

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

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**MEMORANDUM:** 

OFFICE OF AIR AND RADIATION

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To: EPA Regional Air Directors, Regions I - X

Subject: Guidance for Determining the "Attainment Years" for Transportation Conformity in New 8-Hour Ozone and PM<sub>2.5</sub> Nonattainment Areas.

The attached document provides guidance for 8-hour ozone and  $PM_{2.5}$  nonattainment areas in selecting attainment dates for use in transportation conformity determinations both before and after state implementation plans (SIPs) are submitted. This guidance also describes some flexibilities that are available to areas using interim emission or budget tests in choosing which years to perform a regional emissions analysis and applies to all 8-hour ozone and  $PM_{2.5}$  nonattainment areas. We request that you share this guidance with the States.

The Clean Air Act requires areas to attain the national ambient air quality standards as expeditiously as practicable, but no later than specified dates. To demonstrate attainment, an area must predict that emissions during the "season" preceding the attainment date will meet the level of the standard. Ozone pollution is a problem during the hotter months of the year and for most areas the ozone season runs from mid-spring to mid-fall, although for some warm-weather areas (e.g., certain areas in Texas and California), the ozone season runs all year. For  $PM_{2.5}$ , the season is the entire year. In general, the attainment dates for 8-hour ozone are in June. Thus, the relevant ozone season for predicting attainment will be the ozone season in the calendar year preceding the attainment date. Similarly, the attainment dates for  $PM_{2.5}$  will be in April, so the relevant  $PM_{2.5}$  season for predicting attainment will also be in the preceding calendar year.

Because the maximum attainment dates fall relatively early in the calendar year, the final season considered for purposes of attainment will fall in the preceding calendar year for those areas that need the maximum time frame to attain. This situation is different than the situation created by the 1-hour ozone standard and  $PM_{10}$  standard following enactment of the Clean Air Act Amendments of 1990. The Amendments established attainment dates near the end of the relevant ozone and  $PM_{10}$  seasons and thus the maximum attainment date fell within the same year as the final season considered for purposes of attainment. Thus, the confusion some areas have had

about which calendar year to analyze as their attainment year for transportation conformity purposes did not arise for purposes of the 1-hour ozone and  $PM_{10}$  standard.

Finally, many areas designated nonattainment for the 8-hour ozone standard also have existing 1-hour ozone budgets which they will be required to use and which bring with them their own requirements for analysis years in transportation conformity determinations. EPA is issuing the attached guidance to provide clarification on these issues.

The guidance indicates that if there are further questions, the States should contact the transportation conformity staff person responsible for the state at the appropriate EPA regional office. A listing of regional offices, the states they cover, and contact information for EPA regional conformity staff can be found at the following website:

http://www.epa.gov/otaq/transp/conform/contacts.htm.

General questions about this guidance can be directed to Joe Pedelty at EPA's Office of Transportation and Air Quality, via his email address: pedelty.joe@epa.gov or phone number: 734-214-4410.



# Guidance for Determining the "Attainment Year" for Transportation Conformity in New 8-Hour Ozone and PM<sub>2.5</sub> Nonattainment Areas

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### Guidance for Determining the "Attainment Year" for Transportation Conformity in New 8-Hour Ozone and PM<sub>2.5</sub> Nonattainment Areas

Transportation and Regional Programs Division Office of Transportation and Air Quality U.S. Environmental Protection Agency

## Guidance for Determining the "Attainment Year" for Transportation Conformity in New 8-Hour Ozone and PM<sub>2.5</sub> Nonattainment Areas.

#### I. Background Information

The purpose of this guidance is to explain what year is to be an area's attainment year for the purpose of transportation conformity in the new 8-hour ozone and  $PM_{2.5}$  nonattainment areas, both before and after state implementation plans (SIPs) are submitted. This guidance also describes some flexibilities that are available to areas using interim emission or budget tests in choosing which years to perform a regional emissions analysis.

- 1. Q. How is this guidance organized?
  - A. This document is organized by questions and answers under the following headings:
    - I. Background Information (Questions 1 5)
    - **II. Conformity Requirements** 
      - A. Areas With Adequate or Approved Budgets for the 8-Hour Ozone or PM<sub>2.5</sub> Standards (Question 6)
      - B. 8-Hour Ozone Nonattainment Areas with 1-Hour Ozone SIP Budgets (Question 7)
      - C. 8-Hour Ozone Nonattainment Areas With No Existing Adequate or Approved Budgets and PM<sub>2.5</sub> Nonattainment Areas (Questions 8 -9).
    - III. General Information
      - A. Does this Guidance Create New Requirements? (Question 10)
      - B. Who to Contact for More Information (Question 11).
- 2. Q. To which areas does this guidance apply?

A. This guidance applies to all 8-hour ozone and  $PM_{2.5}$  nonattainment areas. We note that the effective date of the nonattainment designation for early action compact (EAC) areas has been deferred. EAC areas are not subject to transportation conformity for the 8-hour ozone standard unless and until an 8-hour designation of nonattainment becomes effective.

3. Q. Why is this guidance document needed?

A. The purpose of this guidance is to clarify which calendar years an area must use to analyze as their attainment year for transportation conformity. The CAA requires areas to attain the relevant standards by the area's maximum attainment date. For purposes of the 8-hour ozone standard and the  $PM_{2.5}$  standard, a determination of attainment after the

attainment date has passed is based on the most recent three complete years of data prior to the area's attainment date. Thus, where an area has a maximum attainment date in April (for  $PM_{2.5}$ ) or June (for 8-hour ozone), the most recent three years of data will be from the three preceding calendar years. For example, if an area's maximum attainment date is April or June of 2010, then air quality monitoring data from 2007, 2008 and 2009 would be considered for the purpose of determining whether the area has met its attainment date. Moreover, for purposes of predicting attainment of the standard through a modeling demonstration, states would need to predict that air quality in the last ozone or  $PM_{2.5}$  "season" (i.e., 2009) would meet the standard. For that reason, EPA's implementation rule for the 8-hour ozone standard requires areas to implement all the measures necessary to demonstrate attainment as expeditiously as practicable, but no later than the start of the final complete ozone season preceding the area's attainment date (40 CFR §51.908). We anticipate that the implementation rule for the PM<sub>2.5</sub> standard will have a similar requirement.

This situation is different from the situation created by the 1-hour ozone and  $PM_{10}$  standard, where areas had a maximum attainment date in November. For 1-hour ozone and  $PM_{10}$ , the final season considered for purposes of demonstrating or determining attainment was in the same calendar year as the attainment date. Because the maximum attainment date for 8-hour ozone and  $PM_{2.5}$  is not in the same calendar year as the final season that must be considered for purposes of ascertaining attainment, there has been some confusion regarding which calendar year areas should use for purposes of transportation conformity.

4. Q. What are the maximum attainment dates for 8-hour ozone areas?

A. The maximum attainment dates for 8-hour ozone areas are as follows. Subpart 1 ("Basic") - June 15, 2009 Marginal - June 15, 2007 Moderate - June 15, 2010 Serious - June 15, 2013 Severe 15 - June 15, 2019 Severe 17 - June 15, 2021

These dates stem from CAA section 172(a)(2) and EPA's regulations at 40 CFR §51.904(b) for "Basic" areas and from CAA section 181(a)(1) and (2) and EPA's regulations at 40 CFR §51.903(a) for subpart 2 (marginal and above) areas.

5. Q. What are the attainment dates for the  $PM_{25}$  areas?

A. The effective date for  $PM_{2.5}$  designations is April 5, 2005. SIPs will be due in April 2008, 3 years from the date of designation. Per CAA section 172(a)(2), all  $PM_{2.5}$  nonattainment areas will have an initial maximum statutory attainment date of April 5, 2010.

#### **II.** Conformity Requirements

#### A. Areas With Adequate or Approved Budgets for the 8-Hour Ozone or PM<sub>2.5</sub> Standards

6. Q. What attainment year will areas use for conformity once motor vehicle emission budgets from an attainment demonstration SIP addressing the 8-hour ozone or  $PM_{2.5}$  standard are adequate or approved?

A. Once an 8-hour ozone or  $PM_{2.5}$  attainment demonstration SIP is submitted and the motor vehicle emissions budgets ("budgets") are found adequate or approved, the SIP will establish the attainment year that is used for conformity determinations. The attainment year established by the SIP will be, at the latest, the calendar year of the final season for determining attainment, which in the case of 8-hour ozone and  $PM_{2.5}$ , will generally be in the calendar year before the area's maximum attainment date. Areas must consider the attainment year established in the SIP as the attainment year for demonstrating consistency and conducting conformity analyses as required by \$93.118(b) and (d) respectively of the conformity rule.

#### **B. 8-Hour Ozone Nonattainment Areas with 1-Hour Ozone SIP Budgets**

7. Q. What attainment year should be used for conformity before 8-hour ozone budgets are found adequate or 8-hour ozone SIPs are approved?

A. 8-hour ozone nonattainment areas that have 1-hour ozone budgets are, in most cases, subject to the regional emissions analysis requirements in \$93.118 of the conformity rule. (See \$93.109(e)(2)(iv) and (v) for limited exceptions.) Prior to adequate or approved 8-hour budgets in these areas, the attainment year that should be used for conformity to meet \$93.118 requirements for the 8-hour standard depends on an area's 8-hour ozone classification, as follows:

#### "Basic", Moderate, Serious and Severe 8-Hour Ozone Areas

All "Basic", moderate, serious and severe 8-hour ozone nonattainment areas that have 1-hour ozone budgets have an option for addressing the conformity rule's requirements to demonstrate consistency (§93.118(b)) and to conduct a conformity analysis (§93.118(d)) for their 8-hour ozone attainment year.

Specifically, before an 8-hour ozone SIP is adequate or approved, EPA believes that these areas may consider either of the following to be the attainment year for the purposes of §93.118:

- the year of the maximum attainment date or
- the year prior to the maximum attainment date.

For example, a moderate area that has 1-hour ozone emissions budgets may perform a regional emissions analysis and demonstrate consistency for either 2010, which is its maximum attainment date, or 2009, which is the last possible year for which there will be a full ozone season to consider for purposes of demonstrating attainment.

These areas have a choice because prior to the development of the 8-hour SIP, no area knows for certain its 8-hour ozone attainment date because the CAA requires that areas attain "as expeditiously as practicable" (CAA section 172(a)(2)(A)). A date "as expeditiously as practicable" cannot be known until an attainment demonstration is completed. Therefore, it would be premature for EPA to require areas to use as their attainment year in conformity any year earlier than the year in which the maximum attainment date falls. EPA has historically interpreted the conformity regulations to allow areas to presume that the attainment year will be the calendar year of the maximum attainment date prior to the development of an attainment SIP and determination of the actual attainment date. Based on this interpretation, areas that have already begun their conformity analysis using the calendar year of the maximum attainment date may complete their analysis using that date.

As an alternative to the maximum attainment date, areas may, instead, analyze the year prior to the maximum attainment date to satisfy the conformity requirement in §93.118 in anticipation that the prior year will be the year for which the SIP will demonstrate attainment and will be the year in which the final season considered for purposes of determining attainment occurs. EPA acknowledges that in some areas the year prior to the maximum attainment date may not be the final attainment year as the CAA requires that attainment be reached as expeditiously as practicable. Therefore, an area's ultimate attainment date could be even earlier because areas cannot anticipate what their modeled attainment demonstrations may conclude. It is appropriate for areas to rely on either the calendar year of the maximum attainment date or the calendar year preceding the maximum attainment date.

Areas that have not yet begun their conformity analysis may choose to use the year prior to their statutory attainment date as the attainment year for conformity purposes with the assumption that this will be the attainment year determined by the SIP. By doing so, they may complete some of the analysis that is required for future conformity determinations (e.g., model development, data collection) and avoid analyzing a year that is not required in future conformity determinations provided that the assumed attainment year does not change during SIP development.

For example, a moderate 8-hour ozone nonattainment area, which has a maximum attainment date of June 15, 2010, has 1-hour rate of progress (ROP) budgets for NOx and VOCs established for the year 2005 and attainment budgets for NOx and volatile organic compounds (VOCs) established for the year 2007. This area wants to perform an 8-hour ozone conformity determination in 2005, prior to the development of its attainment demonstration, for its 2005 - 2025 transportation plan. The conformity determination

would need to show consistency with budgets (per §93.118(b)) for the following years:

- 2005, using the 1-hour ozone 2005 ROP budgets;
- 2007, using the 1-hour 2007 ozone attainment budgets;
- either 2009 or 2010 (8-hour ozone attainment year) budget test using the 1-hour ozone 2007 maintenance budgets;
- 2015, (interim year) using the 1-hour ozone 2007 attainment budgets; and
- 2025, (last year of the transportation plan) using the 1-hour ozone 2007 attainment budgets.

For this conformity determination the area would need to perform regional emissions analyses (per §93.118(d)) for the following years:

- 2005;
- either 2009 or 2010 (8-hour ozone attainment year);
- 2015 (interim year); and
- 2025 (the last year of the transportation plan).

Emissions estimates for the year 2007 can be generated by interpolating between years in which a regional emissions analysis has been performed - in this case, between the years 2005 and, 2009 or 2010.

#### Marginal 8-Hour Ozone Areas

Marginal 8-hour ozone areas with 1-hour ozone budgets may use the year of their maximum attainment date (2007) as the attainment year in their conformity determinations. Alternatively, these areas may also assume the year 2006 as their attainment year since the ozone season in 2006 would be the third ozone season (2004, 2005, 2006) considered for purposes of determining whether the area attained the 8-hour ozone standard by the area's maximum attainment date of June 2007.

Because they are not required to submit an attainment demonstration, marginal areas may choose either 2006 or 2007 as their attainment year for conformity purposes. Also, given the short time prior to their maximum statutory attainment date, these areas are not likely to establish an attainment year before 2006 or 2007. In cases where a marginal area without an attainment demonstration analyzes 2006 as its attainment year for conformity purposes, it should state why it has done so.

For example, a marginal 8-hour ozone area has 1-hour ozone NOx and VOC maintenance budgets established for the years 2003 and 2013. The area wants to determine conformity in 2005, prior to the development of an 8-hour ozone SIP, for its 2005 - 2025 transportation plan. For this conformity determination the budget test requirements (§93.118(b)) would be satisfied by showing consistency for the following years:

- either 2006 or 2007 (assumed attainment year) using the 2003 1-hour ozone maintenance plan budgets;
- 2013 (budget year) using the 2013 1-hour ozone maintenance budgets;
- 2015 (interim year) budget test using the 2013 1-hour ozone maintenance

budgets;

• 2025 (last year of the transportation plan) using 2013 1-hour ozone maintenance budgets.

For this determination the area would need to perform regional emissions analyses (per §93.118(d)) for the following years:

- either 2006 or 2007 (8-hour ozone attainment year);
- 2015 (interim year); and
- 2025 (the last year of the transportation plan).

In this example, emissions estimates for the year 2013 could be generated by interpolating between years in which a regional emissions analysis has been performed - in this case, between the years 2006 or 2007, and 2015.

In the case where a marginal area chooses to perform an attainment demonstration, the date determined by that demonstration would then become the attainment year for transportation conformity purposes.

#### **C. 8-Hour Ozone Areas with No Existing Adequate or Approved Budgets and PM**<sub>2.5</sub> Nonattainment Areas

8. Q. What are the conformity analysis year requirements for areas with no adequate or approved budgets?

A. Nonattainment areas that do not have any adequate or approved budgets are not required to demonstrate conformity and perform a regional emissions analysis for their attainment year. Under 93.119(g)(1) of the conformity rule, nonattainment areas using interim emission tests are required to perform a regional emissions analysis for only the following years:

- a year no more than five years beyond the year in which the conformity determination is being made;
- the last year of the transportation plan's forecast period; and
- any additional years within the time frame of the transportation plan so that analysis years are no more than ten years apart.
- 9. Q. Before a SIP is found adequate or approved, what year should be analyzed as the year no more than five years beyond the year in which the conformity determination is being made?

A. Areas are free to choose any analysis year that is not more than five years into the future from the year in which the conformity determination is made. However, EPA notes that selecting the calendar year of the final season that will be considered for purposes of demonstrating attainment, if it is within the first five years from the conformity determination date, may have certain benefits. For example, selecting the

final ozone season calendar year may save work and valuable state and local resources once a SIP has been submitted. In this case, the areas may be able to complete some of the analysis (e.g., model development, data collection) that is needed for future conformity determinations, should that year be selected as the attainment year in the SIP.

Examples:

apart;

An 8-hour basic ozone nonattainment area has a maximum attainment date of June 15, 2009. The area has no 1-hour ozone budgets and plans to make a conformity determination in 2005 to update its 2005 - 2025 transportation plan. This area could select the following analysis years to meet the conformity rule's interim emission test requirements in §93.119 for the 8-hour ozone standard:

- 2008 near term year (within the first five years) and possible attainment date determined by the SIP;
- 2015 intermediate year so that the analysis years are no more than 10 years

2025 - last year of the transportation plan.

A  $PM_{2.5}$  nonattainment area has a maximum attainment date of April 5, 2010. The area wants to make a conformity determination in 2005 for its upcoming 2006 - 2030 transportation plan. To meet the conformity rule's interim emission tests requirements in §93.119 for  $PM_{2.5}$  the area could analyze the following years:

- 2009 near term year (within the first five years) and possible attainment date determined by the SIP;
- 2015 intermediate year so that analysis years are no more than ten years apart;
- 2025 intermediate year so that analysis years are no more than ten years apart;
- 2030 last year of the transportation plan.

#### **III. General Information**

10. Q. Does this guidance create new requirements?

A. No, this guidance is based on the existing Clean Air Act (CAA) and associated regulations and does not create any new requirements. It merely explains how to fulfill the conformity rule's requirement to analyze the attainment year in 40 CFR §93.118, given the attainment dates for the new 8-hour ozone and PM<sub>2.5</sub> standards.

The statutory provisions and EPA regulations described in this document contain legally binding requirements. This document does not substitute for those provisions or regulations, nor is it a regulation itself. Thus, it does not impose legally binding requirements on EPA, states, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA retains the discretion to adopt approaches on a case-by-case basis that may differ from this guidance, but still comply with the statute and conformity regulations. Any decisions regarding a particular conformity determination will be made based on the statute and regulations. This

guidance is a living document and may be revised periodically without public notice.

11. Q. Who can I contact if I have further questions about attainment year requirements for conformity under the new air quality standards?

A. If this guidance document does not answer a specific question, please contact the transportation conformity staff person responsible for your state at the appropriate EPA regional office. A listing of regional offices, the states they cover, and contact information for EPA regional conformity staff can be found at the following website: <a href="http://www.epa.gov/otaq/transp/conform/contacts.htm">http://www.epa.gov/otaq/transp/conform/contacts.htm</a>.

General questions about this guidance can be directed to Joe Pedelty at EPA's Office of Transportation and Air Quality, via his email address: pedelty.joe@epa.gov or phone number: 734-214-4410.