

# PM2.5 Redesignation Request and Maintenance Plan for Metropolitan Washington, DC-MD-VA

Joan Rohlf

MWAQC

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# PM2.5 Designation

- 1997 EPA set standard at
  - 15.0  $\mu\text{g}/\text{m}^3$  (annual)
  - 65  $\mu\text{g}/\text{m}^3$  (24 hour average)
- 2006 EPA reduced 24 hour standard to 35  $\mu\text{g}/\text{m}^3$
- EPA designated the Washington, DC-MD-VA as “nonattainment” for the standard in 2005
- Washington, DC-MD-VA region submitted PM2.5 SIP in 2007

# PM<sub>2.5</sub> SIP Planning (submitted to EPA, 2008)

EPA finalizes PM<sub>2.5</sub> Standard

Region Designated Nonattainment

PM<sub>2.5</sub> SIP Submitted

Clean Data Determination  
Attainment  
Year

1997

2004

2008

2009

2009

# Clean Data

- Federal Reference Monitors (FRM) demonstrate compliance with 35  $\mu\text{g}/\text{m}^3$  (daily standard)
- Regional monitors demonstrate compliance with annual 15  $\mu\text{g}/\text{m}^3$  since 2005

24-hour Design Value is 27  $\mu\text{g}/\text{m}^3$

Annual Design Value is 11.5  $\mu\text{g}/\text{m}^3$

(based on 2008-2010 data)

# Steps to Official “Attainment” Status

- 2005 - Air quality monitors indicate that average annual concentrations are below the national health standard
- 2008 – MWAQC, States submitted PM2.5 SIP showing attainment by 2009.
- EPA issues a “Clean Data Determination,” 2009
- States request redesignation to attainment and submit a plan to maintain low levels of fine particle pollution for 10 years into future

# Benefits of Attainment

- Official recognition and public awareness:
  - Fine particle pollution (PM<sub>2.5</sub>) levels are lower in the metropolitan Washington area than the level required by the federal health standard
  - Control measures such as cleaner engines, controls on power plants, diesel retrofit measures are working.
- Reduces a significant obstacle for locating new generation capacity (economic development)

# Redesignation Request

- MWAQC/States must request redesignation
- Redesignation Request must demonstrate emissions decline from 2002-2007.

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graph TD; A[Redesignation Request] --> B[SIP]; A --> C[Clean Data Designation];
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Redesignation Request

SIP

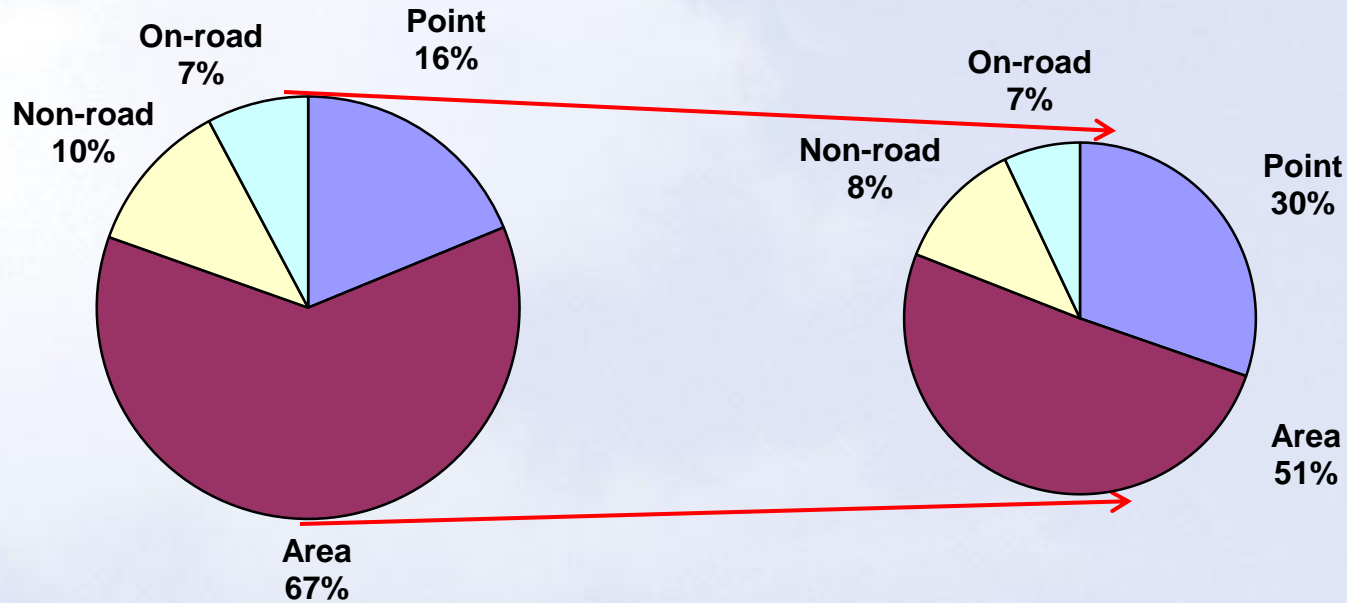
Clean Data Designation



# PM2.5 Emissions, 2002-2007

**PM2.5**  
Base Year 2002 Emissions = 22,145 tpy

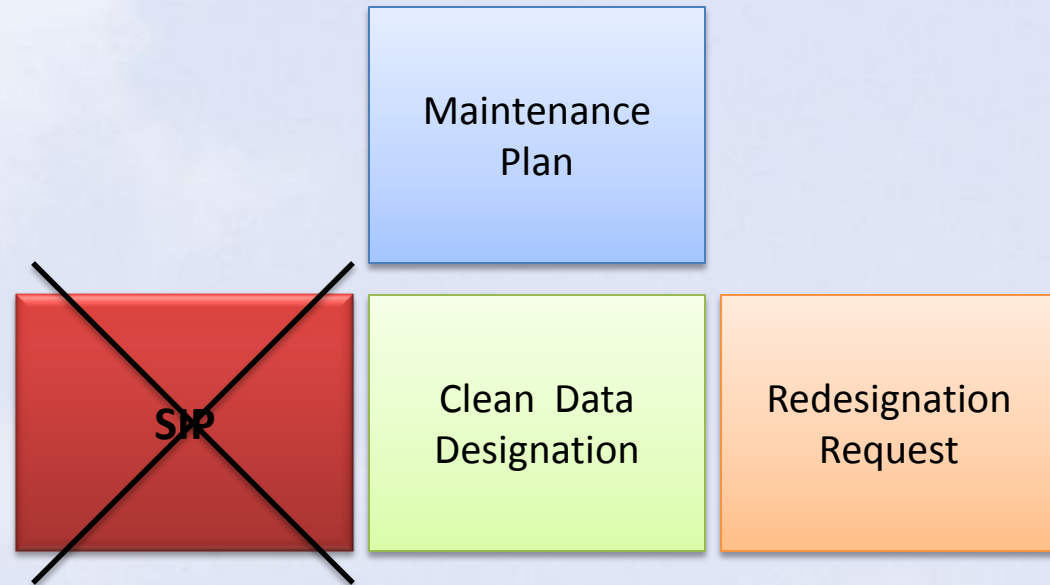
**PM2.5**  
Attainment Year 2007 Emissions = 18,298 tpy





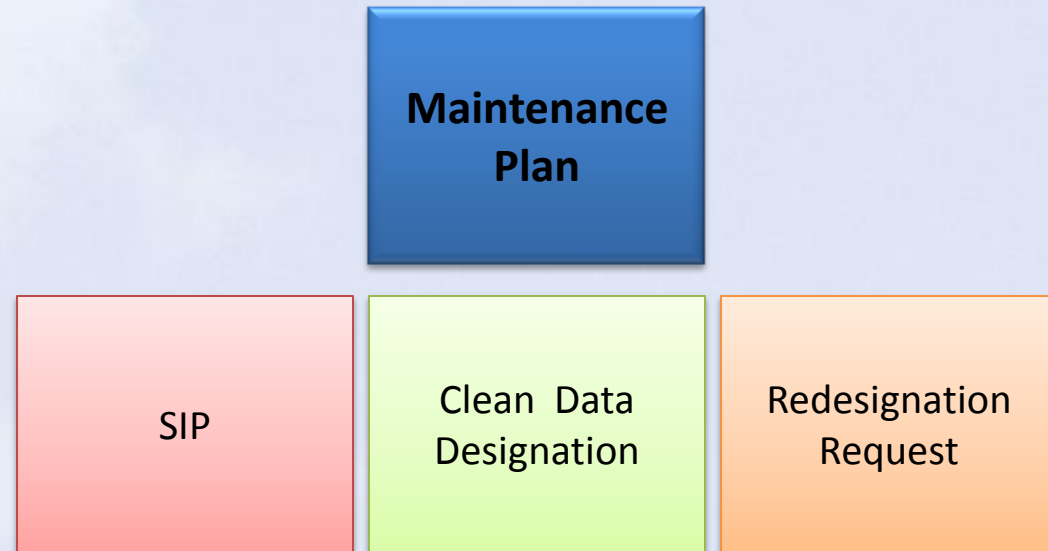
# Withdraw PM<sub>2.5</sub> SIP

States will withdraw the PM<sub>2.5</sub> SIP in early 2012 before submitting the Redesignation Request and Maintenance Plan.



# PM<sub>2.5</sub> Maintenance Plan

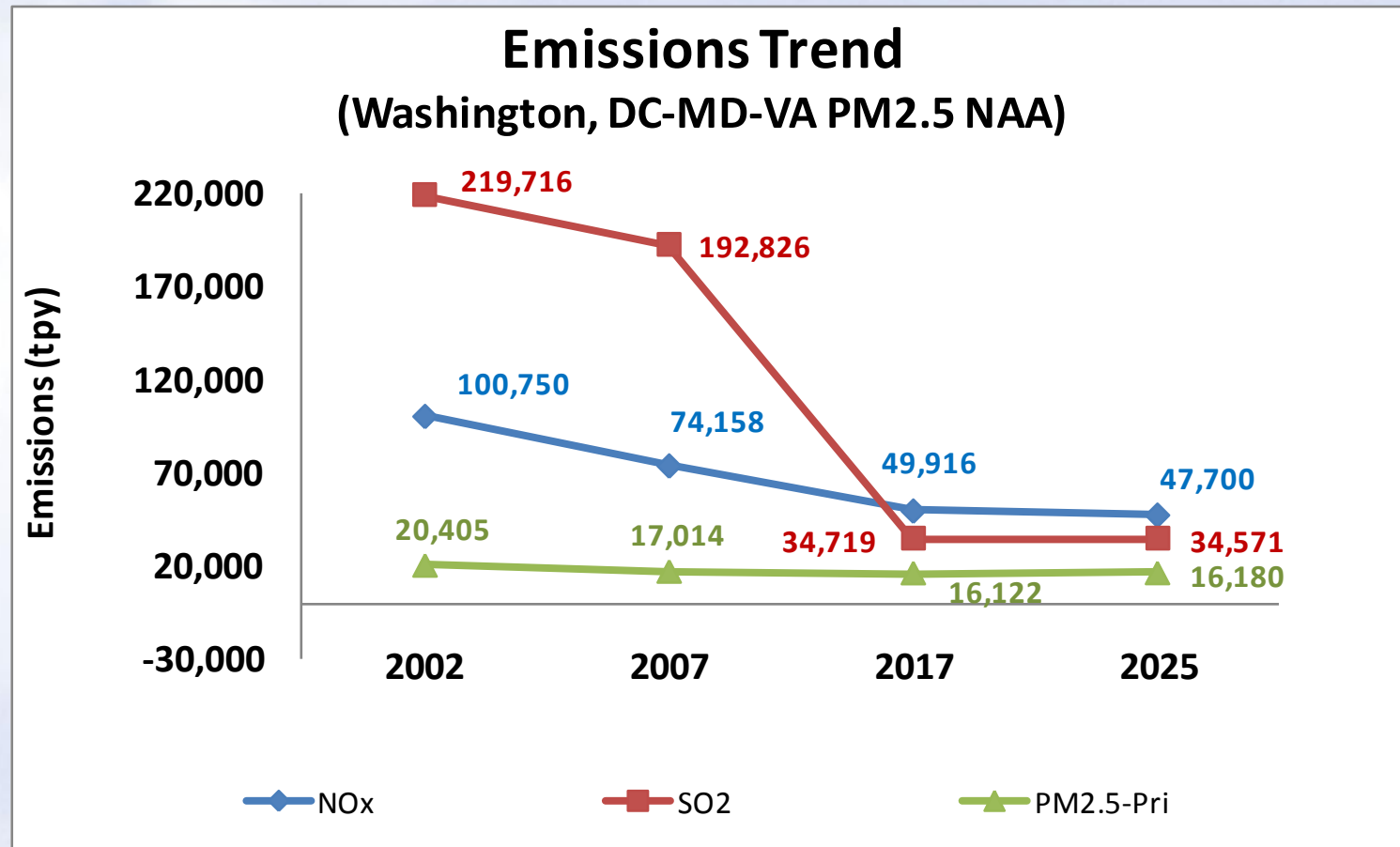
MWAQC/States  
must prepare a plan  
to maintain low  
PM<sub>2.5</sub> levels for 10  
years beyond EPA  
redesignation.



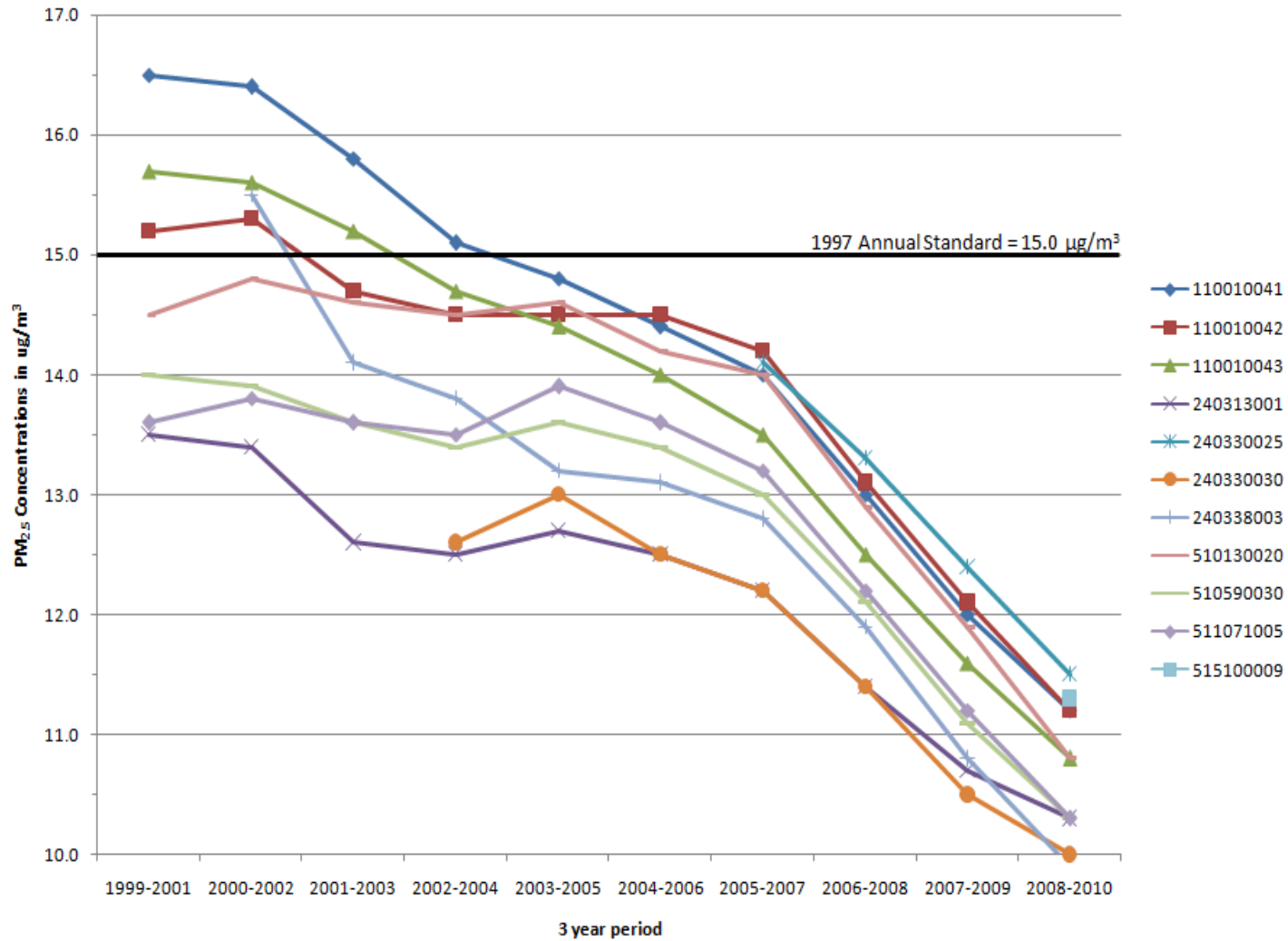
# PM<sub>2.5</sub> Redesignation and Maintenance timeline



# Maintenance Plan



### PM<sub>2.5</sub> Annual Design Value Graph for the Washington DC-MD-VA Region



# Request & Maintenance Plan

- Redesignation Request

Base Year 2002, Attainment Year 2007

Demonstrate decline in PM2.5 from 2002-2007

## Maintenance Plan

Demonstrate compliance ten years into future

2007, 2017, 2025

Contingency triggers, Contingency measures

# Recommended Action

- MWAQC vote to approve that MWAQC and States request redesignation for PM2.5 standard
- MWAQC vote to request that States withdraw the PM2.5 SIP at an appropriate time (Jan-Feb 2012)