United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

MAY 8 2008

In Reply Refer To:
FWS/ANRS-NR/035759

Mr. J. David Thornton
Assistant Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Dear Mr. Thornton:

On February 7, 2008, the State of Minnesota submitted a draft State Implementation Plan (SIP) describing its proposal to improve air quality regional haze impacts at mandatory Class I areas across your region. We appreciate the opportunity to work closely with the State through the initial evaluation, development, and current subsequent review of this plan.

The U.S. Department of the Interior, National Park Service (NPS) and U.S. Fish and Wildlife Service (FWS) have received and conducted a substantive review of the February 2008 proposed SIP, prepared in fulfillment of the requirements under 40 CFR 51.308(i)(2). Please note, however, that only the U.S. Environmental Protection Agency (EPA) can make a final determination regarding the document's completeness and, therefore, its ability to receive federal approval from EPA.

As outlined in a letter to each State dated August 1, 2006, our review focused on eight basic content areas. The content areas reflect key resource priorities for the Federal Land Management agencies, and we have enclosed comments associated with these priorities. Please note that we have highlighted comments in bold face that we feel warrant additional consultation prior to public release and which we believe must be addressed for the SIP to be complete and approvable. We look forward to your response as per section 40 CFR 51.308(i)(3). The NPS and FWS air quality staffs stand ready to work with you towards resolution of these issues. For further information, please contact Bruce Polkowsky with the NPS, Air Resources Division, at (303) 987-6944.

Mr. Thornton

Again, we appreciate the opportunity to work closely with the State of Minnesota and compliment you on your hard work and dedication to significant improvement in our Nation's air quality values and visibility. Cooperative efforts such as these ensure that, together, we will continue to make progress toward the Clean Air Act's goal of natural visibility conditions at all of our most pristine National Parks and Wilderness Areas for future generations.

Sincerely,

Assistant Secretary for Fish
and Wildlife and Parks

Enclosure

Department of the Interior Comments Regarding
Minnesota Draft Regional Haze Rule State Implementation Plan

On February 7, 2008, the State of Minnesota submitted a draft Regional Haze Rule State implementation plan (SIP), pursuant to the requirements codified in federal rule at 40 CFR 51.308(i)(2), to the U.S. Department of the Interior. The air program staffs of the National Park Service (NPS) and the U.S. Fish and Wildlife Service (FWS) have conducted a substantive review of the Minnesota draft plan, and have provided the comments listed below. We applaud the Minnesota Pollution Control Agency (MPCA) for developing a SIP that is responsive to the key policy areas that we identified as important in our August 1, 2006, letter. **As noted below, we have serious concerns in two areas: best available retrofit technology (BART), and the plan for emissions reductions in NE Minnesota.** We look forward to the State's response as per section 40 CFR 51.308(i)(3). For further information regarding these comments, please contact Bruce Polkowsky at (303) 987-6944 or Tim Allen at (303) 914-3802.

Baseline, Natural Condition, and Uniform Rate

We concur with the State's use of adjusted baseline conditions. We agree that days labeled as missing using the standard approach are valid for consideration by the State and better define the impact of sulfate and nitrate on the most impaired days.

Emissions Inventories

We appreciate the inclusion of summary 2002 emissions tables in the SIP on pages 29-30. We request that the 2002 emissions summary information also be placed in the Reasonable Progress section. This better informs the public on the difference between current emissions and future emissions goals of this SIP revision.

Best Available Retrofit Technology (BART)

We concur with MPCA's conclusion that the facilities with emissions units subject to BART are those listed in Table 9.2 on page 58. As noted in that table there are only two source categories with units subject to BART: electric generating units (EGUs) and taconite ore processing facilities.

BART for EGUs

On page 58, the draft SIP notes that MPCA did not complete a BART determination for EGUs subject to BART because those units are subject to the Federal Clean Air Interstate Rules (CAIR). The SIP states that unit specific emissions limits for sulfur dioxide and nitrogen oxides for BART units, as well as for other EGUs will not be fully incorporated into State of Minnesota permits until the five-year assessment required by the Regional Haze rule. This time frame, in conjunction with the unresolved litigation to have Minnesota removed from the CAIR region, could result in substantial delay in meeting BART emissions reduction requirements. **We request the SIP include unit specific**

BART emissions limits for EGUs to avoid delay in implementing BART should Minnesota be removed from the CAIR region. This is particularly important for the Northshore Mining Boiler #2. According to the information contained in the SIP, this facility is not planning to install any emissions controls for sulfur dioxide or nitrogen oxides under CAIR and its current emissions do not represent BART-level limits.

If the listed EGUs become subject to facility-specific BART requirements, additional reductions of particulate emissions would be appropriate since the PM emissions do contribute to their visibility impact and BART limits should be set for all contributing pollutants at levels achievable for a reasonable cost.

BART for Taconite

We believe that there is sufficient information to determine BART emissions limitations for sulfur dioxide emissions, and they should be included in the SIP now. This is particularly important for the United Taconite facility which uses a very high sulfur fuel. That facility could substantially reduce emissions through the use of a re-circulating scrubber at reasonable cost. In addition, we are concerned that the proposed sulfur dioxide emission limits for taconite facilities that burn low sulfur fuels is substantially above measured emissions rates. BART limits should reflect best operational practices.

There is sufficient technical evidence for the State to set BART emissions limits for nitrogen oxides using one or more post-combustion control techniques. Yet, we recognize that there is uncertainty regarding the current yearly nitrogen oxides emissions from taconite facilities, and therefore, there is uncertainty in calculating cost-effectiveness of post-combustion controls. **We concur with a delay in setting BART emissions limits for nitrogen oxides provided that the SIP requires: 1) the sources to install continuous emissions monitors (CEMS), or an equivalent emissions monitoring system, by November 30, 2008, and begin the reporting process no later than January 2009; 2) source emission control trials limited to on-site, slip-stream and other pilot-scale studies; 3) all studies be concluded and reported to MPCA no later than December 2011; and 4) the MPCA to issue permits containing new limits to establish BART for nitrogen oxides at each affected facility no later than December 2012. The SIP should identify appropriate interim deadlines that would assure these actions are completed in a timely fashion.**

Reasonable Progress Goals and Long Term Strategy

On page 82, in the discussion of calculation to determine the emissions reduction goal for sources in NE Minnesota, there is a statement that "75% of all visibility impacts are assumed to be uncontrollable." We would like MPCA to clarify that statement to reflect that those impacts are not controllable by MPCA. MPCA should request in this SIP that these emissions, to the extent controllable by other States or for consideration during international negotiations by EPA, be appropriately controlled to assist MN in making reasonable progress.

The modeling assessment in Chapter 8 of the draft SIP indicates a range of possible outcomes regarding the 20% worst days in 2018. MPCA has selected conservative reasonable progress goals at Voyageurs National Park and Boundary Waters Wilderness that do not achieve the uniform rate of progress, with the understanding that additional improvement is likely pending the outcome of the final BART determinations for taconite facilities and implementation of the NE Minnesota Plan. The SIP should commit the State to updating the information used to set the reasonable progress goals during the 5-year report process and to make decisions on future controls as provided for in the SIP with the knowledge that the uniform rate of progress is not being met in this first implementation period.

NE Minnesota Plan

On page 83, Table 10.4 summarizes the emissions targets for the NE Minnesota region. The more detailed information regarding the specific sources which make up the 2002 inventory is contained in Appendix 10.4. Given the uncertainty regarding the 2002 NOx and SO2 emissions from the taconite facilities, we request that Table 10.4 be expanded to include a column that identifies the total SO2 and NOx emissions from the taconite facilities as a group. This will help frame the discussion how CEM, or equivalent, data on future emissions will be taken into account in final BART determinations and how they figure into controls to be required at the taconite facilities with respect to the regional emissions target. **If initial CEM data indicate a dramatic reduction in emissions from the 2002 inventory and those data are not supported by significant process or line operation changes, then it is likely that the 2002 emissions were less than those listed in the SIP. The "fair share" of the reduction for the NE Minnesota region is 30 percent reduction by 2018 of the actual 2002 emissions. Therefore, some correction factor for CEM versus the 2002 baseline should be accounted for when determining compliance with the 30% reduction goal and to support Prevention of Significant Deterioration air quality related values evaluation by using emissions tracking in the future.**

The draft SIP language indicates that all existing sources identified in calculating the 2002 baseline will be tracked and all future permit applications will be taken into account when calculating the yearly tracking of emissions. We agree that for annual tracking the list of existing sources noted in Appendix 10.4 and new permit applications are sufficient. However, **the SIP should clearly identify those sources. In addition, the SIP should recognize MPCA's responsibility to account for any minor source emissions growth (or decline). The MPCA could address any minor source emissions changes during its 2012 assessment and as part of planning for the next implementation period after 2018.**

We concur with footnote 56 on page 83, indicating it will be difficult to determine the actual baseline emissions given modifications and production fluctuations at taconite plants between the 2002 baseline and current conditions as CEMs are put in place. However, given that the reductions at taconite facilities will represent

BART and will play a key role in whether the NE region is seeing a real 30 percent reduction from actual 2002 emissions, a factor that includes some comparison of the 2002 taconite emissions used in calculating the region's 2002 baseline with the first 12 months of CEM data should be another factor in the selection of cost efficiency requirements for control. This factor should be added to the one listed on Page 84 regarding the selection of cost-effectiveness, or dollar-per-ton-removed thresholds, based on meeting or not meeting the regional emissions reduction target using the original 2002 baseline.

The SIP must have specific dates for completing the BART-like review of the taconite facilities and when the decision on whether non-taconite facilities will need to implement control strategies.

The last three paragraphs of the "Plan for Emissions Reductions in NE Minnesota" section discuss the process by which MPCA will require additional reasonable measures to meet the 2012 and 2018 goals. These paragraphs summarize the framework document contained in Appendix 10.4. **The timelines from the Appendix should be reflected in the SIP language. In addition, the last paragraph concerning not meeting either target should also speak to how the State will address any new permits for facilities to be located in the NE region if targets have not been met (2012) or are likely not to be met (2018).**

The SIP should be clear that the 2018 target remains in place unless altered by a subsequent regional haze SIP revision in 2018 or beyond.

Verification and Contingencies

The issue of adding timelines to the actions indicated in Chapter 10 could be achieved by expanding and adding deadlines to Table 11.1 in the Chapter 11, "Periodic Plan Revisions and Determination of Adequacy".

Coordination and Consultation

We understand MPCA uses a 5 percent contribution threshold for impacts on the worst visibility days for determining which Class I areas it influences for SIP planning purposes. We note that Seney Wilderness, in Michigan, is just below the 5 percent threshold for the worst days but a bit over that threshold when looking at impacts on all days. **We request MPCA to confirm with Michigan that MPCA's SIP meets Michigan's expectations for Minnesota's contribution to assuring reasonable progress at Seney Wilderness.**

Smoke Management

We applaud the SIP's acknowledgement of a smoke management plan that incorporates consideration of visibility effects in its operating procedures. We request the State to

confirm that the plan identifies mandatory Federal Class I areas as sensitive receptors when considering application of smoke reduction techniques.

The State should support its decision to not address smoke management planning regarding agricultural burning activity by a review of available data regarding emissions and visibility impacts rather than relying on EPA's interim air quality policy. The Regional Haze Rule does suggest that agricultural burning activity should be considered as part of the SIP if there is an expectation that such activity significantly contributes to visibility impairment. Since there has been impact from fire during the 20% worst days, it would be important for the State to discuss whether smoke from agricultural sources does or does not contribute to the smoke impacts at Class I areas. If the State considers these fires to be located within an appropriate area of influence for its Class I areas, actions to address these emissions under the SIP should be considered rather than waiting for future interim policies from EPA.