

DEPARTMENT: POLLUTION CONTROL AGENCY

STATE OF MINNESOTA

Office Memorandum

DATE: November 16, 2012

TO: MPCA Citizens' Board

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SUBJECT: Regional Haze State and Federal Implementation Plan Update

Minnesota Pollution Control Agency (MPCA) staff have prepared this briefing memorandum to update the Board on the status of Minnesota's Regional Haze State Implementation Plan (SIP) and the Federal Implementation Plan (FIP) being prepared by the U.S. Environmental Protection Agency (EPA).

In March 2012, the Citizens' Board authorized submittal of a Supplemental Regional Haze SIP for Minnesota. The Supplemental SIP contained enforceable emission limits to implement the Best Available Retrofit Technology (BART) portion of the Regional Haze program. The MPCA submitted the Supplemental Regional Haze SIP to EPA on May 8, 2012.

On June 12, 2012, the EPA published a final notice in the Federal Register concerning Minnesota's Regional Haze SIP. The final notice approved all portions of Minnesota's Regional Haze SIP except two pieces of the BART program. EPA indicated in the notice that they were "deferring action on emission limitations that Minnesota intended to represent best available retrofit technology (BART) for taconite facilities. As proposed, EPA is also deferring action on the requirements for Xcel Energy's Sherburne County (Sherco) facility resulting from its potential certification as a source of reasonably attributable visibility impairment (RAVI)."

BART for Taconite

The MPCA determined that BART at the taconite plants generally did not include additional emission controls. Because of the size and unique nature of the industry, along with the fact that very few controls have been tried on indurating furnaces, the available retrofit technologies were limited. The MPCA determined that BART to control sulfur dioxide (SO₂) and particulate matter (PM) emissions was operation of existing wet scrubbers, while BART to control nitrogen oxides (NO_x) emissions was good combustion practices. These determinations were made in the initial 2009 SIP submittal, with the associated emission limits added in the 2012 Supplemental SIP.

In their proposed approval of the MPCA's SIP (published January 25, 2012), EPA was prepared to approve these BART determinations. However, EPA received several comments indicating that additional controls were available for the industry. Commenters particularly cited the testing of burners designed to reduce NO_x emissions – known as Low NO_x Burners – being carried out at U.S. Steel's Minntac facility.

Based on these comments, EPA did not approve the MPCA's BART determinations for the taconite facilities. On August 15, 2012, EPA published in the Federal Register a proposal for a Federal Implementation Plan (FIP) to implement BART at the taconite facilities in both Minnesota and Michigan. As proposed, the FIP requires every facility to install continuous emission monitors to measure emissions. It also requires each facility to meet a NO_x emission rate based on the installation of Low NO_x Burners, and for the burners to be installed on a staggered schedule with installation completed between 18 months and five years after the effective date. The FIP also proposes additional SO₂ emissions controls on one facility:

EPA received extensive comments on the proposed FIP. Although the MPCA did not send official comments on the proposed FIP, we have continued to have conversations with EPA concerning the FIP and their path forward. We are providing additional information to EPA, via letter, which lays out concerns with both the process EPA has undertaken and the substance of the FIP. In particular, staff are concerned that the time

needed for the agency to issue a permit for installation of the pollution control equipment and for the facility to install the equipment is not adequately accounted for in EPA's FIP compliance schedule. The letter also raises concerns about EPA's process – namely the lack of a formal disapproval of Minnesota's BART for the taconite facilities (though we understand EPA is working to produce this formal disapproval), the conditioning approval of BART on use of a specific technology, and the decision that Low NO_x Burners should be considered in the BART process despite the fact that they were not tested prior to the MPCA's specific technology determination.

EPA is under a consent decree to issue the rule finalizing the FIP. Originally, EPA was to sign the final notice on November 15, 2012, but negotiated an extension to November 29, 2012. EPA recently indicated that they may need an additional few weeks, but a final notice is expected before the end of 2012.

Long-Term Strategy for Taconite

The MPCA does not believe that Low NO_x Burners should be installed under the BART program. However, the Low NO_x Burner technology EPA has proposed in the FIP is an important emissions control technology, and one that the MPCA believes the industry will need to pursue as part of the long-term strategy to improve visibility that is included in the Regional Haze SIP.

The long-term strategy focuses on emissions in the six counties adjacent to Minnesota's Class I areas and is called the Northeast Minnesota Plan. A key part of the plan calls for the taconite industry to demonstrate compliance with new, stringent, one-hour ambient air quality standards for SO₂ and NO₂. The industry is required to submit, by the end of 2012, facility-specific modeling and proposed emission limits that demonstrate that each facility will comply with the ambient standards. The MPCA believes that demonstrating compliance with the ambient standards will require more stringent emission limits and installation of pollution control equipment.

BART for Power Plants and Sherco

The Supplemental SIP submitted to EPA relies on EPA's Cross-State Air Pollution Rule (CSAPR), a federal cap-and-trade rule designed to reduce emissions from power plants, to substitute for source-specific BART at the affected power plants. EPA approved this portion of Minnesota's SIP.

However, on August 12, 2012, the DC Circuit Court of Appeals vacated CSAPR and remanded it to EPA. On October 5, 2012, the EPA filed a petition for an en banc rehearing of the case. Currently, implementation of CSAPR is stayed. In addition, approval of Minnesota's SIP (along with those of several other states) has been challenged in court due to their reliance on CSAPR to substitute for BART. EPA has not yet provided guidance for further action to states that have relied on CSAPR.

In addition to relying on CSAPR, Minnesota's Regional Haze SIP includes additional enforceable emission controls on Xcel's Sherco facility. These were included because the National Park Service had provided information to EPA that Sherco causes Reasonably Attributable Visibility Impairment (RAVI) at Voyageurs National Park, and several commenters raised concerns about Sherco's emissions. EPA approved these controls as part of the SIP.

RAVI is a visibility control program that pre-dates Regional Haze, and was designed to reduce visibility problems caused by single sources. Because Minnesota has never had a source included in this program, the MPCA did not submit a SIP for RAVI and has technically been operating under a FIP since the mid-1980s. EPA has indicated that they have not determined if the controls applied to Sherco in the Regional Haze SIP are sufficient to address the RAVI concern. It is expected that EPA will take further action on this issue after the taconite BART FIP is completed.