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## FACT SHEET

### DRAFT IMPLEMENTATION GUIDANCE FOR THE REVISED GROUND-LEVEL OZONE AND PARTICULATE MATTER NATIONAL AMBIENT AIR QUALITY STANDARDS AND A REGIONAL HAZE PROGRAM

#### TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing draft planning guidance for States to use in designing air pollution control strategies to meet EPA's revised air quality standards for ground-level ozone (smog) and particulate matter (PM).
- ! EPA is making the guidance available for a 30-day public comment period, which will begin on the date EPA publishes a notice of availability in the Federal Register. EPA will publish the notice shortly.
- ! This draft guidance includes both revisions to the draft guidance on ozone and PM that the Agency issued in August 1998, as well as new draft guidance. The main components of this guidance include:
  - # Categories for classifying areas that do not meet the ozone or PM standards, including anticipated designation and classification dates, anticipated dates for States to submit revisions to State implementation plans (SIP) and anticipated compliance and attainment dates;
  - # Details of the State implementation plan requirements for certain categories of areas designated as nonattainment for ozone and PM;
  - # EPA's recommendation for identifying the boundaries for areas that do not meet the revised 8-hour ozone standard.
- ! EPA has consolidated today's new draft guidance with the draft guidance the Agency issued in August 1998 related to the revised ozone and PM standards and the regional haze program. EPA expects to issue one final consolidated guidance document in February 1999.
- ! This guidance reflects President Clinton's July 16, 1997 memorandum to EPA Administrator Browner to develop an implementation strategy for the revised air quality standards by the end of 1998.

## **WHAT DOES THE DRAFT GUIDANCE REQUIRE FOR (GROUND-LEVEL) OZONE NONATTAINMENT AREAS?**

- ! This draft guidance describes how and when EPA will determine “nonattainment” status for areas that do not meet the revised 8-hour ozone standard. It will also outline the implementation requirements for these nonattainment areas.

### **HOW WILL EPA DETERMINE WHETHER OR NOT AN AREA ATTAINS THE OZONE STANDARD?**

- ! EPA will determine that an area has met the 8-hour ozone standard when the monitoring site(s) in that area show that the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm. EPA will determine this area to be in attainment of the standard when every monitoring site in the area meets these requirements.
- ! By July 2000, EPA will classify all areas of the country that do not meet the 8-hour ozone standard into one of the three categories of nonattainment described below.
- ! EPA’s draft guidance requires States to submit a revised SIP for areas that are in nonattainment of the 8-hour standard to ensure that all emission control measures needed for attainment are in place at the beginning of the ozone season in the first year of the 3-year period from which data are averaged to show attainment. For example, for an area that is in nonattainment of the ozone standard in 2000 to come into attainment by 2007, its SIP would have to ensure that controls are in place by the beginning of the ozone season of 2005, and the data from 2005, 2006, and 2007 would be averaged together to determine whether the area actually came into attainment in 2007.
- ! This method of determining attainment status differs substantially from the method EPA proposed in its August 1998 draft guidance. That draft proposed that the SIP provide an attainment date one year after the date States were required to implement all of the emission control measures needed for attainment. This draft guidance proposes an attainment date three years after the date that States are required to implement all of the emission control measures needed for attainment.

### **WHAT IS EPA’S PROPOSED CLASSIFICATION SCHEME FOR AREAS THAT DO NOT MEET THE 8-HOUR OZONE STANDARD?**

- ! Under the 1-hour ozone standard, EPA classified nonattainment areas under one of several categories: extreme, severe, serious, moderate, and marginal. Those categories were tied to

specific congressionally mandated deadlines and emission control requirements. When EPA revises an air quality standard, the Clean Air Act provides EPA with the ability to establish new deadlines and a revised classification scheme to better reflect the challenges associated with the revised standard.

Under the 8-hour standard, EPA proposes to classify nonattainment areas in one of three categories: transitional, traditional, and international transport.

### **Nonattainment Areas Classified as “Transitional”**

- # An area can seek “transitional” classification provided that, by 2000, it meets the 1-hour standard (and thus EPA has revoked that standard for that area) and submits an early plan meeting the various requirements outlined below.
- # For areas in the eastern U.S. projected to meet the revised ozone standard based on EPA’s September 1998 rule requiring regional reductions of nitrogen oxides (a precursor to ozone formation known as NO<sub>x</sub>), areas that wish to be classified as “transitional” will have to submit by September 30, 1999, a plan in response to the NO<sub>x</sub> rule. In addition, the draft guidance allows these areas to submit by May 1, 2000 documentation referencing EPA air quality modeling showing that the area will meet the 8-hour standard as a result of the September 1998 regional NO<sub>x</sub> rule.
- # For other areas covered by EPA’s September 1998 regional NO<sub>x</sub> rule, the revised State implementation plan for areas that wish to be classified as “transitional” will be due in two phases. First, each State must submit an implementation plan in response to the September 1998 regional NO<sub>x</sub> rule. By May 2000, each State must submit a SIP that includes additional control measures sufficient to show attainment.
- # For areas outside the twenty-two State region covered by the September 1998 regional NO<sub>x</sub> rule, the revised State implementation plan for areas that wish to be classified as “transitional” will be due by May 2000 and will consist primarily of the additional emission control measures needed for attainment.
- # For “transitional” areas, EPA anticipates the attainment date will be no later than December 31, 2005 and the implementation date will be no later than May 1, 2003.

### **Nonattainment Areas Classified as “Traditional”**

- # No special qualifications are required for an area to be classified as “traditional.” If an area does not qualify for or does not pursue one of the other two classifications, then

EPA will classify the area as “traditional.” Areas that are nonattainment for only the 8-hour ozone standard where the 1-hour standard has been revoked and areas that are nonattainment for the 8-hour standard where the 1-hour standard has not been revoked can be classified as “traditional.” Areas designated nonattainment for the 1-hour standard will need to continue to implement all the programs currently required under the Clean Air Act (e.g., rate of progress improvements, etc.) for that standard.

# Areas classified as “traditional” will be required to submit by July 2003 their plans demonstrating how they will attain the 8-hour ozone standard. Under this draft guidance, the following deadlines will apply for areas categorized as “traditional”:

1) Attainment by December 31, 2007 (with a final date for implementation of all control measures by May 1, 2005)

- For areas designated nonattainment for only the 8-hour standard;
- For areas that are designated nonattainment for only the 8-hour standard that have not yet had the 1-hour standard revoked; and
- For areas that are designated nonattainment for both standards that have or receive attainment dates up to 2003 under the 1-hour standard.

2) Attainment by December 31, 2009 (with a final date for implementation of all control measures by May 1, 2007)

- For areas that are nonattainment for both standards and classified as “severe-15” for the 1-hour standard.

3) Attainment by December 31, 2010 (with a final date for implementation of all control measures by May 1, 2008)

- For areas that are nonattainment for both standards and classified as “severe 17” for the 1-hour standard.

4) Attainment by December 31, 2010 (with a final date for implementation of all control measures to be determined)

- For the area that is nonattainment for both standards and classified as “extreme” for the 1-hour standard.

#### **Nonattainment Areas Classified as “International Transport”**

# Certain areas affected by emissions from another country (e.g., Mexico) may be classified as “international transport” areas. These areas may include those that are nonattainment for only the 8-hour ozone standard where the 1-hour standard has been

revoked and areas that are nonattainment for the 8-hour standard where the 1-hour standard has not been revoked.

- # Such an area must submit a plan by July 2003 that shows that it would attain the 8-hour ozone standard but for international emissions. EPA anticipates an attainment date for these areas of no later than December 31, 2007, with a final date for implementation of all measures by May 1, 2005.

### **WHAT IS EPA'S POLICY REGARDING IMPLEMENTATION OF CONTROL MEASURES UNDER THE REVISED STANDARD FOR OZONE?**

- ! The Clean Air Act requires all nonattainment area SIPs to provide for all reasonably available control measures, as expeditiously as practicable, for attainment of the air quality standards.
- ! Under the 8-hour ozone standard, if an area demonstrates it can attain the standard with the emission control measures in its State implementation plan, then EPA will consider that the area has met the Clean Air Act's requirements for "reasonably available control measures" and additional measures will not be required.

### **WHAT ARE THE STATE IMPLEMENTATION PLAN REQUIREMENTS FOR AREAS THAT ARE DESIGNATED AS "NONATTAINMENT" FOR THE REVISED OZONE STANDARD?**

#### **"Transitional" Nonattainment Areas**

#### **! Attainment demonstration.**

(1) For areas that attain the 8-hour ozone standard through EPA's regional NO<sub>x</sub> reduction rule, the State can rely on EPA air quality modeling for that rule as the demonstration (unless the State elects to do its own modeling).

(2) Areas included in the twenty-two eastern states covered by EPA's September 1998 regional NO<sub>x</sub> rule that need additional emission control measures (beyond those achieved under the NO<sub>x</sub> rule) to meet the ozone standard must submit a revised plan that uses existing data and analyses to show attainment with a technique EPA has developed (unless the State elects to do its own modeling).

(3) Areas included in the air quality modeling for EPA's September 1998 regional NO<sub>x</sub> rule, but not required to make emissions reductions under the rule, may also use the streamlined modeling technique if it projects air quality levels to be close to the level of

the standard, but must do additional analyses if projected air quality concentrations are much greater than the standard.

(4) Areas outside the region not covered by modeling for EPA's September 1998 regional NOx rule can follow attainment demonstration guidance also being made available.

- ! **Reasonably available control measures.** For areas projected to attain the 8-hour ozone standard through EPA's September 1998 regional NOx rule, this requirement will be met if a State submits a revised State implementation plan, as required by the rule. If an area needs measures for attainment beyond the emissions reductions required by the rule, this requirement will be met if the area submits a plan including the additional measures needed for attainment.
  
- ! **Transportation conformity.** The plan for "transitional" areas must contain a transportation conformity "budget" (i.e., the amount of emissions an area can emit from cars, trucks, and other on-road vehicles) based on an area's plan to demonstrate attainment with the ozone standard. EPA intends to issue a future rulemaking that will provide the details of how transportation conformity will work for these areas.
  
- ! **Reasonable further progress.** For areas projected to attain the ozone standard through EPA's September 1998 regional NOx reduction rule, the "reasonable further progress" requirement will be met if the State achieves the emissions reductions on the schedule contained in that rule (May 1, 2003) and tracks the emission reductions to ensure they are achieved. For areas where additional measures are needed to attain or EPA's rule does not apply, EPA will consider "reasonable further progress" to be implementation of the emission reductions needed for attainment by the implementation date (May 1, 2003 for "transitional" areas).
  
- ! **New source review.** Under the Clean Air Act, there are specific requirements for newly built facilities or those that make a major modification. EPA will address these "new source review" requirements under the revised 8-hour ozone standard in a future rulemaking.
  
- ! **Contingency measures.** Generally the NOx reductions required in areas projected to attain as a result of the September 1998 regional NOx reduction rule will provide sufficient emission reductions to meet the contingency measure requirement. For other areas, contingency measures for failure to attain will consist of emission reductions of the ozone precursor providing most of the emission reductions needed for attainment.

## **“Traditional” Nonattainment Areas**

- ! **Attainment demonstration.** Areas that are classified as “traditional” must submit a plan that includes emission limits and other measures necessary to provide for attainment. The plan must also include emissions inventories and the use of a photochemical dispersion model, or equivalent analysis, to identify reductions in precursor emissions which contribute to the formation and transport of ozone. For transportation conformity purposes, the plan needs to identify the motor vehicle emission budgets.
  
- ! **Reasonably available control measures.** For traditional areas, the Clean Air Act’s requirements for “reasonably available control measures” (RACM)/“reasonably available control technology”(RACT) will be met if the area submits a revised SIP that EPA approves as providing for attainment. If the area is able to demonstrate attainment of the plan, then RACM/ RACT would be met and additional measures would not be required.
  
- ! **Transportation conformity.** Areas classified as “traditional” will be required to implement the transportation conformity rule which EPA issued on November 24, 1993 and amended on August 15, 1997. These rules require SIPs to include conformity programs. The plan must identify the motor vehicle emission budgets for transportation conformity purposes.
  
- ! **Reasonable further progress.** Reasonable further progress for areas classified as “traditional” is defined as the emissions reductions an area needs to come into attainment with the revised 8-hour standard. The State’s revised implementation plan must provide that these reductions will generally have to occur three ozone monitoring seasons before the attainment date (since an area’s ability to meet the standard is judged based on three years worth of data).
  
- ! **New source review.** Areas classified as “traditional” will need to implement the regular new source review program required under existing EPA regulations. However, “traditional” areas that are nonattainment of the 8-hour standard which have had the 1-hour standard revoked will be subject to subpart 1 of Part D of the new source review program rather than the provisions of subpart 2 concerning the definition of new or modified major stationary sources and the required level of emission offsets. EPA intends to address this more specifically in a forthcoming new source review rule.
  
- ! **Contingency measures.** EPA will rely on existing policies for requirements

concerning the form and content of contingency measures. Areas classified as “traditional” will have to adopt measures that control precursors of ozone in order to demonstrate attainment.

### **WHAT IS EPA’S RECOMMENDATION TO STATES FOR ESTABLISHING BOUNDARIES OF AN OZONE NONATTAINMENT AREA?**

- ! EPA believes that all areas with air quality data showing violations of the 8-hour ozone standard, and nearby areas that cause or contribute to violations of the 8-hour standard, must be included in the area designated as nonattainment.
- ! EPA’s strong presumption is that nonattainment boundaries reflect the Metropolitan Statistical Area (MSA) or the Consolidated Metropolitan Statistical Area (C/MSA) for all areas classified under the 8-hour ozone standard.
- ! However, States may request that the nonattainment area be expanded beyond the C/MSA when those counties contribute to the nonattainment problem or contracted (e.g., in the twenty-two States covered by EPA’s September 1998 regional NO<sub>x</sub> rule) if the area will attain due to controls outside the nonattainment area.

### **WHAT DOES THE DRAFT GUIDANCE REQUIRE FOR AREAS IN NONATTAINMENT OF THE PARTICULATE MATTER (PM) STANDARDS?**

- ! This draft guidance describes how EPA will classify nonattainment areas and what the implementation requirements will be for these nonattainment areas.

### **WHAT IS THE PROPOSED CLASSIFICATION SCHEME FOR NONATTAINMENT AREAS?**

#### **Revised PM<sub>10</sub> Standard**

- ! The Clean Air Act Amendments of 1990 explicitly set out a classification scheme for PM<sub>10</sub> nonattainment areas. EPA will use that same classification scheme for the revised PM<sub>10</sub> standard. For that standard, all area designations will be made by July 2000. All initial nonattainment areas will be classified as “moderate”. The attainment plan for the “moderate” areas will be due by January 2002. The attainment date for these areas will be no later than December 31, 2006.



- ! A “moderate” area can be reclassified as “serious” if EPA determines it cannot practicably attain the air quality standard or it fails to attain the standards. If an area fails to attain and becomes “serious,” it must submit a plan delineating the best available control measures, as well as a plan demonstrating attainment. (These plans are due either by eighteen months or by four years from the date of reclassification, depending on the plan and the circumstances of reclassification.) Areas classified as “serious” will have to attain the PM<sub>10</sub> standard no later than December 31, 2010.

### **New PM<sub>2.5</sub> Standard**

- ! EPA believes it is premature to lay out a scheme for classifying areas as attainment or nonattainment for the new PM<sub>2.5</sub> standard until more air quality data become available. Consistent with the July 1997 directive on these matters from President Clinton, EPA will not be requiring control measures for PM<sub>2.5</sub> until after EPA has conducted another scientific review of the PM<sub>2.5</sub> standards and EPA officially designates areas as nonattainment for the pollutant. However, if the PM<sub>2.5</sub> air quality problem is regional in nature (i.e., if, like ozone, fine particles are transported long distances, so that emissions from one State can impact another downwind area), EPA believes that a classification scheme similar to that being established for ozone may be appropriate for PM<sub>2.5</sub> nonattainment areas.

### **WHAT IS EPA’S POLICY FOR AREAS REGARDING IMPLEMENTATION OF CONTROL MEASURES UNDER THE REVISED STANDARDS FOR PM?**

- ! The Clean Air Act requires all nonattainment area SIPS to provide for all reasonably available control measures, as expeditiously as practicable for attainment, of the air quality standards.
- ! EPA’s policy on the requirement for “reasonably available control measures” for the revised PM<sub>10</sub> standards remains the same as the policy that applied to the pre-existing PM<sub>10</sub> standards that were in existence before EPA revised the air quality standards for PM in July 1997. That is, PM<sub>10</sub> nonattainment areas classified as moderate must adopt all reasonable measures that help the area attain.
- ! For PM<sub>2.5</sub>, EPA expects that the approach to “reasonably available control measures” for the PM<sub>2.5</sub> standard will be similar to the general approach for the ozone 8-hour standard and the PM<sub>10</sub> standard. Under this approach, the control requirement is based on measures that are needed for attainment and not on specific source control measures mandated under the Clean Air Act. Once additional information becomes available, including PM<sub>2.5</sub> monitoring data, EPA will provide further guidance. Consistent with the July 1997 Presidential Directive on these matters, EPA will not be requiring control measures until after the PM<sub>2.5</sub> standards are reviewed and EPA makes PM<sub>2.5</sub> nonattainment area designations.

## **WHAT ARE THE PLAN REQUIREMENTS FOR AREAS CLASSIFIED AS “MODERATE” AND “SERIOUS” NONATTAINMENT AREAS FOR THE REVISED PM10 STANDARD?**

- ! **Attainment demonstration.** States must develop attainment demonstrations by performing local modeling consistent with existing EPA modeling guidelines
- ! **Control measures.** For areas classified as “moderate”, reasonably available control measures must be implemented by July 2004 based on an analysis of the attainment needs of the area. For areas classified as “serious”, best available control measures must be implemented four years from the date the area was reclassified and must be based on the maximum degree of emission reduction determined on a case-by-case basis taking into account certain factors.
- ! **Reasonable further progress.** Plans must provide for quantitative milestones. If an area fails to make a milestone, the State must submit a plan revision assuring it will achieve the next milestone (or attain the standard, if there is no next milestone).
- ! **Contingency measures.** Once EPA determines that an area has failed to obtain the standard and must be reclassified as “serious”, the State must implement contingency measures.
- ! **New source review/conformity.** States must comply with the existing program under EPA regulations. In addition, when EPA revokes the pre-existing PM<sub>10</sub> standard in areas attaining those standards as of September 16, 1997, conformity will no longer apply if the areas do not have EPA-approved maintenance plans.

## **WHAT IS EPA’S RECOMMENDATION TO STATES FOR ESTABLISHING BOUNDARIES OF A PM2.5 NONATTAINMENT AREA?**

- ! Guidance on nonattainment boundaries for PM<sub>2.5</sub> will not be issued until more ambient air quality data are available that indicate the nature and extent of the PM<sub>2.5</sub> problem. EPA believes, however, that if PM<sub>2.5</sub> behaves in the manner similar to ozone, then it would recommend boundary guidance similar to that for ozone.

## **OTHER ISSUES ADDRESSED IN THE DRAFT GUIDANCE**

- ! **Framework for Planning.** The EPA expects States to participate in a regional planning effort where there is a need to address transported pollution. The purposes of this guidance are: (a) to provide a framework for future regional air quality planning efforts for the ozone and PM<sub>2.5</sub> standard and to address regional haze; (b) to emphasize that SIP credit toward attainment

demonstrations can be obtained from emission reductions outside individual nonattainment areas under certain circumstances; and (c) to address how SIP attainment dates, attainment demonstrations, and other SIP requirements are affected by a regional planning approach or where areas are affected by transport.

- ! **Supplemental Attainment Planning.** This process will ensure that States begin work early to correct a situation where it appears that an area will fail to attain 8-hour ozone or the PM<sub>2.5</sub> standard. It requires that SIPs contain an enforceable commitment for a SIP revision upon having pollutant concentrations above the level of the standard for the two years after the SIP implementation date. It provides for early action such that the State does not delay addressing the problem of continued nonattainment until after the attainment date passes.

### **RELATED GUIDANCE**

- ! EPA's draft technical guidance on modeling and emissions inventories, which are referenced in the draft implementation guidance document, are available for public review and comment via the implementation website on the Internet at the address listed below under "For Further Information".

### **BACKGROUND**

- ! In the upper atmosphere, ozone occurs naturally and protects people from the sun's ultraviolet radiation. At ground-level, ozone results from pollution and can harm human health and the environment. Ground-level ozone is the primary constituent of smog. Particulate matter consists of the solid particles and liquid droplets found in the air. Individually, these particles and droplets are invisible to the naked eye. Collectively, however, they can appear as clouds or a fog-like haze. Both coarse and fine particles are of concern to human health.
- ! On July 17, 1997, following a lengthy scientific review process, EPA revised the national ambient air quality standards for ground-level ozone and particulate matter.
- ! Specifically, EPA is phasing out the previous 1-hour ozone standard as it moves to implement the 8-hour ozone standard which was finalized to protect the public health by addressing longer exposure periods. The 1-hour ozone standard will continue to apply to an area for an interim period until EPA makes a determination that the area has air quality meeting the 1-hour standard.
- ! In addition, EPA revised the primary (health-based) and secondary (environment-based) particulate matter standards by establishing annual and 24-hour standards for smaller or "fine" particles (particles 2.5 micrometers in diameter or smaller) and by changing the form of the

existing 24-hour and annual particulate matter standards (for particles 10 micrometers in diameter or smaller).

- ! EPA will officially “designate” areas as attainment or nonattainment for the revised ozone and PM<sub>10</sub> standards by July 2000. For the PM<sub>2.5</sub> standards, EPA will designate areas in the 2004 to 2005 time frame. For the ozone and PM<sub>2.5</sub> standards, within three years after EPA designates an area nonattainment the State must submit an implementation plan to EPA. (A State seeking the ozone “transitional” classification for an area must submit the implementation plan by 2000.)
- ! On September 24, 1998, EPA finalized a rule to require 22 states and the District of Columbia to submit state implementation plans that address the regional transport of ground-level ozone, the main component of smog (referred to as the “regional NOx rule”). By improving air quality and reducing emissions of NOx, the actions directed by these plans will decrease the transport of ozone in the East.

### **NEXT STEPS**

- ! EPA has not yet addressed all the comments received on the August 1998 draft guidance but will do so when it publishes the final guidance.
- ! The final version of this implementation guidance is expected to be issued in February 1999.
- ! EPA will issue additional guidance on the development of plans for regional haze after it issues regulations for those plans, expected in the spring of 1999.

### **FOR FURTHER INFORMATION**

- ! Interested parties can download the implementation guidance from the Internet at <http://ttnwww.rtpnc.epa.gov/implement/actions.htm>. The guidance is listed in a document entitled “Major Action Items to Reinvent Ozone and PM NAAQS and Regional Haze Implementation,” which also contains a complete list of planned activities related to implementation of the new national ambient air quality standards.
- ! For general questions on the guidance or specific questions on the ozone portion, contact John Silvasi of EPA's Office of Air Quality Planning and Standards at (919) 541-5666 or Chris Stoneman of EPA's Office of Air Quality Planning and Standards at (919) 541-0823; for specific questions on the PM portion of the guidance, contact Larry Wallace of EPA's Office of Air Quality Planning and Standards at (919) 541-0906; and for specific questions on the regional haze portion of the guidance, contact Rich Damberg of EPA's Office of Air Quality

Planning and Standards at (919) 541-5592.

- ! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the ozone and particulate matter standards, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: <http://www.epa.gov/oar/>. The web site for general information about the new ozone and particulate matter standards is: <http://www.epa.gov/airlinks>.