GUIDANCE ON MITIGATION OF IMPACT TO SMALL BUSINESS WHILE IMPLEMENTING AIR QUALITY STANDARDS AND REGULATIONS

On July 16, 1997, President Clinton directed the Environmental Protection Agency (EPA) to implement the newly revised ozone and particulate matter National Ambient Air Quality Standards (NAAQS) in a common-sense, cost-effective manner.[1] An important element of the President's message was the directive to "work with the States to include in their SIPs flexible regulatory alternatives that minimize the economic impact and paperwork burden on small businesses to the greatest possible degree consistent with public health protection." This guidance addresses this directive by outlining potential implementation strategies that would mitigate adverse impacts on small sources,[2] and by encouraging States to make use of these strategies wherever possible and appropriate.

This guidance includes implementation strategies currently in use and those which are in the conceptual stages. These strategies are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party. As noted above, this document represents EPA's early thinking on these strategies. Future guidance or rules may establish strategies that differ from those described here, as EPA develops those strategies in partnership with interested parties.

It is important to keep in mind that the Clean Air Act was designed to ensure that the nation has strong public health standards -- like the revised NAAQS -- and to give States flexibility in how to meet those standards. The EPA will develop a recommended implementation strategy for the ozone and PM standards that builds upon approaches recommended by the States and other involved parties to take advantage of that flexibility and to help ensure common sense, cost-effective implementation. This will be done in accordance with the attachment to the President's Memorandum to EPA of July 16, 1997 ("President's Directive") which contained instructions on how EPA is to develop ozone and PM NAAQS implementation guidance. The Agency believes many potential impacts on small sources of air pollution can be lessened or even avoided through this strategy. Consistent with the President's Directive and to the extent possible, EPA plans to develop the necessary guidance and rules in ways that help and encourage States to minimize economic impacts on small sources. As EPA develops these rules and guidance, the final implementation strategies may differ from those described below.

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[1]"Memorandum for the Administrator of the Environmental Protection Agency on Implementation of Revised Air Quality Standards for Ozone and Particulate Matter," The White House, July 16, 1997.

[2]"Small sources" as used in the Memorandum includes small entities as defined by the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA). In the case of manufacturing, "small business" is generally defined as a business having less than 500 employees. "Small governmental jurisdiction" is generally defined as having a population of less than 50,000.

It is EPA's hope that as States proceed along the path to requiring sources to reduce emissions as needed to attain the revised NAAQS for ozone and PM, they recognize any potential adverse impacts on small sources. The EPA believes that reducing interstate air pollution through agreements like that of the Ozone Transport Assessment Group, along with Federal and State commitments already in place, could obviate the need for additional local controls on small sources. However, if States choose to control small sources when they ultimately implement the revised standards, EPA encourages them to exercise regulatory flexibility. The EPA also believes innovative approaches to air quality control can minimize adverse economic impacts on small sources by lowering emission control costs.

Potential Economic Impacts on Small Sources

The Clean Air Act (CAA), as amended in 1990, is designed so that the NAAQS are primarily implemented by States through State Implementation Plans (SIPs) containing specific control measures. The CAA also indicates that States are to follow the spirit of certain laws -- including the Regulatory Flexibility Act (RFA) which was recently amended by the Small Business Regulatory Enforcement and Fairness Act (SBREFA) -- in devising their SIPs (see CAA section 507(e)(1)(B)). This is particularly important in the context of implementing the new NAAQS. Since the NAAQS are primarily implemented by States, EPA can only analyze hypothetical implementation scenarios to provide an indicator of the potential impacts that would occur if States chose to regulate certain industrial sectors. The EPA expects that States will comply with the spirit of the RFA in developing their SIPs by analyzing the impact of proposed control measures on small entities and choosing air pollution controls in ways that minimize small entity economic impacts to the extent possible, consistent with attainment and maintenance of the standards.

In promulgating the revised ozone and PM NAAQS, EPA recognized that some small sources could be adversely impacted by implementation of the standards, depending on which control strategies States choose to achieve the necessary reductions in emissions. However, EPA believes that States will generally be able to achieve the necessary emission reductions without the need for controls on large numbers of small sources. With respect to nitrogen oxides (NO_x) reductions, EPA has recognized that utility and other large source emissions are the most likely initial target for control and that those emissions are most efficiently controlled through regional trading programs. To the extent that the CAA provides flexibility to the States to determine what sources to control, EPA expects States will consider controls on small sources only if such controls are as cost-effective as measures for larger sources.

Regional Control Strategies May Obviate the Need for Additional Local Controls

Through the work of the Ozone Transport Commission, the Ozone Transport Assessment Group (OTAG) and the Grand Canyon Visibility Transport Commission, we have learned that air quality problems in many areas are largely a result of pollution transported from other regions over long distances. Consequently, regional measures will be a critical component of any

attainment strategy for those areas. Cooperative planning among all States, tribes and localities contributing to common air quality problems is necessary to develop effective regional control plans. The EPA believes regional control strategies will reduce the costs of controls, in addition to creating greater parity across broad regions and among businesses by requiring reductions from all those who have been found to contribute to the pollution problem, not just those who happen to be located in nonattainment areas.

The EPA's regional implementation plan builds upon the agreement reached in June 1997 between 37 of the easternmost States through OTAG. Reducing interstate pollution will help many areas in the OTAG region meet the revised ozone standard. The central element of this plan is to reduce regional emissions of NO_x by employing a cap-and-trade system, similar to the current acid rain program mandated by Title IV of the CAA, that will lower the cost of reducing NO_x emissions. While States will ultimately determine how the NO_x reductions will be achieved, EPA believes that the most cost-effective strategies will significantly rely on reductions from utilities.

Regional reductions of NO_x emissions from utilities and other large sources using an emissions trading approach will clean the air faster and cheaper without imposing unfair burdens on local communities. The EPA and State air quality modeling shows that this large-utility strategy, along with Federal and State commitments already in place, will allow the majority of newly designated nonattainment areas to meet the new ozone standard without any additional local controls, thereby eliminating the need to locally control VOC emissions from small sources.

Regulatory Flexibility Can Lessen or Avoid Adverse Impacts on Small Sources

To the extent States consider controlling small sources, EPA believes there are many ways States can mitigate the potential adverse impacts those sources might experience. For example, States could choose to exempt less polluting categories of small sources or apply less stringent requirements to small sources. Examples of such exemptions can be seen in existing EPA air-toxic standards for the printing, hazardous waste, and pharmaceutical industries.[3] In these rules, EPA exempted small facilities or facilities with relatively low air emissions, or reduced the recordkeeping and monitoring burdens for smaller affected facilities. States could also extend the effective date for control requirements for small sources as long as such extensions do not interfere with statutory and regulatory requirements. Reductions needed earlier would be obtained from other sources, perhaps using the Clean Air Investment Fund approach

[3] Printing and Publishing Industry National Emission Standards for Hazardous Air Pollutants, 61 FR 27132 (May 30, 1996) (exempts several categories of printers); Hazardous Waste Treatment, Storage and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundment, and Containers, 61 FR 59932 (November 25, 1996) (reduced the recordkeeping and monitoring requirements for most affected units); Pharmaceuticals Production National Emission Standards for Hazardous Air Pollutants, Proposed Rule, 62 FR 15754 (April 2, 1997) (applies only to major sources; exempting smaller facilities).

described below or through the use of innovative technologies. In addition, applying the most cost-effective control technologies first would tend to exclude small sources which generally are among the least cost-effective to control. States could also choose to apply control requirements to other sources first, before requiring them for small sources. The EPA has also recently finalized guidance on incorporating voluntary mobile source emission reduction programs in SIPs[4]. The EPA believes voluntary mobile source measures have the potential to achieve cost-effective emission reductions needed for progress toward attainment and maintenance of the NAAQS, thereby lessening and possibly eliminating a State's need to control emissions from small sources.

Innovative Approaches to Air Quality Control Could Reduce Control Costs for Small Sources

The Agency has learned that market-based programs and incentives for new technology can ultimately achieve environmental and health benefits at a reasonable cost. The EPA is actively pursuing and encouraging adoption of innovative approaches to air quality control. These approaches have the potential to lower the costs of reducing emissions, thereby mitigating potential economic impacts on small sources of air pollution.

Market-Based Programs

States will have to look at their local mix of pollution sources -- both large and small -- and decide on the best strategies to achieve the most cost-effective emission reductions. The EPA has learned that market-based programs -- such as a regional cap-and-trade system -- and other kinds of economic incentives can dramatically cut emission control costs as compared to other approaches. The EPA also recognizes that establishing market-based programs can present many challenges, since they are complicated to design and administer. However, areas are encouraged to adopt market-based systems to meet their PM and ozone air quality goals because such systems allow emission reductions to be achieved using the most cost-effective controls. In addition, market-based programs provide continuous and powerful incentives to develop new technologies which might not become available under typical regulatory approaches. Moreover, for small sources with low pollution control costs, market-based approaches may provide additional sources of revenue (i.e., by sale of emission reduction credits to sources with high pollution control costs).

Cap-and-Trade Programs. Cap-and-trade programs, first incorporated into the Clean Air Act in 1990, harness market forces by allowing sources to decide how best to reduce their pollution. Under a cap-and-trade system, overall emissions levels are set to protect public health. Credits are then allocated to the sources operating in the area subject to the cap. Each source can

[4] "Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (SIPs)," Memorandum from Richard D. Wilson to EPA Regional Administrators, October 23, 1997.

then make the most cost-effective decision about emissions control. They can choose to install controls that lower their emissions below the allocation and then sell their excess allowances. Conversely, sources that find installing controls too expensive can purchase excess credits from other sources to meet the control level. The acid rain program and the lead and chlorofluorocarbon (CFC) phase-out programs are all examples of the ability of market-based programs to provide environmental protection at lower cost.

Market-based systems the Agency believes could potentially be in place 10 years from now include:

- Clean Air Investment Funds (described below)
- Cap-and-trade systems for NO_x in eastern (OTAG) and for SO_2 in western (Grand Canyon) regions;
- Cap-and-trade system for SO_2 to implement the fine particulate matter standard (building on the current acid rain program);
- Cap-and-trade systems for volatile organic compounds (VOC) in major metropolitan areas (modeled on the Chicago program now being adopted); and
- "Open market" trading to bring in cost-reducing emission control opportunities from smaller or unconventional sources outside of the cap-and-trade programs.

Clean Air Investment Funds. Another example of a market-based strategy that could reduce control costs without sacrificing pollution control is an investment fund strategy. "Clean Air Investment Funds" could be established to enable sources to purchase emission credits. Sources facing costs greater than a specified amount would have the option to contribute that amount to the Fund, rather than installing emission controls. The Clean Air Investment Fund would then use these revenues to encourage other more cost-effective sources in the area to make reductions. Such inducements could come in many forms. The Fund could provide rebates for the purchase of cleaner products to replace older more polluting sources. Large-scale small engine (lawn mowers and other such equipment) buy-back programs or funding the cost of mass transit vehicle engine retrofits are other such examples. Other investment opportunities for the Fund include**:** utility and industrial boiler SO_2 and NO_x reductions beyond the acid rain program levels for SO_2 and beyond the .15 lb/MMBTU level for NO_x **;** use of more stringent leak detection programs to control fugitive emissions at chemical plants, refineries, and other large sources of ozone and PM precursors**;** and additional use of low- or no-VOC coatings.

The EPA is developing guidance on the Clean Air Investment Fund concept and market-based Economic Incentive Programs as part of the Agency's recommended implementation strategy for the revised ozone and PM NAAQS. The guidance is expected to be completed by December 1998.

Innovative Technologies

The EPA believes that new technologies, new products, and new production processes will play key roles in meeting the revised NAAQS -- with the added benefit of dramatically lowering future implementation costs for all sources. The EPA identified over 100 emerging technologies for lower emissions and cheaper emissions control in the Regulatory Impact Analysis for the final ozone and PM NAAQS. The EPA can help create a demand for clean technologies through encouragement of market-based policies which create a market for the most efficient, best performing technologies.

Compliance Assistance

The EPA and States will also continue to provide compliance assistance to small businesses through compliance assistance programs and guidelines designed specifically for small businesses. Under section 507 of the CAA, each State has established a Small Business Stationary Source Technical and Environmental Compliance Assistance Program to aid small businesses impacted by air quality regulations. The EPA air office supports these State programs through activities such as providing electronic access to EPA small business assistance information and materials through the World Wide Web, developing plain English guidance materials to explain new CAA requirements, and the presentation of educational satellite downlink seminars on new air regulations. Compliance assistance activities and tools developed by the EPA Office of Compliance include: a policy on compliance incentives to promote environmental compliance among small businesses by providing special incentives; a policy on incentives for self-policing to encourage self-audits, disclosure and correction of environmental violations; small business compliance assistance centers to provide one-stop shopping to receive comprehensive, easy to understand compliance information; sector notebooks profiling selected industries; and several dry cleaning sector initiatives including plain English guides, educational materials and translations of the regulations in several languages. The EPA will also update the existing EPA pollution-control technology clearinghouses to include information on innovative technologies. In addition, EPA's enforcement penalty policy also makes allowances for size and ability to pay. The EPA believes enforcement penalty funds could be used to establish mechanisms for small sources to finance the cost of controls.