



**United States
General Accounting Office
Washington, D.C. 20548**

Office of the General Counsel

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October 29, 1997

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: Control of Emissions of Air Pollution
From Highway Heavy-Duty 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 "Control of Emissions of Air Pollution From Highway Heavy-Duty Engines" (RIN: 2060-AF76). We received the rule on October 17, 1997. It was published in the Federal Register as a final rule on October 21, 1997. 62 Fed. Reg. 54694.

The final rule establishes a new emission standard and related provisions for diesel heavy-duty engines intended for highway operation, beginning with the 2004 model year.

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
"CONTROL OF EMISSIONS OF AIR POLLUTION FROM
HIGHWAY HEAVY-DUTY ENGINES"
(RIN: 2060-AF76)

(i) Cost-benefit analysis

EPA performed a cost-benefit analysis which is included in its Regulatory Impact Analysis (RIA), which was forwarded to our Office, and is summarized in the preamble to the final rule.

Because manufacturers are planning long-term research and development (R&D), EPA's analysis of costs is based on a significant degree of technological development. To reflect this improvement and long-term cost savings, EPA has included \$270 million in R&D outlays in the cost analysis.

The costs of the new technologies for meeting the 2004 model-year standards for light heavy-duty vehicles are estimated to be a purchase price cost increase of \$258 and a life-cycle operating cost increase of about \$7. For medium heavy-duty vehicles and heavy heavy-duty vehicles, the purchase price increases are estimated at \$397 and \$467 and the additional life-cycle cost increases at \$62 and \$131, respectively.

The aggregate costs to society are projected at \$270 million in 2004, \$140 million in 2009, and \$205 million in 2020.

The benefits to the environment are estimated to be a reduction in oxides of nitrogen (NO_x) of over one million tons by the year 2020 or a 5-percent reduction in the total NO_x inventory. Also, based on two cost-effectiveness scenarios in the RIA, the range in the cost effectiveness results for 2009 and later model year heavy-duty diesel vehicles is \$100 to \$200 per ton.

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

EPA has determined that the final rule will not have a significant economic impact on a substantial number of small entities because none of the engine manufacturers affected by the rule is a small entity. In addition, EPA does not find that the portion of the rule dealing with heavy-duty engine rebuilding processes will have a

significant impact on the small businesses that make up a substantial portion of the engine rebuilding business. EPA reached this latter decision because the final rule is not creating a new program regarding engine rebuilding, and the associations representing the engine rebuilders did not raise concerns that the rule would have a significant impact on small entities. Also, the comments received from small rebuilders were supportive of the rulemaking.

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

The final rule does not contain a federal mandate on state, local, or tribal governments but does contain a mandate of \$100 million or more on the private sector. EPA states that it believes the final rule represents the least costly, most cost-effective approach to achieving the air quality goals of the rule. EPA's actions taken to comply with the Unfunded Mandates Reform Act of 1995 are discussed in the RIA.

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

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

Instead of the notice and comment procedures in the Administrative Procedure Act, EPA promulgated this rule using the procedures, which have similar notice and comment requirements, contained in section 307(d) of the Clean Air Act, as amended. 42 U.S.C. § 7607(d). The use of these procedures regarding this rule is mandated by section 307(d)(1)(K) of the Clean Air Act. 42 U.S.C. § 7607(d)(1)(K).

EPA issued an Advance Notice of Proposed Rulemaking on August 31, 1995 (60 Fed. Reg. 45580) and a Notice of Proposed Rulemaking on June 27, 1996 (61 Fed. Reg. 33421). A public hearing was held on August 12, 1996. The comments received as a result of these notices and the hearing are responded to in the preamble to the final rule.

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

The final rule contains an information collection requirement subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act.

The preamble to the final rule sets forth the information required by the act, which includes the reason for the requirement and the estimated burden hours. The information to be collected consists of certification results, durability, maintenance, and averaging, banking and trading information. Also, recordkeeping procedures for engine rebuilding companies are formalized consistent with current industry standards. The average first-year burden hours are estimated to be 4,670 for each

of the 20 likely respondents and a total first-year burden hours of 93,410 hours at a cost of \$5,603,280. Subsequent-year burdens are expected to be one-tenth of the first year because of the practice of engine family carry-over from model year to model year.

OMB has approved the collection requirement and has issued OMB Control No. 2060-0104.

Statutory authorization for the rule

The final rule was issued pursuant to the authority of section 202(a)(3) of the Clean Air Act, 42 U.S.C. § 7521(a)(3), under which EPA establishes emission standards for new heavy-duty motor vehicle engines.

Executive Order No. 12866

The final rule was determined to be an "economically significant regulatory action" under the order and was reviewed and approved by OMB as complying with the requirements of the order.