

Mercury TMDL Implementation Stakeholder Oversight Group Meeting Summaries – 2009, 2010

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Mercury TMDL Implementation Stakeholder Oversight Group

2009 Meeting Summary

Thursday, October 29, 2009

1:00-3:30 p.m.

MPCA St. Paul Office

Attendees:

Stakeholders

- Nancy Lange, Izaak Walton League
- Kris Sigford, Minnesota Center for Environmental Advocacy
- Tim Tuominen, Western Lake Superior Sanitary District
- Nancy Schuldt, Fond du Lac Reservation
- Trent Wickman, U.S. Forest Service
- Tim Hagley, Minnesota Power
- Dave Skolasinski, Cliffs Natural Resources
- Stephanie Campbell, U.S. Steel

MPCA

- David Thornton
- Frank Kohlasch
- John Seltz
- Anne Jackson
- Barbara Conti
- Chris Nelson
- Ed Swain
- Ned Brooks

1. Updates from members

Nancy Lange

EPA is developing MACT standards for power plants.

GAO report high level of reduction from coal-fired utilities at reasonable costs.

Tim Hagley

Minnesota Power's Boswell 3 unit has achieved a 93% reduction due to mercury controls added this year. The plan for Boswell 4 is due in 2011 for reductions sought by the end of 2014.

Reductions at Taconite Harbor are far short of expectations using Mobotech. The manufacturer and MP are exploring options.

Nancy Schuldt

A proposed upgrade to a community sewage-treatment plant on the Fond du Lac Reservation is having difficulty meeting the 1.3 effluent limit for the Lake Superior Basin. Control for phosphorous may aid in meeting the limit.

Tim Tuominen

A new polishing filter installed this year at the WLSSD plant has improved mercury effluent numbers.

2. Overview of TMDL Implementation Plan

Ned Brooks provided an overview of the plan, highlighting key milestones and changes to the document since previous stakeholder discussions. Changes noted include the use of the term "source category" instead of "sector" and referring to "new and modified facilities" instead of "new and expanding facilities." Both of these changes were made to clarify whom these terms

referred to. Discussion regarding the new and modified facility guidelines highlighted the need to clarify that the guidelines apply only to the expanding units at an existing facility and that the term “permitted potential” needs clarification.

3. Update on rule-making for emission reporting and reduction plans

Barbara Conti reported on proposed rules requiring annual mercury reporting from facilities not currently subject to reporting as well as reduction plans for permitted facilities affected by the implementation plan. The MPCA is currently developing the specific approaches for the rule and will seek feedback from this group early next year with the rule being finalized in 2010.

4. Report from Taconite Research and Implementation Council

Dave Skolasinski reported that the council formed and met on August 26 to review research findings and develop plans for future research. Dave reported on three research initiatives:

- Carbon fixed bed. Two bench top tests were performed on a fixed beds by EERC. This technology shows opportunity and has the advantage of not injecting anything into the furnace.
- Corrosion potential of adding bromide salts. Only mild corrosion was observed on metal coupons, need to explore further.
- Bromide injection into furnace converted elemental to mercury; however, the oxidized mercury was not caught by the wet scrubbers leading to potential concerns about local deposition.

Dave described funding sources and stated that the mines will be taking the lead in drafting proposals: DNR money: \$250K, plus \$150K from the mines and hopefully the EPA Great Lakes money, for a sum total of \$2 million.

Next phase of research:

- Answer questions about fixed bed (still bench top; furnaces not running)
- Back-of-the-envelope cost effectiveness study
- Corrosion
- Chemical injection in wet scrubbing

Near- and long-term objectives remain as stated in the taconite industry's plan, now part of the TMDL Implementation Plan. No next meeting scheduled.

5. New and modified air sources and experience with guidance

Anne Jackson and Chris Nelson described that the agency is negotiating compliance agreements with two modified facilities, a new line at Keetac and a new waste combustion unit at Pope Douglas to implement the guidance for new and modified facilities. These are considered enforceable documents will outline how the facilities will comply with the equivalent reduction provisions. In the case of Keetac, meeting the taconite goal ahead of schedule at existing Keetac and Minntac lines will offset the Keetac expansion, at least until 2025. Pope Douglas

emissions are expected to be below the minimum requirement for equivalent reductions but the facility has prepared a strategy to account for the increase if required. Polymet, a proposed new nonferrous mining and processing facility, has proposed equivalent reductions and other mitigation strategies, included in the draft EIS recently posted to the DNR Website.

- Regional, National and International Updates – MPCA, 10 min.
 - Regional
 - Great Lakes Air Reduction Strategy
 - Great Lakes Restoration Initiative
 - Utility/Industrial Boiler Regulation
 - UN Environment Programme International Treaty Negotiations

3:15 Plans for 2010

- Finalize rule for emission reporting and reduction plans
- Prepare 2008 inventory
- Improve emissions estimates from sources with lower confidence (crematories, product manufacturing, recycling, smelting, petroleum)
- Taconite Reduction Council
- 2010 meeting

3:30 Adjourn

Fall 2010 Mercury TMDL Implementation Stakeholder Oversight Group

Tuesday, November 30, 2010

12:30 – 2:30 p.m.

Draft meeting summary 12/14/2010

Attendees:

Stakeholders

Nancy Lange, Izaak Walton League

Boise Jones, environmental justice advocate

Tim Tuominen, Western Lake Superior Sanitary District

Nancy Schuldt, Fond du Lac Reservation

Trent Wickman, U.S. Forest Service

Tim Hagley, Minnesota Power

Dave Skolasinski, Cliffs Natural Resources

Chrissy Bartovich, U.S. Steel

Mike Robertson, Minnesota Chamber of Commerce

MPCA Staff

Frank Kohlasch, Barbara Conti, Mike Sandusky, Bruce Monson, Ed Swain, Ann Foss,

Anne Jackson, John Gilkeson, Todd Biewen, Carol Hubbard, Carri Lohse-Hanson

Summary

State of Knowledge 2010 Update

Ed Swain reported on key release measures and environmental response indicators and distributed a draft copy of the “Mercury in the Minnesota Environment, 2010 State of Knowledge Report.”

Air emissions appear to be going down with the caveat that data are preliminary. A finalized air emission inventory is expected later in December and will be sent to the group. Water loading, mercury releases from point sources, appears to be about the same as when calculated in 2005 and we are still well below the annual allowable load established in the TMDL. New data from peat mining show high flow and concentrations, something that will be confirmed. Deposition data show no clear trend. Fish concentrations are down over the long term but show a recent increase since the mid 1990s.

Water Implementation Updates

The MPCA has been implementing its permitting strategy, modified to reflect TMDL stakeholder recommendations. Suspiciously high data from several small wastewater-treatment plants and peat mines will be investigated.

Products Implementation Updates

John Gilkeson reported on priority products and key strategies identified for action in the near term. Priority products/sectors include thermostats, lamps/CFLs, scrap and salvage, building demolition.

Carol Hubbard reported on the accomplishments of the Mercury Free Zone program and its transition to an assistance effort through Health Dept and Education Dept.

Air Implementation Updates

Chrissy Bartovich and Dave Skolasinski provided a written and oral report on the Taconite Research and Implementation Council's efforts. Six projects have been selected to receive funding from a DNR-secured EPA Grant, supplemented by other sources.

Tim Hagley reported on Minnesota Power and Xcel Energy's implementation of the Minnesota Mercury Reduction Act of 2006. MP's Boswell 3 unit has installed activated carbon injection and is shooting for 90% removal. A challenge has been measurement at low levels present in the emissions. MP has sought an extension on Boswell 4 due to federal regulatory uncertainty. The request proposes a plan by 2015 with operation by 2018. Xcel has submitted all of its plans called for in the 2006 legislation. ACI is installed on Sherco 3 with some optimization needed. Upgrades at units 1 and 2 are scheduled for completion by the end of 2014. The King plant should be completed by 2011

MP's Taconite Harbor Plant's emission-reduction attempts were unsuccessful using the sorbent first tried. A new system will be installed by mid-2011, hopefully achieving around 80% control.

Barbara Conti reported on progress on MPCA rule-making for emission reporting and reduction plans. A draft version of the rule was circulated and comments are invited by the end of the year.

Anne Jackson and Ned Brooks reported on experience fine-tuning guidelines for new and modified air sources and described experience implementing the guidance with several facilities in the past year. A subgroup that had met from the fall of 2008 to early 2009 met last week to review implementation in more detail. Trent Wickman requested to be part of this subgroup in the future and requested a meeting early in 2011 to discuss implementation in more detail.

Ned Brooks and Anne Jackson informed the group that a Great Lakes Air Emissions Strategy has been prepared by the Great Lakes Regional Collaboration with the states and EPA. The final draft will be posted at www.gllrc.us/initiatives/toxics/draftHgEmissionReductionStrategy1109.html.

The EPA has also issued or intends to issue rules for most mercury-emitting sources in the next 1-2 years.

Implementation Plan Progress-Other

Nancy Schuldt reported that an EPA contractor is preparing a multi-pollutant TMDL for the St. Louis River. Contractor problems have delayed the start.

End of Meeting