



National Mercury MONITORING WORKSHOP

Tracking mercury concentrations in air, land, water, and biota

May 5-7, 2008
Loews Hotel, Annapolis, MD

Convened by: U.S. Environmental Protection Agency – Clean Air Markets Division
With: National Atmospheric Deposition Program, U.S. Geological Survey, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and National Park Service

Workshop Goal: To develop a strategy for designing and implementing a collaborative, integrated national network for monitoring the ecological responses of mercury deposition.

Workshop Outcomes: Workshop participants and organizers will explore specific approaches to a national mercury monitoring network design, build agreement around a defined strategy, and outline implementation steps. Together they will produce a workshop report that includes a mercury monitoring network design document and national strategy.

Day 1 - The Vision for a National Mercury Monitoring Network

Noon – Registration and lunch

1:15 - Introductions and Stage-setting

Why are we here and what are we trying to accomplish? – Rick Haeuber, EPA

1:30 – Workshop Roadmap & Planning Efforts

History of planning work and overview of the workshop – Christine Negra, facilitator

1:45 – What are the goals and objectives of a national mercury monitoring network? Panel

Objective: understand the full range of mercury monitoring needs and constituencies and merge with previous compilations of monitoring goals and objectives.

Mercury policy/regulation

National perspective – Sam Napolitano, EPA

State-level perspective – Ed Swain, Minnesota Pollution Control Agency

Mercury research/modeling

Atmospheric perspective – Mark Cohen, NOAA

Ecological watershed perspective – Cindy Gilmour, SERC

Mercury biological effects

Biodiversity/conservation perspective – Tiffany Parsons, US FWS

Fish monitoring perspective – Jim Wiener, University of Wisconsin

Draft monitoring goals and objectives for national program – Dave Schmeltz, EPA

Group discussion – Areas of agreement/disagreement? Adaptations to list of goals and objectives?

3:45 – BREAK

4:00 - What is needed to meet network goals and objectives? Major elements of a comprehensive national mercury monitoring network

Objective: summarize previous network design work accomplished through 2003 SETAC conference and Steering Committee discussions.

Role of intensive and cluster sites – Rob Mason, University of Connecticut

Types of sites needed to meet network objectives: trends, causality, background/reference – Dave Krabbenhoft, USGS

Site selection: siting needs for model development and other site-specific considerations – Dave Krabbenhoft (for Reed Harris)

Group discussion: Areas of agreement/disagreement? Omissions?

5:15 – Review Workshop Goals

Review agenda, ground rules and anticipated workshop outcomes – facilitator

Q&A

5:30 – Adjourn for the day and happy hour

Day 2 - The Status of National Mercury Monitoring Today

8:00 – Continental breakfast

8:30 – **Review of workshop goals and agenda** – facilitator

8:45 –What is already in place? What’s new with existing mercury monitoring programs?

Objective: understand the landscape in which the new network will be implemented; provide an overview of existing and emerging monitoring efforts.

Brief Updates

NADP Atmospheric Mercury Initiative – David Gay, University of Illinois

USGS National Water Quality Assessment Program – Mark Brigham, USGS

NOAA fish and shellfish monitoring – Tony Lowery, NOAA

National Park Service – Kristi Morris, NPS

Tribal monitoring – Larry Scrapper, Cherokee Nation

State-level fish monitoring –Neil Kamman, VT DEC

Q&A

10:15 – BREAK

10:30 –What is already in place? (continued) Characterizing and mapping current sites
Objective: describe efforts to-date to construct the MercNet meta-database and highlight key findings.

Development of MercNet meta-database and compilation of maps – Colleen Haney, EPA and Dave Evers, BRI

Q&A and invitation to complete site data forms

11:15 –What are the major gaps? Characterizing potential intensive sites

Objective: describe efforts to-date to characterize potential intensive sites based on preliminary selection criteria.

Potential intensive sites: coverage of monitoring objectives, site criteria and measurement parameters – Tim Sharac, EPA

Q&A

12:00 – 1:30 LUNCH – (walk around room and look at maps on walls)

1:30 – How can gaps be addressed? Strategies for selecting intensive sites

Objective: describe process and outcomes of a planning exercise for identifying intensive sites.

Potential intensive mercury monitoring sites: results from the March 4th workshop – Charley Driscoll, Syracuse University

Q&A

Charge to breakout groups – facilitator

2:30 – BREAK (go straight to breakout rooms)

2:45 – How can gaps be addressed? (continued) Breakout group discussions

Objective: develop solutions-oriented critiques of the planning exercise outcomes; solicit suggestions for additional candidate intensive sites.

What are the top 3 strengths and 3 weaknesses of the recommendations from the March 4th planning exercise, and what would you change? Are there any additional sites that should be considered?

4:00 – How can gaps be addressed? (continued) Report from breakout groups

Solicit and summarize key points from breakout group discussion – facilitator

4:45 – How can gaps be addressed? (continued) Revising the intensive site approach

Group discussion – How to develop a refined intensive site selection approach based on feedback from breakout sessions.

5:30 – Adjourn for the day

Day 3 - Developing Options for a National Mercury Monitoring Network

8:00 – Continental breakfast

8:30 – **Recap** from Day 2 and outline plan for the day – facilitator

8:45 – **How can gaps be addressed? (continued) Approaches to cluster sites**

Objective: review goals of cluster sites and evaluate possible approaches to identification; understand why cluster sites should be included in the network; what will be learned from cluster site measurements and what will be needed to establish cluster sites.

Case studies: Everglades – Dave Krabbenhoft; Acadia – Dave Evers; Cluster sites and atmospheric modeling – Mark Cohen; Northeast – Charley Driscoll

Group discussion

9:30 - **How do the pieces fit together? Designing a national network**

Group discussion: How can new intensive and cluster sites function in partnership with existing sites/networks?

10:15 – BREAK

10:30 – **How do the pieces fit together? (continued) Demonstration projects: Breakout group discussions**

Objective: develop near-term strategies for implementing coordinated monitoring and demonstration projects based on earlier discussions.

What are the first steps for building the network? What types of demonstration projects are needed? How to implement demonstration projects under a range of budget scenarios? How to leverage additional resources?

12:30 - LUNCH

1:30 - **How do the pieces fit together? (continued) Report from breakout groups**

Solicit and summarize key points from breakout group discussion – facilitator

2:15 - **Summarize areas of general agreement** – facilitator

- Approach to intensive sites
- Approach to cluster sites
- Overlapping programs
- Implementation options for near-term priorities
- Ideas for attracting new resources
- Options for demonstration projects

2:45 - **Brainstorm Next Steps** – **Group discussion**

- What can we produce for specific outcomes?
- Guidance on monitoring for states and others?

- MercNet database and atlas?
- Options for developing national network
- Approach to demonstration projects
- How can this work be shared with others – paper, presentations at meetings
- How can we advance the need for mercury monitoring at state, regional and continental scale?

4:00 Workshop Adjourns

4:30 – 6:30 Inter-agency session (federal and state agency representatives welcome¹)

- Review workshop progress/outcomes
- Develop schematic that shows the major pieces of the mercury monitoring network and the roles that each of the agencies play in providing the various pieces.
- Review follow-up steps for agencies

¹ Based on FACA (Federal Advisory Committee Act) considerations.