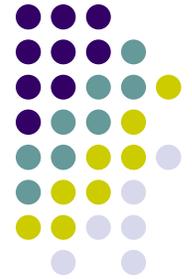


PM 2.5 Implementation Program

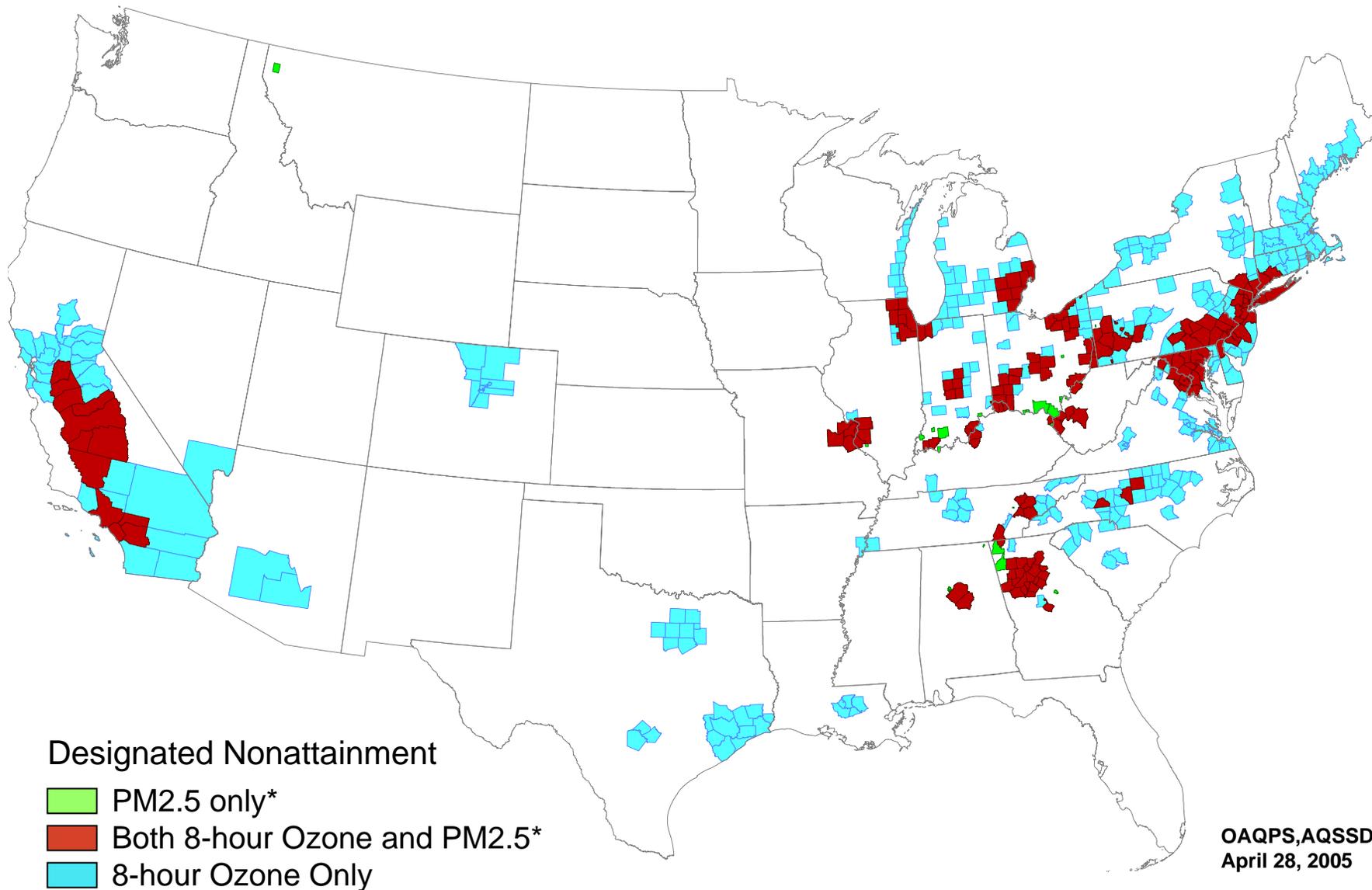




PM_{2.5} Implementation Schedule

- **September 8, 2005: Proposed implementation rule signed by Administrator**
- **Proposed Rule published November 1, 2005 (70 FR 65984)**
- **Comment Period closes January 3, 2006**
- **Public Hearing not scheduled**
- **Summer/Fall 2006: Finalize implementation rule**
- **December 2007: Regional haze implementation plans due**
- **April 2008: PM_{2.5} SIPs due**
 - **EPA encourages States to coordinate development of regional haze and PM_{2.5} plans and intends to review these plans together**

8-hour Ozone and PM2.5 Nonattainment Areas



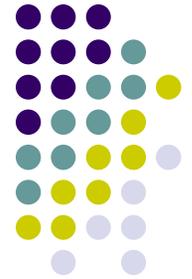
* For PM2.5, the designated partial county areas are shown as actual boundaries designated.



PM_{2.5} Implementation Rule Issues

- Attainment dates
- Classifications
- PM_{2.5} precursors
- Modeling and attainment demonstration
- Reasonably available control technology (RACT)
- Reasonably available control measures (RACM)
- Reasonable further progress (RFP)
- New source review





Attainment Dates

- State attainment demonstrations and SIP revisions are due April 2008
 - Attainment demonstrations need to provide the supporting analysis for State adoption of measures that will result in the area attaining the standard “as expeditiously as practicable”
- Attainment date is no later than 5 years from date of designation (e.g., April 2010)
 - Extensions of 1-5 years are possible
- Attainment determination would be based on most recent 3 calendar years (e.g., 2007-2009 for April 2010 attainment date)



Classifications

Option 1: No classification system

- Keeps it simple under subpart 1

Option 2: Moderate & serious classifications

- Request comment on criteria for two-tier system (examples: attainment date within 5 years or not; design value threshold)





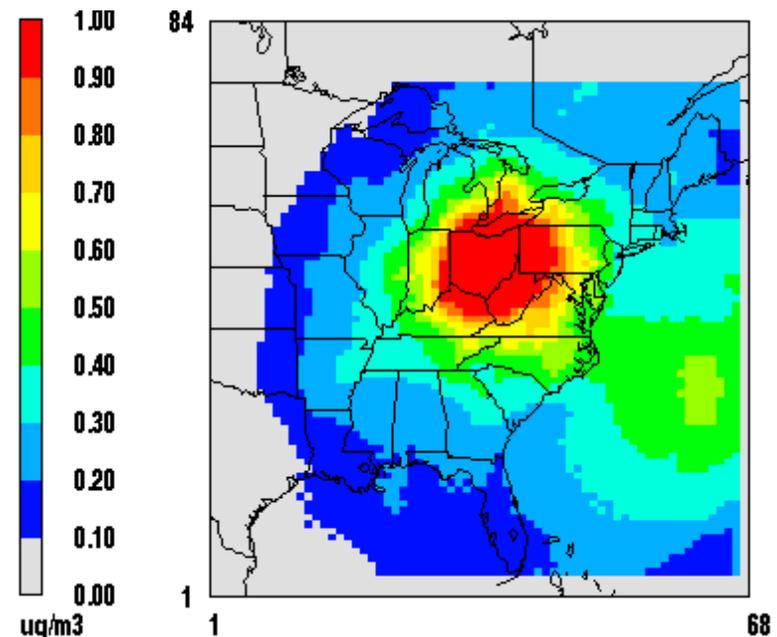
Coverage of PM_{2.5} Precursors

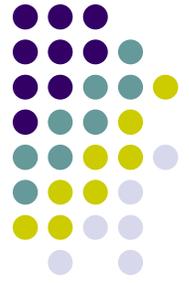
- Atmospheric chemistry leading to PM_{2.5} formation is complex
- Proposed approach for PM_{2.5} implementation and new source review:
 - PM_{2.5} direct emissions (includes organic carbon, elemental carbon, and crustal material) and SO₂ must be addressed
 - NO_x must be addressed in all areas, unless the State and EPA provide a demonstration finding that NO_x is not a significant contributor in a specific area.
 - VOC and ammonia would not be addressed, unless EPA or the State provides a demonstration that VOC or ammonia is a significant contributor in a particular area.



Modeling and Attainment Demonstrations

- All nonattainment areas need to submit an attainment plan having appropriate modeling according to PM_{2.5} modeling guidance
- One-atmosphere modeling recommended (ozone, PM, haze)
- Years to model: coordinate with ozone and regional haze attainment & reasonable progress dates to the extent possible
- Mid-course reviews will be required on a case-by-case basis through SIP approval process
 - Check progress in 2010 and 2013; if not on track, conduct new modeling and evaluate new measures

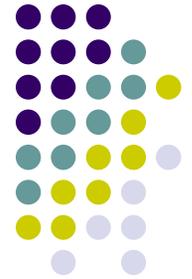




Reasonably Available Control Technology (RACT)

- RACT is the lowest emission limit that a source is capable of meeting with available control technology, considering technological and economic feasibility
 - **Option 1:** RACT required for all stationary sources with the potential to emit (pte) more than 100 tpy of direct $PM_{2.5}$ or any precursor
 - Also requesting comment on thresholds of 70 and 50 tpy
 - **Option 2:** RACT required for stationary sources only to the extent it is needed for expeditious attainment or to meet RFP
 - **Option 3:**
 - Option 2 for areas with attainment dates within 5 years
 - Option 1 for areas with attainment dates > 5 years

Reasonably Available Control Measures (RACM)



- A RACM demonstration must show that the State has adopted all reasonable measures needed to attain the standard as expeditiously as practicable and meet RFP
 - The demonstration should show that there are no additional measures available that would advance the attainment date or contribute to RFP
 - In determining RACM for an area, the State must consider the cumulative impact of implementing the available measures and whether such measures taken together would advance the attainment date
 - Limited RACM analysis for areas with attainment dates of April 2010 or earlier





Reasonable Further Progress (RFP)

- RFP: annual incremental reductions in emissions for purpose of ensuring timely attainment
- Baseline emission inventory year is 2002
- RFP plan due with attainment demonstration in 2008



PM_{2.5} and New Source Review

- NSR applies upon effective date of PM_{2.5} designations
 - PM_{2.5} rule includes changes to NSR program
 - OAQPS April 5, 2005 guidance memo addresses interim period from effective date of designations to date of final rule
- Key Points
 - Use PM₁₀ major NSR program as surrogate, using either Appendix S or State's SIP-approved PM₁₀ program
 - Major stationary source: potential to emit 100 tpy of PM₁₀ (including condensable emissions)
 - Offset ratio: 1 to 1
 - Significant emissions rate for modifications: 15 tpy of PM₁₀
 - Precursors not included in applicability for PM_{2.5} major NSR program at this time
 - Until final NSR rules for PM_{2.5} are issued, address NO_x under NSR program for ozone or PSD program for NO₂ NAAQS, address VOC under NSR if area is also an ozone nonattainment area, and address SO₂ under PSD program for the SO₂ NAAQS.



PM_{2.5} Implementation Rule - Other Issues

- Technical overview – chemistry, sources, ambient data
- Transportation conformity and general conformity
- Contingency measures
- Innovative program mechanisms
- PM_{2.5} source test methods / condensables
- Improved monitoring techniques to reduce emissions
- Emission inventories
- Tribal issues



For more information ...

- PM_{2.5} designations and the proposed PM_{2.5} Implementation Rule are available at: www.epa.gov/pmdesignations
- Technical information is located at:
www.epa.gov/ttn/naaqs/pm/pm25_index.html
- Contacts:
 - Rich Damberg, damberg.rich@epa.gov
 - Amy Vasu, vasu.amy@epa.gov
 - Joe Paisie, paisie.joe@epa.gov
 - Raj Rao, rao.raj@epa.gov (NSR issues)