



United States Government Accountability Office
Washington, DC 20548

B-323911

September 25, 2012

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: Standards of Performance for Petroleum Refineries; Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007*

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 "Standards of Performance for Petroleum Refineries; Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007" (RIN: 2060-AN72). We received the rule on August 31, 2012. It was published in the *Federal Register* as a "final rule; lift stay of effective date" on September 12, 2012. 77 Fed. Reg. 56,422.

The final rule finalizes amendments and technical corrections originating from amendments EPA promulgated on June 24, 2008, to the Standards of Performance for Petroleum Refineries and new standards of performance for petroleum refinery process units constructed, reconstructed, or modified after May 14, 2007. EPA subsequently received three petitions for reconsideration of these final rules. On September 26, 2008, the EPA granted reconsideration and issued a stay for the issues raised in the petitions regarding process heaters and flares. On December 22, 2008, the EPA addressed those specific issues by proposing amendments to certain provisions for process heaters and flares and extending the stay of these provisions until further notice. EPA also proposed technical corrections

to the rules for issues that were raised in the petitions for reconsideration. In this final rule, the EPA not only finalizes those amendments and technical corrections, but is also lifting the stay of all the provisions granted on September 26, 2008, and extended until further notice on December 22, 2008.

The stay of the definition of “flare” in 40 C.F.R. § 60.101a, paragraph (g) of 40 C.F.R. § 60.102a, and paragraphs (d) and (e) of 40 C.F.R. § 60.107a is lifted and this final rule is effective on November 13, 2012. The incorporation by reference of certain publications listed in the final rule is approved by the Director of the *Federal Register* as of November 13, 2012.

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

ENCLOSURE

REPORT UNDER 5 U.S.C. § 801(a)(2)(A) ON A MAJOR RULE
ISSUED BY THE
ENVIRONMENTAL PROTECTION AGENCY
ENTITLED
"STANDARDS OF PERFORMANCE FOR PETROLEUM REFINERIES;
STANDARDS OF PERFORMANCE FOR PETROLEUM REFINERIES
FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR
MODIFICATION COMMENCED AFTER MAY 14, 2007"
(RIN: 2060-AN72)

(i) Cost-benefit analysis

EPA prepared a regulatory impact analysis of the potential costs and benefits associated with this action, including a summary of the monetized benefits, compliance costs, and net benefits for the final petroleum refineries new source performance standards (NSPS) in 2017 at discount rates of 3 percent and 7 percent in 2006 dollars. EPA states that all estimates are for the implementation year (2017) and are rounded to two significant figures. EPA estimates total monetized benefits to be \$270 to \$580 million, at a discount rate of 3 percent, and \$240 to \$530 million at a discount rate of 7 percent. The total monetized benefits reflect the human health benefits associated with reducing exposure to PM_{2.5} (particles smaller than 2.5 microns) through reductions of PM_{2.5} precursors such as NO_x (nitrogen oxide) and SO₂, (sulfur dioxide) as well as CO₂ benefits. EPA notes that the monetized benefits do not include the reduced health effects from direct exposure to NO_x and SO₂, ozone exposure, ecosystem effects, or visibility impairment. EPA explains that human health benefits are shown as a range from Pope, *et al.* (2002) to Laden, *et al.* (2006) and these models assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality because the scientific evidence is not yet sufficient to allow differentiation of effects estimates by particle type. According to EPA, the net present value of reduced CO₂ emissions is calculated differently than other benefits. EPA estimates net benefits to be \$340 to \$660 million at a discount rate of 3 percent and \$320 to \$610 million at a discount rate of 7 percent. Additionally, EPA notes that non-monetized benefits include health effects from direct exposure to SO₂ and NO₂, health effects from PM_{2.5} exposure from volatile organic compounds (VOC), ecosystem effects, and visibility impairment.

EPA estimates that total compliance costs save about \$79 million in the fifth year after the effective date of these final amendments. Alternatively, if no refineries install flare gas recovery systems, EPA estimates total annualized compliance costs to be \$10.7 million in the fifth year after proposal. Regardless of whether any refineries install flare gas recovery systems, EPA does not anticipate any adverse

economic impacts associated with this regulatory action, as no increase in refined petroleum product prices or decrease in refined petroleum product output is expected.

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

After considering the economic impacts of these final amendments on small entities, EPA certifies that this action will not have a significant economic impact on a substantial number of small entities. EPA also states that the small entities directly regulated by these final amendments are small petroleum refineries. EPA has determined that 31 small refiners, or 55 percent of total refiners, will experience an impact of between less than 0.01 percent up to 0.63 percent of revenues.

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

EPA states that the final rules do not contain a federal mandate that may result in expenditures of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. According to EPA, the costs of the final amendments would not increase costs associated with the final rule. Thus, EPA states that the final rule is not subject to the requirements of sections 202 or 205 of the UMRA. Additionally, EPA notes that the final rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. EPA believes that the final amendments contain no requirements that apply to such governments and impose no obligations upon them.

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

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

On December 22, 2008, EPA published a proposed rule entitled, “Standards of Performance for Petroleum Refineries; Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced after May 14, 2007.” 73 Fed. Reg. 78,522. EPA received a total of 22 comments from refineries, industry trade associations, and consultants; state and local environmental and public health agencies; environmental groups; and other members of the public. These final amendments reflect EPA’s full consideration of all of the comments it received.

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

EPA states that the final amendments to the Standards of Performance for Petroleum Refineries (40 C.F.R. part 60, subpart J) do not impose any new

information collection burden. The final amendments are clarifications and technical corrections that do not affect the estimated burden of the existing rule. Therefore, EPA has not revised the information collection request for the existing rule. However, the Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing rule (40 C.F.R. part 60, subpart J) under the provisions of the Paperwork Reduction Act, 44 §§ U.S.C. 3501, et seq., and has assigned OMB control number 2060–0022. The OMB control numbers for the EPA's regulations are listed in 40 C.F.R. part 9.

Statutory authorization for the rule

EPA states that the final rules are authorized by 7 U.S.C. §§ 135, et seq., 136-136y; 15 U.S.C. § 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. § 331j, 346a, 348; 31 U.S.C. § 9701; 33 U.S.C. § 1251, et seq., 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345(d) and (e), 1361; E.O. 11,735; 38 Fed. Reg. 21,243; 3 C.F.R., 1971-1975 Comp. p. 973; 42 U.S.C. § 241, 242b, 243, 246, 300f, 300g, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-1, 300j-2, 300j-3, 300j-4, 300j-9, 1857, et seq., 6901-6992k, 7401-7671q, 7542, 9601-9657, 11023, 11048.

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

EPA states that the final action is an “economically significant regulatory action” because it is likely to have an annual effect on the economy of \$100 million or more. Accordingly, EPA submitted the final action to OMB for review under Executive Order 12,866 and Executive Order 13,563, and any changes made in response to OMB recommendations have been documented in the docket for this action.

Executive Order No. 13,132 (Federalism)

EPA states that the final action does not have federalism implications, nor will it 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, as specified in Executive Order 13,132. The final action does not modify existing responsibilities or create new responsibilities among EPA regional offices, states or local enforcement agencies. Thus, EPA states that Executive Order 13,132 does not apply to this action.