

AGENDA
NARSTO-ONE-ATMOSPHERE MULTIPOLLUTANT MANAGEMENT
MINI-WORKSHOP
AMERICAN PETROLEUM INSTITUTE
OCTOBER 4-5, 2006

October 4

8:30AM Welcome and Introductions (Pennell)
Goal of this workshop

8:45 Proposed NARSTO Assessment –Where we are (Hidy)

- Scope
- Proposed Charge
- Proposed Definitions
- Proposed Outline for assessment

9:15 Review of NRC Report on Air Quality Management (Greenbaum)

- NRC Conclusions about Improvements in AQM
- NRC Interpretation of multi-pollutant management and accountability
- NRC committee Options for Future
- Application to North American Context

9:45 Break

10:15 EPA Response —Thinking about multi-pollutant results-oriented approaches (Harnett and/or Wegman)

11:00 Canadian Outlook on multi-pollutant results-oriented management (Puckett)

11:30 Mexico's position on multi-pollutant results-oriented management (Molina?)

12:00 Lunch

1:00 How can NARSTO support thinking about multi-pollutant, accountability-based approaches to air quality management (policy direction relative to current practice), and where does science contribute to apparent policy options? (Panel Discussion: Vickery, Puckett, Jansen)

- Overview
- Current practices and what would be different (stakeholder perspective), including planning, non-attainment and SIP development; regional issues and command and control vs. cap and trade.
- Atmospheric science contribution
- Linkage with health sciences
- Linkage with ecological sciences

15 minutes discussion by participants

2:00 – 5:30 Designing NARSTO’s proposed “terms and conditions” for developing an assessment of the technical challenges in implementing multi-pollutant, accountability-based air quality management options?

Part 1 (2:00 – 3:00): Multiple Pollutant and Multiple Media considerations (Scheffe)

- What are some of the assumed government approaches to multi-pollutant management?
- How would multi-pollutant air quality management work compare with current approaches?
- What “new” science or technical approaches will be needed to inform or facilitate a multi-pollutant direction?
- What tact might NARSTO’s assessment take to address these needs?

30 minutes discussion by participants on potential approaches

3:00- 3:30 Break

Part 2 (3:30 - 4:30): Incorporating Accountability Concepts into the Assessment -- the effects-atmosphere interface (Demerjian)

- What approaches are being used or explored as a means of tracking end-to-end progress from emissions changes and the resulting changes in atmospheric conditions to changes in health and ecological conditions?
- In an ideal world, how can improvements in human and ecosystem health be tracked and quantified relative to improvements in air quality? What current or future methods (statistical or other) can be applied?
- How would a “risk-based” health and ecological protection policy work in terms of targets or goals and measurable progress?
- What approaches to identifying health-based indicators associated with implementation of air quality management programs are suggested by the health-effects and exposure communities?
- What approaches to identifying ecosystem indicators associated with implementation of air quality management programs are suggested by the aquatic and terrestrial ecosystem communities?
- How can the effects sciences be more meaningfully integrated with atmospheric sciences and emission characterization?
- How might the NARSTO assessment be structured to move us in this direction?

30 minutes discussion by participants on potential approaches

Part 3 (4:30 - 5:30): Linking with Spatial Scaling Issues and Climate-Air Quality Interactions (Scheffe)

[While a group of hazardous air pollutants (e.g., numerous aromatics and aldehydes) are well integrated through oxidant and aerosol formation processes and some commonality of sources, the fate of several HAPs (solvents and trace metals) act largely independent in nature and on very

localized exposure scales. Other HAPs such as mercury share in many of the same atmospheric transport and oxidant chemistry processes as aerosols and ozone, but typically require a multiple scale approach to assessment given the importance of global mercury cycling and near field transformation/deposition phenomena in the mercury system. Over the next few decades, the relative fraction of air pollution generated within North America relative to that transported in from other continents is expected to decrease. Accompanying a relative increase in transported air pollution could be an expected enhancement of climate-air quality interactions, as well as climate-ecosystem perturbations. How do we consider these aspects in this current assessment?]

- How should this assessment address those HAPs that predominantly act on local scales and participate only minimally with other pollutants in source emissions and atmospheric process?
- How should the scaling issues associated with inter-continental transport of air pollutants and precursors be accommodated in a broad based accountability and multiple pollutant-media assessments?
- How should the scaling and process issues of climate-air quality interactions and climate-ecosystem perturbations be addressed in this assessment?

30 minutes discussion by participants on potential approaches

5:30 Adjourn

October 5

8:30 Recapitulation of previous day discussions (Hidy)

- What is the best process for assembling a meaningful NARSTO assessment?
- Are we clear on definitions and on “pathways” for policy development and what science or technology is needed to give insight along these pathways?
- How should we include HAPs and climate?
- What are the key science integration or “needs” areas that should be discussed in such an assessment?
- What do past NARSTO’s assessments or other available documents, -- including the NAS report -- contribute?
- How should we go about setting priorities for an air quality improvement agenda?
- How would science and technology inform prioritization strategies?

10:00 Break

10:30 What revisions in NARSTO charge and scope are needed? (Demerjian or Scheffe?)

11:00 What would be the major sections of an assessment and what would be the general content of these sections? (Demerjian or Scheffe?)

- Review and modification of straw-man outline

- Who would be well-suited for authorship of sections, providing North American perspective and conceptual “leadership”?

12:00 Lunch

1:00 Where do we go from here? (Pennell)

- What process should we follow in implementing the assessment? [e.g., additional multi-disciplinary workshops, a state-of-science conference -- like the emissions inventory symposium in Austin, a super-workshop with designated authors, etc.]
- Author invitations
- Funding needs
- Proposed schedule [Is an author workshop needed; if so, when would this be scheduled? What is a realistic schedule for completion? etc.]
- How should the assessment draft be reviewed?

2:00-2:30 Adjourn