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June 17, 2016

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

The Honorable Fred Upton
Chairman
The Honorable Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce
House of Representatives

Subject: *Environmental Protection Agency: Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources*

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 "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources" (RIN: 2060-AS30). We received the rule on May 20, 2016. It was published in the *Federal Register* as a final rule on June 3, 2016. 81 Fed. Reg. 35,824.

The final rule establishes new standards and finalizes amendments to the current New Source Performance Standards for certain emissions in the oil and natural gas source category. EPA finalizes the implementation of the New Source Performance Standards. The New Source Performance Standards include volatile organic compounds and greenhouse gas emission standards for certain new, modified, and reconstructed equipment, processes, and activities across the oil and natural gas source category. EPA also finalizes new standards based on its determination of the best system of emissions reduction for reducing emissions of greenhouse gases, specifically methane, as well as volatile organic compounds across a variety of additional emission sources in the oil and natural gas source category (i.e., production, processing, transmission, and storage).

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
“OIL AND NATURAL GAS SECTOR: EMISSION STANDARDS
FOR NEW, RECONSTRUCTED, AND MODIFIED SOURCES”
(RIN: 2060-AS30)

(i) Cost-benefit analysis

The Environmental Protection Agency (EPA) has estimated emissions reductions, benefits, and costs for 2 years of analysis: 2020 and 2025. EPA states that the data show that the standards are cost-effective measures to reduce emissions and the rule’s benefits outweigh these costs.

EPA states that actions taken to comply with the final New Source Performance Standards are anticipated to prevent significant new emissions in 2020, including 300,000 tons of methane; 150,000 tons of volatile organic compounds; and 1,900 tons of hazardous air pollutants. The emission reductions anticipated in 2025 are 510,000 tons of methane; 210,000 tons of volatile organic compounds; and 3,900 tons of hazardous air pollutants. Using a 100-year global warming potential of 25, the carbon dioxide-equivalent (CO₂ Eq.) methane emission reductions are estimated to be 6.9 million metric tons CO₂ Eq. in 2020 and 11 million metric tons CO₂ Eq. in 2025. The methane-related monetized climate benefits are estimated to be \$360 million in 2020 and \$690 million in 2025 using a 3 percent discount rate (model average). EPA said it was unable to monetize the benefits of volatile organic compounds reductions due to the difficulties in modeling the impacts with the current data available.

EPA estimates the total capital cost of the final New Source Performance Standards will be \$250 million in 2020 and \$360 million in 2025. The estimate of total annualized engineering costs of the final New Source Performance Standards is \$390 million in 2020 and \$640 million in 2025 when using a 7 percent discount rate. When estimated revenues from additional natural gas are included, the annualized engineering costs of the final New Source Performance Standards are estimated to be \$320 million in 2020 and \$530 million in 2025, assuming a wellhead natural gas price of \$4/thousand cubic feet. These compliance cost estimates include revenues from recovered natural gas, as the EPA estimates that about 16 billion cubic feet in 2020 and 27 billion cubic feet in 2025 of natural gas will be recovered by implementing the New Source Performance Standards. According to EPA, this rule results in a net benefit. The quantified net benefits (the difference between monetized benefits and compliance costs) are estimated to be \$35 million in 2020 and \$170 million in 2025 using a 3 percent discount rate (model average) for climate benefits in both years.

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

EPA states that it prepared an initial regulatory flexibility analysis (IRFA) for the proposed rule and convened a Small Business Advocacy Review Panel to obtain advice and recommendations from small entity representatives that potentially would be subject to the rule’s requirements. Summaries of the IRFA and Panel recommendations are presented in the proposed rule at 80 Fed. Reg. 56,593. EPA prepared a final regulatory flexibility analysis

(FRFA) for the final rule. The FRFA addresses the issues raised by public comments on the IRFA for the proposed rule. The complete FRFA is available for review in the Regulatory Impact Analysis in the public docket (Docket ID EPA-HQ-OAR-2010-0505) and is summarized in the final rule.

EPA estimates that about 2,031 small entities may be subject to the requirements for hydraulically fractured and re-fractured oil well completions and fugitive emissions requirements at well sites. EPA further estimates that the cost of compliance for small firms will be about \$110 million in 2020 and \$190 in 2025. EPA also considered several options to minimize the impact to small entities, including reduced emission completion and completion combustion requirements for a subset of newly completed oil wells, but concluded that the options would likely reduce the effectiveness of the rule. EPA is preparing a Small Entity Compliance Guide, which will be available online 60 days after publication of 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 says that this action contains a federal private sector mandate under the Unfunded Mandates Reform Act of 1995 (UMRA) that may result in expenditures of \$100 million or more for the private sector in any one year. Accordingly, EPA prepared a written statement in compliance with sections 202 and 205 of UMRA. EPA discusses its statutory authority under section 111 of the Clean Water Act, explains the monetized benefits of the final rule, summarizes the effects on the national economy, and discusses regulatory alternatives. EPA states that this rule is not subject to the requirements of section 203 of UMRA because it 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 proposed amendments to the New Source Performance Standards at subpart OOOO and proposed new standards at subpart OOOOa on September 18, 2015. 80 Fed. Reg. 56,593. Prior to the proposal, EPA pursued a structured engagement process with states and stakeholders. Prior to that process, EPA issued draft white papers addressing a range of technical issues and then solicited comments on the white papers from expert reviewers and the public. The white papers are available at <http://www.epa.gov/airquality/oilandgas/methane.html> and the public comments on the papers are at <http://www.regulations.gov>, Docket ID No. EPA-HQ-OAR-2014-0557.

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

According to EPA, the Office of Management and Budget (OMB) has previously approved the information collection activities contained in 40 C.F.R. part 60, subpart OOOO under PRA and has assigned OMB control number 2060-0673 and ICR number 2437.01; a summary can be found at 77 Fed. Reg. 49,537. EPA states that the information collection requirements in the final action titled, Standards of Performance for Crude Oil and Natural Gas Facilities for Construction, Modification, or Reconstruction (40 C.F.R. part 60 subpart OOOOa) have been submitted for approval to OMB under PRA. The information collection request (ICR) document prepared by EPA has been assigned EPA ICR Number 2523.01. A copy of the ICR is available in the docket for this rule (Docket ID EPA-HQ-OAR-2010-0505).

EPA says that the information to be collected for the final New Source Performance Standards is based on notification, performance tests, recordkeeping and reporting requirements which will be mandatory for all operators subject to the final standards. The information will be used by the delegated authority (state agency, or regional administrator if there is no delegated state agency) to ensure that the standards and other requirements are being achieved. Based on review of the recorded information at the site and the reported information, the delegated permitting authority can identify facilities that may not be in compliance and decide which facilities, records, or processes may need inspection.

EPA states that the estimated average annual burden (averaged over the first 3 years after the effective date of the standards) for the recordkeeping and reporting requirements in subpart OOOOa for the 2,554 owners and operators that are subject to the rule is 98,438 labor hours, with an annual average cost of \$3,361,074. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 20 hours per response. Respondents must monitor all specified criteria at each affected facility and maintain these records for 5 years.

Statutory authorization for the rule

EPA cites to section 111(b) of the Clean Air Act and section 4701 et. seq. of title 42 of the United States Code as authority for this rulemaking.

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

EPA determined that this rulemaking is an economically significant regulatory action that was submitted to OMB for review. EPA prepared a Regulatory Impact Analysis (RIA) of the potential costs and benefits associated with this action. The RIA is available in the docket and describes in detail the empirical basis for the EPA's assumptions and characterizes the various sources of uncertainties affecting its estimates.

Executive Order No. 13,132 (Federalism)

According to EPA, this action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. EPA states that the final rules primarily affect private industry and would not impose significant economic costs on state or local governments.