

# **Reasonable Further Progress Plan – Status Update**

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# Background

- Washington, DC Region –
  - Currently designated as “Marginal” ozone nonattainment area for current ozone standard (75 ppb)
  - Needs to attain by December 31, 2015
  - If not, then the region will get redesignated (bumped-up) to “Moderate” ozone nonattainment area
- Reasonable Further Progress (RFP) Plan required for Moderate Ozone NAA.

# Background

- Washington, DC Region
  - Agreement between states in PM2.5 Maintenance Plan to work proactively on Reasonable Further Progress (RFP) Plan
  - Allow submission of RFP plan in short time-frame, if needed
  - EPA Ozone implementation guidance still not final, so working with a few uncertainties

# RFP Plan Components

- RFP Milestone Years
  - Base Year: 2011
  - First RFP Milestone Year: 2017
  - Second RFP Milestone Year: 2018 (?)
- RFP Emissions Reduction Requirements:
  - 15% VOC and/or NOx emission reduction during 2011 – 2017
  - Additional 3% VOC and/or NOx emission reduction during 2017 – 2018 (?)

# Emissions Inventories

- Emissions Sources
  - Point (EGU & NEGU)
  - Area
  - Nonroad (NMIM model & MAR sources)
  - Onroad (MOVES model)
- Pollutants - VOC & Nox
- Time – Average Ozone Season Day

# Development of 2017 Emissions

Methodology to develop future year emissions inventory varies depending on emission sources

- EGU Sources
  - Current emissions, future expected emissions changes (fuel switching, plant shutdowns, known controls)
- Non-EGU, Area, and MAR Sources
  - Emissions projection from 2011 to 2017 using growth surrogates (population, employment, household, fuel consumption, VMT, etc)
- Nonroad Model Sources
  - Constitute majority of nonroad sources, developed using NMIM model (projection & controls imbedded for different nonroad categories)
- Onroad Sources
  - Developed using MOVES model (uses projected VMT & known vehicle emission control and fuel parameters)

# Development of 2017 Emissions

- First Emissions Inventory Sub-Committee Call – April 1
  - Discussion focused on growth surrogates for projecting area, non-EGU, and MAR source emissions from BY2011 to RFP milestone year 2017
  - Next calls will focus on final decisions on growth factors and developing control factors
- Point Sources
  - EGU (States)
  - Non-EGU (COG)
    - Non-EGU Growth Factors
      - COG Co-operative forecast 8.3 (Population, household, employment), Annual Energy Outlook projections
      - Discussion on Growth Surrogates ongoing

# Development of 2017 Emissions

- Area & MAR Sources (COG)
  - COG Co-operative forecast 8.3
  - Discussion on Growth Surrogates ongoing
- Nonroad Sources (COG)
  - NMIM model: PM2.5 RR/MP inputs as starting point, Tier 3 gas sulfur (10 ppm)
- Onroad (COG)
  - 2013 CLRP MOVES2010a emissions available
  - 2014 CLRP MOVES2010a emissions - Oct 2014
  - Can use MOVES2014 emissions in 2016, in needed for official submission