# AQM Subcommittee Recommendations

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# Introduction

- Agency has received the recommendations
- Agency engaging in significant activity

# Background on AQM Subcommittee

- Recommendations developed through a two-phased process
- Phase I completed in Jan. 2005
  - Recommendations were “low hanging fruit”
  - CAAAC recommended a second phase to look at long-term changes to the air quality management system
- Phase II completed in June 2007
  - Developed 13 recommendations and 47 sub-recommendations

# Overarching Recommendation: Air Quality Management Plan (AQMP)

- EPA, states, local governments and tribes develop comprehensive statewide AQM plan
  - Deals with multiple air quality issues in one document/process
  - Multi-pollutant approach
  - Integration with land use, energy and transportation
  - Account for greenhouse gases
  - Revise periodically (e.g., every 5 -10 years)

# Implementation of AQMP Recommendation

- EPA is working with three pilot areas:
  - New York
  - North Carolina
  - St. Louis partnering with Missouri and Illinois
- Areas to develop plan that:
  - Adopts multi-pollutant approach integrating control of criteria pollutants and hazardous air pollutants
  - Incorporates land use, transportation, energy and climate into their management process
  - Addresses Clean Air Act-mandated requirements, such as State Implementation Plans
- Pilot projects serve as “laboratory” to:
  - Test and analyze implementation of several of the 12 supporting recommendations
- More to come ...

# Twelve Key Supporting Recommendations

1. Improve environmental and health data
2. Improve the priority setting process
3. Improve accountability mechanisms
4. Take climate change into account
5. Support transportation and land use scenario planning
6. Integrate air quality planning into land use, transportation and community development plans
7. Encourage pollution prevention, energy efficiency and renewable energy

# Twelve Key Supporting Recommendations

8. Expand the use of episodic controls
9. Overcome potential barriers to clean energy/air quality integration
10. Provide incentives for voluntary and innovative land use, energy, and transportation approaches
11. Develop programs to reduce public demand for polluting activities
12. Establish an inter-agency liaison group to coordinate land use, energy, transportation, climate change, and air quality goals

# Agency Activities Responsive to Recommendations

- Agency engaging in several initiatives that are responsive to the twelve recommendations
- Highlight some of the key activities
- Additional examples can be found in the appendix to this briefing

# EPA Engaging in Major Initiatives on Air Quality Assessment

- Developing air quality information, forecasting tools, and indicators to measure program success in terms of public health outcomes (Recs. 1, 2 and 3)
  - Participating in Public Health Air Surveillance Evaluation Project with CDC and three States to track potential relationships between public health and environmental data and air quality
- Enhancing ecosystem effects analysis through combined secondary NAAQS review for NOx and SOx that are closely linked (Rec. 2)
  - Groundbreaking approach will improve Agency's ability to focus resources on the most significant and widespread ecosystem effects

# EPA Engaging in Major Initiatives on Air Quality Assessment

- Reengineering National Emissions Inventory (NEI) to improve quality and timeliness of emissions data (Rec. 1)
  - Building new Emissions Inventory System (EIS) to better automate inventory development
  - Changing NEI reporting to reduce burden and shorten inventory development and reporting time
  - Built a multipollutant emissions modeling platform to facilitate multipollutant air quality modeling and data analyses

# EPA Engaging in Major Initiatives on Air Quality Assessment

- Assessing impacts of global climate change on U.S. air quality through the EPA Global Change Research Program (Rec. 4)
  - Long-term goal is to enhance the ability of air quality managers to consider global change in their decisions through improved characterization of the potential impacts of global change on air quality
  - Draft report is currently under internal review and expected to be released later in 2008
  - Research findings will ultimately be reflected in air quality modeling

# EPA Engaging in Initiatives on AQM Planning

- Launched new community-based initiative called Sustainable Skylines (Rec. 6)
  - Dallas
  - Kansas City
  - Expanding to other cities in 2008
- Undertaking comprehensive review of Agency's use of pollution prevention in the air and other programs with the goal of increasing its use (Rec. 7)

# EPA Engaging in Initiatives on Implementing Air Quality Strategies

- Performed preliminary technical work on stationary source episodic control measures for certain industries (Rec. 8)
  - Pulp and paper, iron and steel and cement manufacturing
- Expanding outreach and assistance to increase use of energy efficiency/ renewable energy measures in air quality plans (Rec. 9)
  - Provided substantial technical analysis/expertise to Ozone Transport Commission (OTC) seeking to deploy clean energy strategies for ozone on high electric demand days
  - Conducted monthly technical forum discussions
    - Enables state policy makers from air and energy to discuss how key clean energy challenges can be handled in a more comprehensive, integrated fashion

# Conclusions

- Agency is acting on most of the AQM Subcommittee recommendations
- AQM subcommittee report is a living document
- Agency intends to continue to consult with CAAAC and to implement report

# Appendix

Additional Activities That Are Responsive To AQM Subcommittee Recommendations

# Improving Air Quality Assessment

- Creating a national multi-pollutant air monitoring network under the National Monitoring Strategy (Rec. 1)
  - Advancing air toxics monitoring by adding methods, sites to the National Air Toxics Trends network and special studies within the Community Scale Monitoring network
  - Improving collection and quality of speciated particulate matter monitoring, including better consistency in carbon measurements
  - Improving quality of Tribal community air quality monitoring
- Identified critical issues at the National Air Toxics Data Analysis workshop to coordinate/consolidate critical data systems (Rec. 1)
  - First air toxics data workshop held November 2007 provided insights to local and national scale air toxics issues

# Improving Air Quality Assessment

- National-Scale Activity Surveys (Recs. 1, 3)
  - Conducting a national-scale survey to collect a variety of data related to the Air Quality Index and the public's awareness of and response to air pollution in general, focusing initially on ozone
  - The data collected will support accountability initiatives and policy analysis at EPA

# Improving Air Quality Assessment

- EPA Workshops on Air Quality/Health Linkages (Rec. 1):
  - EPA and the Health Effects Institute are collaborating on workshops to foster improved long-term communication between air quality experts and health researchers
  - Participants discussing modifications that could be made to air quality monitoring that could significantly advance understanding of the impacts of air pollutant exposures on public health/welfare
  - First step toward ensuring ambient air monitoring program offers, and health researchers use, the best and most appropriate data possible to support the health research that serves as foundation for EPA's NAAQS

# Improving Air Quality Assessment

- Conducting first ever multi-pollutant, multi-scale modeling in Detroit that will help inform how we conduct such modeling elsewhere (Rec. 1)
- Built a Multipollutant Modeling Platform (Rec. 1)
  - Combined an integrated emissions inventory (criteria + toxics) and “one-atmospheric” air quality model to facilitate multi-pollutant assessments
  - Provides consistency, transparency, and efficient development of air quality baselines and projections for regulatory and policy assessments
- Promoting and advancing use of new emissions monitoring technologies, e.g., Mercury CEMS, fugitive emissions scanning (Rec. 1)
  - Needed to apply innovative emissions reduction strategies and assess difficult to monitor sources, sectors and pollutants

# Improving Air Quality Assessment

- Combining economic analysis for the NOx/SOx Secondary NAAQS (Rec. 2)
  - Analysis will consider the costs/benefits of reaching attainment with alternative secondary standards, and will incorporate important new approaches to valuation of ecosystem goods and services
  - By linking ecosystem effects to ecosystem services, EPA can better prioritize our programs to protect public welfare
- Regional Vulnerability Assessment (ReVA) (Rec. 2)
  - Using the ReVA program, developing a National Ecosystem Assessment Toolkit that will help identify ecosystems that are most vulnerable to air pollution

# Improving Air Quality Assessment

- Enhancing air quality modeling capabilities to improve accuracy of daily ozone and PM forecast that will support use of episodic controls (Rec. 2)
- Conducting retrospective evaluation of cost of compliance with OAR rules (Rec. 3)

# EPA Efforts and Achievements Include AQM Planning

- Analyzing expansion of ozone flex policy for new ozone nonattainment areas (Rec. 6)

# EPA Efforts and Achievements Include Implementing Air Quality Strategies

- Enhancing air quality modeling capabilities to improve accuracy of daily ozone and PM forecast that will support use of episodic controls (Rec. 8)
- Launched workgroup of EPA staff per the EPA Administrator's Priority on Energy and Climate to maximize opportunities for using EE/RE to help address AQ and GHG challenges (Rec. 9)

# EPA Efforts and Achievements Include Implementing Air Quality Strategies

- Organized productive sessions at the EPA-State Innovations Conference to highlight state actions for using energy strategies to meet climate change goals (Rec. 9)

# EPA Efforts and Achievements Include Implementing Air Quality Strategies

- Issued guidance documents on determining emissions reductions associated with voluntary/innovative mobile source control measures and showed how these types of measures can be used in SIPs (Rec. 10)
  - Reduction of Long Duration Truck Idling
  - Diesel Retrofits
  - Best Work Places for Commuters
  - SmartWay Transport Programs