

US EPA ARCHIVE DOCUMENT

Implementation Guidance for Ozone/PM NAAQS and Regional Haze

Policy for 8-hour ozone standard, PM_{2.5} and regional haze

Contents of Guidance

- ▶ **Proposed Implementation Guidance (IG) - comment period closed Sep 23, 1998**
 - **Ozone and PM10 classification scheme: designation/classification dates, SIP due dates, and attainment dates**
 - **RACM/RACT for ozone and PM SIPs**
 - **SIP requirements for ozone transitional areas and PM10 areas**
 - **Placeholders for additional guidance**

Contents of Guidance (cont)

- ▶ Remainder to be proposed Nov 1998 (comment period will be reopened)
 - Emission Inventories/modeling/attainment demonstration
 - Reasonable further progress
 - Nonattainment area boundaries/Corrective actions/Contingency planning
 - Framework for planning

Important Points

- ▶ 8-hour ozone standard under subpart 1 - more flexible than subpart 2 (1-hour standard)
- ▶ Revised PM10 standard under subpart 4
- ▶ Need PM2.5 air quality data to fully understand PM2.5 NAAQS program but lay out PM2.5 implementation principles now to ensure coordination (will be governed by subpart 1)

Classification Schemes

Ozone Classification Scheme

Classification	Desig/Class Date*	SIP Due Date*	Attainment Date*
Transitional	July 2000	Sep 1999/ May 2000	Dec 2005
Traditional	July 2000	July 2003	Dec 2007, 2009 or 2010
International transport	July 2000	July 2003	Dec 2007

*Dates are "no later than"

Definition of Ozone Attainment Date

- ▶ Attainment is defined as the date by which control measures are implemented by the State, such that the area attains the standard with 3 years of clean data
 - 3-year average of the 4th-highest daily maximum 8-hour average ozone concentration less than or equal to 0.08 ppm
- ▶ Definition revised since August draft based on comments received
 - Previously, attainment was defined as the date by which control measures are implemented by the State, such that the area has 1 year of clean data (the 4th highest daily max 8-hr avg < 0.08 ppm)

PM10 Classification Scheme

Classification	Desig/Class Date*	SIP Due Date*	Attainment Date*
Moderate	July 2000	Jan 2002	Dec 2006
Serious	NA	Depends on date of reclass and SIP	Dec 2010

*Dates are "no later than"

PM2.5 Classification Scheme

- ▶ For the PM2.5 NAAQS, too early for a classification scheme - need to wait for data
- ▶ But, if PM2.5 regional like ozone, then minimal PM2.5 classifications and look at ozone approach
- ▶ Evaluate new data and issue final classifications guidance before designations
- ▶ Per Presidential Directive, PM2.5 control measures not required until after the PM2.5 standards are reviewed and designations made

Ozone SIP Requirements

Attainment Demonstration

- ▶ Transitional areas that attain via NOx SIP call
 - Rely on NOx SIP call emission inventory and modeling
- ▶ Transitional areas that need measures beyond the NOx SIP call (SIP call areas)
 - No additional modeling required (possible additional analyses if projected air quality concentrations much greater than NAAQS)
 - Use information and techniques which EPA will provide (draft Nov 98; final Dec 98)

Attainment Demonstration (cont)

- ▶ Transitional areas inside OTAG but no SIP call
 - No new modeling if projected air quality concentrations close to NAAQS
 - Additional analysis if projected air quality concentrations much greater than NAAQS
- ▶ Transitional areas outside the OTAG domain
 - Additional modeling required if none exists
 - Use information and additional EPA-developed techniques in document

Attainment Demonstration (cont)

- ▶ Traditional areas
 - Modeled attainment test relying on ambient data
 - Use model in "relative" rather than "absolute" fashion with optional weight of evidence test to reduce uncertainty
 - Encourage use of CMAQ/MODELS3, subject to same criteria as "alternative" models; EPA will not identify "guideline" model
 - Areas that come into attainment as result of the NOx SIP call may also rely on EPA modeling.
- ▶ International transport areas
 - Demonstrate attainment "but for" international emissions
 - Use same guidance as traditional areas
 - Subject to negotiation between Region and State based on area specific characteristics

RACM/RACT

- ▶ Overall policy
 - If plan demonstrates attainment, RACM/RACT met and additional measures not required as "reasonably available"
- ▶ Transitional areas
 - NOx SIP call plus attainment SIP with additional measures, as needed
- ▶ Traditional areas
 - Attainment SIP
- ▶ International transport areas
 - "But for" attainment SIP

Reasonable Further Progress

- ▶ Transitional areas
 - Emission reductions needed for attainment
 - Areas that attain via NOx SIP call
 - NOx SIP call emission reductions on schedule
 - All other areas
 - Rely on NOx SIP call, as applicable
 - Additional control measures implemented by May 1, 2003

Reasonable Further Progress (cont)

- ▶ Traditional areas
 - Emission reductions needed for attainment
 - Test of making RFP: meet control measure implementation date (generally 3 monitoring years before attainment date)
 - for 8-hour nonattainment - May 1, 2005
 - for 1- and 8-hour nonattainment - May 1, 2005, 2007 or 2008
 - Areas where 1-hour NAAQS still applies must still meet subpart 2 rate of progress requirements (3% /year reductions)
 - Corrective actions
 - If failure to implement measures, make finding of failure to implement
 - start sanctions

Reasonable Further Progress (cont)

- ▶ International transport areas
 - "But for" attainment emissions
 - Follow same guidance as traditional areas - control measures implementation date - May 1, 2005
 - Subject to negotiation between Region and State based on area specific characteristics

Supplemental Attainment Planning

- ▶ Section 179(c) and (d) sets forth process for when an area fails to attain a NAAQS
- ▶ Guidance proposes early process for State to automatically revise SIP in advance for potential failure to attain
- ▶ Relies on enforceable SIP commitment to analyze the cause of the potential failure and to revise the SIP 2 years after implementation if the area has 2 years unclean data
 - New attainment demonstration and list of measures (not yet adopted)
 - Submit 18 months after determination of 2 unclean years data

Supplemental Attainment Planning (cont)

- ▶ Under section 179(c), 6 months after the attainment date, EPA determines if area attained the NAAQS
 - If failure to attain, State submits adopted measures in 1 year which provide for attainment
 - New attainment date established

NSR and Transportation Conformity

- ▶ Transitional areas
 - For NSR, see forthcoming rule
 - For transportation conformity, see forthcoming rule
- ▶ Traditional and international transport areas
 - Program under current EPA regulations

PM2.5 SIP Requirements

- ▶ **RACM/RACT**
 - Similar to approach for revised ozone and PM10 standards
 - EPA will provide further guidance
 - Per Presidential Directive, PM2.5 control measures not required until after the PM2.5 standards are reviewed and designations made
- ▶ Further guidance to be provided on other requirements

Other Related Implementation Guidance Issues

Nonattainment Area Boundaries

► Ozone

- Strong presumption of C/MSA, but allow exceptions
- Can expand area to include additional counties with contributing sources
- Rural nonattainment areas can be counties
- Select area smaller than C/MSA for transport problem expected to be solved thru regional control (e.g., NOx SIP call)
 - Minimum - county with violation
 - Exceptionally large counties or C/MSAs (e.g., some in west) can be split.
- Where 1-hr NAAQS applies - larger of C/MSA or 1-hr nonattainment area
- International transport areas - status quo from 1-hr nonattainment area

Nonattainment Area Boundaries (cont)

▶ PM2.5

- Too early for firm guidance, but may be similar to ozone
- Factors for consideration:
 - Localized contributions
 - Near field/short range transport considerations
 - Long range transport areas
- Initial thoughts -- if PM2.5 is like ozone, start with same approach to boundaries as ozone

Framework for Planning

► Need for framework:

- Ozone, PM_{2.5}, regional haze - pollutants are not confined locally - require approach addressing areas outside immediate problem area
- Need to apply the level of planning appropriate to the level of the problem
- Substantial evidence regarding transport of pollutants leading to regional haze, PM_{2.5}, and ozone problems
 - Common precursors, atmospheric processes, spatial patterns
- EPA recognizes need for future regional planning efforts for regional haze and the NAAQS
- For regional haze, all States will need to participate initially in regional coordination due to nature of visibility impacts and long-range transport

Framework for Planning (cont)

- ▶ Scope of framework:
 - Regional scale planning
 - Areas affected by transport
 - Intrastate transport
 - SIP credit and requirements for all geographic scales
- ▶ Regional scale planning
 - Provides principles for
 - Process
 - Technical assessment
 - Strategy development and adoption
 - EPA participation

Framework for Planning (cont)

- ▶ For SIP attainment (including the 8-hr ozone NAAQS) or regional haze reasonable progress demonstrations, State can take credit for emission reductions in--
 - The nonattainment area
 - The same State
 - A neighboring State that is part of a multistate nonattainment area
 - Another State
- ▶ These credits must be supported by an adequate technical demonstration

Framework for Planning (cont)

- ▶ Areas affected by transport (ozone, PM_{2.5})
 - Attainment dates for areas affected will be aligned with those of areas contributing to nonattainment problem
 - Attainment demonstration through modeling unless EPA determines infeasible (e.g., certain mountain situations)
 - SIP implementation date and RFP
 - All measures needed for attainment at least 3 monitoring years before attainment date
 - Local controls at least 3 monitoring years before original presumptive attainment date
 - RACM/RACT
 - Met by measures needed for attainment
 - Extends to regional scale control strategy
 - Other requirements - same as for other traditional areas

Comments from Small Entities

- ▶ Metro. Washington Council of Govt's
 - Comment: Counties within CMSA should be able to have different classifications.
 - Response: In certain cases, guidance would allow this.
 - Comment: Current process of setting emissions budgets for transportation conformity in "traditional" areas should remain intact.
 - Response: EPA not proposing any changes to traditional area transportation conformity related to budget setting.

WEB SITES OF INTEREST

- ▶ Major Action Items to Reinvent Ozone and PM NAAQS and Regional Haze ("Action Items Matrix")
 - <http://ttnwww.rtpnc.epa.gov/implement/actions/htm>
- ▶ Small Entity Implementation Website
 - <http://ttnwww.rtpnc.epa.gov/implement>
 - Click on "Actions of Particular Interest to Small Entities"