



United States
General Accounting Office
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Office of the General Counsel

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April 29, 1998

The Honorable John H. Chafee
Chairman
The Honorable Max Baucus
Ranking Minority Member
Committee on Environment and Public Works
United States Senate

The Honorable Thomas J. Bliley, Jr.
Chairman
The Honorable John D. Dingell
Ranking Minority Member
Committee on Commerce
House of Representatives

Subject: Environmental Protection Agency: Emission Standards for Locomotives
and Locomotive Engines

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 "Emission Standards for Locomotives and Locomotive Engines" (RIN: 2060-AD33). We received the rule on March 26, 1998. It was published in the Federal Register as a final rule on April 16, 1998. 63 Fed. Reg. 18978.

The final rule contains emission standards and associated regulatory requirements for the control of emissions from locomotives and locomotive engines as required by section 213 (a)(5) of the Clean Air Act. The standards will take effect in the year 2000 and will ultimately result, according to EPA, in a more than 60-percent reduction in oxides of nitrogen from locomotives.

Enclosed is our assessment of the 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 indicates that the EPA complied with the applicable requirements.

If you have any questions about this report, please contact James Vickers, Assistant General Counsel, at (202) 512-8210. The official responsible for GAO evaluation work relating to the Environmental Protection Agency is Peter Guerrero, Director, Environmental Protection Issues. Mr. Guerrero can be reached at (202) 512-6111.

Robert P. Murphy
General Counsel

Enclosure

cc: Mr. Thomas E. Kelly
Director, Office of Regulatory
Management and Information
Environmental Protection Agency

ANALYSIS UNDER 5 U.S.C. § 801(a)(1)(B)(i)-(iv) OF A MAJOR RULE
ISSUED BY
THE ENVIRONMENTAL PROTECTION AGENCY
ENTITLED
"EMISSION STANDARDS FOR LOCOMOTIVES AND LOCOMOTIVE ENGINES"
(RIN: 2060-AD33)

(i) Cost-benefit analysis

EPA performed a cost-benefit analysis which is summarized in the preamble to the final rule. Our Office received a copy of the full analysis.

Over the 41-year life of the program, the time necessary to ensure a complete fleet turnover, EPA estimates that the total costs will be \$3.273 billion or \$1.331 billion at net present value.

This will result in a total benefit in the reduction of oxides of nitrogen of over 20 million tons and reductions of 275,000 metric tons of particulate matter and 400,000 metric tons of hydrocarbons. An analysis for oxides of nitrogen reveals a cost effectiveness of \$163 per ton or \$66 per ton at net present value.

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

The Administrator of the EPA has certified that the final rule will not have a significant economic impact on a substantial number of small entities.

EPA has identified two types of small entities which could potentially be impacted by the rule: (1) small businesses involved in locomotive aftermarket parts production and locomotive remanufacturing and (2) small railroads. EPA has determined that the impacts would be minimal or nonexistent because, among other reasons, the phase-in of the remanufacturing requirements combined with the compliance flexibility given to small businesses during the initial years of the program will allow them to make the transition into the new marketplace for certified remanufactures without hardship. Also, small railroads are exempt from the Tier 0 remanufacturing requirements for their existing fleets and the railroad in-use test program included in the rule only applies to Class I freight railroads, thus exempting all small railroads from the requirement.

EPA states that it tailored the rule to minimize or eliminate the effects on small entities.

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

According to EPA, the final rule does not impose an intergovernmental mandate of \$100 million or more in any one year because the rule does not impose an enforceable duty on any state, local, or tribal government. However, the final rule does impose a mandate that may result in the expenditure of \$100 million or more in any one year on the private sector.

EPA utilized the cost and benefit analysis it performed pursuant to Executive Order No. 12866 and the discussion of alternatives it considered to satisfy the requirements of the Unfunded Mandates Reform Act, as permitted by section 202(c) of the Act. EPA also states that the analysis shows that it chose the alternative which represented the least costly, most cost effective approach to achieving the air quality goals of the Clean Air Act.

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

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

The final rule was issued using the notice and comment procedures in 5 U.S.C. § 553. On February 11, 1997, EPA published a notice of proposed rulemaking in the Federal Register (62 Fed. Reg. 6365). In addition to the 31 written comments received in response to the notice of proposed rulemaking, EPA held a public hearing in Romulus, Michigan, on May 15, 1997. EPA responds to the comments in the preamble to the final rule.

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

The final rule contains collections of information which are subject to review and approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. EPA has submitted the required documentation to OMB and no party need respond to any collection of information until the collection is approved by OMB and a control number is issued.

The preamble to the final rule contains the required information regarding the collection, including the reason and need for the information, the number of respondents, and an estimate of the annual burden hours which will be imposed.

The information being collected will allow EPA to certify locomotives and locomotive engines will be in compliance with the applicable emission standards. It is estimated that it will average 494 hours per the expected 126 responses from 20 respondents at an annualized capital/startup cost of \$1.8 million.

Statutory authorization for the rule

The final rule was promulgated under the authority of sections 114, 203, 204, 205, 206, 207, 208, 209, 213, 215, 216, and 301(a) of the Clean Air Act as amended in 1990 (42 U.S.C. §§ 7417, 7522, 7523, 7524, 7525, 7541, 7542, 7543, 7547, 7549, 7550, and 7601(a)).

Executive Order No. 12866

The final rule was determined to be an "economically significant" regulatory action under the Order. It was reviewed by the Office of Management and Budget and was approved as complying with the requirements of the Order on December 17, 1997.