

# Products of the Air Quality Multi-Pollutant Process



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October 7, 2009



## What is an Air Quality Multi-Pollutant Process to North Carolina?

- The purpose of the Air Quality Multi-Pollutant Process (AQMP) is to define the process that an integrated air quality plan will be developed and implemented and to establish a timeline for such a plan.
- The process will focus on multi-pollutant strategies instead of single pollutant planning.



# Outline of AQMP

- Lay of the Land
  - Focuses on the current air quality issues in North Carolina and addresses future challenges
- Conceptual Model
  - Focuses on the state of air quality in North Carolina



# Outline of AQMP

- Communication Strategy
  - Focuses on communicating with stakeholders to disseminate information and receive feedback
- Control Strategy Evaluation Process
  - Focuses on outlining some key variables and tools to evaluate potential control strategies



# Summary of the Lay of the Land

- Air Quality issues and concerns
  - Status of compliance with NAAQS
  - Air Toxics
  - Other air quality issues and concerns
- Climate Change and Greenhouse Gas Initiatives
- Ecosystem Health Concerns



# Summary of the Lay of the Land

- Energy Issues
  - Renewable Energy
  - Energy Efficiency
- Public Health Concerns
  - Cardiovascular Health
  - Respiratory Health
- Growth as it relates to multi-pollutant strategies



# Summary of the Lay of the Land

- Stakeholder Involvement
- Process for implementing AQMP so it is consistent with federal, state and local legislation and regulation
- Regional and neighboring State Issues



# Summary of the Lay of the Land

- Other air quality planning efforts that potentially impact the AQMP
  - Transportation Plans
  - Watershed Plans
  - Adaptation Issues
  - Emergency or Contingency Planning
  - Climate Action Plans



# Summary of the Conceptual Model

- Pollutants of concern in North Carolina
  - Ozone
  - Particulate Matter
  - Regional Haze
  - Toxics
  - Greenhouse Gases
  - Other Criteria Pollutants



# Summary of the Conceptual Model

- Development of a multi-pollutant emissions inventory
- Impacts of meteorology on ozone, particulate matter and regional haze
- Technical tools available to support air quality management



# Summary of the Conceptual Model

- Potential control strategies and control strategy assessment
- Potential Roadblocks



# Communication Strategy

- Identifies potential stakeholders
  - North Carolina State Agencies
  - Other State Agencies
  - Federal Agencies
  - Local Agencies
  - Regulated Community
  - Environmental and Public Groups



# Communication Strategy

- Addresses some of the various methods to communicate with stakeholders
  - Utilize existing stakeholder infrastructure
    - For Example, Outside Involvement Committee, State Interagency Consultation Workgroup, Sustainable Environment for Quality of Life, Early Action Compact Workgroups, etc.



# Communication Strategy

- Developing conduits for disseminating information effectively and captures the interests of the various stakeholders
  - One means of achieving this is to develop “subgroups” that focus on particular areas of interests of the stakeholders
  - Foster effective communication among a diverse group of stakeholders



# Communication Strategy

- Provide useful information to the stakeholders so they can provide input and feedback throughout the process
  - Milestones
  - Updates to documents
  - Other pertinent information



# Communication Strategy

- Determine, based on stakeholder feedback, the what, when and how information should be provided so the stakeholders are engaged throughout process
  - Capture and maintain the stakeholders' interest level throughout the process



# Communication Strategy

- Utilize the various technological tools available to communicate with stakeholders
  - NCDAQ website
  - List serves
  - Meetings
  - Webinars
  - E-mail



# Control Strategy Evaluation Process

- Addresses the best practical means of evaluating potential control strategies
- Major focus on the evaluation process is considering the multi-pollutant benefit at a reasonable cost and ease of implementation



# Control Strategy Evaluation Process

- Some of the key variables for consideration
  - Feasibility of implementation
  - Cost Benefits
  - Pollutants Impacted
  - Environmental Justice
  - Air Quality Impacts



# Control Strategy Evaluation Process

- Determine the best method for prioritization of potential control strategies
  - Local air quality benefits to meet air quality standards vs. benefits to reduce health risk
  - Reductions in one pollutant vs. increase in another pollutant



# Control Strategy Evaluation Process

- Evaluative tools to assist stakeholders in prioritizing and ranking potential control strategies
  - Pollutant Reduced
  - Emission Reduction
  - GHG Reduction
  - Air Quality Impacts
  - Area Covered
  - Other Environmental Impacts



# Control Strategy Evaluation Process

- Tools to assist stakeholders evaluate potential control strategies
  - Environmental Justice Issues
  - BENMAP Risk Assessment
  - Implementation Concerns
  - Cost Benefits
  - Voluntary vs. Regulatory
  - Percentage of Affected Population
  - Percentage of Emission Contribution



# Control Strategy Evaluation Process

- Parameters for evaluating implementation of air quality rules
  - Compliance Rate
  - Enforcement
  - Public Awareness and Outreach
  - Overseeing Agency



# Control Strategy Evaluation Process

- Other important variables to consider are the area of influence the control strategy covers, implementation and desired air quality benefits



# Structure of the AQMP

- Lay of the Land
- Conceptual Model
- Communication Strategy
- Control Strategy Evaluation Process
- Structure of 1<sup>st</sup> Multi-Pollutant Air Quality Management Plan



# Structure of the AQMP

- Appendices
  - Population Growth Information
  - Population Density Maps
  - Commuting Patterns
  - Emission Density Plots
  - 2009 and 2018 Modeling Projections for Ozone and Fine Particulate Matter
  - Rule Worksheet



# Structure of the AQMP

- Maps of Point Source Emissions and Highway Networks per Region
- Maps of Animal Operations per Region
- AQM-Plan Timescale