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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: National Ambient Air Quality Standards for Particulate Matter; Final Rule and National Ambient Air Quality Standards for Ozone; Final Rule

Pursuant to section 801(a)(2)(A) of title 5, United States Code, this is our report on two major rules promulgated by the Environmental Protection Agency (EPA), entitled "National Ambient Air Quality Standards for Particulate Matter; Final Rule" and "National Ambient Air Quality Standards for Ozone; Final Rule" (RIN: 2060-AE66 and RIN 2060-AE57). We received the rules on July 18, 1997. They were published in the Federal Register as final rules on July 18, 1997. 62 Fed. Reg. 38652 and 38856.

Our Office is issuing a combined major rule report on the two rules because the rules are closely related and EPA has given the same reasons for certain regulatory actions it has taken or not taken. Both rules involve the issuance of National Ambient Air Quality Standards (NAAQS) pursuant to provisions of the Clean Air Act.

The first rule revises the NAAQS for particulate matter (PM) by establishing two new $PM_{2.5}$ standards, set at 15μg/m³, based on the 3-year average of annual arithmetic mean $PM_{2.5}$ concentrations from single or multiple community-oriented

monitors, and 65μg/m³, based on the 3-year average of the 98th percentile of 24-hour $PM_{2.5}$ concentrations at each population-oriented monitor within an area; and the current 24-hour PM_{10} standard is revised to be based on the 99th percentile of 24-hour PM_{10} concentrations at each monitor within an area.

The NAAQS for ozone (O_3) are revised by replacing the current 1-hour primary standard with an 8-hour standard at a level of 0.08 parts per million with a form based on the 3-year average of the annual fourth highest daily maximum 8-hour average O_3 concentrations measured at each monitor within an area. The current 1-hour secondary standard is replaced by an 8-hour standard identical to the new primary standard.

EPA states that these revised standards will provide increased protection to the public, against a wide range of O_3-induced and PM-related health effects.

On July 18, 1997, a Petition for Review of these final rules was filed in the United States Court of Appeals for the District of Columbia Circuit pursuant to the section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1) and section 242 of the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. § 611. The plaintiffs contend that the rules violate the Clean Air Act and SBREFA. American Trucking Associations, Inc., et. al. v. United States Environmental Protection Agency (Nos. 97-1440 and 97-1441, July 18, 1997).

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
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Enclosure

cc: Mr. Thomas E. Kelly
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Environmental Protection Agency

ENCLOSURE

ANALYSIS UNDER 5 U.S.C. § 801(a)(1)(B)(i)-(iv) OF MAJOR RULES
ISSUED BY
THE ENVIRONMENTAL PROTECTION AGENCY
ENTITLED
"NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER; FINAL RULE AND NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE; FINAL RULE"
(RIN: 2060-AE66 and RIN 2060-AE57)

(i) Cost-benefit analysis

The Regulatory Impact Analysis contains cost-benefit analyses for both final rules. While the Clean Air Act has been interpreted as requiring the setting of standards to be health-based and not based on cost or other economic considerations, EPA points out that the consideration of cost is an essential decision-making tool for implementation of the standards.

The analysis for PM estimates the annual cost of partial attainment in the year 2010 to be $8.6 billion (in 1990$). EPA points out that the Clean Air Act does not require full attainment by 2010 but estimates full attainment costs of $37 billion per year. EPA estimates the annual benefits for partial attainment to range from $19 to $104 billion, including 3,300 to 15,600 incidences of premature mortality avoided, which represent 12% to 70% of the benefit estimate. Full attainment monetized benefits range from $20 to $110 billion per year, including 3,700 to 16,600 incidences of premature mortality avoided.

The analysis for ozone estimates partial attainment costs at $1.1 billion per year and, as above, while the Clean Air Act does not require full attainment by 2010, the estimated cost of full attainment is $9.6 billion per year. EPA's estimated monetized annual benefits range from $0.4 to $2.1 billion, including 0 to 330 incidences of premature mortality avoided, which represents 90% of the high end benefits estimates. Full attainment monetized benefits range from $1.5 to $8.5 billion annually, including 0 to 1,300 incidences of premature mortality avoided.

EPA notes that not all benefits from the rules were monetized. For PM, some of these benefits included reductions in pulmonary functions, cancer, infant mortality and damage to ecosystems. For ozone, the nonmonetized benefits included reductions in pulmonary inflammation, chronic respiratory damage/premature aging of lungs, damage to ecosystems and nitrates in drinking water.

The analyses also estimated the costs and benefits for three alternative standards each for PM and ozone.

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

Under section 605(b) of the Act, an agency is exempted from the preparation of regulatory flexibility analyses concerning the impact of the rule on small entities otherwise required by the Act if the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The EPA Administrator made such a certification at the proposal stage of the NAAQS. The certification was based on EPA's interpretation of the term "impact" in the Act. EPA concluded that the term refers to the impact of the rule on small entities subject to the rule's requirements because the purpose of a regulatory flexibility analysis is to consider ways of easing a rule's requirements as they will apply to small entities. According to EPA, that purpose cannot be served in the case of rules such as NAAQS, which do not themselves impose requirements that apply to small entities. The NAAQS establish levels of air quality that states are primarily responsible for achieving by adopting plans containing specific control measures. Because the only choice EPA has in promulgating the NAAQS is the level of the standard and not its implementation, EPA states that there is nothing it can do in setting the NAAQS to tailor state implementation measures as they apply to small entities. However, EPA further states that if and when it issues any rules addressing state implementation of statutorily required actions, EPA would analyze and address the impact of those rules on small entities as appropriate under the Act.

Notwithstanding its certification of the proposed rule as exempt from performing a regulatory flexibility analysis, EPA recognized that the NAAQS would begin a process of state implementation that could eventually lead to small entities having to comply with new or different control measures, depending on the implementation plans developed by the states. Therefore, EPA has undertaken to work with small entity representatives and states to provide information and guidance on how states can address small entity concerns when they prepare their implementation plans. In this connection, EPA analyzed how hypothetical state plans for implementing the rule might affect small entities. In addition, it convened, along with the Small Business Administration (SBA), outreach meetings to solicit small entities' concerns with the new NAAQS. Also with the SBA, it began an interagency panel process to collect advice and recommendations from small entity representatives to be used to prepare guidance on how states can lessen any impacts on small entities. Finally, to supplement the input the EPA receives from its ongoing Clean Air Act Advisory Committee, EPA has added small entity representatives to the subcommittee on NAAQS implementation.

As noted previously, the question of EPA's compliance with the Act is currently before the Court of Appeals for the District of Columbia Circuit, in accordance with section 611 of title 5 of the United States Code.

Section 611, as amended on March 29, 1996, now permits judicial review of final agency actions under the Regulatory Flexibility Act, including agency compliance with section 604, the preparation of a final regulatory flexibility analysis. Previously, judicial review had not been permitted. The petitioners sought review of EPA's actions at the earliest possible time under the new authority, the date of final agency action and publication of the rules in the Federal Register, July 18, 1997.

Our Office has been advised by the Clerk of the Court of Appeals that the initial submissions of the petitioners are due by August 27, 1997 and from the respondent on September 11, 1997.

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

Under section 202(a) of UMRA, unless otherwise prohibited by law, before promulgating a proposed or final rule containing federal mandates that may result either in expenditures in the aggregate by State, local, and tribal governments, or expenditures by the private sector of $100 million or more in any 1 year, agencies are required to prepare a written statement containing five items. Those items are:

(1) an identification of the provision of federal law under which the rule is being promulgated;
(2) a qualitative and quantitative assessment of the anticipated costs and benefits of the federal mandate;
(3) estimates, to the extent feasible, of future compliance costs of the federal mandate and any disproportionate budgetary effects upon any particular region;
(4) estimates, to the extent feasible, by the agency of the effect on the national economy; and
(5) a description of the agency's prior consultation with representatives of affected State, local, and tribal governments, a summary of the comments and concerns presented by them, and a summary of the agency's evaluation of those comments and concerns.

EPA states that, because it is precluded by Section 109 of the Clean Air Act (42 U.S.C. § 7409) from considering economic costs or technical feasibility in setting the NAAQS, it did not have to prepare a written statement under section 202(a) of UMRA. EPA cites the "unless otherwise prohibited by law" language in section 202(a) of UMRA, and the Conference Report for UMRA which states "this section [202] does not require the preparation of any estimate or analysis if the agency is

prohibited by law from considering the estimate or analysis in adopting the rule" as the basis for its determination that it is not required to prepare a written statement under section 202(a).

We disagree with EPA's interpretation of section 202(a) in one respect. EPA is only prohibited by law from considering any estimate or analysis in setting the NAAQS. It is not prohibited from identifying the provision of federal law under which the rules are being promulgated and from describing its outreach efforts with State, local, and tribal governments. (UMRA section 202(a)(1) and (a)(5)) Thus, EPA would not be excused from preparing a written statement containing those items that are not covered by the unless otherwise prohibited by law exclusion. The Conference Report language for section 202 which states that "items in the written report be included 'unless prohibited by law' " supports this view.

Nevertheless, even though EPA stated it was not required to prepare written statements under section 202 of UMRA, it did satisfy the requirements of the statute. EPA identified in the two rules the provisions of federal law under which the rules were being promulgated, discussed its consultation efforts, and stated that a written statement describing EPA's outreach efforts, including a summary of the comments and concerns presented by State, local, and tribal governments, and a summary of EPA's evaluation of those comments and concerns would be placed in the docket. Our Office confirmed that these items are in the docket and available to the public.

(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, the EPA promulgated the rules using the procedures, with similar notice and comment requirements in section 307(d) of the Clean Air Act, as amended. (42 U.S.C. § 7607(d)). The use of these procedures for rules pertaining to the promulgation or revision of any national ambient air quality standard is mandated by section 307(d)(1)(A) of the Act. (42 U.S.C. § 7607(d)(1)(A)).

On November 27, 1996, EPA announced its proposed revisions of the O_3 and PM standards, which proposals were published in the Federal Register on December 13, 1996 (61 Fed. Reg. 65716 and 65638, respectively) and public comments were solicited. In addition to establishing a toll-free telephone number and an ability to receive comments via the Internet, EPA held several public hearings and meetings in various parts of the country.

EPA received over 50,000 comments, 14,000 telephone calls and 4,000 Internet messages concerning the proposals. EPA responds to the major issues raised by

the comments in the preamble to the rules and a comprehensive summary of the comments is available to the public in the docket for the rulemakings (Docket Nos. A-95-58 and A-95-54).

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

EPA, in its discussion of administrative burden in the Regulatory Impact Analysis, notes that states have the primary responsibility for designing air quality management plans which will bring the state into attainment. To aid in the process by which EPA will identify and oversee nonattainment areas, EPA has established a subcommittee on ozone and PM under the Federal Advisory Committee Act to make recommendations. As the work of the subcommittee has not been completed, EPA states that it cannot prepare an Information Collection Request to submit to the Office of Management and Budget under the Paperwork Reduction Act at this time.

However, EPA's Analysis contains an approximation of the additional administrative burden effects that might be expected from the rules based on a hypothetical determination of nonattainment areas and control measures the states may select.

EPA estimates the marginal administrative costs associated with the rules to be about $54 million per year.

Statutory authorization for the rule

The rules were promulgated under the authority of sections 108 and 109 of the Clean Air Act, as amended (42 U.S.C. §§ 7408 and 7409).

Executive Order No. 12866

The final rules are considered to be "significant regulatory actions" under Executive Order No. 12866 in view of the important policy implications and were reviewed by the Office of Management and Budget (OMB). A Regulatory Impact Analysis of the rules was prepared as required by the Order. The Office of Information and Regulatory Affairs of OMB approved the rules as complying with the requirements of the Order based on the information supplied by EPA, including the planned regulatory action document describing the reason for the rule and an assessment of the costs and budgetary impacts of the rules.

Executive Order No. 12898 (Environmental Justice)

The Order, which requires that each federal agency make achieving environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health and environmental effects of its programs, policies and activities on minorities and low-income populations, was, according to EPA,

considered in promulgating these rules. EPA states, however, that since the actual distribution of economic impacts will depend on implementation strategies employed by the states, it is not possible to assess the environmental justice concerns at this time. EPA anticipates that the costs associated with the standards will likely be spread widely across various industries and consumers and the benefits will likely be concentrated in urban areas with high concentrations of minority and low-income populations.