STATE OF MINNESOTA DEPARTMENT OF NATURAL RESOURCES (DNR)
ENVIRONMENTAL IMPACT STATEMENT (EIS) SCOPING PROCEDURES

U. S. STEEL MINE EXPANSION PROJECT

1. U. S. Steel proposes to expand the existing Keetac iron ore mine and re-start an idle indurating line near Keewatin, Minnesota. The proposed project includes the dewatering of existing mine pits in the area and open pit mining operations to remove ore and waste rock. Waste rock would be stockpiled near the mine pit and ore would be hauled to the crusher and conveyed to the processing plant. Tailings from the concentrator would be discharged to the existing tailings basin. Taconite pellets would be transported to steel production facilities.

2. The DNR is the designated Responsible Government Unit (RGU) for the expansion of an existing metallic mineral processing facility according to Minnesota Rules part 4410.4400, subpart 8C.

3. The United States Army Corps of Engineers (USACE) is the lead federal agency for this joint federal and state EIS. The USACE received an application from U. S. Steel to discharge fill material in waters of the U. S., including wetlands, to develop the Keetac Mine Expansion Project. The USACE has determined that its action on the permit would be a major federal action that could significantly affect the quality of the human environment, requiring the preparation of a Federal EIS pursuant to the National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321-4347) and its implementing regulations (40 C.F.R. parts 1500-1508).

4. An EIS is discretionary for this proposed project pursuant to Minnesota Rules, part 4410.2000, subpart 3. The rule states that an EIS may be pursued when the RGU and the proposer of the proposed project agree that an EIS should be prepared.

5. The EIS will meet all the applicable requirements of Minnesota Rules parts 4410.0200 to 4410.6500 that regulate the Minnesota Environmental Review Program (EQB rules). The DNR will obtain the services of a consultant to assist in EIS preparation but will retain control of, and responsibility for, the content and analysis contained in the EIS.

6. The EQB rules require a thorough but succinct discussion of potentially significant direct or indirect, adverse, or beneficial effects generated. Data and analyses shall be commensurate with the importance of the impact and the relevance of the information to a reasoned choice among alternatives and to the consideration of the need for mitigation measures.

7. The EQB rules direct the RGU to consider the relationship between the cost of data and analyses and the relevance and importance of the information in determining the level of detail of information to be prepared for the EIS.

8. In 1997, the EQB amended its rules to emphasize that only potentially significant issues need to be addressed in the EIS. The amendment brought the rules into conformity with Minnesota Statutes Section 116D.04, Subdivision 2a, which states that an EIS analyzes the proposed project's significant environmental impacts. In addition, the amendment "shifts the focus of scoping towards the purpose of the EIS (better decision making) and away from merely responding to public controversy" (see Statement of Need and Reasonableness March 6, 1995).

9. The DNR prepared and issued for public review and comment, a Scoping EAW and Draft Scoping Decision Document, both prepared in accordance with Minnesota Rules part 4410.2100.

10. The Notice of Availability for review of the Scoping Environmental Assessment Worksheet (EAW) and Draft Scoping Decision Document was published in the EQB Monitor (Vol. 32, No. 18) on September 8, 2008. This began a mandatory 30-day public review and comment period, which concluded October 8, 2008 as per Minnesota Rules part 4410.2100, subpart 3A.

11. The DNR supplied a press release to at least one newspaper in the vicinity of the proposed project announcing the availability of the Scoping EAW and Draft Scoping Decision Document, the opportunity for public comment, and the location of review copies.

12. The DNR provided public review copies of the scoping documents to one public library, as well as the DNR Library in St. Paul, the DNR Northeast Regional Office in Grand Rapids, Minnesota, the Duluth Public Library and the Keewatin Public Library.

13. On Wednesday, October 1, 2008, the DNR held a public scoping meeting, as required by Minnesota Rules Part 4410.2100, subpart 3B, at the Nashwauk-Keewatin High School in Nashwauk, Minnesota from 6:30 PM to 8:30 PM. Approximately 30 people attended the meeting. The attendees received information about the Minnesota Environmental Review Program, the project, the proposed EIS contents, and were given an opportunity to ask questions and give verbal comments about the project and the EIS process. The DNR provided a comment form for submitting written comments on the proposed EIS scope.

14. The DNR received eight comment letters and zero verbal comments on the Scoping EAW and Draft Scoping Decision Document during the 30-day review and comment period. Comments letters are included in Appendix C of this document.

15. The EQB rules do not require the RGU to respond to comments received on the Scoping EAW and Draft Scoping Decision Document, but require the RGU to consider the comments received in developing the Final Scoping Decision Document.

16. The EQB rules require the RGU to issue a Final Scoping Decision Document within 15 days after the close of the 30-day scoping period.

17. The DNR considered the comments received during the scoping period made revisions to the Draft Scoping Decision Document as warranted, and issued the Final Scoping Decision on October 29, 2008.

18. The Scoping Decision will be sent, within 5 days of completion, to all parties on the EQB Distribution List, to all parties submitting comments on the draft EIS scope, and to all parties requesting copies.

19. Comments received, and responses or discussion of their consideration, are attached to this document.

RESPONSES TO EIS SCOPING COMMENTS
U. S. STEEL MINE EXPANSION PROJECT

The DNR received eight comment letters on the Scoping EAW and Draft Scoping Decision Document during the 30-day review and comment period.

COMMENTS WERE RECEIVED FROM:
David C. Olson, Minnesota Chamber of Commerce
Craig Pagel, Iron Mining Association of Minnesota
Kenneth Westlake and Sherry Kamke, U. S. Environmental Protection Agency (EPA), Region 5
Joy Wiecks, Fond du Lac Reservation
Nancy Schuldt, Fond du Lac Reservation
Matt Norton, Minnesota Center of Environmental Advocacy
Brandy Toft, Leech Lake Band of Ojibwe
Nick Axtell, 1854 Treaty Authority

No verbal or written comments were received at the October 1, 2008 Public Scoping Meeting.

The comments relating to the EIS scope are summarized below. Comment context and meaning has been retained in each summary. Refer to the original letters (Appendix C) for exact wording. Many comments address issues already proposed in some degree for inclusion in the EIS. Other comments necessitated additions to, or clarification of, information in the both scoping documents. The responses identify substantive comment-based revisions to the Draft Scoping Decision Document.

COMMENTS RELATING TO THE SCOPING EAW
A number of comments on the Scoping EAW indicated it lacked information in some areas. The EQB's Guide to Minnesota Environmental Review Rules advise RGUs that for significant EIS topics, little factual information should be included in the Scoping EAW. Instead, the Scoping EAW may simply state that the EIS will include a major discussion of the topic and provide a description of its intended scope and study methods. Consequently the Scoping EAW contains the least detailed information about issues that will be discussed extensively in the EIS, and more complete information regarding issues that will not be covered in the EIS.

Comment Letter 1: Minnesota Chamber of Commerce

Comment Summary 1A: The Scoping EAW provides excellent information about the project and environmental issues.

Consideration/Response: Comment noted.

Change(s) in Scope: None.

Comment Letter 2: Iron Mining Association

Comment Summary 2A: The Scoping EAW provides excellent information about the project and environmental issues.

Consideration/Response: Comment noted.

Change(s) in Scope: None.

Comment Letter 3: U. S. EPA, Region 5

Comment Summary 3A: It is our experience that interagency meetings to kick-off the NEPA process have supported good coordination under tight time frames. We find these meetings assist resource agency staff in getting a basic understanding of project details and help everyone appreciate resource issues early in the process. We respectfully request such a meeting with you, other federal/state agencies, and the proponents of the project. In addition, we believe there is a need to discuss multiple projects that are occurring across the Mesabi Range and Duluth Complex from a cumulative effects perspective. We would like to work with the USACE on setting up these discussions, which should involve multiple federal and state agencies.

Consideration/Response: The DNR and the USACE support early coordination efforts and welcome discussions with EPA, Region 5.

Change(s) in Scope: None.

Comment Summary 3B: We believe the location and operation of waste rock and overburden stockpiles and haul roads should be included in the alternatives analysis. In the case of these types of operations, we believe that alternatives that avoid environmental impacts, especially wetland should be considered impacts. Evaluation of wetland impacts should be pursued extensively in the Federal EIS.

Consideration/Response: Location alternatives for waste and overburden stockpiles, including in-pit stockpiling, will be evaluated in the Keetac EIS as specified in section 2.5.4 in the Draft Scoping Decision Document. The location and length of haul roads and use by haul trucks, with their associated environmental effects, are largely contingent on stockpile locations. In the evaluation of stockpile alternatives, the environmental consequences of haul road and truck operations associated with each alternative will be considered. An evaluation of potential impacts to wetlands is also a part of the stockpile alternatives analysis.

Change(s) in Scope: None.

Comment Summary 3C: As part of this scoping effort, we encourage the USACE and other project proponents to work with federal and state resource agencies to determine the geographic and temporal scope of the cumulative effects analyses. The EIS should present the rationale for why the cumulative effects analysis was limited to the area analyzed, explaining geographic and temporal ranges used and projects and other actions included.

Consideration/Response: Potentially affected resources are used to define the geographic scope of the cumulative effects analyses. Each potentially affected resource has its own geographic scope. The text in Scoping EAW Item 29, page 98 describes the geographic scope for each resource that will be evaluated. The approach subsection for each cumulative effects analysis in the Scoping EAW also provides details on the geographic scope of the analysis.

The Scoping EAW gives insight into the proposed temporal scope of the cumulative effects in Scoping EAW Item 29, page 97. "Cumulative effects should be analyzed over the entire life of the potential project impact and not just the life of the project." The temporal scope of each cumulative effects analysis is dependent upon the nature of the effect, the resource that may be affected, and reclamation activities following mining operations. Additional details on the temporal scope and the rationale for the temporal scope of the cumulative effects analysis will be included in the EIS.

Change(s) in Scope: None.

Comment Summary 3D: No avoidance or mitigation discussion was included for possible aquatic habitat and fisheries impacts. We believe it will be important to discuss potential loss of habitat, fisheries, decline of water quality and erosion, and steps that could be taken to avoid/alleviate some of these negative impacts. In particular we are concerned with how pit dewatering will impact aquatic resources.

Consideration/Response: The Draft Scoping Decision Document considers potential mitigation of possible aquatic habitat and fisheries effects in several places. For example, section 3.3.1.1 Fish and Wildlife: Project Specific Analysis, the Draft Scoping Decision Document states, "The DNR consultant will…assess the potential for impacts on fisheries and other aquatic species and assist with the evaluation of mitigation strategies." Under section 3.3.1.2.1 Cumulative Effects Analysis: Aquatic Habitat and Fisheries the Draft Scoping Decision Document states, "If adverse impacts occur as a result of the project, mitigation will be discussed." Under section 3.2.7 Erosion and Sedimentation the Draft Scoping Decision Document says, "Mitigation for adverse impacts will be described." Other examples are included in sections 3.3.3.1, and 3.3.3.2.3.

Mitigation, including avoidance, will be considered in the EIS for all project-related adverse environmental effects.

Change(s) in Scope: None.

Comment Summary 3E: EPA is concerned about both direct and indirect effects of mining and associated activities on waterbodies. These effects should be fully analyzed in the EIS.

Consideration/Response: Indirect effects from mine pit dewatering will be analyzed in the EIS (Scoping EAW Item 12, pages 33 and 38). The cumulative effects analysis will include indirect effects on a given resources (Scoping EAW Item 29, page 97), which includes aquatic resources.

Change(s) in Scope: A study on the indirect wetland effects will be added to the list of studies in the Final Scoping Decision Document.

Comment Summary 3F: We note on page 31 of the Scoping EAW that a special emphasis is placed on the potential for impacts to Swan Lake from stream flow and lake water level changes. The rationale for emphasizing Swan Lake over and above all other lakes and streams in proposed analyses was not provided. We recommend that a discussion about potential impacts resulting from stream flow and lake water level changes to all lakes and streams be included in the EIS.

Consideration/Response: The EIS will include a comprehensive analysis of potentially affected waters. O'Brien Creek will undergo a Rosgen analysis on river geomorphology. The EIS will include a qualitative description of fisheries resources and angling activity in the Swan Lake, Welcome Lake, Hay Lake, and the four unnamed lakes, as well as Hay Creek and West Swan

River. The EIS will discuss the potential effects to fisheries and angling that could result from varying water levels and flows. Changes to water quality are not expected. Upper Swan River and Swan Lake are emphasized because they are the only waterbodies that are affected by other projects other than Keetac and therefore may have cumulative effects.

Change(s) in Scope: None.

Comment Summary 3G: Mining activities should be evaluated for their effect on wetland hydrology. These effects should be addressed in the EIS evaluation.

Consideration/Response: Mining activities' affect on wetland hydrology will be discussed in the EIS. This will include impacts from plant facilities, mining operations, stockpiles, and tailings basin; see Scoping EAW Item 12, page 33. U. S. Steel initiated a wetland hydrology study. This study placed shallow wells in existing wetlands near the proposed mining areas to establish a baseline for evaluating any future changes to wetlands.

Change(s) in Scope: See Comment Summary 3E.

Comment Summary 3H: We recommend that the EIS demonstrate how the current project configuration has been developed to utilize previously disturbed areas and to reduce wetland impacts.

Consideration/Response: The Scoping EAW addresses this topic briefly. The proposed project involves use of the existing tailings basin. By minimizing the footprint of the basin by stacking the tailings, fewer wetlands near the basin would be directly affected. U. S. Steel is also considering in-pit disposal of waste rock. The proposed project intends to use existing low stockpile areas, which have the capacity to hold more waste rock. Also, the modifications to the processing plant will be done within the existing plant footprint. These project components would decrease the pressure to fill wetlands near the expanded pit. More details will be provided in the EIS.

Change(s) in Scope: None.

Comment Summary 3I: The wetland delineation for the EIS will address wetland function and values.

Consideration/Response: The wetland delineation for the EIS will include wetland function and values.

Change(s) in Scope: The Scoping Decision Document in section 3.3.3.1 will include language specifying that wetland function and values will be included in the EIS wetland analysis.

Comment Summary 3J: The EIS should provide more information about the quality of the mitigation areas and the USACE plans for mitigating for the impacts.

Consideration/Response: Information on the quality of wetland mitigation sites being considered will be offered in the EIS. The quality of wetland mitigation areas will consider environmental variables such as land slope, areas mapped as peat or lacustrine geomorphology, and potential size. The quality of wetland mitigation sites will also consider land ownership and other factors that affect the feasibility and long-term success of wetland mitigation. These criteria will be balanced in order to identify the highest quality sites.

Change(s) in Scope: None.

Comment Summary 3K: The 1968 land exchange agreement reference on page 43 of the Scoping EAW should be fully explained in the EIS.

Consideration/Response: The 1968 land exchange agreement will be fully explained in the EIS.

Change(s) in Scope: None.

Comment Summary 3L: The rationale for emphasizing O'Brien Creek and Upper Swan River and Swan Lake for stream geomorphology and stream flow impacts was not presented in the Scoping EAW. The EIS should provide a rationale for why the stated creeks, rivers and lakes were analyzed, whereas others were not.

Consideration/Response: The purpose of the EIS is to evaluate potentially significant environmental effects. Based upon the information available, O'Brien Creek, Upper Swan River and Swan Lake have the potential to be significantly affected while other waterbodies do not have the potential to be significantly affected. The EIS will add a rationale for the emphasis placed on O'Brien Creek, Upper Swan River and Swan Lake.

Change(s) in Scope: Text will be added to the Scoping Decision Document requiring the EIS to clarify the reasoning for selecting some bodies of water and not others in sections 3.3.3.1 and 3.3.3.2.1.

Comment Summary 3M: The cumulative effects analysis should evaluate all past, present and reasonably foreseeable future actions in the Mesabi Range and Duluth Complex area**.**

Consideration/Response: Scoping EAW Item 29, page 99 lists past, present and reasonably foreseeable future actions to be included in the cumulative effects analysis. Projects on this list are located in the Mesabi Range and Duluth Complex areas.

Change(s) in Scope: None.

Comment Summary 3N: No information was presented in the Scoping EAW regarding the status of tribal rights or concerns. This is information that should be summarized in the Scoping EAW.

Consideration/Response: As a point of clarification, this project does not intersect with the 1854 Treaty ceded territory. It is within the 1855 Treaty Ceded Territory. The Bois Forte Tribe is a cooperating agency.

Change(s) in Scope: Text will be added to Section 3.2.16 of the Scoping Decision Document to require a discussion of tribal rights, including usufructuary rights in the EIS.

Comment Letter 4: Fond du Lac Reservation—Air Quality

Comment Summary 4A: Please estimate how many miles of new haul roads will be built.

Consideration/Response: This topic is addressed in Comment Summary 3B.

Change(s) in Scope: This topic is addressed in Comment Summary 3B.

Comment Summary 4B: Please estimate any air emissions associated with additional rail cars.

Consideration/Response: The EIS will address the issue of air emissions associated with additional rail cars.

Change(s) in Scope: Additional air emissions from locomotives resulting from increased pellet production will be included in an analysis of GHG. See Section 2.4.1.3 of the Final Scoping Decision Document. Where applicable they will be included proposed air quality evaluations.

Comment Summary 4C: A new plan for controlling fugitive dust at the site needs to be made available for public review and comment as soon as it has been completed.

Consideration/Response: Studies completed as a part of the EIS process will be made available to reviewing agencies and the public, including this study. Any study is available upon request of the DNR. Important studies will also be included as attachments to the Draft EIS.

Change(s) in Scope: None.

Comment Summary 4D: The section of the Scoping EAW dealing with cumulative effects of mercury deposition (page 21) states that "Sources to be included in this cumulative effects analysis include those with significant mercury emissions within 12.4 miles (20 km) of the Expansion Project." Please explain what is meant by "significant" emissions and why only sources within 12.4 miles would be included. The Band is of the opinion that this would leave out many important sources of concern. This proposal needs to be revisited. The analysis should also provide both existing and proposed sources to be included in the analysis.

Consideration/Response: The radius surrounding the facility will be determined in a protocol that will be approved by the Minnesota Pollution Control Agency (MPCA). The approved protocol will include the logic behind the chosen radius. Both existing and proposed sources will be considered in the analysis. If a source is eliminated from the analysis, the logic will be included.

Change(s) in Scope: The planned assessment will consider all existing and proposed facilities within a yet to be determined radius of the proposed project, see Section 3.3.1.2.2 of the Final Scoping Decision Document.

Comment Summary 4E: The section on page 72 addressing emissions from vehicles associated with the construction and operation of the project states that air quality emissions will be studied, including carbon monoxide. This analysis should include all criteria pollutants and toxics associated with vehicle use. Toxics should also be listed in pounds emitted per year where applicable, as some regulations are written with "pounds per year" requirements.

Consideration/Response: This comment is in response to Item 22 of the Scoping EAW Vehicle-related air emissions. As a point of clarification, the Scoping EAW does not state in this section that carbon monoxide emissions will be studied in the EIS from vehicles associated with the construction and operation of the project. Item 22 references emissions from on-road vehicles—those unassociated with the construction and operation of the mine. These emissions are projected to be insignificant and will not be subject to detailed study in the EIS. See Comment 4R for further discussion.

Tailpipe emissions from haul trucks and other equipment will be evaluated in the Risk Assessment and Class I area analysis. Particulate matter generated from these sources will be evaluated in the Risk Assessment and Class II Area analysis. Refer to the table in Appendix A.

Change(s) in Scope: None.

Comment Summary 4F: As cited on page 72, and several other instances in the document, the Band agrees that the air quality analysis should include: Class I and Class [II] air impacts analyses, including visibility, increment, and Air Quality Related Values (AQRVs); determination of Best Available Control Technology (BACT) to control all Prevention of Significant Deterioration (PSD) pollutants; taconite Maximum Achievable Control Technology for mercury and particulates; and an Air Emissions Risk Analysis (please see following paragraph for further related comments on this topic). Upon our first reading, it seemed that these air quality analysis items are not always carried through the document consistently, although the short time period available for review and comment made it impossible to verify this. Please correct as need for consistency. Are any New Source Performance Standards (NSPS) applicable to the facility? Again, due to the short time available to review this document, the Band has not been able to ascertain whether the re-started line will be considered a new source or an existing source with regard to NSPS and other applicable regulations.

Consideration/Response: Refer to the table in Appendix A. The determination if NSPS are applicable is a permitting decision outside the scope of an EIS. All applicable regulations and standards, including NSPS, will be used during preparation of the EIS and the air permit. The 40 CFR 60, subpart LL – Standards of Performance for Metallic Mineral Processing Plants, will apply to the project.

Change(s) in Scope: None.

Comment Summary 4G: The Band does not agree with the Scoping EAW's assertion that analyses of the National Ambient Air Quality Standards (NAAQS) and the Minnesota Ambient Air Quality Standards (MAAQS) do not need to be performed for all pollutants. On page 73, the Scoping EAW states that a Class II NAAQS analysis will be performed for CO, SOx, and PM_{10}, and that a NAAQS and increment analysis may be performed for $PM_{2.5}$, pending protocol guidance from the MPCA. The Band believes that it is necessary for the $PM_{2.5}$ analyses to be performed because the final rule was promulgated by the Environmental Protection Agency (May 16, 2008) and guidance issued by the Minnesota Pollution Control Agency (July 18, 2008) before this Scoping EAW was submitted.

Consideration/Response: Refer to the table in Appendix A. There is currently no federal requirement for a $PM_{2.5}$ increment analysis. If $PM_{2.5}$ increment becomes a federal requirement during the EIS process, the EIS will include that analysis.

Change(s) in Scope: None.

Comment Summary 4H: The Band disagrees with the statement from page 73 that "The Class II NAAQS modeling will include existing sources in the area including Minnesota Steel (MSI) and Excelsior Energy, thus eliminating the need for a cumulative Class II analysis." First, Excelsior Energy is not yet an existing source, but a proposed source. Second, if this document seeks to list proposed sources other than the Keetac expansion, it needs to also include PolyMet and Mesabi Nugget, Phase II. Third, it has not been our understanding in the past that a NAAQS/MAAQS analysis can take the place of a cumulative Class II analysis. The Band understands a NAAQS

analysis to consider only the proposed source and already existing sources, whereas a Class II cumulative analysis considers these plus any other proposed sources in the area. In addition, the modeling protocols may be different for these two different kinds of analyses. Also, a NAAQS analysis would not include an increment analysis for the Class II area.

Consideration/Response: The Class II NAAQS analysis is a cumulative effects analysis. Keetac's Class II NAAQS modeling demonstration will consider all existing sources, permitted sources, and proposed sources (i.e., those sources with a completed permit application or who have started environmental review). Therefore, Excelsior Energy, PolyMet, Mesabi Nugget Phase I and Mesabi Nugget Phase II will be considered in the analysis. If a source is eliminated from the final modeling, the rationale will be included in the modeling protocol.

An increment analysis will also be conducted. See Appendix A.

Change(s) in Scope: None.

Comment Summary 4I: Class I areas – the Boundary Waters Canoe Area, Voyageur's National Park, Isle Royale, and the Rainbow Lakes Wilderness Area appears not be mentioned consistently throughout the Scoping EAW and the Draft Scoping Decision Document. Please check for consistency.

Consideration/Response: Page 73 of the EAW discusses that under PSD air permitting that Class I area effects for the proposed project are required to be evaluated for Voyageurs National Park, the Boundary Waters Canoe Area Wilderness (BWCA), Isle Royale National Park, and Rainbow Lakes Area Wilderness. PSD modeling guidance from the Federal Land Managers requires that modeled changes be assessed for all Class I areas with a 300-kilometer radius of a proposed project and therefore all four parks are included in the scope for the PSD modeling analysis.

Page 83 of the EAW discusses the scope of the cumulative studies that will be conducted as part of the EIS for the Class I areas and identifies Voyageurs National Park and the BWCA as parks that will be evaluated. The Cumulative Air Impact Studies take a semi-quantitative approach to evaluating environmental effects. These studies will evaluate monitoring data trends, air emission trends, and regulatory developments to determine if there is the potential for significant effects on air quality in the Class I areas.

Potential changes to air quality decrease with distance from an emission source. In other words, the greatest effects will occur at the Class I areas closest to the Keetac facility. Voyageurs and BWCA are 50 to 60 miles from the Keetac facility, Isle Royale is 100 miles and Rainbow Lakes is 175 miles from the Keetac facility. Therefore, any predicted changes at Voyageurs or the BWCAW would be higher than potential changes at Isle Royale or Rainbow Lakes. Similarly, if mitigation were identified for impacts at Voyageurs or the BWCA, these measures would also mitigate impacts at Isle Royale and Rainbow Lakes.

Change(s) in Scope: None.

Comment Summary 4J: The Band believes a more detailed description of mercury control equipment should be included in the later versions of this document.

Consideration/Response: The EIS will include a more detailed description of mercury control equipment. It will occur within a summary of mercury control technologies to be provided in the alternatives analysis section 2.4.1.2 in the Scoping Decision Document.

Change(s) in Scope: None.

Comment Summary 4K: U. S. Steel proposes to limit nitrogen oxides (NOx) emissions to "net out" of PSD for this pollutant. The facility proposes to do this through fuel switching. They will use more natural gas and biofuels, because combustion of these fuels creates less NOx than combustion of coal or fuel oil does. The Band is worried that it might prove difficult to track NOx emissions closely enough to justify know that the Keetac facility is in fact netting out. We assume that Continuous Emissions Monitors will be installed for NOx on existing and re-started equipment, and that emissions will be tracked on a daily and monthly basis to ensure that the limit is not exceeded. The facility should also create a contingency plan in case they cannot meet these limits as expected. For instance, if they exceed these limits such that the expansion is subject to PSD, there should be a definite timetable as to when a PSD permit application will be submitted to the MPCA.

Consideration/Response: Continuous Emissions Monitors will be installed for NOx. If NOx emissions increase beyond the permitted level for NOx, appropriate enforcement actions will be taken to bring the facility into compliance.

Change(s) in Scope: None.

Comment Summary 4L: The Band reminds U. S. Steel that a Class I impacts analysis must include increment and AQRVs, not just visibility. Also, a Class II NOx NAAQS/MAAQS analysis may still be needed, even though the facility is choosing to net out of PSD review for this pollutant. MSI and Excelsior Energy are not the only other proposed facilities that should be included in cumulative analyses. Please give more information on what kind of $PM_{2.5}$ mitigation is proposed.

Consideration/Response: The RGU agrees that a Class I analysis must include increment and AQRVs and not just visibility (see Scoping EAW Item 23, page 79). This will be completed as part of the EIS. A Class II NAAQS/MAAQS analysis is required for the facility even though they plan to net out and this will also be completed for the EIS. Refer to the table in Appendix A.

See Response 3M regarding projects to be included in the cumulative effects analysis. Facilities are chosen for the cumulative effects analysis that can affect the resource being studied.

It is premature to offer information on the type of $PM_{2.5}$ mitigation because the potential effects from $PM_{2.5}$ have not been studied. Once $PM_{2.5}$ is analyzed in the EIS, mitigative actions will be discussed if adverse environmental effects are identified.

Change(s) in Scope: NOx will be added to the Class II NAAQS analysis description in section 3.3.6.1 of the Scoping Decision Document.

Comment Summary 4M: The Scoping EAW states that if visibility to Class I areas is adversely affected, mitigation will take place. MSI is already committed to mitigating NOx emissions at their new plant to prevent visibility problems. For the Scoping EAW, Keetac should find out what mitigation strategies MSI is pursuing and then state how Keetac would mitigate their emissions in light of the actions undertaken by MSI. Our concern is that there may not be enough available emissions credits for both facilities to use in order to mitigate to the needed level. Emissions credits

must be located within a certain distance of the plant and/or Class I area to have any noticeable effect.

Consideration/Response: Mitigation will be discussed in the EIS once project-related effects are fully understood. Available emissions credits will be a part of this discussion.

Change(s) in Scope: None.

Comment Summary 4N: In several instances in the cumulative effects sections of the Scoping EAW (see pages 86 and 87, etc.) the text refers to studying the impacts of MSI. This neglects other projects that have been proposed since the MSI Scoping EAW was prepared. These include: Excelsior Energy, PolyMet, and Mesabi Nugget Phase II. Although the PolyMet project is mentioned on page 14 of the Draft Scoping Decision Document with regard to an acidification analysis, mention of this facility is not carried out consistently throughout these documents.

Consideration/Response: Each of the cumulative effects analysis has a set of projects that contribute to affecting a particular resource. Past, present and reasonably foreseeable future projects were chosen on this basis. Excelsior Energy, PolyMet, and Mesabi Nugget Phase II will be addressed in the cumulative effects studies where appropriate.

Change(s) in Scope: None.

Comment Summary 4O: With regard to regional haze, the Band expects that this project will adhere to the pollutant caps included in the Northeast Minnesota Regional Haze State Implementation Concept Plan, as well as the requirements of the Minnesota Regional Haze State Implementation Plan. Reference to the Northeast Minnesota Regional Haze State Implementation Concept Plan should also be added to the list of Governmental Actions found on page 99. Mention might also be made here of the Clean Air Interstate Rule. Although it was vacated earlier this year by the Federal Appeals Court, it may yet return in some form.

Consideration/Response: The SIPs mentioned above are not yet approved. Any new federal or state regulation that becomes applicable during the EIS process will be considered in the EIS and followed during permitting.

Change(s) in Scope: None.

Comment Summary 4P: In many places, the document mentions using the MSI cumulative analysis as a basis for the Keetac analysis. However, the PolyMet or Mesabi Nugget Phase II analyses are the most up-to-date, as they were submitted after the MSI analysis, although these analyses are only in "preliminary draft EIS" form at this time.

Consideration/Response: Mesabi Nugget Phase II draft EIS and the cumulative effects analyses have not yet started. The project is currently being scoped. This project is in its infancy and does not yet provide a template to base future cumulative effects analyses. That said, any information available at the time of the Keetac EIS preparation can be used, including studies or permit applications from other projects.

The PolyMet EIS is in the process of writing the draft EIS. Pertinent analyses and information developed for PolyMet will be used for the Keetac EIS. Also see Comment Summary 4N.

Change(s) in Scope: None.

Comment Summary 4Q: On pages 93 and 94, visual impacts are discussed. We suggest that the last sentence on page 93 be modified to read "Overall, the project would have no local or immediate change in visibility impact". We suggest that the second paragraph under Tailings Basin on page 94, beginning "The visual impacts discussed here are considered to be different than…." be moved to the beginning of the Visual Impacts section.

Consideration/Response: A point of clarification will be made in the Final Scoping Decision Document.

Change(s) in Scope: The noted text will be clarified in the Final Scoping Decision Document in section 3.2.14.

Comment Summary 4R: On page 5, the Band does not agree that emissions from the proposed project will be so minor that they can be left out of the EIS. Please provide more information to support this argument.

Consideration/Response: As a point of clarification, the Scoping EAW item "Vehicle related air emissions" referred to above addresses on-road vehicle use only. On-road vehicle users in the case of this project are people commuting to and from Keetac. It is reasonable to expect that many of the mineworkers would be commuting to other jobs or activities in the region if they were not commuting to Keetac. The proposed project itself would therefore not generate a significant amount of additional vehicle-related air emissions. See Comment Summary 4E.

Change(s) in Scope: None.

Comment Summary 4S: Do the Risk Assessment and Human Health Risk Assessment Protocol include the study of asbestos-like fibers?

Consideration/Response: Asbestos-like fibers will be studied as part of the EIS, but they will be addressed in a separate study, and not in the Human Health Risk Assessment. Asbestos-like fibers will be evaluated in this EIS focusing on the possibility of amphibole fibers in the Keetac ore body as described in section 3.2.16.1 of the Scoping Decision Document.

Change(s) in Scope: None.

Comment Letter 5: Fond du Lac Reservation—Water Resources

Comment Summary 5A: The cumulative effects analysis must take wetland loss into account on a regional scale since the vast majority of these wetlands are not being replaced in their immediate watersheds.

Consideration/Response: Most wetland impacts will be mitigated on-site or within the sub-watershed where wetlands were lost. All mitigation will be done in the Mississippi River Watershed. This issue is addressed in Scoping EAW Item 12, page 35.

Change(s) in Scope: None.

Comment Summary 5B: The proposed wetland impacts include 15.0 acres of previous compensatory wetland mitigation sites from past wetland impacts. These mitigation wetlands

should be under either a conservation easement or covenant and therefore, should not be impacted for any reason. If the USACE allows compensatory mitigation wetlands to be impacted, a higher mitigation ratio should be imposed on this type of impact.

Consideration/Response: The 15 acres of wetlands referenced above are not under a covenant or easement. Thirteen of the 15 acres of wetlands have been constructed for future banking and are currently being monitored. These wetlands could be removed without mitigation. Two acres of the 15 were constructed for past mitigation projects (see scoping EAW Item 12, page 33). If these wetlands are affected, then the USACE will require mitigation and determine the correct replacement ratio.

Change(s) in Scope: None.

Comment Summary 5C: One cannot conduct an appropriate cumulative effects analysis regarding the net loss of wetlands within the watershed if wetland mitigation is only for the first five year time period of mine activity (page 35).

Consideration/Response: An overall wetland mitigation plan will be developed for the EIS. If the project is approved, then the plan will be implemented in 5-year increments over the life of the project. This plan will estimate the total acres of wetlands that will be mitigated in various sub-watersheds. This estimate will allow for an appropriate cumulative effects analysis.

Change(s) in Scope: None.

Comment Summary 5D: The design criteria listed in the Scoping EAW for restored or created wetlands contain mostly criteria applicable to inundated wetland types (Types 3, 4, and 5 – i.e., shallow and deep marsh or shallow open water). The USACE has indicated that it will not approve any mitigation banks consisting of these types. In addition, it is difficult to judge whether these design criteria are appropriate since the project proposer has only listed the amount of proposed wetland impacts, but has not indicated what types of wetlands would be impacted (Page 38).

Consideration/Response: A mitigation bank is not being proposed for this project. The USACE requires compensatory wetland mitigation to replace the lost functions and values for unavoidable wetland impacts.

A summary of potential wetland impacts resulting from the proposed project by wetland type cannot be provided at this time due to the lack of wetland classification data in the areas where field verification has not been completed. A more detailed approximation of wetland effects associated with each major project component will be determined following the completion of field wetland delineations and project planning (Scoping EAW pages 32 and 33). Wetland types will be identified in the wetland mitigation plan to be included in the EIS.

Change(s) in Scope: None.

Comment Summary 5E: Not all wetland functions are related to watershed processes, therefore it is inappropriate to restrict the analysis to the immediate watersheds of Welcome Creek, Hay Creek and O'Brien Creek.

Consideration/Response: This comment references the geographic scope of the cumulative effects analysis for wetland loss. Wetland functions not related to watershed processes such as habitat for plant and animal species including those that are threatened, endangered will be evaluated in the

EIS. Possible changes to these wetland functions will be evaluated independent of watershed boundaries.

Change(s) in Scope: None.

Comment Summary 5F: Although, at least as stated by the project proponent, groundwater modeling may not be necessary to evaluate potential hydrogeologic impacts of the proposed Keetac operation on the City of Keewatin's municipal wells, it should be necessary to conduct ground water modeling to evaluate the potential impacts to other resources especially wetlands with ground water connections (Page 47).

Consideration/Response: It is unlikely that a groundwater flow model would be a useful tool for estimating changes to wetlands or other groundwater resources in the project area. Groundwater movement in the project area is strongly affected by flow through fractured bedrock. As a result, the porous media assumptions commonly employed in groundwater flow models may not be appropriate. In addition, it would be very difficult to adequately characterize the different components of a groundwater flow mode in this setting, which would include a variety of glacial deposits whose boundaries and hydraulic characteristics are poorly defined, several different bedrock units whose hydraulic characteristics are poorly defined and which are probably highly variable depending on degree of fracturing and weathering, and wetlands and other surface water bodies whose hydrologic parameters are poorly known at best.

Because of these issues, any output from a groundwater flow model would have a high degree of uncertainty and could provide misleading conclusions. A more useful approach would consist of a water level monitoring program tied to a contingency strategy (Scoping EAW Item 13, page 47) that would identify steps the company would take in the event of unacceptable water level declines at wells or wetlands. See the Consideration/Response in Comment Summaries 5J and the Change(s) in Scope in Comment Summary 3I.

Change(s) in Scope: None.

Comment Summary 5G: Along with the loss of significant wetland acreage, the proposed project will also destroy 585 acres of forest, and an additional 460 acres of reclaimed forest. Under the "Proposed Treatment of Topic in EIS", it should clearly state that these losses will be evaluated in the context of the carbon cycle; i.e., release of stored carbon and loss of carbon sequestration capacity.

Consideration/Response: The release of stored carbon into the atmosphere would only occur if the trees were burned. If the trees were to be incinerated, their use as fuel displaces the use of another fuel source such as coal or natural gas. Air emissions from wood incineration would therefore not be added to existing air emissions, but substitute for them. Though air emissions from fuel sources differ, it is projected that a significant adverse effect would not result from the use of wood as opposed to another fuel source.

The guidance cited in the comment promulgated by the MPCA applies only to proposed projects where it is the Responsible Governmental Unit.

Change(s) in Scope: Climate change will be discussed as stated in sections 2.4.1.3 and 3.2.16.3 of the Final Scoping Decision Document.

Comment Summary 5H: The impacts of a proposed project on global climate change must be evaluated, per several recent federal court rulings. This analysis should be done in addition to the GHG emissions calculations defined by MPCA 2008 protocol.

Consideration/Response: Comment noted.

Change(s) in Scope: Sections 2.4.1.3 and 3.2.16.3 have been added to the Final Scoping Decision Document.

Comment Summary 5I: Fisheries, wildlife and ecologically sensitive resources will be evaluated in the context of tribal treaty-protected resources related to the 1855 and 1854 Ceded Territories. Text will be added to Item 30, Other Potential Environmental Effects in the Final Scoping Decision Document. See Comment Summary 3N.

Consideration/Response: Comment noted.

Change(s) in Scope: Fisheries, wildlife and ecologically sensitive resources will be evaluated in the context of tribal treaty-protected resources related to the 1855 Ceded Territories. Text will be added to Item 30, Other Potential Environmental Impacts in the Scoping Decision Document. Please see comment 3N.

Comment Summary 5J: We disagree with the statement that ground water modeling is not necessary to evaluate potential hydrogeologic impacts on drinking water wells. Given the number and proximity of domestic and municipal wells, along with the recent experience of the city of Hibbing and the municipal well it lost from pit dewatering at Hibbing Taconite, the agencies should require the company to use appropriate hydrologic modeling techniques to examine potential impacts from mine pit dewatering.

Consideration/Response: See the Consideration/Response to Comment 5F. Monitoring of water levels in municipal wells and mine pit water levels will be done in order to understand possible hydrologic connections between the Keetac Mine and wells. A contingency plan that could be implemented to mitigate adverse effects if they were to occur will be provided in the EIS.

Change(s) in Scope: None.

Comment Summary 5K: The USACE, as a federal trustee, should initiate consultation under Section 106 of the National Historic Preservation Act with 1855 Treaty tribes.

Consideration/Response: Consultation with 1855 Treaty tribes has been initiated by the USACE under Section 106.

Change(s) in Scope: None.

Comment Summary 5L: We are particularly interested in seeing how the EIS evaluates the current and proposed future mining pit operations at Keetac, Hibbing Taconite, and the key runout locations and elevations in the Herr and Gleason study (Central Mesabi Iron Range Hydrology Study, Minnesota Department of Natural Resources, 2007). We are concerned about the potential for an inter-basin transfer of water from these operations.

Consideration/Response: Comment noted.

Change(s) in Scope: None.

Comment Letter 6: Minnesota Center of Environmental Advocacy (MCEA)

Supporting information was submitted to the DNR by the MCEA with their comments.

Emmons & Olivier Resources, Inc. "Cumulative Effects Analysis on Wildlife Habitat Loss/Fragmentation and Wildlife Travel Corridor Obstruction/Landscape Barriers in the Mesabi Iron Range and Arrowhead Regions of Minnesota." Prepared for the Minnesota Department of Natural Resources, 2006.

In the Matter of the Minnesota Draft Haze State Implementation Plan. Affidavit of Dr. Ranajit Sahu. 2008.

In the Matter of United States Steel Corporation Keewatin Taconite, Inc., Administrative Order by Consent with the Minnesota Pollution Control Agency, 2007.

Lange, Nancy. "A Whole New Game: The Effects of Climate Change on Hunting, Fishing and Outdoor Recreation in Minnesota." Izaak Walton League of America. 2007.

Minnesota Pollution Control Agency. "Global Warming and Climate Change in Minnesota." Web page saved as an electronic static document from MPCA website. 2008.

Marrow, M. W. et.al. "Draft Regional Haze State Implementation Plan Comments." Memo from the Minnesota Center of Environmental Advocacy to the Minnesota Pollution Control Agency. 2008.

Pilgrum, J., Fang, X., Stefan, H. "Stream Temperature Correlations with Air Temperature in Minnesota: Implications for Climate Warming." Paper No. 96164 of the Journal of the American Water Resources Association. Abstract from webpage saved in static electronic form. 2007.

Smith, J. B., Tirpak, D. "The Potential Effects of Global Climate Change on the United States: Report to Congress." United States Environmental Protection Agency. 1989.

Stefan H.G., Fang X., Hondzo M. "Simulated Climate Change Effects On Year-Round Water Temperatures In Temperate Zone Lakes." 1998.

The Humane Society of the United States, et al., v Dirk Kempthorne Secretary, United Stated Department of the Interior, et.al. United States District Court for the District of Columbia. 2008.

United States Environmental Protection Agency. "Health and Environmental Impact of NOx." Web page saved as a static electronic document from USEPA website. 2008.

Wheelabrator. Project Report: MHIA/Iron Dynamics Inc. DRI Facility Butler Indiana. Web page saved as a static electronic document from Wheelabrator Air Pollution Control website. 2005.

Comment Summary 6A: The draft scoping documents entirely avoid any mention or analysis regarding the effects of climate change and its interaction with and amplification of the Project's negative effects on the environment. Minnesota natural resources have been affected and will increasingly be affected by climate change in a variety of ways. See attachments, generally.

Because nature inherently involves interacting conditions and systems, without consideration of climate change and its many effects it is not possible to take the requisite hard look at the Project and its effects on Minnesota's environment.

Consideration/Response: The EIS will include an assessment of project-related effects in the context of global climate change.

Change(s) in Scope: Sections 2.4.1.3 and 3.2.16.3 have been added to the Final Scoping Decision Document.

Comment Summary 6B: Climate change is expected to increase the formation of pollutants that cause haze. These un-inspected effects render the draft scoping documents' discussion of haze formation and its reliance on the Regional Haze State Implementation Plan (SIP) for mitigation meaningless. The scope of review must include the effects of climate change, which are omitted from the SIP.

Consideration/Response: The Affidavit of Dr. Ranajit Sahu provided by MCEA reports that climate change will change dust, smoke, and biogenic emissions (i.e., Volatile Organic Compounds and Nitrogen Oxides) wind flow, weather patterns generally, rainfall, and relative humidity. Dr. Sahu states that changes in these variables will affect the prediction of haze at Minnesota Class I areas. Dr. Sahu questions the assumptions in predictive models relative to haze formation that do not incorporate climate change.

It is recognized that future potential effects of climate change render predictive models used for haze less accurate. However, the information supplied does not support MCEA's conclusion that climate change is expected to *increase* the formation of pollutants that cause haze. Dr. Sahu contradicts this conclusion when he writes, "…(more/fewer fires?; more/fewer wind borne dust?; more/fewer biogenic emissions?; etc.)." It is not known if there will be more smoke, more dust or more biogenic emissions.

Change(s) in Scope: None.

Comment Summary 6C: The effects from the Project's additional process water demands and de-watering activities on watershed, flow regime, stream morphology, and water quality effects on Hay Creek, Swan Lake, Swan River, and perhaps other water bodies, cannot be assessed properly without recognition and consideration of the compounding effects of climate change. The scope of review must encompass climate change and its compounding effects.

Consideration/Response: Comment noted.

Change(s) in Scope: Section 3.2.16.3 has been added to the Final Scoping Decision Document.

Comment Summary 6D: Windstorms are mentioned three times in the Scoping EAW, and never in the context of increasing frequency or climate change. Climate change is also affecting and will continue to affect the presence, composition, and distribution of forest types in Minnesota, including the Arrowhead. Absent consideration of the effects climate change will have on major wind events, and thereby on northern Minnesota forests, the analysis of the Project's biomass harvest-related effects on forests and wildlife can be of little value. The scope of review must be expanded to include climate change.

Consideration/Response: Comment noted.

Change(s) in Scope: Section 3.2.16.3 has been added to the Final Scoping Decision Document.

Comment Summary 6E: The Scoping EAW asserts that BACT analysis "will not be necessary for NOx because U. S. Steel currently expects to limit NOx emissions below PSD thresholds." MCEA disagrees with the decision not to conduct a BACT analysis for NOx as unnecessarily dismissive and a bad idea for many reasons. First, the 40-ton Prevention of Significant Deterioration (PSD) threshold is miniscule in comparison to the Project's expected total emissions. It would not require much of an interruption in supplies of biomass, or much of a decrease in the desired/allowed mix of coal (due to mercury or sulfur emissions, or the coming imposition of carbon costs) for the Project to blow the 40-ton PSD threshold. This distinct possibility must be apparent to the Project proponent, because the facility would maintain natural gas and fuel oil as back-up fuels.

Consideration/Response: It is acknowledged that the fuel mix used at the Keetac Mine will change over time. The permit will contain federally enforceable conditions that ensure NOx emissions from the project do not exceed PSD significance levels. Although NOx emissions would not increase with the proposed project, they are included in the EIS analysis. To that end, if NOx creates an adverse effect, mitigation will be identified in the EIS.

Change(s) in Scope: None.

Comment Summary 6F: The NOx PSD Netting Summary improperly cites the existing 2005 air permit. That air permit for Phase II has been superseded by the MPCA Administrative Order By Consent, In the Matter of United States Steel Corporation – Keewatin Taconite, Inc. While the Regional Haze Rule (RHR) may be in limbo, the MPCA's Administrative Order remains in effect. It is that Administrative Order that resulted in the significant drop in NOx emissions from the years 2004-2005 to 2006-2007, from 5,857 TPY to 3,503 TPY, a greater than 40% reduction. Phase II is not now entitled to return to operations that would increase its NOx emissions to any level close to the maximum specified in the 2005 permit. The Administrative Order was issued for the purpose of improving emissions and reducing haze, not for the purpose of creating an emissions gap for U. S. Steel-Keetac to fill by expanding its operations 60%. It is therefore inappropriate to cite operationally unavailable NOx emissions tonnage (the gap between either 6,072 or 5,857 TPY and approximately 3,503 TPY) to determine that the Project – i.e., restarting the long-idled Phase I line – will not trip the need for BACT analysis. It is likewise inappropriate to presume that the MPCA would reissue the upcoming 2010 air permit without reducing the NOx emissions limits to some amount more closely approximating current actual emissions. Doing either of these inappropriate things would violate the purpose and intent of the Administrative Order, which is to achieve significant progress at Keetac toward visibility goals in Minnesota's Class I areas.

Consideration/Response: The purpose of the MPCA's Administrative Order dated September 27, 2007 was to collect more emissions data using continuous emission monitors to establish emission levels for Best Available Retrofit Technology (BART) under 40 CFR 51.300 at some time in the future.

Federally enforceable permit limits will be included in the air permit that ensure the project is limited below PSD significance levels for NOx.

Change(s) in Scope: None.

Comment Summary 6G: The scope of review must be broadened to include BACT analysis for NOx, and Project design modifications for inclusion of BACT. Such technologies are agreed to be

tested at U. S. Steel-Minntac, are going to being tested at Minnesota Steel's facility now under construction, and apparently already exist.

Consideration/Response: See the response offered in Comment Summar 6E.

Change(s) in Scope: None.

Comment Summary 6H: Some conditions of the water resources in question that are known, but which I did not find in a review of the draft scoping documents, include basic water quality assessment data.

Consideration/Response: The Scoping EAW is not intended to disclose all available information but to prescribe an analytic response to potential significant environmental effects resulting from a proposed project. To that end, necessary information will be provided in the EIS.

Change(s) in Scope: None.

Comment Summary 6I: Given the problems with sulfate levels in discharged water at the Minntac facility, and the role that sulfates play in the formation of methylmercury, it is important the scope of review include the effect of sulfates releases, through process water discharges or any other avenue.

Consideration/Response: The EIS will perform a detailed water and chemistry balance that will project sulfate levels and where necessary, mercury levels.

Change(s) in Scope: None.

Comment Summary 6J: Effects of nitrification or phosphorus content of the process water discharges, or from aerial deposition, must be included in the scope of review.

Consideration/Response: The EIS will include a detailed water and chemistry balance that will include nutrients. The EIS will include a discussion of impaired waters that may be affected by the project and how the project will affect these impairments. This analysis will include, but will not be limited to, phosphorus (Scoping EAW Item 18, page 61).

Change(s) in Scope: None.

Comment Summary 6K: MCEA is pleased that the Scoping EAW addresses landscape barriers and recognizes that the roughly 100 mile long Mesabi Iron Range largely prevents terrestrial wildlife from dispersal and travel from the southeast side to the north and west side of the Mesabi Iron Range. It is also very good to see mention of the DNR-ordered report entitled "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota." This document and its maps are omitted in the listing of data needs for cumulative effects analysis, however, and should be added there if that list is exclusive. The scope of review must include this report, and the report's conclusions must inform and should broaden the range of alternatives selected for analysis in the EIS.

Consideration/Response: The "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota" (study) will be reviewed by EIS preparers and is available upon request for public review.

It is not clear to the DNR how this report would influence an alternatives analysis because the proposed project would not directly affect the wildlife corridors identified in the study. Study Corridor #4 is the only known travel corridor near the mine and it is on the west end of the Keetac Mine Pit expansion and new stockpiles areas are proposed for the east end of the Keetac Mine.

Change(s) in Scope: Maps contained in "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota" study will be added to the list of data needs.

Comment Summary 6L: The "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota" provides relevant data and conclusions to assessing cumulative effects from the Project. MCEA believes that the report and all the internally-referenced scientific articles that inform it should be included in the listing of data needs for cumulative effects analysis, if that list is exclusive.

Consideration/Response: Comment noted.

Change(s) in Scope: The "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota" including references used in the study will be added to the data needs section of the loss of threatened and endangered species cumulative effects analysis.

Comment Summary 6M: The Project as proposed impinges on the western end of "Travel Corridor #4," identified as one of 13 corridors permitting terrestrial wildlife to disperse and travel from the southeast side to the north and west side of the Mesabi Iron Range. MCEA is disappointed that this fact is omitted from discussion in the draft scoping documents, that among the many color figures there is none that depicts Corridor #4, and that there is no discussion of the implications for this Corridor - for its attractiveness to wildlife as foraging or dispersal habitat - of a 60% increase in operations and traffic at the Project.

Consideration/Response: The western end of Travel Corridor #4 abuts Highway 65 and the City of Nashwauk. No proposed project component impinges on this travel corridor. A small section of an existing stockpile area does intersect the corridor. However, the stockpile area is already permitted and not a part of the proposed project.

Change(s) in Scope: None.

Comment Summary 6N: The draft scoping documents are deficient in description of the Project's effect on the permeability of the Mesabi Iron Range. They also insufficiently limit the proposed scope of review to "wildlife species in the Project area" and to a buffer 15 miles around the Iron Range. Many wildlife species, including in particular Canada lynx, regularly travel more than 15 miles, and may travel many hundreds of miles from point to point. The scope of review must be expanded to include potential wildlife movement from areas beyond the proposed buffer through the Mesabi Iron Range to suitable habitat on the other side. Regarding lynx, MCEA is pleased that field surveys are being done, but the survey findings, if negative for lynx in the 15-mile buffer, are not and must not be considered to dismiss the changes in the foraging and dispersal habitat suitability of Corridor #4.

Consideration/Response: The EIS will evaluate wildlife whose movement may interact with the proposed project. Field studies will detect signs of wildlife movement that would likely intersect with the proposed project. Increasing the geographic scope of this analysis would reveal signs of

wildlife movement that are unlikely to intersect with the proposed project and therefore provide no value to understanding the project's potential environmental consequences.

There will be no change to foraging and dispersal suitability of Corridor #4.

Change(s) in Scope: None.

Comment Summary 6O: The draft scoping documents inexplicably narrow the proposed scope of mitigation consideration to long-term mineland reclamation strategies. The final scope of analysis must include additional immediate and continuing mitigation in all the alternatives. Canada lynx habitat suitability correlates strongly with large amounts of structure – vegetation, thick growth of conifers, etc. – at ground level. For that reason, mitigation could include protecting large blocks of habitat, re-vegetating large blocks of habitat. One option would be for the Project proponent to obtain agreements from other landowners excluding from biomass harvest existing large habitat blocks in the areas that extend in a funnel away from Corridor #4 and other Corridors. Another option would be to propose as a permit requirement that the Project proponent pay for the "improvement" of insufficiently forested reclaimed mine sites at and around other identified Corridors. Lynx biologists should be consulted for other immediate and ongoing mitigation options to include in the analysis.

Consideration/Response: Text in Draft Scoping Decision Document section 3.3.1.1 states, "The EIS will discuss mitigation, as warranted, through long-term mineland reclamation strategies and *preservation of available wildlife corridors* within or near the mining area…. The DNR consultant will review [cumulative effects to wildlife] and *assess additional possible mitigation if warranted*." Emphasis added. This text and the slightly modified text in the final scope do not limit mitigation to only mineland reclamation. Wording is sufficiently broad enough to allow for any mitigation strategy that may decrease or eliminate potential adverse effects.

Change(s) in Scope: None.

Comment Summary 6P: Biomass energy is incorrectly described by the draft scoping documents and the MPCA guidance on measuring GHG emissions as being "carbon neutral." Carbon neutrality of fuel is a trait that cannot be described without reference to an important currency: time. Some types of biomass fuel are faster-to-neutrality than others. Some types of forest biomass - depending on site index, forest type, and method and time of harvest – are extremely slow, and burning that "slow carbon" cannot accurately or fairly be described as carbon neutral, given the rush the state of Minnesota is in to achieve substantial reductions in statewide GHG emissions. See Minn. Stat. § 216H.02. The scope of analysis, and the alternatives including but not limited to mitigation, must be expanded to recognize and explore the time factor.

Consideration/Response: It is acknowledged that the term, "carbon neutral," is only accurate with a certain set of assumptions. GHG emissions resulting from combustion of biomass will be determined and shown separately in the EIS from other GHG emissions as recommended by The Climate Registry General Reporting Protocol (March 2008).

Change(s) in Scope: None.

Comment Letter 7: Leech Lake Band of Ojibwe

Comment Summary 7A: The Band is concerned about the amount of confidence that is given to the Particulate Matter on-site data that will be used as background data for modeling. Please be cognizant that this data has only been collected since March 2008 and is not a true representation of background levels in such a short period of time. Does the March 2008 timeframe include project setup and calibrations or has the data only been collected after the "kinks" were worked out?

Consideration/Response: The commenter is correct that there is insufficient data currently available from the on-site monitors for the purpose of establishing background concentrations. The background concentrations used in the modeling analysis will be taken from the MPCA Air Dispersion Modeling Guidance - Table of Background Concentrations (see Appendix B).

Change(s) in Scope: None.

Comment Summary 7B: We are concerned about the fugitive dust emissions from the Keetac facility. It states in the Scoping EAW that the facility will be building new haul roads and to view existing haul roads on figure 5-4. The figure was merely a visual and did not provide any data. We would like to know: 1) the length of existing haul roads and 2) the amount and length of haul roads proposed for the project. With the large vehicles utilized on these roads the amount of fugitive emissions along with the vehicle emissions is not minimal and should be address.

Consideration/Response: The length of existing and proposed haul roads will be provided in the EIS. Proposed haul road lengths and locations will be evaluated within the stockpiles alternatives analysis. See Comments Summary 3B and Comment Summary 4E.

Change(s) in Scope: None.

Comment Summary 7C: The Scoping EAW states "The EIS will not evaluate vehicle-related air emissions". The Band is very concerned regarding this statement. Please detail what ambiguities in the rules allow for these emissions to be disregarded. The engine size and fuel usage by these vehicles creates a large amount of air emissions.

Consideration/Response: Refer to Comment Summary 4E and Comment Summary 4R.

Change(s) in Scope: None.

Comment Summary 7D: We strongly recommend that MPCA fully address PSD for $PM_{2.5}$ in Keetac's air quality permit and address the issues of PSD increments, significant impact levels, and significant monitoring concentrations.

Consideration/Response: The EIS will address PSD for $PM_{2.5}$ where applicable. Refer to the table in Appendix A.

Change(s) in Scope: None.

Comment Summary 7E: The Band is concerned about cumulative mercury emissions only taken in to account if they are "significant" and are within 12.4 miles of Keetac. Why the limited mileage? Is it stemming from a modeling program? Why is the mileage not larger, say 100 km, especially with the recent MPCA TMDL concerns? Then there is the question on what does Keetac considered to be "significant"? Please provide more information.

Consideration/Response: See Comment Summary 4D.

Change(s) in Scope: None.

Comment Summary 7F: BACT for mining operations is outdated. Both existing and new technology needs to be pushed to establish new BACT standards and further emissions controls for mining operations. As we understand, some BACT standards date to the 1960's. There is updated technology that must be installed to improve air quality, especially in places such as Keewatin where the town and the facility are next-door neighbors.

Consideration/Response: It is outside the scope of this EIS to establish new BACT standards. BACT requires the consideration of all technologies, including the newest ones. Refer to Comment Summary 6F.

Change(s) in Scope: None.

Comment Summary 7G: Overall this facility expansion is a significant emission addition to northeastern Minnesota. Careful consideration of the cumulative impacts of this facility and surrounding facilities, mining and non-mining, operational and in EIS or permitting stages, need to be factored into the overall equation. The Band has counted eight mining facilities within 50 miles of the Keetac facility and can think of at least a dozen other Title V facilities in the range of Keetac to be evaluated. Proximity to Class 1 areas is another critical consideration.

Consideration/Response: Past, present and reasonably foreseeable actions (both mining and non-mining) will be considered in the EIS. A cumulative Class I area analysis will be included in the EIS.

Change(s) in Scope: None.

Comment Letter 8: 1854 Treaty Authority

Comment Summary 8A: Figure 12-4: Wetland Impacts shows the direct wetland losses that are to be expected with this proposed project. The 1854 Treaty Authority is concerned with the indirect wetland impacts in the area between the pit expansion and the additional stockpiles. Additional figures show that the surface water flows south into those wetlands and with the pit being directly north of them, the 1854 Treaty Authority is concerned that the surface and groundwater recharge to those wetland will be inadequate for sustainability.

Consideration/Response: In regard to indirect wetland effects, see Comment Summary 3E and 3G. If indirect or direct changes occur to wetlands, mitigation will be required.

Change(s) to Scope: See Comment Summary 3E.

Comment Summary 8B: The project has the potential for inter-basin transfer of water between Lake Superior and Mississippi River watersheds. We support including an analysis in the environmental impact statement and properly addressing legal implications.

Consideration/Response: It is not within the scope of the EIS to discuss legal implications of a proposed action. However, background information can be provided on the regulatory environment associated with the inter-basin transfer or water issue.

Change(s) in Scope: Text will be added to section 3.3.3.2.2 of the Draft Scoping Decision Document that will require the EIS to discuss policy and regulations relating to the inter-basin transfer of water issue.

Comment Summary 8C: In the NOx PSD Netting Summary (Scoping EAW Item 23, page 80), an impact analysis on Class I areas will be performed and will "likely include an analysis of whether NOx emissions (including tailpipe emissions from haul trucks) will consume Class I NOx increment." The 1854 Treaty Authority would like to see that analysis with the emissions from the Mesabi Nugget Phase II and PolyMet taken into affect.

Consideration/Response: A cumulative Class I area effects analysis will be completed for the proposed project (Scoping EAW Item 29, page 83). The proposed or reasonably foreseeable facilities to be used in this analysis are unspecified. However, Mesabi Nugget Phase II and PolyMet will be included in the analysis. These projects are listed on page 100 of the Scoping EAW as a part of private actions, which may be included in the cumulative effects analyses.

Change(s) in Scope: None.

Comment Summary 8D: The 1854 Treaty Authority would like to request a more detailed description of Keetac's plan to limit NOx emissions to prevent triggering PSD. The 1854 Treaty Authority would like to see the monitoring strategy that Keetac will use to track NOx emissions and what contingency plans are in place if they fail to stay under their limits.

Consideration/Response: See Comment Summary 4K.

Change(s) in Scope: None.

Comment Summary 8E: The 1854 Treaty Authority would like to see Minnesota's State Implementation Plan (SIP) further addressed in the EIS with mitigation of impacts from the existing facility and expansion evaluated.

Consideration/Response: See Comment Summary 4N. Minnesota's SIP will be further addressed in the EIS.

Mitigation of the existing facility's environmental effects will not be evaluated in this EIS. The EIS will analyze proposed actions, which may cause a significant environmental effect. If a proposed action will have an adverse environmental effect, mitigation will be discussed.

Change(s) in Scope: None.

Comment Summary 8F: The 1854 Treaty Authority would like to see a Hazardous Air Pollutant Analysis performed in the EIS that takes into consideration not only the fugitive and point source emissions, but also tailpipe emissions from haul trucks.

Consideration/Response: See Appendix A and Comment Summary 4E. Hazardous Air Pollutants will be analyzed in the Human Health and Ecological Risk Assessments.

Change(s) to Scope: None.

Comment Summary 8G: Mercury releases should be analyzed in the environmental impact statement, including compliance with the mercury total maximum daily load (TMDL) that is in

place for Minnesota. Sulfate loading to surface water, potentially increasing methylmercury formation, should also be addressed.

Consideration/Response: See Comment Summary 6I. See section 3.3.1.2.2 and the third paragraph in section 3.3.1.1 of the Final Scoping Decision Document.

Change(s) to Scope: None.

Comment Summary 8H: Traditional Cultural Properties (TCPs) need to be included in the discussion of cultural resources. Has there been any effort to locate TCPs in the project area? TCPs are of great concern to the 1854 Treaty Authority and an active program of identification is needed before the project can proceed. Such work must include proper consultation with tribes.

Consideration/Response: As a federal EIS, a Section 106 process has been initiated under the National Historic Preservation Act which will identify historic properties. These properties include those with traditional cultural importance to an Indian Tribe (§800.16 (l)(1). Consultation with tribes has begun under Section 106. See also Comment Summary 5J.

Change(s) to Scope: None.

Comment Summary 8I: Discussions on economic and social impacts should identify effects from the project on tribes and tribal members. A separate section describing tribes and treaty rights, and effects from the project on resources of concern may also be appropriate.

Consideration/Response: Tribes and tribal members living near the proposed project are an integral a part of the fabric of Iron Range communities. As such the economic and social analysis proposed is inclusive of Native peoples. See Comment Summary 3N.

Change(s) to Scope: None.

Comment Summary 8J: Mine closure plans appear to not be addressed in the document. We would ask that consideration be given to proper closure and long-term plans for the area.

Consideration/Response: The design and operation of and mitigation of adverse effects due to the expansion project will adhere to mineland reclamation requirements. The Permit to Mine process (which occurs during and after the EIS) will set the stage for mine closure evaluation and intended compliance with the State of Minnesota's Mineland Reclamation Rules, part 6130.2200. Reclamation planning will be discussed in the EIS.

Change(s) to Scope: None.

Appendix A

Air Modeling Scope Summary Table

	Studies Involving Modeling						Cumulative Air Impact Studies for Class I Areas
	Near Field Modeling (Class II)		Far Field Modeling (Class I)		Risk Assessment		
	Ambient Air Concentrations (NAAQS) [1]	Increment	Visibility	Deposition	Ambient Air Concentrations	Deposition	Monitoring data, emission inventory, regulatory changes
Pollutants	PM_{10}, $PM_{2.5}$, SO_2, NO_x, CO, Pb	PM_{10}, SO_2, NO_x [4] [5]	PM_{10}, $PM_{2.5}$, SO_2, NO_x	SO_2, NO_x	COPI [7], NO_x, Pb, Mercury, PM_{10}, $PM_{2.5}$	COPI, Pb, Mercury	PM_{10}, $PM_{2.5}$, SO_2, NO_x, Mercury
Keetac Stationary Sources							
Existing	X	X	X		X	X	X
New	X	X	X	X	X	X	X
Keetac Haul Truck Fugitive Dust Emissions (PM_{10}, $PM_{2.5}$)							
Existing	X	X			X	X	X
New	X	X			X	X	X
Keetac Mining Equipment Tailpipe Emissions							
Existing			X		X	X	X
New			X	X	X	X	X
Background	X		X	X [6]	X	X	X
Non-Keetac Existing Sources [2]	X	X			X [8]	X [8]	X
Other Newly Permitted and Reasonably Foreseeable Sources [2][3]	X	X			X	X	X

(1) Cumulative air concentrations will be evaluated as defined as modeled concentrations from new and existing sources at Keetac, plus background, plus modeled concentrations from nearby existing sources, plus modeled concentrations from nearby newly permitted and reasonably foreseeable sources.

(2) Non-Keetac Sources will be considered and if eliminated from the modeling analysis, an explanation of why will be included in modeling protocols reviewed by MPCA.
(3) Newly permitted or reasonable foreseeable sources are defined as sources which have received an air permit but are not yet operating, have submitted an air permit application, or have started the environmental review process.

(4) Changes in existing sources that impact increment will be modeled.

(5) $PM_{2.5}$ increment regulations are pending. If standards become applicable before the EIS is completed the EIS will include a increment analysis for $PM_{2.5}$.

(6) Analysis for the Forest Service parks includes consideration of background.

(7) COPI = Constituents of Potential Interest, including hazardous air pollutants.

(8) Existing sources are accounted for in background monitoring data that will be used in the risk assessment.

Appendix B

Minnesota Pollution Control Agency
Table of Background Concentrations

Minnesota Pollution Control Agency

The choice of background concentration or background Hazard Index (HI) values depends on the number, size, and proximity of nearby sources being modeled.

Option 1: higher background values when modeling onsite sources only. (1st high for annual; 2nd high for rest)	Option 2: lesser background values when modeling onsite & nearby sources within approximately 2 miles.	Option 3: pristine background values when modeling **all** sources including MPCA FAR Approach and/or MNRisks.
1. CO (EPA web site, 2006 data) 5520 ug/m3 (1-hr), 2875 ug/m3 (8-hr)	1. CO (Option 1 values * 0.8) 4400 ug/m3 (1-hr), 2300 ug/m3 (8-hr)	1. CO (**draft** FAR background values) 350 ug/m3 (1-hr), 300 ug/m3 (8-hr)
2. NO2 (EPA web site, 2006 data) Twin Cities: 21 ug/m3 (annual) Rest of MN**: 7 ug/m3 (annual)	2. NO2 (Option 1 values * 0.8) Twin Cities: 17 ug/m3 (annual) Rest of MN**: 6 ug/m3 (annual)	2. NO2 (**draft** FAR background values) 3 ug/m3 (annual)
3. PM2.5 (EPA web site, 2006 data) LOCATION 24-HOUR ANNUAL Twin Cities: 31 ug/m3 11.1 ug/m3 Rochester: 29 ug/m3 8.3 ug/m3 Rest of MN**: 24 ug/m3 8 ug/m3	3. PM2.5 (Option 1 values * 0.9) LOCATION 24-HOUR ANNUAL Twin Cities: 28 ug/m3 10 ug/m3 Rochester: 26 ug/m3 7.5 ug/m3 Rest of MN**: 21 ug/m3 7 ug/m3	3. PM2.5 (**draft** FAR background values) 10 ug/m2 (24-hour) 4 ug/m3 (annual)
4. PM10 (EPA web site, 2006 data) LOCATION 24-HOUR ANNUAL Mpls/St.Paul 70 ug/m3 28 ug/m3 Rest of TC*: 43 ug/m3 20 ug/m3 Duluth, MN: 55 ug/m3 24 ug/m3 Rest of MN**: 33 ug/m3 15 ug/m3	4. PM10 (Option 1 values * 0.8) LOCATION 24-HOUR ANNUAL Mpls/St.Paul 56 ug/m3 22 ug/m3 Rest of TC*: 34 ug/m3 16 ug/m3 Duluth, MN: 44 ug/m3 19 ug/m3 Rest of MN**: 26 ug/m3 12 ug/m3	4. PM10 (**draft** FAR background values) 15 ug/m2 (24-hour) 5 ug/m3 (annual) Also Under Consideration (Tentative): 24-hour PM10 background varies from 10 ug/m3 (S.MN) to 5 ug/m3 (N.MN): 10 ug/m3 - (YUTM - 4800000)/100000.
5. SO2 (EPA web site, 2006 data) Minneapolis: 157 ug/m3 (1-hour), 136 ug/m3 (3-hour) 79 ug/m3 (24-hour), 5 ug/m3 (annual) Rest of TC*: 58 ug/m3 (1-hour), 39 ug/m3 (3-hour) 24 ug/m3 (24-hour), 5 ug/m3 (annual) Rest of MN*: 26 ug/m3 (1-hour), 13 ug/m3 (3-hour) 5 ug/m3 (24-hour), 3 ug/m3 (annual)	5. SO2 (Option 1 values * 0.8) Minneapolis: 126 ug/m3 (1-hour), 109 ug/m3 (3-hour) 63 ug/m3 (24-hour), 4 ug/m3 (annual) Rest of TC*: 46 ug/m3 (1-hour), 31 ug/m3 (3-hour) 19 ug/m3 (24-hour), 4 ug/m3 (annual) Rest of MN*: 21 ug/m3 (1-hour), 10 ug/m3 (3-hour) 4 ug/m3 (24-hour), 2 ug/m3 (annual)	5. SO2 (**draft** FAR background values) Minneapolis: 20 ug/m3 (1-hour), 15 ug/m3 (3-hour) 10 ug/m3 (24-hour), 3 ug/m3 (annual) Rest of TC*: 15 ug/m3 (1-hour), 10 ug/m3 (3-hour) 5 ug/m3 (24-hour), 2 ug/m3 (annual) Rest of MN*: 10 ug/m3 (1-hour), 5 ug/m3 (3-hour) 2 ug/m3 (24-hour), 1 ug/m3 (annual)
6. 1-Hour Acute HI Values*** Mostly Rural Sites: 0.2 Intermediate Sites: 0.3 Mostly Urban Sites: 0.6	6. 1-Hour Acute HI Values*** Mostly Rural Sites: 0.2 Intermediate Sites: 0.2 Mostly Urban Sites: 0.3	6. 1-Hour Acute HI Value**** 0.15
7. Chronic HI Values*** Mostly Rural Sites: 0.6 Intermediate Sites: 1.0 Mostly Urban Sites: 1.3	7. Chronic HI Values*** Mostly Rural Sites: 0.6 Intermediate Sites: 0.6 Mostly Urban Sites: 1.0	7. Chronic HI Value**** 0.59
8. Cancer risk values (10^{-5})*** Mostly Rural Sites: 2.5 Intermediate Sites: 4.0 Mostly Urban Sites: >5	8. Cancer risk values (10^{-5})*** Mostly Rural Sites: 2.5 Intermediate Sites: 2.5 Mostly Urban Sites: 4.0	8. Cancer risk value (10^{-5})*** 2.07

* "Rest of TC" denotes rest of the Twin Cities (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington County).
** "Rest of MN" denotes the remaining portions of the state not included in any of the other named locations.
*** Minnesota Statewide Air Toxics Monitoring Study (1996-2001), Final Report and Appendix E:
http://www.pca.state.mn.us/publications/reports/aq1-29-report.pdf
http://www.pca.state.mn.us/publications/reports/aq1-29-appendixe.pdf
**** Email attachment from Kari Palmer, MPCA, January 31, 2007 (Holloway Update 1998-1999.XLS).

Note: 1-hour extrapolated background risk values are 5X larger than 24-hour monitored background risk values.
Note: Option 2 background risks reflect Option 1 adjusted by one category.
Note: Option 3 background risks reflect "rural" conditions (state-wide).
Note: 1 ppm CO = 1150 ug/m3; 1 ppm NO2 = 1880 ug/m3; 1 ppm SO2 = 2620 ugm3.

Appendix C

Keetac Mine Expansion Project
Public Scoping Comment Letters

MINNESOTA
CHAMBER *of*
COMMERCE

September 22, 2008

Mr. Erik Carlson
Principal Planner
Environmental Policy and Review Unit
Minnesota Department of Natural Resources
Division on Ecological Services
500 Lafayette Road, Box 25
St. Paul, Minnesota 55155-4025

Mr. Jon K. Ahlness
Regulatory Branch
U.S Army Corps of Engineers
190 Fifth Street East
Suite 410
St. Paul, Minnesota 55101-1638

Re: Scoping EAW and Draft Scoping Decision Document
Keetac Mine Expansion Project

Dear Mr. Carlson and Mr. Ahlness:

I am writing to congratulate the Minnesota Department of Natural Resources and the United States Army Corps of Engineers for the publication of the Scoping Environmental Assessment Worksheet and the Draft Scoping Document for the Keetac Mine Expansion Project.

The Scoping EAW provides excellent information about the project and environmental issues that the DNR, U.S Army Corps of Engineers and other agencies will assess as the environmental review process moves through the Environmental Impact Statement process. It is truly a credit to the agencies and the company that so much information is being supplied to the public at this stage of the environmental review.

I applaud U.S. Steel for volunteering to proceed with the preparation of an Environmental Impact Statement for the Keetac Mine Expansion and the DNR and UCACE for their commitment to preparing a thorough environmental review of the project in a timely manner.

I also understand and appreciate the tremendous benefits that iron mining produces for both our part of the state and the rest of Minnesota. The industry produces hundreds of millions of dollars every year in wages and benefits and supports hundreds of businesses that supply product and services to the iron mining companies. The expansion at Keetac is a very welcoming sign of the economic strength of Minnesota's iron range.

Thank you for giving me the opportunity to comment.

Sincerely,

David C. Olson
President

400 ROBERT STREET NORTH, SUITE 1500, ST. PAUL, MN 55101
T: 651/292-4650 800/821-2230 F: 651/292-4656 WWW.MNCHAMBER.COM

IRON MINING ASSOCIATION OF MINNESOTA

September 24, 2008

Erik Carlson
Principal Planner
Environmental Policy and Review Unit
Minnesota Department of Natural Resources
Division of Ecological Services
500 Lafayette Road, Box 25
St. Paul, Minnesota 55155-4025

Jon K. Ahlness
Regulatory Branch
U.S. Army Corps of Engineers
190 Fifth Street East Suite 410
St. Paul, Minnesota 55101-1638

Re: Scoping EAW and Draft Scoping Decision Document for Keetac Mine Expansion Project

Dear Messrs. Carlson and Ahlness:

Thank you for the development and publication of the Scoping Environmental Assessment Worksheet (EAW) and the Draft Scoping Decision Document for the Keetac Mine Expansion Project. The concerted effort of the United States Army Corps of Engineers and Minnesota Department of Natural Resources to produce the document in a timely manner is truly appreciated.

The Scoping EAW provides excellent information about the project and the environmental issues that the DNR, U. S. Army Corps of Engineers and other agencies will assess as the environmental review process moves through the Environmental Impact Statement process. It is truly a credit to the agencies and the company that so much information is being supplied to the public at this stage of the environmental review.

The Iron Mining Association (IMA) mission to promote an iron ore industry that will provide long-term growth and prosperity for all stakeholders through profitability in a competitive, global market includes goals promoting environmental stewardship.

324 West Superior Street, Suite 502 • Duluth, Minnesota 55802 • www.taconite.org • Phone: 218-722-7724 • Fax: 218-720-6707

Therefore we appreciate U. S. Steel for volunteering to proceed with an Environmental Impact Statement for the Keetac Mine Expansion as well as the DNR and USACE for their commitment to preparing a thorough environmental review of the project in a timely manner.

The IMA is made up of the six iron ore mines located in Northeast Minnesota as well as hundreds of vendors that supply their products and services to the mining industry. The companies that operate the six mines in Minnesota include ArcelorMittal, Cleveland Cliffs and US Steel. Iron mining contributes 1.6 billion dollars to the economy of Minnesota every year in the form of purchases, wages and benefits, taxes and royalties. Taxes alone are over $100 million. The mines employ nearly 3,000 men and women directly with an additional 12,000 to 14,000 employed by the vendors who provide products and services to the mines. New mines and production lines are estimated to increase these numbers significantly.

Iron mining in Northeast Minnesota is a significant contributor to the region's economic and social well being—as well as to the rest of the State of Minnesota.

Thank you for giving me the opportunity to submit comments. I look forward to the environmental review process for this project and hope to be able to comment in the future.

Again thank your extremely timely work on the document—it is appreciated!

Sincerely,

Craig Pagel
President
Iron Mining Association of Minnesota
324 West Superior Street, Suite 502
Duluth, Minnesota 55802
Ph: 218-722-7724 Fax: 218-720-6707
Cell: 1-866-336-3348

E-19J

Mr. Jon Ahlness
St. Paul District
U.S. Army Corps of Engineers
190 Fifth Street East
St. Paul, MN 55101

Re: U.S. Steel Keetac Expansion Project, located in Itasca and St. Louis Counties, Minnesota - Scoping Environmental Assessment Worksheet/Draft Scoping Decision Document

Dear Mr. Ahlness:

Thank you for providing the link to the Environmental Assessment Worksheet (EAW) and Draft Scoping Decision Document (DSDD) for the U.S. Steel Keetac Expansion Project. The proposer of the project is U.S. Steel – Minnesota Ore Operations, which is located in Keewatin, Minnesota. The project area consists of areas adjacent to existing facilities around the town of Keewatin, MN in Itasca and St. Louis Counties, Minnesota.

According to the EAW for this project, U.S. Steel proposes to restart an idled production line and expand the mine pit at its Keetac taconite mine and processing facility. The proposed project would increase Keetac's iron pellet production output from 6.0 million tons of taconite to 9.6 million tons per year. The additional taconite production is intended for domestic markets. Mine plans and detailed designs are being developed for a 25-year project period. The U.S. Army Corps of Engineers (USACE) and the Minnesota Department of Natural Resources (MDNR) are preparing a joint Environmental Impact Statement (EIS) to satisfy federal and State of Minnesota requirements. As part of this process, the MDNR prepared an EAW and DSDD, which are available for public review.

Based on the information that we currently have about the project, we agree with the outline of how impacts will be evaluated in the EIS. We agree with the statement made in the DSDD that the project is most likely to have significant impacts to fish and wildlife, state and/or federal listed species, water resources including wetlands, water use, water quality, and stationary air source emissions. The EAW for this project states that implementation of the project has the potential to directly impact approximately 700 acres of wetlands, requiring a Clean Water Act Section 404 permit from the USACE. We reserve the right to comment further on potential impacts and their coverage in the EIS as we review future project documentation under the National Environmental Policy Act (NEPA). Additional comments are enclosed.

The Keetac project is one of several mining projects that are in various stages of NEPA analysis. Since these projects are often on expedited schedules, we believe that early coordination with the federal and state lead agencies is essential. It is our experience that interagency meetings to kick-off the NEPA process have supported good coordination under tight time frames. We find these meetings assist resource agency staff get basic understanding of project details and help everyone appreciate resource issues early in the process. We respectfully request such a meeting with you, other federal/state agencies, and the proponents of the project. In addition, we believe there is a need to discuss multiple projects that are occurring across the Mesabi Range and Duluth Complex from a cumulative effects perspective. We would like to work with the USACE on setting up these discussions, which should involve multiple federal and state agencies.

We look forward to working with you as this project develops and will, of course, review and rate the Draft EIS in accordance with our authority under NEPA and Section 309 of the Clean Air Act. Please contact Sherry Kamke of my staff at (312) 353-5794 or via email at kamke.sherry@epa.gov with any questions about the comments.

Sincerely,

Kenneth A. Westlake
Supervisor, NEPA Implementation
Office of Enforcement and Compliance Assurance

Enclosure

Cc: Erik Carlson, MDNR

EPA Comments on the U.S. Steel Keetac Expansion Project - Scoping Environmental Assessment Worksheet/Draft Scoping Decision Document

Alternatives Analysis – In various places throughout the EAW, the statement is made that alternatives will be evaluated to avoid impacts. In general, all alternatives should be evaluated so that environmental impacts are minimized. We agree that taking advantage of existing infrastructure wherever possible supports this goal. For example, the existing production plant and tailings basins are already in place and alternatives that would move these facilities would likely have significantly more environmental impacts than expanding existing facilities. Similarly, the location of the mine(s) itself is dictated by the location of mineral deposits and the formations that are being mined. We agree that alternatives to mining locations should not be pursued. The main areas where we believe alternatives could be realistic are the location and operation of waste rock and overburden stockpiles and haul roads. In the case of these types of operations, we believe that alternatives that avoid environmental impacts, especially wetland impacts, should be pursued extensively in the Federal EIS.

Cumulative Effect Analysis – The EAW provides an explanation of what would be covered under a cumulative effects analysis for each resource area. Both direct and cumulative effects are discussed, and general information is provided explaining steps to be taken in the cumulative effects analysis. Based on the information provided, detailed protocols for these cumulative effects analysis have not yet been finalized. As part of this scoping effort, we encourage the USACE and other project proponents to work with federal and state resource agencies to determine the geographical and temporal scope of these analyses. For example, on page 20, the EAW states that aquatic habitat and fisheries cumulative effects will be determined by evaluating what the cumulative effects analysis of water quality, water flow changes, and stream channel changes are. The EAW further states that no other actions other than those will be considered in the cumulative effects analysis. We understand the need to draw practical boundaries around the scope of cumulative effects analysis, but it would be best to decide on this scope with relevant federal and state resource agencies. Additionally, the EIS should present the rationale for why the cumulative effects analysis was limited to the area analyzed, explaining geographic and temporal range used and projects and other actions included.

Proposed Treatment of Resource Topics in EIS - The EAW is organized by resource area topics (e.g. fish and wildlife and ecologically sensitive resources, physical impacts on water resources, etc.). Each section in the EAW provides information about the steps that will be taken for project-specific analysis, and cumulative effects analysis (including approach to evaluation and data needs for cumulative effects analysis). Some resource areas also have a description of proposed mitigation measures to compensate for unavoidable impacts to the resource. No such avoidance minimization/mitigation discussion was included for aquatic habitat and fisheries. We believe it will be important for the applicant to address potential loss of habitat, fisheries, decline of water quality, and erosion, and steps that could be taken to avoid/alleviate some of these negative

impacts. In particular, we are concerned how pit dewatering will impact aquatic resources.

Lakes and Streams – We note the statement made on page 30 of the EAW, which states that direct physical impacts to waterbodies other than mine pits will be limited. Indirect impacts to waterbodies may occur via watershed changes and mine dewatering. EPA is concerned about both direct and indirect effects of mining and associated activities on waterbodies. These effects should be fully analyzed in the EIS. We believe that many mining activities, but especially mine pit dewatering, have the potential to affect aquatic resources, including wetland hydrology.

We note on page 31 of the EAW that a special emphasis is placed on the potential for impacts to Swan Lake from stream flow and lake water level changes during mining and after closure. The rationale for emphasizing Swan Lake over and above all other lakes and streams was not provided. We recommend that a discussion about these impacts to all lakes and streams be included in the EIS. If there are reasons that Swan Lake's water level is a priority for protection, the reasons should be included in the EIS.

Wetlands – As stated above, we believe that mining activities have the potential to impact wetland hydrology. The effect of mining activities, including but not limited to mine pit dewatering, should be evaluated for their effect on wetland hydrology. These effects should be addressed and included in the EIS evaluation.

We note on page 32 of the EAW a statement, "The current project configuration has been developed to utilize previously disturbed areas and to reduce wetland impacts." We recommend that the EIS include information demonstrating how this was done. We commend the USACE and MDNR for utilizing the Eggers and Reed wetland classification system for wetlands characterization. We recommend that information on wetland functions and values be included in the analysis and documented in the EIS.

We note on page 33 of the EAW, under the heading "Wetland Impacts of Tailings Basin," that 15.0 acres of mitigation wetlands are proposed to be affected by the expansion of the tailings basin. Later on page 43 of the EAW, the tailings basin wetland bank is mentioned, but no detail is provided. The EIS should provide more information about the quality of the mitigation areas and the USACE plans for mitigating for the impacts.

On page 43 of the EAW, a reference is made to the existence of and implications for a 1968 land exchange agreement. This agreement and its implications should be fully explained in the EIS.

Surface and Groundwater Effects – We note that an emphasis is being placed on O'Brien Creek and upper Sand River and Sand Lake for stream geomorphology and stream flow impacts. The rationale for emphasizing these streams was not presented in the EAW. Table 12-1 includes a list of waterbodies for which similar analyses could be done. The EIS should provide rationale for why the stated creeks, rivers and lakes were analyzed, whereas others were not.

The EAW is not clear how possible chemical contamination from the tailings basin has been and will be dealt with. This information should be provided in the EIS.

Stationary Source Air Emissions – This resource area is a topic of concern for EPA. Both the Prevention of Significant Deterioration (PSD) regulations and risk assessment/greenhouse gas calculations will be reviewed by our Agency. The cumulative effects analysis should evaluate all past, present, and reasonably foreseeable future actions in the Mesabi Range and Duluth Complex area. As stated before, we would like to have discussions with the USACE and other federal and state agencies about this topic. Potential impacts on Class I air quality areas (e.g., Isle Royale and Voyageurs National Parks and the Boundary Waters Canoe Area Wilderness) should be evaluated in the EIS.

Tribal Effects – No information was presented in the EAW regarding the status of tribal rights or concerns. This is information that should be summarized in the EAW. We plan to follow-up with the USACE and provide subsequent input if necessary.

Standard bcc's: Originator's Copy
Official File Copy
NEPA Reading File
OECA Reading File

Other bcc's: Melissa Gebien, WD
Ed Fairbanks, OIA

Author: Sherry Kamke
Filename: f:\user\share\oeca\nepa\sherry\Keetac EAW-SDD.doc

CONCURRENCES

Org/Unit:	Author	Plain Lang.	Team Leader	Admin/ Clr.	DD/ OD	ORA *(St. Coord)*	ORA
Initial/Date:							
Other Concurrences:							

October 8, 2008

Erik Carlson, Principal Planner
Division of Ecological Services
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

Jon Ahlness
Regulatory Branch, St. Paul District
U.S. Army Corps of Engineers
190 Fifth Street East, Suite 401
St. Paul, MN 55101-1638

RE: U.S. Steel (Keetac) Scoping Environmental Assessment Worksheet ("SEAW") and Draft Scoping Decisions Document ("DSDD")

Dear Mr. Carlson and Mr. Ahlness:

The Fond du Lac Band of Lake Superior Chippewa ("the Band") hereby submits comments on the documents referenced above. The proposed project is located near the boundaries of the 1854 treaty territory whereby the Chippewa of Lake Superior ceded lands to the United States. However, hunting and fishing and other usufructuary rights in these lands were retained in perpetuity. Air emissions from this project have the potential to affect the Ceded Territories through transport. On that basis, and on the standing of the Band as a sovereign entity with Treatment as an Affected State status for air quality, I have reviewed the above documents. I am providing comments to the lead agencies that highlight the Band's concerns about specific resource categories, with the intent that these concerns will be addressed through the EIS process.

SEAW

On page 7 of the SEAW, mention is made of potential new haul roads at the facility. Please estimate how many miles of new roads are expected to be built. Also, please estimate any air emissions associated with additional rail cars, as mentioned on page 8 of this document.

On page 14, the SEAW mentions a new plan for controlling fugitive dust at the site. This plan needs to be made available for public review and comment as soon as it has been completed, especially given the large amounts of fugitive dust emissions expected from the mining site.

The section of the SEAW dealing with cumulative effects of mercury deposition (page 21) states that "Sources to be included in this cumulative effects analysis include those with significant mercury emissions within 12.4 miles (20 km) of the Expansion Project". Please explain what is meant by "significant" emissions and why only sources within 12.4 miles would be included. The Band is of the opinion that this would leave out many important sources of concern. This proposal needs to be revisited. The analysis should also provide for both existing and proposed sources to be included in such an analysis.

The section on page 72 addressing emissions from vehicles associated with the construction and operation of the project states that air quality emissions will be studied, including carbon monoxide. This analysis should include all criteria pollutants and toxics associated with vehicle use. Toxics should be listed in pounds emitted per year where applicable, as some regulations are written with "pounds per year" requirements.

As cited on page 72, and several other instances in the document, the Band agrees that the air quality analysis should include: Class I and Class I air impacts analyses, including visibility, increment, and Air Quality Related Values ("AQRV's"); determination of Best Available Control Technology to control all Prevention of Significant Deterioration ("PSD") pollutants; taconite Maximum Achievable Control Technology for mercury and particulates; and an Air Emissions Risk Analysis (please see following paragraph for further related comments on this topic). Upon our first reading, it seemed that these air quality analysis items are not always carried through the document consistently, although the short time period available for review and comment made it impossible to verify this. Please correct as need for consistency. Are any New Source Performance Standards ("NSPS") applicable to the facility? Again, due to the short time available to review this document, the Band has not been able to ascertain whether the re-started line will be considered a new source or an existing source with regard to NSPS and other applicable regulations. Please address this further.

With regard to the paragraph above, the Band does not agree with the SEAW's assertion that analyses of the National Ambient Air Quality Standards ("NAAQS") and the Minnesota Ambient Air Quality Standards ("MAAQS") do not need to be performed for all pollutants. On page 73, the SEAW states that a Class II NAAQS analysis will be performed for CO, SOx, and PM_{10}, and that a NAAQS and increment analysis may be performed for $PM_{2.5}$, pending protocol guidance from the MPCA. The Band believes that it is necessary for the $PM_{2.5}$ analyses to be performed because the final rule was promulgated by the EPA (May 16, 2008) and guidance issued by the MPCA (July 18, 2008) before this SEAW was submitted.

The Band disagrees with the statement from page 73 that "The Class II NAAQS modeling will include existing sources in the area including MSI and Excelsior Energy,

thus eliminating the need for a cumulative Class II analysis". First, Excelsior Energy is not yet an existing source, but a proposed source. Second, if this document seeks to list proposed sources other than the Keetac expansion, it needs to also include Polymet and Mesabi Nugget, Phase II. Third, it has not been our understanding in the past that a NAAQS/MAAQS analysis can take the place of a cumulative Class II analysis. The Band understands a NAAQS analysis to consider only the proposed source and already existing sources, whereas a Class II cumulative analysis considers these plus any other proposed sources in the area. In addition, the modeling protocols may be different for these two different kinds of analyses. Also, a NAAQS analysis would not include an increment analysis for the Class II area.

The Band agrees (see page 73 of the SEAW) that Class I impacts analyses need to be performed at the four nearest Class I areas – the Boundary Waters Canoe Area, Voyageur's National Park, Isle Royale, and the Rainbow Lakes Wilderness Area. Upon our first reading, it appears that these four locations may not be mentioned consistently throughout the SEAW and the DSDD. Please check for consistency.

On page 73, U.S. Steel proposes to install control equipment for mercury, likely the same type of control equipment that is being used at power plants. The Band believes a more detailed description of this proposal should be included in the later versions of this document.

U.S. Steel proposes to limit NOx emissions to "net out" of PSD for this pollutant. The facility proposes to do this through fuel switching. They will use more natural gas and biofuels, because combustion of these fuels creates less NOx than combustion of coal or fuel oil does. The Band is worried that it might prove difficult to track NOx emissions closely enough to justify this action. We assume that Continuous Emissions Monitors will be installed for NOx on existing and re-started equipment, and that emissions will be tracked on a daily and monthly basis to ensure that the limit is not exceeded. The facility should also create a contingency plan in case they cannot meet these limits as expected. For instance, if they exceed these limits such that the expansion is subject to PSD, there should be a definite timetable as to when a PSD permit application will be submitted to the MPCA.

On page 80 of the SEAW, regional visibility issues are discussed. This section states that if visibility affects at nearby Class I areas are predicted due to the expansion, mitigation will take place. Minnesota Steel Inc. ("MSI") is already committed to mitigating NOx emissions at their new plant to prevent visibility problems. For the EAW, Keetac should find out what mitigation strategies MSI is pursuing and then state how Keetac would mitigate their emissions in light of the actions undertaken by MSI. Our concern is that there may not be enough available emissions credits for both facilities to use in order to mitigate to the needed level. Emissions credits must be located within a certain distance of the plant and/or Class I area to have any noticeable effect.

In several instances in the cumulative effects sections of the SEAW (see pages 86/87, etc) the text refers to studying the impacts of MSI. This neglects other projects that have been

proposed since the MSI EAW was prepared. These include: Excelsior Energy, Polymet, and Mesabi Nugget Phase II. Although the Polymet project is mentioned on page 14 of the DSDD with regard to an acidification analysis, mention of this facility is not carried out consistently throughout these documents. On page 83, the SEAW states that no specific list of included facilities has been proposed yet. The Band reserves the right to comment on this list once it has been proposed. With regard to regional haze, the Band expects that this project will adhere to the pollutant caps included in the Northeast Minnesota Regional Haze State Implementation Concept Plan, as well as the requirements of the Minnesota Regional Haze State Implementation Plan. Reference to the Northeast Minnesota Regional Haze State Implementation Concept Plan should also be added to the list of **Governmental Actions** found on page 99. Mention might also be made here of the Clean Air Interstate Rule. Although it was vacated earlier this year by the Federal Appeals Court, it may yet return in some form.

In many places, the document mentions using the MSI cumulative analysis as a basis for the Keetac analysis. However, the Polymet or Mesabi Nugget Phase II analyses are the most up-to-date, as they were submitted after the MSI analysis, although these analyses are only in "preliminary draft EIS" form at this time.

On pages 93 and 94, visual impacts are discussed. We suggest that the last sentence on page 93 be modified to read "Overall, the project would have no local or immediate change in visibility impact". We suggest that the second paragraph under Tailings Basin on page 94, beginning "The visual impacts discussed here are considered to be different than…." be moved to the beginning of the Visual Impacts section.

DSDD

On page 5, the Band does not agree that vehicle emissions from the proposed project will be so minor that they can be left out of the EIS. Please provide more information to support this argument.

On page 9 (Section 3.3.1.2.2), the Band again disagrees with the proposal to include only "significant" sources of mercury located within 20 km of the proposed Keetac expansion project on a cumulative analysis (see remarks above).

On page 13, the Band reminds the facility that a Class I impacts analysis must include increment and AQRV's, not just visibility. Also, a Class II NOx NAAQS/MAAQS analysis may still be needed, even though the facility is choosing to net out of PSD review for this pollutant. As stated above, MSI and Excelsior Energy are not the only other proposed facilities that should be included in cumulative analyses. Please give more information on what kind of $PM_{2.5}$ mitigation is proposed.

On pages 13 and 14, do the Risk Assessment and the Human Health Risk Assessment Protocol include the study of asbestos-like fibers?

On page 16, the Band again asserts that a NAAQS/MAAQS study needs to be performed for emissions from this expansion.

If you have any questions regarding this letter, I can be reached at 218-878-8008. Thank you for this opportunity to comment.

Joy Wiecks
Air Quality Technician
Fond du Lac Reservation

c.c. Ben Giwojna, EPA Region V Air and Radiation Division

October 8, 2008

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RE: U.S. Steel (Keetac) Scoping Environmental Assessment Worksheet ("SEAW")

Dear Mr. Carlson and Mr. Ahlness:

The Fond du Lac Band of Lake Superior Chippewa ("the Band") hereby submits additional comments on the document referenced above. The proposed project is located near the boundaries of the 1854 treaty territory whereby the Chippewa of Lake Superior ceded lands to the United States. Fond du Lac Office of Water Protection staff have reviewed the SEAW for details about how this project may impact surface water, ground water, wetlands, and other resources, and are providing comments to the lead agencies that highlight the Band's concerns about specific resource categories, with the intent that these concerns will be addressed through the EIS process.

Wetlands

- A total of 676.5 acres (604.5 acres unpermitted and 72.0 acres previously permitted) is once again a significant impact in this region. The cumulative affects analysis must take this large wetland loss into account on a regional scale, since the vast majority of these wetlands are not being replaced in their immediate watersheds.

- The proposed wetland impacts include 15.0 acres of previous compensatory wetland mitigation sites from past wetland impacts. These mitigation wetlands should be under either a conservation easement or covenant and therefore, should not be impacted for any reason. If the U.S. Army Corps allows compensatory mitigation wetlands to be impacted, a higher mitigation ratio should be imposed on this type of impact.

- Cannot conduct an appropriated cumulative affects analysis regarding the net loss of wetlands within the watershed if wetland mitigation is only for the first five year time period of mine activity (Page 35).

- The design criteria listed in the SEAW for restored or created wetlands contains mostly criteria applicable to inundated wetland types (Types 3, 4, and 5 – i.e., shallow and deep marsh or shallow open water). The U.S. Army Corps of Engineers has indicated that it will not approve any mitigation banks consisting of these types. In addition, it is difficult to judge whether these design criteria are appropriate since the project proposer has only listed the amount of proposed wetland impacts, but has not indicated what types of wetlands would be impacted (Page 38).

- Not all wetland functions are related to watershed process, therefore it is in appropriate to restrict the analysis to the immediate watersheds of Welcome Creek, Hay Creek and O'Brien Creek (Page 42).

- Although, at least as stated by the project proponent, ground water modeling may not be necessary to evaluate potential hydrogeologic impacts of the proposed Keetac operation on the City of Keewatin's municipal wells, it should be necessary to conduct ground water modeling to evaluate the potential impacts to other resources especially wetlands with ground water connections (Page 47).

Other Resources

- Section 10. Cover Types. (Table 10-1) Along with the loss of significant wetland acreage, the proposed project will also destroy 585 acres of forest (both the North and South Project areas), and an additional 460 acres of reclaimed forest. Under the "Proposed Treatment of Topic in EIS", it should clearly state that these losses will be evaluated in the context of the carbon cycle; i.e., release of stored carbon and loss of carbon sequestration capacity. The impacts of a proposed project on global climate change must be evaluated, per several recent federal court rulings. This analysis should be done in addition to the greenhouse gas emissions calculations defined by MPCA 2008 protocol.

- Section 11. Fisheries, Wildlife and Ecologically Sensitive Resources: (p. 20) Should also be evaluated in context of tribal treaty-protected resources (1855 Ceded Territories)

- Section 13. Water Use (p. 36) Proposed Treatment of Topic in EIS: We disagree with the project proponent's statement that ground water modeling is not necessary to evaluate potential hydrogeologic impacts on drinking water wells. Given the number and proximity of domestic and municipal wells, along with the recent experience of the city of Hibbing and the municipal well it lost from pit dewatering at Hibbing Taconite, the agencies should require the company to use

appropriate hydrologic modeling techniques to examine potential impacts from mine pit dewatering.

- Section 25. Nearby Resources – Archaeological, Historical or Architectural Resources. The US Army Corps of Engineers, as a federal trustee, should initiate consultation under Section 106 of the National Historic Preservation Act with 1855 Treaty tribes.

- We are particularly interested in seeing how the EIS evaluates the current and proposed future mining pit operations at Keetac, HibbTac, and the key runout locations and elevations in the Herr and Gleason study (*Central Mesabi Iron Range Hydrology Study*, Minnesota Department of Natural Resources, 2007). We are concerned about the potential for an interbasin transfer of water from these operations.

If you have any questions regarding this letter, I can be reached at 218-878-8010. Thank you for this opportunity to comment.

Nancy Schuldt, Water Projects Coordinator
Fond du Lac Reservation

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October 8, 2008

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Re: Keetac Expansion Project; Scoping EAW/Draft Scoping Decisions Document

Dear Mr. Carlson,

I am writing you to submit comments on the Scoping Environmental Assessment Worksheet (EAW) and Draft Scoping Decisions Document (DSDD) for the Keetac Expansion Project (Project). I am a staff attorney for the Minnesota Center for Environmental Advocacy (MCEA). MCEA is a Minnesota nonprofit environmental organization whose mission is to use law, science, and research to preserve and protect Minnesota's natural resources, wildlife, and the health of its people. MCEA has state-wide membership. The Project involves environmental impacts in many of the areas of MCEA's work, including water quality, natural resources, public health, and energy policy. Thank you for the opportunity to offer comments on the Scoping EAW and DSDD (collectively, "draft scoping documents") for the Project.

While MCEA appreciates the coverage of some important issues in the draft scoping documents, MCEA finds a number of significant omissions and offers the following comments to ensure that the final scoping document for the Draft Environmental Impact Statement requires consideration of all the materials and issues that it should.

I. Climate Change

The draft scoping documents entirely avoid any mention or analysis regarding the effects of climate change and its interaction with and

amplification of the Project's negative effects on the environment. Minnesota natural resources have been affected and will increasingly be affected by climate change in a variety of ways. *See* attachments, generally. Because nature inherently involves interacting conditions and systems, without consideration of climate change and its many effects it is not possible to take the requisite hard look at the Project and its effects on Minnesota's environment.

A. Climate change and air resources

Climate change is expected to increase the formation of pollutants that cause haze. *See* Regional Haze SIP final cmnts.pdf, *and* Affidavit of Dr. Ranajit Sahu.pdf, attached. These un-inspected effects render the draft scoping documents' discussion of haze formation and its reliance on the Regional Haze State Implementation Plan (SIP) for mitigation (*see* Scoping EAW at p. 80) meaningless. *Id.* The scope of review must include the effects of climate change, which are omitted from the SIP.

B. Climate change and water resources

Water is also certain to be affected by climate change in many ways, with warmer average annual water temperatures, fewer weeks of ice cover, earlier spring thaw, higher rates of evaporation, and higher and longer-lasting peak temperatures in lakes and streams, are all problems in their own right, but they combine to cause other factors, such as lower stream flows and higher stream temperatures at critical times in the summer. Climate change is predicted to bring less frequent, more intense rainfall events, which damage stream morphology and contribute to erosion and channel-widening, further exposing streams to higher insolation and temperatures. Temperature problems will be particularly acute in the surface-fed streams of the Arrowhead. Warmer water possesses decreased oxygen solubility and higher potential for growth of algal blooms, both of which deplete oxygen and lead to more extensive hypoxic conditions in lakes and streams. *See* StefanFangHondzo-climatelakes.pdf, PilgrimFangStefan- StreamTemp in MN_CC.pdf, NewGame-effects of CC on animals fish in MN.pdf, attached. The effects from the Project's additional process water demands and de-watering activities on watershed, flow regime, stream morphology, and water quality effects on Hay Creek, Swan Lake, Swan River, and perhaps other water bodies, cannot be assessed properly without recognition and consideration of the compounding effects of climate change. The scope of review must encompass climate change and its compounding effects.

C. Climate change and forest and wildlife resources

Climate change is also expected to affect northern Minnesota forests by increasing the frequency and intensity of derechos – the storms that charge from west to east with straight-line winds, like the July 4th storm in 1999 that leveled hundreds of thousands of acres of forest in the Superior National Forest/Boundary Waters Canoe Area Wilderness. *See* MPCA-Global Warming & Climate Change in MN.pdf, attached; *also, Pers. com.* Dr. Lee Frelich, University of Minnesota. Windstorms are mentioned three times in the Scoping EAW, and never in the context of increasing frequency or climate change.

Climate change is also affecting and will continue to affect the presence, composition, and distribution of forest types in Minnesota, including the Arrowhead. *Pers. com.* Dr. Lee Frelich, University of Minnesota; *see also* NewGame-effects of CC on animals fish in MN.pdf, attached. Absent consideration of the effects climate change will have on major wind events, and thereby on northern Minnesota forests, the analysis of the Project's biomass harvest-related effects on forests and wildlife can be of little value. The scope of review must be expanded to include climate change

II. Air

The Scoping EAW asserts that Best Available Control Technology (BACT) analysis "will not be necessary for nitrogen oxides (NOx) because U. S. Steel currently expects to limit NOx emissions below PSD thresholds." *See* Scoping EAW at p. 72. MCEA disagrees with the decision not to conduct a BACT analysis for NOx as unnecessarily dismissive and a bad idea for many reasons. First, the 40-ton Prevention of Significant Deterioration (PSD) threshold is miniscule in comparison to the Project's expected total emissions. It would not require much of an interruption in supplies of biomass, or much of a decrease in the desired/allowed mix of coal (due to mercury or sulphur emissions, or the coming imposition of carbon costs) for the Project to blow the 40-ton PSD threshold. This distinct possibility must be apparent to the Project proponent, because the facility would maintain natural gas and fuel oil as back-up fuels. *See* Scoping EAW at p. 4.

Second, the NOx PSD Netting Summary improperly cites the existing 2005 air permit. That air permit for Phase II has been superseded by the Minnesota Pollution Control Agency (PCA) Administrative Order By Consent, In the Matter of United States Steel Corporation – Keewatin Taconite, Inc. While the Regional Haze Rule (RHR) may be in limbo, the PCA's Administrative Order remains in effect. *See* Admin Order by Consent-USSCorp-Keewatin.pdf, attached. It is that Administrative Order that resulted in the significant drop in NOx emissions from the years 2004-2005 to 2006-2007, from 5,857 TPY to 3,503 TPY, a greater than 40% reduction. Phase II is not now entitled to return to operations that would increase its NOx emissions to any level close to the maximum specified in the 2005 permit. The Administrative Order was issued for the purpose of improving emissions and reducing haze, not for the purpose of creating an emissions gap for U. S. Steel-Keetac to fill by expanding its operations 60%. It is therefore inappropriate to cite operationally unavailable NOx emissions tonnage (the gap between either 6,072 or 5,857 TPY and approximately 3,503 TPY) to determine that the Project – i.e., restarting the long-idled Phase I line – will not trip the need for BACT analysis. It is likewise inappropriate to presume that the PCA would reissue the upcoming 2010 air permit without reducing the NOx emissions limits to some amount more closely approximating current actual emissions. Doing either of these inappropriate things would violate the purpose and intent of the Administrative Order, which is to achieve significant progress at Keetac toward visibility goals in Minnesota's Class I areas.

It is unclear why Keetac would object, in any case. It is generally better and less costly to design and build correctly at the outset, rather than going back and fixing a facility after it is operating. Furthermore, while the RHR may be in limbo, its decedent and the SIP will

eventually be passed and finalized, triggering the long-anticipated mandated reductions in haze-producing emissions, including NOx.

The scope of review must be broadened to include BACT analysis for NOx, and Project design modifications for inclusion of BACT. Such technologies are agreed to be tested at U. S. Steel-Minntac, are going to being tested at Minnesota Steel's facility now under construction, and apparently already exist. *See* Wheelabrator-NOx emission cntrl system.pdf, attached.

III. Water

Some conditions of the water resources in question that are known, but which I did not find in a review of the draft scoping documents, include basic water quality assessment data. Hay Creek (Assessment Unit ID# 07010103-545) has been assessed for Fish Index of Biological Integrity and apparently found to be OK (not impaired) by the PCA. It will be important to maintain that status, if true. No assessment work has been done for phosphorus, ammonia, fecal coliform, heavy metals, turbidity, suspended sediments, etc.

Swan Lake has been assessed and is impaired by mercury. Given the problems with sulfate levels in discharged water at the Minntac facility, and the role that sulfates play in the formation of methylmercury, it is important the scope of review include the effect of sulfates releases, through process water discharges or any other avenue.

Swan River below Swan lake (as of PCA's 2008 assessment) is impaired for Low Dissolved Oxygen, Mercury, Phosphorus and Bio-Chemical Oxygen Demand. Effects of nitrification or phosphorus content of the process water discharges, or from aerial deposition, must be included in the scope of review.

IV. Habitat Permeability For Wildlife

MCEA is pleased that the Scoping EAW addresses landscape barriers and recognizes that the roughly 100 mile long Mesabi Iron Range largely prevents terrestrial wildlife from dispersal and travel from the southeast side to the north and west side of the Mesabi Iron Range. It is also very good to see mention of the DNR-ordered report entitled "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota." This document and its maps are omitted in the listing of data needs for cumulative effects analysis, however, and should be added there if that list is exclusive. *See* Scoping EAW at p. 25. The scope of review must include this report, and the report's conclusions must inform and should broaden the range of alternatives selected for analysis in the EIS.

Likewise, in the Scoping EAW section – Cumulative Effects Analysis – Loss of Threatened and Endangered Species, the same report certainly provides relevant data and conclusions to assessing cumulative effects from the Project. MCEA believes that the report and all the internally-referenced scientific articles that inform it should be included

in the listing of data needs for cumulative effects analysis, if that list is exclusive. *See* Scoping EAW at pp. 28-29.

The Project as proposed impinges on the western end of "Travel Corridor 4," identified as one of 13 corridors permitting terrestrial wildlife to disperse and travel from the southeast side to the north and west side of the Mesabi Iron Range. MCEA is disappointed that this fact is omitted from discussion in the draft scoping documents, that among the many color figures there is none that depicts Corridor #4, and that there is no discussion of the implications for this Corridor - for its attractiveness to wildlife as foraging or dispersal habitat - of a 60% increase in operations and traffic at the Project.

The draft scoping documents are deficient in description of the Project's effect on the permeability of the Mesabi Iron Range. They also insufficiently limit the proposed scope of review to "wildlife species in the Project area" (*see* Scoping EAW at p. 22) and to a buffer 15 miles around the Iron Range. Many wildlife species, including in particular Canada lynx, regularly travel more than 15 miles, and may travel many hundreds of miles from point to point. The scope of review must be expanded to include potential wildlife movement from areas beyond the proposed buffer through the Mesabi Iron Range to suitable habitat on the other side.

Regarding lynx, MCEA is pleased that field surveys are being done, but the survey findings, if negative for lynx in the 15-mile buffer, are not and must not be considered to dismiss the changes in the foraging and dispersal habitat suitability of Corridor #4.

In addition, the draft scoping documents inexplicably narrow the proposed scope of mitigation consideration to long-term mineland reclamation strategies. The final scope of analysis must include additional immediate and continuing mitigation in all the alternatives. Canada lynx habitat suitability correlates strongly with large amounts of structure – vegetation, thick growth of conifers, etc. – at ground level. For that reason, mitigation could include protecting large blocks of habitat, revegetating large blocks of habitat. One option would be for the Project proponent to obtain agreements from other landowners excluding from biomass harvest existing large habitat blocks in the areas that extend in a funnel away from Corridor #4 and other Corridors. Another option would be to propose as a permit requirement that the Project proponent pay for the "improvement" of insufficiently forested reclaimed mine sites at and around other identified Corridors. Lynx biologists should be consulted for other immediate and ongoing mitigation options to include in the analysis.

V. Biomass

Biomass energy is incorrectly described by the draft scoping documents and the PCA guidance on measuring greenhouse gas emissions as being "carbon neutral." Carbon neutrality of fuel is a trait that cannot be described without reference to an important currency: time. Some types of biomass fuel are faster-to-neutrality than others. Some types of forest biomass - depending on site index, forest type, and method and time of harvest – are extremely slow, and burning that "slow carbon" cannot accurately or fairly

be described as carbon neutral, given the rush the state of Minnesota is in to achieve substantial reductions in statewide greenhouse gas emissions. *See* Minn. Stat. § 216H.02. The scope of analysis, and the alternatives including but not limited to mitigation, must be expanded to recognize and explore the time factor.

VI. Conclusion

The role of environmental review is to explore the factors and combinations of factors leading to impacts to the environment, without regard to whether some of those factors are beyond the immediate control of the permitter or the project proponent. The role of review is to understand how a project's effects – alone, in combination, or cumulatively with outside effects – may affect the environment. The point of such review is to enable the permitter to properly weigh those effects, select sufficient alternatives for analysis, and decide on the best alternative that achieves the requirements of state law.

This concludes MCEA's comments on the Project.

Sincerely,

Matt Norton
Staff Attorney

Enclosures/Attachments

Leech Lake Band of Ojibwe

Arthur "Archie" LaRose, Chairman
Michael J. Bongo, Secretary/Treasurer
District I Representative *Robbie M. Howe*
District II Representative *Lymon L. Losh*
District III Representative *Eugene Whitefeather*

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RE: U.S. Steel Keetac Scoping Environmental Assessment Worksheet and Draft Scoping Decisions Document

Dear Mr. Carlson and Mr. Ahlness,

The Leech Lake Band of Ojibwe (Band) is providing comments on U.S. Steel Keetac Scoping Environmental Assessment Worksheet (SEAW) and Draft Scoping Decisions Document (DSDD) in part as official involvement in the EIS process. However, of greater consequence is the Band's sovereign status and our obligation and ability to protect our people and our environment today and for generations to come. In addition, the Leech Lake Band of Ojibwe has Treatment as an Affected Sovereign/State (TAS) status for locally issued air quality permits and strives to protect the health and well-being of the environment and its members by means of protecting air quality.

The Leech Lake Reservation is a federally recognized Reservation located in north-central Minnesota encompassing 865,000 acres, serving 8,050 members, and 12,000 Reservation residents. The Reservation is characterized by an abundance of lakes and rivers (approximately 300,000 acres of surface waters), wetlands (163,000 acres), and forests (over 300,000 acres). The Leech Lake Band of Ojibwe retained and exercise their inherent right to hunt, fish, and gather for subsistence purposes in the 1855 Treaty with the United States government. Resources must be available and safe to utilize for

the exercise of these rights. Protection of the Reservation's environment and trust resources is crucial for the health and welfare of the Reservation population and the traditional, cultural and spiritual well being of the Band.

The Band is interested in the U.S. Steel Keetac facility as it has the potential to impact Leech Lake Band of Ojibwe members and resources both on the Reservation and within the Band's ceded territories. The facility is located within the 50 mile TAS radius of the Leech Lake Reservation and within the Band's 1855 Ceded Territory. Emissions from this facility and the facilities immediately around U.S. Steel Keetac affect areas where Leech Lake Band members hunt, fish, gather, recreate, and live.

The Band is concerned about the amount of confidence that is given to the PM on-site data that will be used as background data for modeling. Please be cognizant that this data has only been collected since March 2008 and is not a true representation of background levels in such a short period of time. Does the March 2008 timeframe include project setup and calibrations or has the data only been collected after the "kinks" were worked out?

Along with our concern regarding the PM monitors we are equally concerned about the fugitive dust emissions from such a facility. It states in the SEAW that the facility will be building new haul roads and to view existing haul roads on figure 5-4. The figure was merely a visual and did not provide any data. We would like to know: 1) the length of existing haul roads and 2) the amount and length of haul roads proposed for the project. With the large vehicles utilized on these roads the amount of fugitive emissions along with the vehicle emissions is not minimal and should be address.

The SEAW states that "The EIS will not evaluate vehicle-related air emissions". The Band is very concerned regarding this statement. Please detail what ambiguities in the rules allow for these emissions to be disregarded. The engine size and fuel usage by these vehicles creates a large amount of air emissions.

We strongly recommend that MPCA fully address PSD for $PM_{2.5}$ in Keetac's air quality permit and address the issues of PSD increments, significant impact levels, and significant monitoring concentrations.

The Band is concerned about cumulative mercury emissions only taken in to account if they are "significant" and are within 12.4 miles of Keetac. Why the limited mileage? Is it stemming from a modeling program? Why is the mileage not larger, say 100km, especially with the recent MPCA TMDL concerns? Then there is the question on what does Keetac considered to be "significant"? Please provide more information.

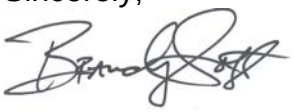
BACT for mining operations is outdated. Both existing and new technology needs to be pushed to establish new BACT standards and further emissions controls for mining operations. As we understand, some BACT standards date to the 1960's. There is updated technology that must be installed to improve air quality, especially in places such as Keewatin where the town and the facility are next door neighbors.

Overall this facility expansion is a significant emission addition to northeastern Minnesota. Careful consideration of the cumulative impacts of this facility and surrounding facilities, mining and non-mining, operational and in EIS or permitting stages, need to be factored into the overall equation. The Band has counted eight mining facilities within 50 miles of the Keetac facility and can think of at least a dozen other Title V facilities in the range of Keetac to be evaluated. Proximities to Class 1 areas is another critical consideration.

Due to the limited review time and limited previous involvement in the project the Band has not had the appropriate time to properly formulate all their comments. With this, if there are any questions or concerns regarding our comments please contact the Air Quality Staff for further clarification at 218-335-7429 or by email at air@lldrm.org.

In closing, we thank you for your time and consideration of the Leech Lake Band of Ojibwe's comments.

Sincerely,



Brandy Toft
Air Quality Specialist
Division of Resource Management

CC: Leech Lake Tribal Council
Bruce Johnson, DRM Director
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1854 Treaty Authority

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October 7, 2008

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RE: Keetac Scoping Environmental Assessment Worksheet

Mr. Ahlness and Mr. Carlson,

The purpose of this letter is to provide comments on the Environmental Assessment Worksheet for the Keetac Expansion project.

The 1854 Treaty Authority is an inter-tribal natural resource management organization governed by the Bois Forte Band and Grand Portage Band of Lake Superior Chippewa, both federally recognized tribes. The organization manages the off-reservation treaty rights of these bands in the 1854 Ceded Territory. Please note that these comments are submitted by 1854 Treaty Authority staff with the understanding that member reservations may submit comments from their own perspective.

The 1854 Treaty Authority would like to highlight several resource concerns related to the proposed project. Although the project lies just outside the 1854 Ceded Territory, certain aspects of the project have the potential to affect tribal interests or resources (ex. air emissions, cultural resources, etc.)

Figure 12-4: Wetland Impacts shows the direct wetland losses that are to be expected with this proposed project. The 1854 Treaty Authority is concerned with the indirect wetland impacts in the area between the pit expansion and the additional stockpiles. Additional figures show that the surface water flows south into those wetlands and with the pit being directly north of them, the 1854 Treaty Authority is concerned that the surface and groundwater recharge to those wetlands will be inadequate for sustainability.

The project has the potential for inter-basin transfer of water between the Lake Superior and Mississippi River watersheds. We support including analysis in the environmental impact statement and properly addressing any legal implications.

In the NOx PSD Netting Summary (on page 80), an impact analysis on Class I areas will be performed and will *"likely include an analysis of whether NOx emissions (including tailpipe emissions from haul trucks) will consume Class I NOx increment."* The 1854 Treaty Authority would like to see that analysis with the emissions from Mesabi Nugget Phase II and PolyMet taken into affect.

The 1854 Treaty Authority would request a more detailed description of Keetac's plan to limit NOx emissions to prevent triggering PSD. The 1854 Treaty Authority would like to see the monitoring strategy that Keetac will use to tract NOx emissions and what contingency plans are in place if they fail to stay under their limits.

The 1854 Treaty Authority would also like to see Minnesota's State Implementation Plan (SIP) further addressed in the EIS with the mitigation of impacts from the existing facility and expansion evaluated.

The 1854 Treaty Authority would like to see a Hazardous Air Pollutant Analysis performed in the EIS that takes into consideration not only the fugitive and point source emissions but the tailpipe emissions from the haul trucks.

The 1854 Treaty Authority appreciates the inclusion of the option to remove mercury via the transfer of segregated taconite dust to the tailings basin (thereby sequestering the mercury) in the EIS. Air deposition of mercury to the lakes and wetlands and resultant bioaccumulation in the ceded territory is a major concern and any removal of mercury before it is emitted is strongly recommended. Mercury releases should be analyzed in the environmental impact statement, including compliance with the mercury total maximum daily load (TMDL) that is in place for Minnesota. Sulfate loading to surface water, potentially increasing methylmercury formation, should also be addressed.

Traditional Cultural Properties (TCPs) need to be included the discussion of cultural resources. Has there been any effort to locate TCPs in the project area? TCPs are of great concern to the 1854 Treaty Authority and an active program of identification is needed before the project can proceed. Such work must include proper consultation with tribes.

Discussions on economic and social impacts should identify effects from the project on tribes and tribal members. A separate section describing tribes and treaty rights, and effects from the project on resources of concern, may also be appropriate.

Mine closure plans appear to not be addressed in the document. We would ask that consideration be given to proper closure and long-term plans for the area.

Finally, we support analysis of cumulative impacts. This project, along with several others being developed or proposed in the region, has the potential to impact a variety of resources (water, air, wildlife, fish, etc.). Cumulative impacts should be understood to the extent possible.

Thank you for considering our comments on the EAW for the Keetac Expansion project.

Sincerely,

Nick Axtell
Environmental Specialist
1854 Treaty Authority