



U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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Washington, DC 20548

B-325810

May 13, 2014

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

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

Subject: *Environmental Protection Agency: Control of Air Pollution From Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards*

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 "Control of Air Pollution From Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards" (RIN: 2060-AQ86). We received the rule on April 23, 2014. It was published in the *Federal Register* as a final rule on April 28, 2014. 79 Fed. Reg. 23,414.

The final rule establishes more stringent vehicle emissions standards and will reduce the allowable sulfur content of gasoline beginning in 2017, as part of a systems approach to addressing the impacts of motor vehicles and fuels on air quality and public health. The gasoline sulfur standard is intended to make emission control systems more effective for both existing and new vehicles and to enable more stringent vehicle emissions standards. The vehicle standards are intended to reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty vehicles. This will result in significant reductions in pollutants such as ozone, particulate matter, and air toxics across the country and help state and local agencies in their efforts to attain and maintain health-based National Ambient Air Quality Standards. These vehicle standards are also intended to harmonize with California's Low Emission Vehicle program, thus creating a federal vehicle emissions program that will allow automakers to sell the same vehicles in all 50 states. The vehicle standards will be implemented over the same timeframe as the greenhouse gas/fuel efficiency standards for light-duty vehicles, as part of a comprehensive approach toward regulating emissions from motor vehicles.

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  
"CONTROL OF AIR POLLUTION FROM MOTOR VEHICLES:  
TIER 3 MOTOR VEHICLE EMISSION AND FUEL STANDARDS"  
(RIN: 2070-AQ86)

(i) Cost-benefit analysis

The Environmental Protection Agency (EPA) estimated the costs for the vehicle and fuel programs under this final rule. For the years 2017 to 2025 and 2030, EPA's estimate of vehicle exhaust emission control costs ranged from \$268 million in 2017 to \$664 million in 2030. For the years 2017 to 2025 and 2030, EPA's estimate of vehicle evaporative emission control costs ranged from \$26 million in 2017 to \$121 million in 2022. For the years 2017 to 2025 and 2030, EPA's estimate of vehicle operating costs ranged from zero in 2017 to negative \$19 million in 2030. EPA's estimates the facilities costs to be \$21 million for 2016 and \$4 million annually for 2017 to 2025 and 2030. For 2017 to 2025 and 2030, EPA's estimate of fuel sulfur control costs ranged from \$804 million in 2017 to \$696 million in 2030. In total, EPA estimated a cost of \$21 million in 2016, costs ranging from \$1.101 billion in 2017 to \$1.51 billion in 2025, and a cost of \$1.457 billion in 2030.

EPA also estimated the benefits of this final rule. The vehicles and fuels subject to the standards contained in this rule are significant sources of mobile source air pollution which is linked to adverse human health impacts such as premature deaths as well as other important public health and environmental effects. Using the lower end of EPA's range of preferred premature mortality estimates, EPA estimates that by 2030, implementation of the standards will reduce approximately 770 premature mortalities annually and will yield between \$6.7 billion and \$7.4 billion in total annual benefits, depending on whether a 3 percent or 7 percent discount rate is used. Using the upper end of EPA's range of preferred premature mortality estimates, EPA estimates that by 2030, implementation of the standards will reduce approximately 2,000 premature mortalities annually and will yield between \$18 billion and \$19 billion in total annual benefits.

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

EPA prepared a final regulatory flexibility analysis (FRFA) for this final rule under the Act. The FRFA included a discussion of the reason for the rule; the legal basis for the rule; a summary of potentially affected small entities; reporting, recordkeeping, and compliance requirements; and related small rules. The FRFA also discussed steps taken to minimize the economic impact of the rule on small entities including findings by the Small Business Advocacy Panel and the results of EPA's outreach to small entities. EPA is also preparing a Small Entity Compliance Guide to help small entities comply with the 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 this rule contains 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 and therefore prepared a written statement of the cost-benefit analysis as described above. EPA also identified and considered a reasonable number of regulatory alternatives. EPA also determined that the rule contains no regulatory requirements that might significantly or uniquely affect small governments, imposes no enforceable duty on any state, local, or tribal governments, contains no regulatory requirements that might significantly or uniquely affect small governments, but does contain a federal mandate that may result in expenditures of \$100 million or more for the private sector in any one year. EPA believes that the program being finalized today represents the least costly, and least burdensome approach to achieve the statutory requirements of the rule.

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

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

EPA posted a proposed rule on its web site on March 29, 2013, and published it in the *Federal Register* on May 21, 2013. 78 Fed. Reg. 29,816. EPA held two public hearings in Philadelphia and Chicago in April 2013. In response to stakeholder requests, EPA extended the public comment period to July 1, 2013. EPA received more than 200,000 comments from a broad range of stakeholders, including state and local governments, auto manufacturers, emissions control suppliers, refiners, fuel distributors and others in the petroleum industry, renewable fuels providers, environmental organizations, consumer groups, labor groups, private citizens, and others. Some of the issues raised in comments included lead time and the program's start date, the vehicle manufacturers' support for a 50-state program harmonized with California, the need for and degree of gasoline sulfur control (including the level of the sulfur cap), the ethanol content of vehicle certification test fuel, and various details on the flexibilities and other program design features of both the vehicle and fuels standards. EPA responded to comments in the final rule.

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

EPA determined that this final rule continues with changes to existing information collection requirements under the Act. The Office of Management and Budget (OMB) had previously approved these existing information collection requirements under OMB Control Numbers 2060–0437 (fuels), 2060–0104 (light-duty vehicles), 2060–0287 (heavy-duty vehicles), and 2060–0086 (in-use verification program). This rule also contains additional information collection requirements. This rule contains reporting and recordkeeping requirements to implement EPA's motor vehicle certification program and the manufacturers' in-use verification program. For this requirement, EPA estimates the total number of respondents to be 55, the total burden hours to be 73,567, and the total cost to respondents to be \$7,690,934. To assess the need to make test procedure adjustments related to fuel economy testing such that the change in test fuel quality does not impact the stringency of the standards, EPA is gathering the information needed to develop any such adjustments. For this requirement, EPA estimates that over a 3-year period, the added hour burden to be 1,050 hours and the sum of the cost of testing and the hour burden to be \$402,150. This rule also contains reporting, recordkeeping, and Product Transfer Document requirements for refiners and importers of motor vehicle gasoline. For this requirement, EPA estimates the total number of respondents to be 2,675, the

total burden hours to be 84,000, and the total cost to respondents to be \$6,300,000. Lastly, this rule contains provisions for qualifications of laboratories on test methods. For this requirement, EPA estimates an annual reporting burden of 95 hours and an annual recordkeeping burden of 104 hours per respondent, yielding a total of 199 hours—unless a laboratory elects to be a reference installation, in which case the annual reporting burden would be 95 hours and the annual recordkeeping burden would be 128 hours. EPA will submit the additional information collection requirements in this rule to OMB for approval.

#### Statutory authorization for the rule

EPA promulgated this final rule under the authority of sections 202, 203 to 209, 211, 213, 216, and 301 of the Clean Air Act. 42 U.S.C. §§ 7414, 7521, 7522 to 7525, 7541, 7542, 7543, 7545, 7547, 7550, 7601. EPA also stated that additional support for the procedural and compliance related aspects of the rule come from sections 114, 208, and 301(a) of the Clean Air Act. 42 U.S.C. §§ 7414, 7542, 7601(a).

#### National Technology Transfer and Advancement Act of 1995, 15 U.S.C. § 272 note

EPA determined that this final rule involves technical standards and decided to update a number of regulations that already contain voluntary consensus standards to more recent versions of these standards. EPA is finalizing use of the American Society for Testing and Materials International standards. EPA also determined that this rule involves environmental monitoring or measurement. Consistent with its Performance Based Measurement System (PBMS), EPA has decided not to require the use of specific, prescribed analytic methods. Rather, the rule will allow the use of any method that meets the prescribed performance criteria. The PBMS approach is intended to be more flexible and cost-effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. EPA is not precluding the use of any method, whether it constitutes a voluntary consensus standard or not, as long as it meets the performance criteria specified.

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

EPA determined that this final rule is an economically significant rule under the Order because it is likely to have an annual effect on the economy of \$100 million or more. EPA submitted this rule to OMB for review.

#### Executive Order No. 12,898 (Environmental Justice)

EPA has determined that this final rule will not have a disproportionately high adverse human health or environmental effect on minority or low-income populations.

#### Executive Order No. 13,045 (Children's Health)

EPA does not expect children to experience greater ambient concentrations of air pollutants than the general population. However, because of their greater susceptibility to air pollution and their increased time spent outdoors, EPA considers it likely that this final rule will have particular benefits for children's health.

#### Executive Order No. 13,132 (Federalism)

EPA determined that this final rule does not have federalism implications and that 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 under the Order. EPA specifically solicited comment on the rule from state and local officials.

#### Executive Order No. 13,175 (Consultation and Coordination with Indian Tribal Governments)

EPA determined that this final rule does not have tribal implications under the Order. EPA did solicit additional comment from tribal officials in developing this final rule.

#### Executive Order No. 13,211 (Energy Supply)

EPA determined that the flexibilities in this final rule for entities in the gasoline production and distribution system will mitigate any potential adverse effects on gasoline supply and distribution. Although EPA does not expect this rule to have significant adverse effects on the supply or distribution of gasoline, it did prepare a Statement of Energy Effects for this rule consisting of a discussion of (1) the fuel provisions of the rule and flexibilities, including hardship provisions; (2) the estimated costs of the fuel program; (3) the economic impacts, specifically for fuel economic impacts; and (4) the employment impacts. Given the estimated costs and impacts, EPA does not expect this rule to have an adverse effect on the supply or distribution of gasoline. Further, EPA does not believe that there are any reasonable alternatives to the control of sulfur in gasoline which would provide the level of reduction of emissions, considering its cost-benefit analyses, given by the sulfur reduction being finalized in this rule.