an estimated 57,000 state or local governments. EPA used boiler inventories for the health services, educational services, and government-owned building sectors from 13 states to estimate the nationwide number of potentially impacted state or local governments. EPA consulted with state and local officials in the process of developing the final rule to permit them to have meaningful and timely input into the development, and EPA met with 10 national organizations representing state and local elected officials to provide general background on the proposed rule, answer questions, and solicit input from state and local governments. As required by the Executive Order, EPA included a certification from its Federalism Official stating

that EPA had met the Executive Order's requirements in a meaningful and timely manner when it sent to the draft of the final action to OMB for review pursuant to Executive Order 12,866 (See above).