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BEFORE THE
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AND
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Messrs. Chairmen, Members of the Subcommittees, thank you for inviting me to discuss implementation plans for the Environmental Protection Agency's (EPA's) revisions to the national ambient air quality standards for ground-level ozone and particulate matter.

As you know, the Clean Air Act directs EPA to set national standards for certain air pollutants to protect public health and the environment. For each of these pollutants, Congress directed EPA to set what are known as "primary" standards to protect public health without consideration of cost. Under the Act, Congress directs EPA to review these standards every five years to determine whether the latest scientific research indicates a need to revise the standards.

In July of this year, I set new standards for ozone and particulate matter that will be a major step forward in public health and welfare protection. Each year, these updated standards have the potential to prevent as many as 15,000 premature deaths, and hundreds of thousands of cases of significantly decreased lung function in children and cases of aggravated asthma.

Numerous other public health and welfare benefits will result from implementation of the new standards. Additional public health benefits would include: reduced respiratory illnesses, reduced acute health effects, reduced cancer from air toxics reductions, and various other public health benefits. Public welfare benefits will include: reduced adverse effects on vegetation, forests, and natural ecosystems, improved visibility, and protection of sensitive waterways and estuaries from deposition of airborne nitrogen that can cause algal blooms, fish kills, and loss of aquatic vegetation. Estimated total monetized health and public welfare benefits associated with the new standards are enormous, ranging in the tens of billions of dollars annually. Many additional potentially large benefit categories, such as reduced chronic respiratory damage, infant mortality, and other health and welfare benefit categories, cannot be monetized.

The new ozone and particulate matter standards are based on an extensive scientific and public review process. Congress directs EPA to consult with an independent scientific advisory board, the Clean Air Scientific Advisory Committee (CASAC). In conducting these reviews, EPA analyzed thousands of peer-reviewed scientific studies that had been published in well-respected scientific journals. These studies were then synthesized and, along with a recommendation on whether the existing standards were adequately protective, presented to CASAC. After three-and-a-half years of work, 11 meetings totaling more than 125 hours of public discussion, and based on 250 of the most relevant studies, the CASAC panel concluded that EPA's air quality standards for ozone and particulate matter should be revised. CASAC unanimously supported changing the ozone standards from a 1-hour averaging period to an 8-hour average to reflect increasing concern over prolonged exposure to ozone.

CASAC also supported adding a fine particle standard. Fine particles are inhaled deeply into the lungs and are more strongly associated with serious health effects and visibility impairment than larger particles.

Based on scientific evidence reviewed by EPA and CASAC, EPA proposed revised standards and conducted an extensive public comment process, receiving approximately 57,000 comments at public hearings across the country and through written, telephone and E-mail message communications.

After carefully considering the results of this extensive process, and with the support of the President, I issued a final rule updating the ozone standard from 0.12 parts per million (ppm) of ozone measured over one hour to a standard of 0.08 ppm measured over eight hours, with the three-year average of the annual fourth highest concentration determining whether an area is out of compliance. The new standard will reduce "flip-flopping" in and out of attainment by changing it from an "expected exceedance" to a "concentration-based" form.

For particulate matter, EPA has added new standards for particles smaller than 2.5 micrometers in diameter (known as "PM-2.5" or fine particles). The fine particle standard has two components: an annual standard, set at 15 micrograms per cubic meter and a 24-hour standard, set at 65 micrograms per cubic meter. EPA has also changed the form of the current 24-hour PM-10 standard; this will provide some additional stability and flexibility to states in meeting that standard.

We believe it is critical to move forward with these standards now. The American public deserves to know whether its air is healthy or not. The standards we have set serve as an essential benchmark for people to use in understanding whether the air they are breathing is safe. In addition, the implementation plan for the standards will

encourage early action to help reduce adverse health effects as soon as possible. By setting the standards, states will now be able to proceed with the monitoring and planning requirements over the next several years. PM-2.5 areas can begin to develop inventories and characterize the nature of their PM-2.5 problem. As I will now discuss, the President has directed EPA to undertake an implementation strategy that has been developed through an extensive interagency consultative process to assure that concerns of state and local governments and affected industries, such as transportation and agriculture, are addressed. This strategy will allow states and local areas the time they need to implement these standards in a cost-effective and reasonable way.

Implementation of the Revised Air Standards

In evaluating the changes to these air quality standards, I believed that it was critical to develop a common sense implementation plan. Because of the vital importance to states, cities, and industry, we believed that early implementation guidance should be given and that implementation be done in a flexible, cost-effective way. In the interagency process leading up to the issuance of these standards, EPA worked with other federal agencies to develop a strategy for implementing the standards. In a memorandum signed July 16, 1997, President Clinton set forth several general principles for implementing the standards, and directed EPA to follow the interagency implementation strategy. I would like to summarize the principal features of that strategy for you today.

Achieving the air quality benefits of the updated standards requires a common sense, cost-effective means for communities and businesses to meet the standards. We believe it is important that these standards be implemented in the most flexible, reasonable and least burdensome manner. The President's implementation

package has four basic features, all of which can be carried out under existing legal authority:

- “1. Implementation of the air quality standards is to be carried out to maximize common sense, flexibility, and cost effectiveness;
2. Implementation shall ensure that the Nation continues its progress toward cleaner air by respecting the agreements already made by States, communities, and businesses to clean up the air, and by avoiding additional burdens with respect to the beneficial measures already underway in many areas.

Implementation also shall be structured to reward State and local governments that take early action to provide clean air to their residents; and to respond to the fact that pollution travels hundreds of miles and crosses many State lines;

3. Implementation shall ensure that the Environmental Protection Agency (‘Agency’) completes its next periodic review of particulate matter, including review by the Clean Air Scientific Advisory Committee, within 5 years of issuance of the new standards, as contemplated by the Clean Air Act. Thus, by July 2002, the Agency will have determined, based on data available from its review, whether to revise or maintain the standards. This determination will have been made before any areas have been designated as ‘nonattainment’ under the PM-2.5 standards and before imposition of any new controls related to the PM-2.5 standards; and

4. Implementation is to be accomplished with the minimum amount of paperwork and shall seek to reduce current paperwork requirements wherever possible.”

Strategy for Meeting the Revised Ozone Standard

Ozone and ozone precursors travel great distances and it is increasingly important to address them as a regional problem. For the past two years, EPA has been working with the 37 most eastern states through the Ozone Transport Assessment Group (OTAG) in the belief that reducing interstate pollution will help all areas in the OTAG region attain the NAAQS. A regional approach can reduce compliance costs and allow areas to avoid most traditional local nonattainment planning requirements. The OTAG was an effort sponsored by the Environmental Council of States, with the objective of assessing ozone transport and recommending strategies for mitigating interstate pollution.

The OTAG completed its work in June 1997 and forwarded recommendations to EPA. Based on these recommendations, EPA will soon propose a rule requiring states in the OTAG region that are significantly contributing to nonattainment, or interfering with maintenance of attainment, in downwind states to submit state implementation plans (SIPs) to reduce their interstate pollution. EPA will issue the final rule by September 1998.

EPA will encourage and assist the states to develop and implement a cap and trade program for nitrogen oxides (Nox), including developing a model program with the states. A regional emissions cap and trade system, similar to the current acid rain program, is expected to achieve cost-effective reductions for meeting the new standards. Most important, based on EPA's review of the latest modeling, a regional approach, coupled with the implementation of other already existing state and Federal Clean Air Act requirements, will allow the vast majority of areas that currently meet the 1-hour standard but would not otherwise meet the new 8-hour ozone standard to achieve healthful air quality without further local controls.

Areas in the OTAG region that would still exceed the new standard after the regional strategy, including areas that do not meet the current 1-hour standard, will benefit as well, because the regional NO_x program will reduce the extent of additional local measures needed to achieve the 8-hour standard. In many cases these regional reductions may be adequate to meet CAA progress requirements for a number of years, allowing areas to defer additional local controls.

Phase-out of 1-hour Ozone Standards

EPA's revised ozone standard will replace the current 1-hour standard with an 8-hour standard. However, the 1-hour standard will continue to apply to areas not attaining it for an interim period to ensure an effective transition to the new 8-hour standard.

As you know, the Clean Air Act includes provisions (Subpart 2 of part D of Title I) that address requirements for different nonattainment areas that do not meet the 1-hour standard (i.e., those classified as marginal, moderate, serious, severe and extreme). These requirements include such items as mandatory control measures, annual rate of progress requirements for emission reductions and emission offset requirements for new sources. All of these requirements have contributed significantly to the improvements in air quality since 1990. Although EPA initially proposed an interpretation of the Clean Air Act that would have been more flexible in how these provisions applied to existing ozone nonattainment areas after promulgation of a new ozone standard, based on comments received, EPA has reconsidered its interpretation and EPA has concluded that these provisions should continue to apply as a matter of law for the purpose of achieving attainment of the 1-hour standard. Once an area attains the 1-hour standard, those provisions and the 1-hour standard will no longer

apply to that area. An area's implementation of the new 8-hour standard would then be governed by the provisions of Subpart 1 of Part D of Title I.

The purpose of retaining the current standard is to ensure a smooth transition to the new standard. It is important not to disrupt the controls that are currently in place as well as those that are underway to meet the current ozone standard. These controls will continue to be important for reaching the new 8-hour standard.

General Time Line for Meeting the Ozone Standard

Following promulgation of a revised NAAQS, the Clean Air Act provides up to three years for state governors to recommend and EPA to designate areas according to their most recent air quality. In addition, states will have up to three years from designation to develop and submit SIPs to provide for attainment of the new standard. Under this approach, areas would be designated as nonattainment for the 8-hour standard by July 2000 and would be required to submit their nonattainment SIP by July 2003. The Act allows up to 10 years plus two 1-year extensions from the date of designation for areas to attain the revised NAAQS.

Transitional Classification

For areas that attain the 1-hour standard but not the new 8-hour standard, EPA will follow a flexible implementation approach that encourages cleaner air sooner, responds to the fact that ozone is a regional as well as local problem, and eliminates unnecessary planning and regulatory burdens for state and local governments. A primary element of the plan will be the establishment under Section 172(a)(1) of the CAA of a special "transitional" classification for areas that participate in a regional strategy and that opt to submit early plans to attain the new 8-hour standard. Because many areas will need little or no additional new local emission reductions to reach

attainment, beyond those reductions that will be achieved through the regional control strategy, and will come into attainment earlier than they otherwise might be required, EPA will exercise its discretion under the law to eliminate unnecessary local planning requirements for such areas. EPA will revise its rules for new source review (NSR) and conformity so that states will be able to comply with only minor revisions to their existing programs in areas classified as transitional. During this rulemaking, EPA will also reexamine the NSR requirements applicable to existing nonattainment areas, in order to deal with issues of fairness among existing and new nonattainment areas. The transitional classification would be available for any area attaining the 1-hour standard but not attaining the 8-hour standard as of the time EPA promulgates designations for the 8-hour standard. In terms of process, areas would follow the approaches described below based on their status.

(1) Areas attaining the 1-hour standard, but not attaining the 8-hour standard, that would attain the 8-hour standard through the implementation of the regional NO_x transport strategy for the East.

Based on the OTAG analyses, areas in the OTAG region that would reach attainment through implementation of the regional transport strategy would not be required to adopt and implement additional local measures. When EPA designates these areas under section 107(d), it will place them in the new transitional classification if they would attain the standard through implementation of the regional transport strategy and are in a state that by 2000 submits an implementation plan that includes control measures to achieve the emission reductions required by EPA's rule for states in the OTAG region. This is three years earlier than an attainment SIP would otherwise be required. We anticipate that we will be able to determine whether such areas will attain

the revised ozone standard based on the OTAG and other regional modeling and that no additional local modeling would be required.

(2) Areas attaining the 1-hour standard but not attaining the 8-hour standard for which a regional transport strategy is not sufficient for attainment of the 8-hour standard.

To encourage early planning and attainment for the 8-hour standard, EPA will make the transitional classification available to areas not attaining the 8-hour standard that will need additional local measures beyond the regional transport strategy, as well as to areas that are not affected by the regional transport strategy, provided they meet certain criteria. To receive the transitional classification, these areas must submit an attainment SIP prior to the designation and classification process in 2000. The SIP must demonstrate attainment of the 8-hour standard and provide for the implementation of the necessary emissions reductions on the same time schedule as the regional transport reductions.

(3) Areas not attaining the 1-hour standard and not attaining the 8-hour standard.

The majority of areas not attaining the 1-hour standard have made substantial progress in evaluating their air quality problems and developing plans to reduce emissions of ozone-causing pollutants. These areas would be eligible for the transitional classification provided that they attain the 1-hour standard by the year 2000 and comply with EPA's regional transport rule, as applicable.

Areas not Eligible for the Transitional Classification

Existing nonattainment areas which cannot attain the 1-hour standards by 2000 will not be eligible for the transitional classification. However, their work on planning and control programs to meet the 1-hour standard by their current attainment date will

take them a long way toward meeting the 8-hour standard. While areas will need to submit an implementation plan for achieving the 8-hour standard within three years of designation as nonattainment for the new standard, such a plan can rely in large part on measures needed to attain the 1-hour standard. For virtually all of these areas, no additional local control measures beyond those needed to meet the requirements of Subpart 2 and needed in response to the regional transport strategy would be required to be implemented prior to their applicable attainment date for the 1-hour standard. This approach allows them to make continued progress toward attaining the 8-hour standard throughout the entire period without requiring new additional local controls for attaining the 8-hour standard until the 1-hour standard is attained.

Implementing the New Particulate Matter Standards

Implementing the new particulate matter standards will require a different path from the one I just discussed for ozone. As required under the Act, within the next 5 years EPA will complete the next periodic review of the particulate matter criteria and standards, including review by the CASAC. As with all NAAQS reviews, the purpose is to update the pertinent scientific and technical information and to determine whether it is appropriate to revise the standards in order to protect the public health with an adequate margin of safety or to protect the public welfare. EPA has concluded that the current scientific knowledge provides a strong basis for the revised PM-10 and new PM-2.5 standards. We, along with the Departments of Transportation, Health and Human Services, Energy, and others, will continue to sponsor research to better understand the causes and mechanisms of fine particles effects on human health, and the species and sources of PM-2.5. EPA will also promptly initiate a new review of the scientific criteria on the effects of airborne particles on human health and the

environment. By July 2002, we will have determined, based on data available from its review, whether to revise or maintain the standards. This determination will have been made before any areas have been designated nonattainment under the PM-2.5 standards and before imposition of any new controls related to the PM-2.5 standards.

Implementation of New PM-2.5 NAAQS

The first priority for implementing the new PM-2.5 standard is establishing a comprehensive monitoring network to determine ambient fine particle concentrations across the country. The monitoring network will help EPA and the states determine which areas do not meet the new air quality standards, what the major sources of PM-2.5 in various regions are, and what action is needed to clean up the air. EPA and the states will consult with affected stakeholders on the design of the network and will then establish the network, which will consist of approximately 1,500 monitors. All monitors will provide for limited "speciation," or analysis of the chemical composition, of the particles measured. At least 50 of the monitors will provide for a more comprehensive speciation of the particles. EPA will work with states to deploy the PM-2.5 monitoring network. Our intent will be to work with states to ensure that monitors are placed in urban areas with the most significant population exposures and generally not in agricultural areas. The EPA will fund the cost of purchasing the monitors, as well as the cost of analyzing particles collected at the monitors to determine their chemical composition.

Because we are establishing standards for a new indicator for particulate matter (i.e., PM-2.5), it is critical to develop the best information possible before attainment and nonattainment designation decisions are made. Three calendar years of federal reference monitoring data will be used to determine whether an area does or does not

attain the new PM-2.5 standards. In view of the time needed to establish the network and collect data, EPA expects that three years of PM-2.5 monitoring data will not be available until between 2001 and 2004, depending on when monitors are installed in a given locality. Therefore, actual designations of attainment or nonattainment will not take place until between 2002 and 2005. The Clean Air Act, however, requires that EPA make designation determinations (i.e., attainment, nonattainment, or unclassifiable) within two to three years of revising a NAAQS. To fulfill this requirement, in 1999 EPA will issue "unclassifiable" designations for PM-2.5. These designations will not trigger the nonattainment planning or control requirements of Title I of the Act.

When EPA designates nonattainment areas for PM-2.5 pursuant to the governors' recommendations beginning in 2002, areas will be allowed three years to develop and submit to EPA pollution control plans showing how they will meet the new standards. As for ozone, areas will have up to 10 years from the date of being redesignated as nonattainment until they will have to attain the PM-2.5 standards. In addition, two 1-year extensions are possible.

In developing strategies for attaining the PM-2.5 standards, it will be important to focus on measures that decrease emissions that contribute to regional pollution. Available information indicates that nearly one-third of the areas projected to not meet the new PM-2.5 standards, primarily in the Eastern U.S., could come into compliance as a result of the regional SO₂ emission reductions already mandated under the Clean Air Act's acid rain program, which will be fully implemented between 2000 and 2010. Similarly, the Grand Canyon Visibility Transport Commission, consisting of western states and tribes, committed to reductions in regional emissions of PM-2.5 precursors (sulfates, nitrates, and organics) to improve visibility across the Colorado Plateau.

As detailed PM-2.5 air quality data and data on the chemical composition of PM-2.5 in different areas become available, EPA will work with the states to analyze regional strategies that could reduce PM-2.5 levels. If further cost-effective regional reductions help areas meet the new standard, EPA will encourage states to work together to use a cap and trade approach similar to that used to curb acid rain. The acid rain program delivered environmental benefits at a greatly reduced cost than originally anticipated by EPA and industry.

Given the regional dimensions of the PM-2.5 problem, local governments and local businesses should not be required to undertake unnecessary planning and local regulatory measures when the problem requires action on a regional basis. Therefore, as long as the states are doing their part to carry out regional reduction programs, the areas that would attain the PM-2.5 standards based on full implementation of the acid rain program will not face new local requirements. Early identification of other regional strategies could also assist local areas in completing their programs to attain the PM-2.5 standards after those areas have been designated nonattainment.

The EPA will also encourage states to coordinate their PM-2.5 control strategy development and efforts to protect regional visibility. Visibility monitoring and data analysis will support both PM-2.5 implementation and the visibility program.

Implementation of Revised PM-10 NAAQS

In its rule, EPA revised the current set of PM-10 standards. Given that health effects from coarse particles are still of concern, the overall goal during this transition period is to ensure that PM-10 control measures remain in place to maintain the progress that has been achieved toward attainment of the current PM-10 NAAQS (and which provides benefits for PM-2.5) and protection of public health. To ensure that this

goal is met, the existing PM-10 NAAQS will continue to apply until actions by EPA, and by states and local agencies, are taken to sustain the progress already made.

Cost-Effective Implementation Strategies

Consistent with states' ultimate responsibility to attain the standards, EPA will encourage the states to design strategies for attaining the particulate matter and ozone standards that focus on getting low cost reductions and limiting the cost of control to under \$10,000 per ton for all sources, which is the high end of the range of reasonable cost to impose on sources. Market-based strategies can be used to reduce compliance costs. EPA will work with states to develop a model program for a Clean Air Investment Fund, which would allow sources facing control costs higher than \$10,000 a ton for any of these pollutants to pay a set annual amount per ton to fund cost-effective emissions reductions from non-traditional and small sources. Compliance strategies like this will likely lower the costs of attaining the standards through more efficient allocation, minimize the regulatory burden for small and large pollution sources, and serve to stimulate technology innovation as well.

Future Activities

In accordance with the President's July 16th directive, to ensure that the final details of the implementation strategy are practical, incorporate common sense, and provide for appropriate steps toward cleaning the air, input is needed from many stakeholders including representatives of state and local governments, industry, environmental groups, and Federal agencies. EPA will continue seeking advice from a range of stakeholders and, after evaluating their input, propose the necessary guidance to make these approaches work. In particular, EPA will continue working with the

Subcommittee on Implementation of Ozone, Particulate Matter and Regional Haze Rules which EPA established to help develop innovative, flexible and cost-effective implementation strategies. Moreover, EPA will continue to work with a number of Federal agencies to ensure that those agencies comply with these new standards in cost-effective, common sense ways. EPA plans to issue all guidance and rules necessary for this implementation strategy by the end of 1998.

EPA will continue to work with the Small Business Administration (SBA) because small businesses are particularly concerned about the potential impact resulting from future control measures to meet the revised PM and ozone standards. EPA, in partnership with SBA, will work with the states to include in their SIPs flexible regulatory alternatives which minimize the economic impact and paperwork burden on small businesses to the greatest possible degree consistent with public health protection.

Legal Authority for Implementation

Messrs. Chairmen, you asked that I address the legal basis for the Administration's implementation strategy for these revised standards. This implementation strategy was subject to careful legal review by EPA and EPA believes that it is properly based within the authority Congress has provided under the Clean Air Act, and general principles of administrative law and statutory construction. As you are aware, Title I of the Clean Air Act establishes the steps that EPA and States must take once a new national ambient air quality standard is established. Under section 107 of the Clean Air Act, EPA must designate areas two years after promulgation of a new or revised standard, but may take an additional year if there is insufficient information to promulgate the designations. For areas designated as nonattainment, the general planning provisions of Subpart 1 of Part D of the Act apply. In particular, section 172(b)

requires EPA to establish a deadline not later than 3 years from the date an area is designated for states to submit plans showing how they will meet the new or revised standards. Subpart 1 provides ample room for flexibility in implementation. EPA has historically developed policy and guidance documents to further delineate these and other planning requirements for states.

As discussed earlier, part of the Administrations's approach to implementing the new 8-hour ozone standard will include a "transitional" classification. Section 172(a) provides EPA with discretion to create classifications for areas designated as nonattainment. Classifications may be created for the purpose of establishing attainment dates or for other purposes. In developing such a classification scheme, EPA has the authority under the Clean Air Act and generally applicable legal principles to interpret and apply the provisions of Subpart 1, including new source review and transportation conformity, in a way that recognizes the particular circumstances of areas. As previously explained, areas that have attained the 1-hour ozone standard, but that have air quality that violates the 8-hour standard, will be eligible for this transitional classification.

Conclusions

In summary, EPA believes that the new ozone and particulate matter standards will provide important new health protection and will improve the lives of Americans in coming years. Our implementation strategy will ensure that these new standards are implemented in a common sense, cost-effective and flexible manner. We intend to

work closely with state and local governments, other Federal agencies and all other interested parties to accomplish this goal.

Messrs. Chairmen, this concludes my written statement. I will be happy to answer any questions that you might have.