

# Status of PM<sub>2.5</sub> Redesignation & Maintenance Plan

(Washington DC-MD-VA PM<sub>2.5</sub> Nonattainment Area)

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# Status of Emissions Inventories - 1

- **Milestone Years**

- 2002, 2007, 2017, 2025

- **Inventories needed**

- Point Source (EGU & NEGU)
- Area Source
- Nonroad Source
- Onroad Source

- **Inventory sources**

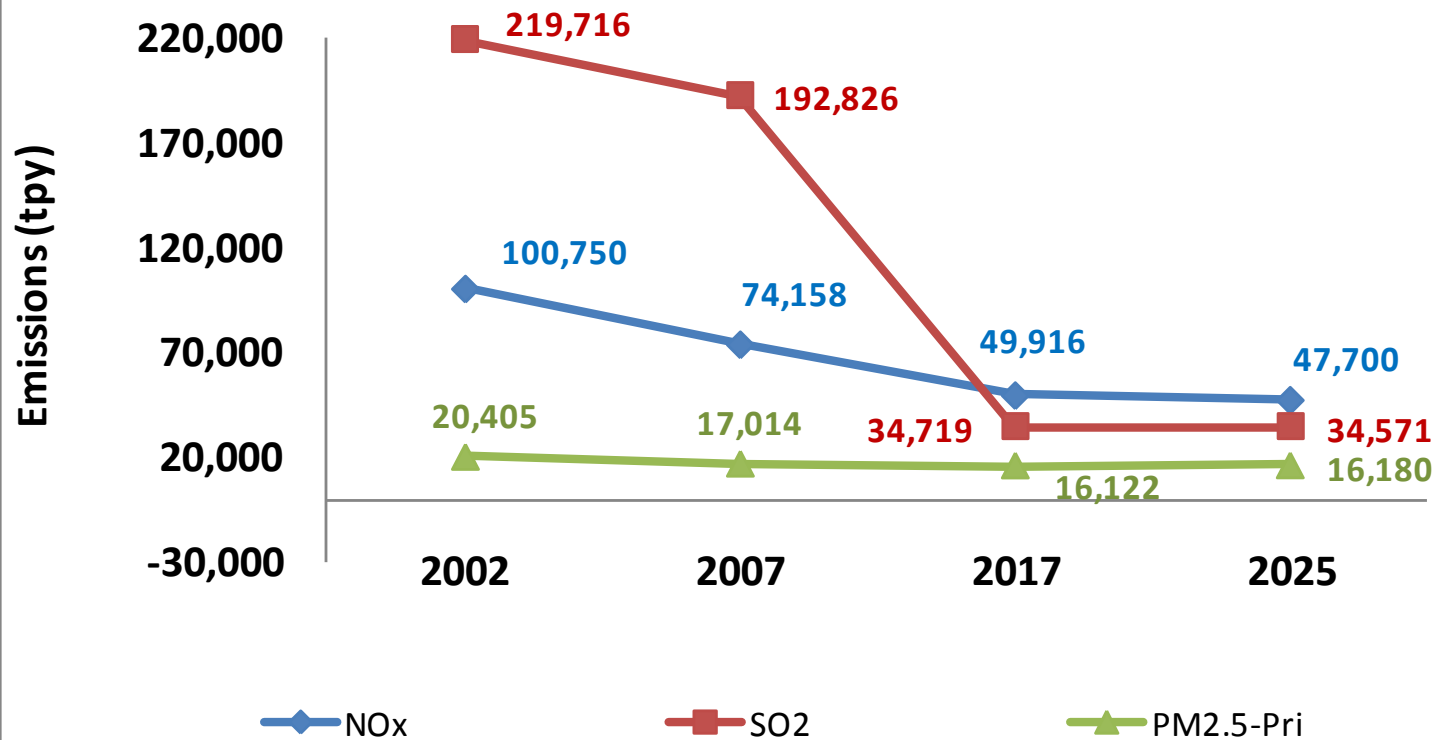
- 2002: All four sources - MWCOG
- 2007/17/25: NMIM emissions for Virginia –MWCOG
- 2007/17/25: All other sources - MARAMA ver 2\_1 (October 24, 2011)

# Status of Emissions Inventories – 2

Source	2002	2007	2017	2025
Point	Final	Draft Final	Draft Final	Draft Final
Area	Draft	Draft Final	Draft Final	Draft Final
Nonroad	Draft	Draft	Draft	Draft
Onroad *				

\* Onroad emissions (MOVES based) are scheduled to be developed by February 2012.

## Emissions Trend (Washington, DC-MD-VA PM2.5 NAA)



**MOVES emissions are not included.**

**2002 Area source emissions need to be revised with application of “Transport factor”.**

# Summary of Draft Emissions Inventories

Source	SO2				NOx				PM2.5-Pri			
	2002	2007	2017	2025	2002	2007	2017	2025	2002	2007	2017	2025
Point	204,602.38	183,448.61	28,173.51	28,227.35	60,608.24	37,855.18	22,838.03	23,173.54	4,154.68	5,546.75	5,242.87	5,579.33
Area	12,321.79	7,730.73	6,112.13	5,826.89	13,954.02	9,421.64	9,481.58	9,812.88	13,666.87	9,262.82	9,296.16	9,327.98
NMIM	2,094.10	1,230.52	27.11	29.60	21,926.91	20,181.45	11,282.95	8,002.69	2,296.41	2,003.41	1,424.12	1,112.09
MAR	697.50	415.72	405.90	487.52	4,260.91	6,699.80	6,313.23	6,710.54	287.35	200.87	158.62	160.38
<b>Total</b>	<b>219,716</b>	<b>192,826</b>	<b>34,719</b>	<b>34,571</b>	<b>100,750</b>	<b>74,158</b>	<b>49,916</b>	<b>47,700</b>	<b>20,405</b>	<b>17,014</b>	<b>16,122</b>	<b>16,180</b>

**MOVES emissions are not included.**

**2002 Area source emissions need to be revised with application of "Transport Factor".**

# **MARAMA Emissions Inv Changes**


**(Since July 8, 2011)**

- **Current inventory version – ver 2\_1 (Oct 24, 2011)**
- **Previous inventory version – ver 1\_2 (July 8, 2011)**
  
- **Inventory changes**
  - **Revised dust emissions from paved roads**
  - **AEO 2011 fuel emissions factors**
  - **EGU future control factors**
  - **DC & MD point source changes – shutdown of Pepco Benning & Buzzard facilities, MD HAA emissions limits included**
  - **Previously missing RWC emissions added for DC for 2007/17/25**

# Triggers & Contingency Measures

- **Control measures work-group call : Oct 26, 2011**
  - **Two triggers identified**
    - **Exceedance of 1-year mean PM<sub>2.5</sub> concentration of 15.0 ug/m<sup>3</sup> in any given year**
    - **Exceedance of 3-year mean PM<sub>2.5</sub> concentration of 15.0 ug/m<sup>3</sup> (Design value for 1997 annual PM<sub>2.5</sub> standard)**
  - **Contingency measures being discussed:**
    - **PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> RACM**
    - **Additional SO<sub>2</sub> controls from Maryland Healthy Air Act if trigger before 2013**
    - **Diesel emission reduction strategies**
    - **Alternative fuel (e.g., liquid propane and compressed natural gas) and diesel retrofit programs for fleet vehicle operations**
    - **Concrete manufacturing-upgrade wet suppression**

# Conclusion

- **NO<sub>x</sub>, SO<sub>2</sub>, & PM<sub>2.5</sub>-Pri emissions**
  - 2002 – 2007
  - 2007 – 2017
  - 2007 - 2025
- **Downward emissions trend**
  - 2002 – 2007: Satisfies the criterion for Redesignation Request
  - 2007 – 2017 & 2007 – 2025: Continued maintenance of 1997 annual PM<sub>2.5</sub> standard (15 ug/m<sub>3</sub>)
- **A number of inventories are still draft and MOVES emissions need to be developed to complete the picture.**
- **A number of contingency measures are being discussed.**