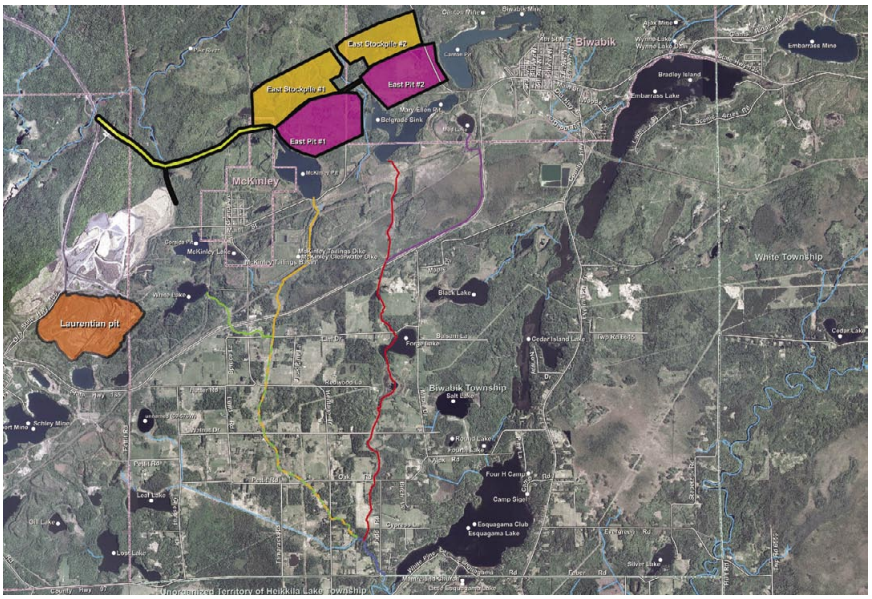
Final Environmental Impact Statement
Mittal Steel USA - Minorca Mine, Inc.
East Reserve Project

Minnesota Department of Natural Resources
U.S. Army Corps of Engineers



December 18, 2006

Minnesota
DEPARTMENT OF
NATURAL RESOURCES

US Army Corps
of Engineers
St Paul District

COVER SHEET

Final Environmental Impact Statement
Mittal Steel USA – Minorca Mine, Inc.
East Reserve Project

The Minnesota Department of Natural Resources and the U.S. Army Corps of Engineers have jointly prepared this Final Environmental Impact Statement to evaluate the proposed project in accordance with the National Environmental Policy Act 42 U.S. C. §§ 4321-4347, the National Environmental Policy Act's implementing regulations, 40 C.F.R. parts 1500-1508, and the Minnesota Environmental Policy Act, Minn. Stat. § 116D.

State Co-Lead Agency and RGU:
Minnesota Department of Natural Resources

MNDNR Contact:
Scott E. Ek
Principal Planer
Environmental Policy and Review
Division of Ecological Services
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025
651.259.5156
scott.ek@dnr.state.mn.us

Federal Co-Lead Agency
U.S. Army Corps of Engineers

USACE Contact:
Jon K. Ahlness
Regulatory Branch, St. Paul District
U.S. Army Corps of Engineers
190 Fifth Street East, Suite 401
St. Paul, MN 55101-1638
651.290.5381
651.290.5330 (FAX)
jon.k.ahlness@mvp02.usace.army.mil

Project Proposer: Mittal Steel USA, Minorca Mine, Inc.

Proposer Contact: Gustav R. Josephson
Manager of Safety and Environment
Mittal Steel USA, Minorca Mine, Inc.
5950 Old Highway 53
PO Box 1
Virginia, MN 55792
218.749.5910

Abstract: This Final Environmental Impact Statement (EIS) responds to timely substantive comments on the DEIS, and corrects errors in the DEIS. Together, the FEIS and the DEIS comprise the complete EIS, which documents the analysis of potential impacts associated with Mittal Steel USA's proposal to open the East Reserve; a new open-pit mine area located between the towns of Biwabik and McKinley. The East Reserve mining area would consist of two separate mine pits; an overburden, waste rock and lean taconite stockpile area north of the mine pits; and a new haul road extension from the existing Laurentian Mine haul road.

Certification of Responsible Government Unit: I hereby certify that the information contained in this document is true and complete to the best of my knowledge, and that copies of the completed FEIS have been made available to all persons and parties on the official Environmental Quality Board (EQB) distribution list or requesting to be copied on the document.

12/11/06
Date

Scott E. Ek
Minnesota Department of Natural Resources

12/11/06
Date

Jon K. Ahlness
U.S. Army Corps of Engineers

Table of Contents

Mittal Steel USA - Minorca Mine, Inc.
East Reserve Project

Final Environmental Impact Statement

Chapter 1 Introduction

Mittal Steel USA, Minorca Mine, Inc. (Mittal), proposes to develop two mine pits near the cities of Biwabik and McKinley, Minnesota (See Draft Environmental Impact Statement (DEIS) **Figure 1-1**). Mittal currently operates the Minorca Mine located in Virginia, Minnesota (See DEIS **Figure 1-2**) where low-grade iron ore is mined in the Laurentian pit and then hauled to the Minorca production facility which processes low-grade crude iron ore into high-grade iron ore pellets. Mittal has operated the Laurentian Mine near Gilbert, Minnesota (See DEIS **Figure 1-2**) since 1990 to supply crude ore to the Minorca concentrating and pelletizing production facility. Economically mineable ore reserves in the Laurentian Mine are expected to be exhausted by 2011 and a new source of ore is necessary to maintain the Minorca concentrating and pelletizing production facility. Mittal proposes to move their mining operations from the Laurentian Mine to the East Reserve mining area, formerly known as the J&L East Reserve (See DEIS **Figure 1-2)**. There would be no increase in annual total tonnage of ore mined in the future relative to the tonnage mined in recent years. Taconite mining in the East Reserve would begin in 2007 and be operational for approximately 18 years. However, the actual operational life of the mine will be dependent on future mining and economic conditions, which could fluctuate with market prices for steel.

The Proposed Action includes moving mining operations in a phased manner from the Laurentian Mine to the East Reserve and includes the following components: mining operations in two new mine pits, new haul roads, mine waste stockpile areas, and dewatering. A full and complete description of the Proposed Action and all of the related project elements is included in **Chapter 2** of the DEIS.

The Minnesota Department of Natural Resources (MNDNR) and U.S. Army Corps of Engineers (USACE) have jointly prepared an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4347, NEPA's implementing regulations, 40 C.F.R. parts 1500-1508, and the Minnesota Environmental Policy Act (MEPA), Minn. Stat. Ch. 116D.

The MNDNR serves as the co-lead agency in the EIS preparation and is responsible for determining EIS adequacy pursuant to MEPA, and preparing the state Record of Decision (ROD). The USACE agreed to participate as the lead federal agency in the preparation of a joint State/Federal EIS for the proposed project. The USACE will determine whether the EIS satisfies NEPA and will prepare the Federal ROD.

In accordance with the Minnesota Environmental Quality Board (EQB) rules, the MNDNR prepared a Scoping Environmental Assessment Worksheet (SEAW) to identify potentially significant environmental issues. The companion Scoping Decision Document (SDD) described the project alternatives and assisted in identifying the issues and level of analyses to be included in the EIS.

This Final Environmental Impact Statement (FEIS) responds to timely substantive comments on the DEIS consistent with the scoping decision. The FEIS also contains corrections to the DEIS. Corrections and Revisions are in **Chapter 2** of the FEIS. **Chapter 3** provides information on the public meeting held in Biwabik, Minnesota to: 1) provide information on the DEIS, 2) allow questions to be answered, and 3) have the USACE and MNDNR receive comment from the public. **Chapter 4** contains copies of the timely comment letters submitted and responses to comments.

The FEIS and DEIS together comprise the complete EIS for the proposed Project.

The USACE and MNDNR will receive comments on the adequacy of the FEIS during a 30-day comment period commencing with publication of the Notice of Availability of the FEIS in the Federal Register and the EQB Monitor. The Minnesota EQB Rules indicate the EIS shall be found adequate if it:

- Addresses the potentially significant issues and alternatives raised in scoping so that all significant issues for which information can be reasonably obtained have been analyzed in conformance with Minn. 4410.2300, items G and H;
- provides responses to the substantive comments received during the DEIS review concerning issues raised in scoping; and
- was prepared in compliance with the procedures of the Minnesota Environmental Policy Act and Minn. Rules parts 4410.0200 to 4410.6500.

Chapter 2 Draft EIS Revisions

Note the following corrections, revisions, and additions to the Draft Environmental Impact Statement prepared for the Mittal Steel USA – Minorca Mine, Inc., East Reserve Project, located between the cities of Biwabik and McKinley, Minnesota.

Chapter 3, Section 3.13 – Cultural Resources

Text Insertion: The following paragraphs are added as a new section to Chapter 3 (Affected Environment) of the DEIS.

3.13.1 Precontact Archaeology

No previously recorded precontact archaeological sites have been recorded within the East Reserve Mine project area. A recent Phase I archaeological survey of a large parcel immediately north of the project area recorded one small lithic site on a terrace overlooking the Pike River (see **Appendix B**).

Potential for precontact archaeological sites was determined to be low for most of the project area. Pre-field examination of aerial photos and topographic maps indicated four locations (A through D) (see **Figure 2** in **Appendix B**) with a moderate archaeological potential. Three of the locations are within the area of the proposed haul road and the fourth location is within the proposed mine pit area.

Location A is on a high level terrace overlooking the convergence of several linear wetlands and is located west of a small drainage, tributary to the Pike River to the north. This location showed no signs of previous disturbance. Close interval shovel tests were excavated and soil material was screened for cultural resources. All shovel tests were negative.

Location B is located on a high level terrace east of the small drainage discussed under Location A. This location shows no signs of previous disturbance. Close interval shovel tests were excavated and soil material was screened for cultural resources. All shovel tests were negative.

Location C is on a moderately elevated terrace overlooking a small intermittent drainage that flows south along one of the existing mine pits. Field examination showed that this location has been extensively disturbed by activity associated with past mining. As a result, no subsurface testing was conducted.

Location D is on a level terrace with a gentle slope to the lower basin to the south. This basin had once been a part of Glacial Lake Upham. Field examination of the area showed that this terrace was very indistinct and lacked the archaeological potential apparent on topographic maps. As a result, no subsurface testing was conducted.

3.13.2 Historic Mining Landscape Assessment

An extensive pedestrian survey was conducted, with an emphasis on the "Belgrade" location, to determine the presence of a Historic Mining Landscape (see **Appendix C**). A literature review was also conducted that examined a variety of mining histories, mine industry maps, federal census records, and local histories in the University of Minnesota and Minnesota Historical Society Collections. The literature search focused on the Belgrade Mine (1908-1926) and the Belgrade Location (ca. 1908-ca. 1960s) because they appear to be central features with important associations with the proposed project area.

Based on information gathered as part of the literature review it was determined that the mines within proximity of the project area are typical of the Mesabi pattern where enlargement and consolidation resulted in a continuous and water-filled pit. Some early stockpiles created by steam shovel and rail were also modified or enlarged. The Belgrade location was established adjacent to an underground mine owned by the

Balkan Mining Co. and was comprised of modest houses and a population of immigrant miners. During the initial 20 years of existence, the Belgrade establishment was typical of a company-sponsored location. The settlement persisted beyond the mine closing, with its houses either razed or dispersed across Biwabik Township.

The Belgrade location as shown on the McKinley and Biwabik USGS quadrangle maps (compiled in 1950) had a limited network of streets, with the abandoned segment of State Highway 135 running east-west through the center. At the time of the compilation of these maps thirteen extant structures are indicated in or adjacent to the location. Other features in the area from the 1950 compilation are a small “inactive mine”, an adjacent dump pile (the Holland Mine), and an abandoned railroad spur.

The pedestrian survey revealed little remaining evidence of the mining related features. Of the thirteen extant structure locations, no evidence remained at twelve. The remains of a collapsed and decayed building and the remaining concrete floor and perimeter foundation were observed. This building was 28 feet by 112 feet in size and appeared to have had two garage stalls. Debris associated with this feature; drill cores, core storage trays, metal file drawers, etc., suggest it had an administrative/geology lab function. Remnants of structural components such as an aluminum/plastic doorway threshold, indicated that it functioned well after the historic mining period of the Belgrade Mine. Partial remains of concrete foundations and floors were observed at eight additional locations, none of which were indicated as structures on the 1950 base maps.

Page 80, Chapter 4, Section 4.6.1.2.1 – Paragraph 1, Sentence 9

Revision: change “The 1,197 feet amsl water level is a worse-case scenario and the Groundwater Study indicates that it is highly unlikely that dewatering of the East Reserve Mine would cause drawdown in the adjacent pits to this elevation because of hydraulic resistance of the rock that separates the pits.” to “The 1,197 feet amsl water level is a worse-case scenario and the Groundwater Study indicates that dewatering of the East Reserve Mine will likely result in some degree of drawdown on adjacent pits, perhaps even to the level of 1,197 feet amsl. However, the hydraulic resistance of the rock that separates adjacent pits makes it difficult to determine the extent of water level changes on these adjacent pits.”

Page 81, Chapter 4, Section 4.6.1.2.1 – Paragraph 5

Deletion: Delete sentences 3 and 4

Text Insertion: The following text should be added to the end of paragraph 5. "Water quality sampling and analysis should be completed on the water from the Canton pit and treated water from the City's water treatment plant prior to the beginning of dewatering activities. The analysis should test for, at a minimum, the 91 contaminants listed in the National Primary Drinking Water Standards and the 15 contaminants listed in the National Secondary Drinking Water Standards. An actual list of contaminants to test for should be determined during the contingency planning. The initial test results would serve as a baseline water quality. Once dewatering has begun, water from the Canton pit and treated water from the City's water treatment plant would be monitored annually and compared to the baseline water quality to determine if a change in water quality is occurring. If a change in water quality is occurring the sampling data can be used to determine the changes in the treatment process that would be required to meet the baseline water quality or if a new raw water source would be needed."

Chapter 4, Section 4.8.2

Deletion: Delete paragraph 1

Text Insertion: The following paragraphs are added after Paragraph 3 of Section 4.8.2 of the DEIS.

The USACE is in the process of conducting Endangered Species Act Section 7 consultation with the USFWS regarding the three threatened wildlife species that may utilize habitat on the proposed project site. The three species are:

- Bald eagle (*Haliaeetus leucocephalus*).
- Gray wolf (*Canis lupus*).
- Canada lynx *(Lynx canadensis).*

The USACE has reviewed available information regarding the proposed project and the three threatened species and has conducted informal consultation with the USFWS. Based upon the review and informal consultation, the USACE position regarding the three threatened species is that the proposed project would have no affect on the bald eagle; may affect, but is not likely to adversely affect the gray wolf; and may affect the Canada lynx. The final position regarding affects to the three threatened species will be reached through the ongoing consultation process between the USACE and the USFWS.

If the USACE decides to issue a Section 404 permit for the proposed project, the USACE will strongly consider inclusion of any permit conditions suggested by the USFWS through the consultation process. The purpose of the permit conditions would be to minimize project impacts to the threatened species.

Chapter 4, Section 4.10 – Cultural Resources

Text Insertion: The following paragraphs are added as a new section to Chapter 4 (Environmental Consequences) of the DEIS.

4.10.1 No Action

Under the No Action Alternative, no possible cultural resources located on the East Reserve Mine site would be affected.

4.10.2 Proposed Action

As discussed in Section 3.13, a recent Phase I Archaeological survey (see **Appendix B**) including field testing/observations and a literature review was conducted to determine if precontact archaeological sites or a Historic Mining Landscape exists that could be eligible for listing on the National Register of Historic Properties.

Shovel testing and observation of the most apparent locations (Locations A through D) (see **Figure 2** in **Appendix B**) for precontact archaeology was negative and no additional locations requiring archaeological testing were observed.

A pedestrian survey of a potential Historic Mining Landscape showed a complete absence of intact features. Other than a few highly deteriorated concrete foundations, no evidence was observed related to the Belgrade mining era. The network of streets and roads shown on the USGS quadrangle maps are apparent on the ground only as linear clearings and some road fill. The entire area has been relatively cleaned up. It appears the area has been furrowed, possibly for tree planting, but few planted trees are present. The only visible trash observed was of relatively recent origin. As a result of these investigations, it appears that no features are present that would warrant further research focused on a potential NRHP-eligible historic mining landscape.

If it is later determined that the proposed project will adversely affect historic properties, the Advisory Council on Historic Preservation will be notified and provided an opportunity to participate in the resolution of adverse effect. An agreement will need to be reached regarding the appropriate treatment to resolve the adverse effect. A memorandum of agreement (MOA) stipulating that treatment will then be executed among the State and Federal agencies, the SHPO, Mittal Steel, and other consulting parties before the USACE may issue permits for the project. The MOA will be incorporated by reference as a special permit condition of any permit that the USACE may issue for the project.

4.10.3 Section 106 Consultation

Pursuant to the U.S. Army, Corps of Engineers' responsibilities under Section 106 of the National Historic Preservation Act, the Corps in consultation with the Minnesota State Historic Preservation Office (SHPO) is requiring Mittal Steel to complete cultural resource investigations. A Phase I archaeological survey of the project area and an identification of potential historic mining properties that may exist in or adjacent to the project area have been completed. Any properties identified as a result of these investigations or future investigations will be further evaluated to determine eligibility status for listing on the National Register of Historic Places (NRHP).

The Corps has also invited northern Minnesota Native American tribes to consult regarding the proposed Mittal Steel project. Those tribes that have requested to consult will be included in the continued Section 106 review for the project. Copies of the Phase I survey report will be distributed to consulting agencies for review.

Chapter 3 Public Information Meeting

On October 12, 2006, the USACE and MNDNR held a Public Information Meeting regarding the DEIS. The meeting was held at the Biwabik City Hall (Pavilion), 100 5th Avenue North, Biwabik, Minnesota from 5:30 pm to 7:30 pm.

Approximately 15 individuals attended the meeting, including a number of representatives from the USACE, MNDNR, Minnesota Pollution Control Agency (MPCA), Minnesota Department of Health (MDH), Mittal Steel USA – Minorca Mine, Inc., and the EIS consultant.

Staff from the MNDNR provided a presentation that outlined the EIS process and the information contained in the DEIS. The meeting was then opened for public questions or comments on the Project and the DEIS. Meeting participants were encouraged to submit comments on the DEIS in writing, but were also invited to submit their comments as testimony at the meeting.

The comments and responses provided at the public meeting have been paraphrased and are provided below. A complete transcript of the public meeting is attached as **Appendix A**.

Public Comment 1: Mr. Terry Lowell questioned the language used in page 80 of the DEIS that read, "The 1,197 feet of amsl water level is a worst-case scenario, and the Groundwater Study indicates that it is highly unlikely that dewatering in the East Reserve Mine would cause drawdown in the adjacent pits to this elevation because of hydraulic resistance of the rock that separates the pits." Mr. Lowell questioned the wording "highly unlikely" since water levels are expected to drop in the Canton Pit due to dewatering in the East Reserve Mine.

Reply 1: Mr. Jim Walsh from the Minnesota Department of Health replied, "the 1,197 elevation would be the lowest elevation of the mining at the East Reserve. The current water level in the Canton is considerably higher than that and what the EIS is saying is that water levels may drop to, but not drop below the base elevation of the East Reserve."

Ms. Ann Foss added, "If the language is unclear, please submit a comment regarding the concern with the EIS language."

Public Comment 2: Mr. Terry Lowell, asked "The list of required permits/approvals includes the contingency plan agreement with the towns of Biwabik and McKinley. However, the presentation indicated the plan would not be issued until all of the other permits/approvals are complete and that they all have to be in place before operations can begin, am I understanding that correctly?"

Reply 2: Mr. Scott Ek replied, "That is correct, they cannot be issued until the environmental review process is complete. The contingency plan would be a part of the water appropriations permit, but it was added to let people know that it has been highly considered in this DEIS."

Public Comment 3: Mr. Terry Lowell, stated "The EIS indicates that power for the East Reserve project will be provided by Minnesota Power. However, a portion of the mine site is in the City of Biwabik's electric service area, so Minnesota Power cannot provide you power in our service area."

Reply 3: Comment noted.

Public Comment 4: Dave Sherek stated, "I would like to see a definitive time line in the contingency plan to make sure that when/if something is observed, that the plan requires immediate action to ensure the water quality and quantity is there because the City is expecting and currently experiencing growth.

Reply 4: Mr. Scott Ek replied, “In order for Mittal to even begin their dewatering, they need a water appropriations permit. The contingency plan is part of that water appropriations permit, so it will already be in place and will require immediate action if an issue is observed. There is no seven years down the line and the plan is going to be worked out between Mittal, the DNR, and the City of Biwabik.”

Mr. Gus Josephson added, “Part of the contingency plan is we were committed to installing data loggers, which will tell us the actual water level and when/if it starts to go down. Our intention is we will work with the city to develop a response when the water reaches a certain level based on your past experience. We are not going to wait until you're impacted. We have to comply with the plan, like we did in McKinley.

Public Comment 5: Mr. Terry Lowell commented that on page S-8 of the EIS, the City does not believe the following conclusion is accurate: "However, even at that level (1,197) there would be a sufficient volume available to meet the needs of the city."

Mr. Marty Halverson, from Benchmark Engineering added “I work with the City of Biwabik on their engineering projects and I have concerns over the conclusions and statements regarding the adequate supply of water after you are going to pump something like 98 percent of the water out. To say that a viable water supply will remain I think is an inappropriate conclusion.”

Reply 5: Comments noted. Mr. Scott Ek responded by saying “The hydrology and underground workings are unknown and the interconnectivity with these different pits is difficult to determine. As a result, making an exact determination of what might happen and how far it may drop is complicated and that is the reason for the contingency plan. The EIS concludes that at this time the water usage by the City and the volume of water in the Canton would be adequate to supply the City of Biwabik.”

Public Comment 6: Mr. Marty Halverson asked “the EIS mentions MnDOT related projects and wetlands impacts and I am curious what and where are these MnDOT projects?”

Reply 6: Comment noted. No specific projects were discussed, but the wetland impacts were related to the Cumulative Impact Assessment and the wetland estimates were provided by the transportation department for their foreseeable future work in the area.

Public Comment 7: Mr. Terry Lowell, asked “If the City of Biwabik were to grow and have additional demands for water, I would ask it to be considered the same way as the MnDOT's issue related to future highway development.”

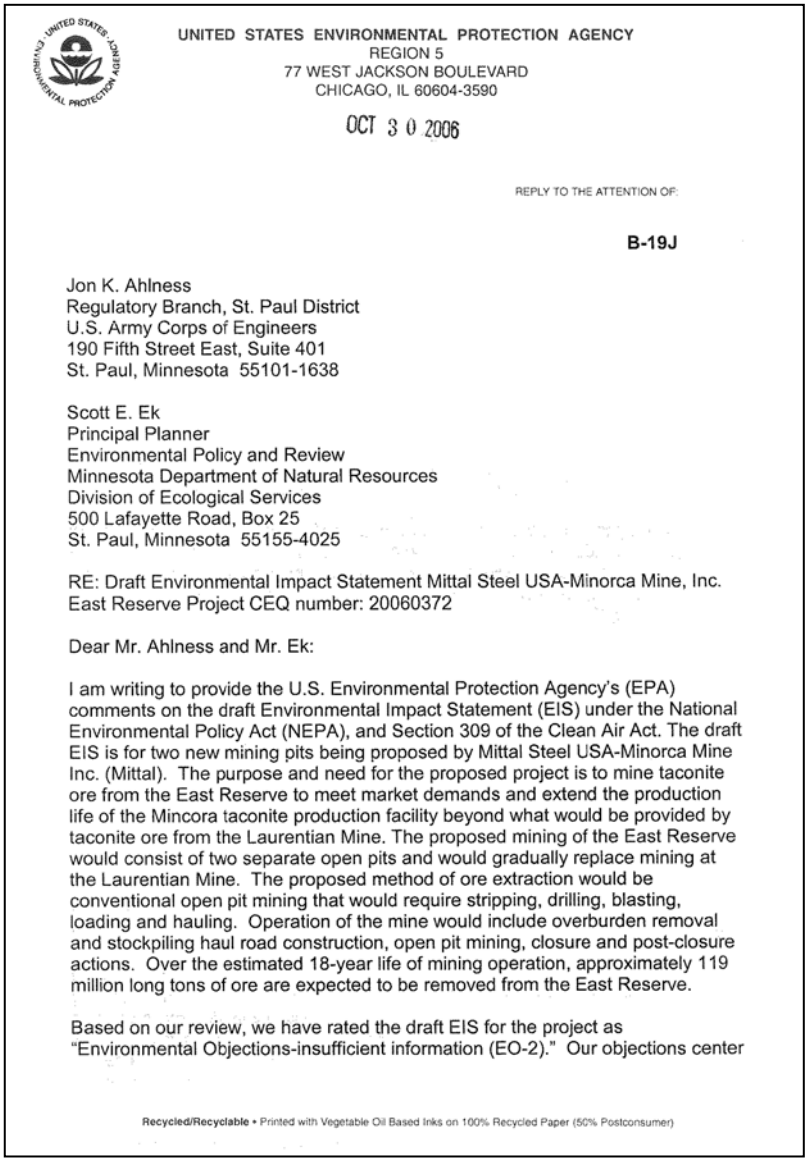
Reply 7: Mr. Jon Ahlness, Army Corps of Engineers, replied, “Cumulative impacts are assessed for reasonably foreseeable future actions that are on the books or that we know what impacts to expect.”

Ms. Kelly Henry added, “The City of Biwabik was also contacted when this cumulative impact study was done to identify their future projects.”

This concludes the summary of public testimony provided to the USACE and MNDNR on October 12, 2006 regarding the findings of the DEIS prepared for the Mittal Steel USA – Minorca Mine, Inc., East Reserve Project.

Chapter 4 Responses To Comments

4.1 Environmental Protection Agency (EPA)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 30 2006

REPLY TO THE ATTENTION OF:

B-19J

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

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

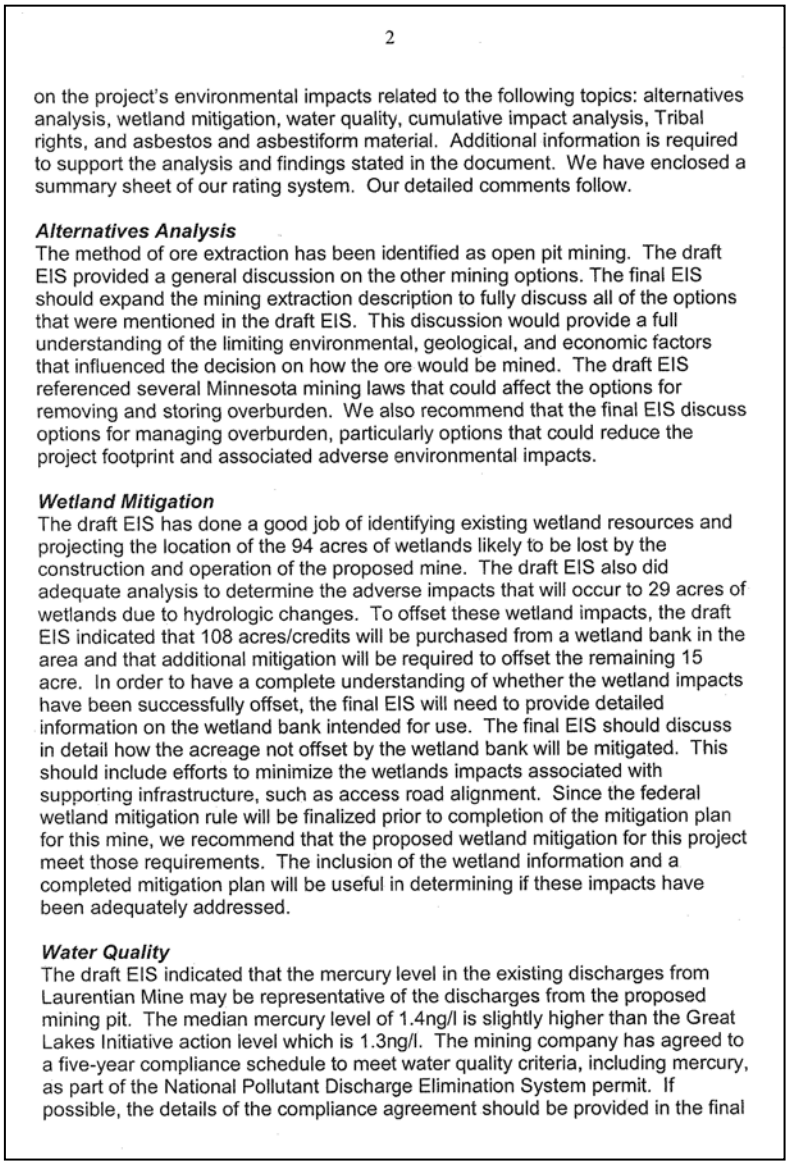
RE: Draft Environmental Impact Statement Mittal Steel USA-Minorca Mine, Inc.
East Reserve Project CEQ number: 20060372

Dear Mr. Ahlness and Mr. Ek:

I am writing to provide the U.S. Environmental Protection Agency's (EPA) comments on the draft Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act. The draft EIS is for two new mining pits being proposed by Mittal Steel USA-Minorca Mine Inc. (Mittal). The purpose and need for the proposed project is to mine taconite ore from the East Reserve to meet market demands and extend the production life of the Mincora taconite production facility beyond what would be provided by taconite ore from the Laurentian Mine. The proposed mining of the East Reserve would consist of two separate open pits and would gradually replace mining at the Laurentian Mine. The proposed method of ore extraction would be conventional open pit mining that would require stripping, drilling, blasting, loading and hauling. Operation of the mine would include overburden removal and stockpiling haul road construction, open pit mining, closure and post-closure actions. Over the estimated 18-year life of mining operation, approximately 119 million long tons of ore are expected to be removed from the East Reserve.

Based on our review, we have rated the draft EIS for the project as "Environmental Objections-insufficient information (EO-2)." Our objections center

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)



2

on the project's environmental impacts related to the following topics: alternatives analysis, wetland mitigation, water quality, cumulative impact analysis, Tribal rights, and asbestos and asbestiform material. Additional information is required to support the analysis and findings stated in the document. We have enclosed a summary sheet of our rating system. Our detailed comments follow.

Alternatives Analysis

The method of ore extraction has been identified as open pit mining. The draft EIS provided a general discussion on the other mining options. The final EIS should expand the mining extraction description to fully discuss all of the options that were mentioned in the draft EIS. This discussion would provide a full understanding of the limiting environmental, geological, and economic factors that influenced the decision on how the ore would be mined. The draft EIS referenced several Minnesota mining laws that could affect the options for removing and storing overburden. We also recommend that the final EIS discuss options for managing overburden, particularly options that could reduce the project footprint and associated adverse environmental impacts.

1

Wetland Mitigation

The draft EIS has done a good job of identifying existing wetland resources and projecting the location of the 94 acres of wetlands likely to be lost by the construction and operation of the proposed mine. The draft EIS also did adequate analysis to determine the adverse impacts that will occur to 29 acres of wetlands due to hydrologic changes. To offset these wetland impacts, the draft EIS indicated that 108 acres/credits will be purchased from a wetland bank in the area and that additional mitigation will be required to offset the remaining 15 acre. In order to have a complete understanding of whether the wetland impacts have been successfully offset, the final EIS will need to provide detailed information on the wetland bank intended for use. The final EIS should discuss in detail how the acreage not offset by the wetland bank will be mitigated. This should include efforts to minimize the wetlands impacts associated with supporting infrastructure, such as access road alignment. Since the federal wetland mitigation rule will be finalized prior to completion of the mitigation plan for this mine, we recommend that the proposed wetland mitigation for this project meet those requirements. The inclusion of the wetland information and a completed mitigation plan will be useful in determining if these impacts have been adequately addressed.

2

Water Quality

The draft EIS indicated that the mercury level in the existing discharges from Laurentian Mine may be representative of the discharges from the proposed mining pit. The median mercury level of 1.4ng/l is slightly higher than the Great Lakes Initiative action level which is 1.3ng/l. The mining company has agreed to a five-year compliance schedule to meet water quality criteria, including mercury, as part of the National Pollutant Discharge Elimination System permit. If possible, the details of the compliance agreement should be provided in the final

3

Response 1: Chapter 2 of the DEIS and the SEAW (located in Appendix B of the DEIS) provides a detailed description of the proposed action and discusses the project alternatives considered and dismissed from consideration. As stated in the DEIS, no other mining technologies other than open pit mining exist that would provide the same combination of economic efficiency and minimized environmental impacts.

Section 2.2.1.1 of the DEIS discusses the proposed method of overburden removal and stockpiling. The size of stockpile areas will be kept to the smallest area possible in an effort to minimize environmental impacts. However, due to the amount of material (overburden, waste rock, and lean taconite) anticipated from the site, the stockpile areas identified on Figure 2-1 of the DEIS are expected to be impacted. It should be noted that mining/stockpiling activities will be performed in areas that have already been impacted from past mining operations.

Response 2: A wetland permit application and a compensatory wetland mitigation plan for the first five years of wetland impacts have already been submitted to the USACE by Mittal. The wetland permit application and mitigation plan include detailed plans and data, the administrative procedures, and details requirements needed to mitigate the proposed wetland impacts. Wetland sequencing and mitigation prioritization followed the WCA and Section 404 requirements and related policies issued by the respective state and federal agencies. A good faith search for wetland replacement sites near the mining areas in the St. Louis River watershed was conducted by Ispat Inland (Mittal Steel) in 1995.
(Response to EPA Comment #2 continued on next page).

Having found no adequate sites, the search was resumed in Aitkin County where a wetland replacement site was identified and a wetland mitigation bank was constructed. Other wetland banks with available credit were located in watersheds or MNDNR Ecoregions that were further away distally from the project than the Aitkin County site. Special one-time legislation passed by the Minnesota State Legislature allowed exemption from the Wetland Conservation Act (WCA) location criteria for the site (1996), and permitted wetland mitigation outside the county and watershed in which the activities were conducted. Previous agreements between the USACE and Ispat Inland (Mittal Steel) authorized use of the Aitkin County mitigation bank for future mine project wetland mitigation.

Planning approaches for the remaining 29 acres of wetland mitigation required will follow the same prioritization approach where project specific and local sources of mitigation are explored first, followed by opportunities within the watershed or county, neighboring watersheds or counties, and so forth. The USACE and MNDNR Division of Lands and Minerals will be responsible for approving the wetland replacement plan.

Response 3: Mercury monitoring data collected to date indicates that while mine pit dewatering discharges from the existing Laurentian Mine are often at or below the mercury water quality standard, the discharges do not *consistently* achieve the concentrations necessary for compliance. Since the existing Laurentian Mine discharge is acting, in essence, as a surrogate for the proposed East Reserve Mine discharge(s), there is concern that the proposed discharge(s) may also not meet applicable water quality standards. To address this issue, the National Pollution Discharge Elimination System/State Disposal System (NPDES/SDS) permit is proposed to contain a Mercury Effluent Compliance Schedule which will provide a framework for Mittal to develop the necessary information and test data to achieve compliance with mercury requirements within the five year life of the permit. Key components of the permit Compliance Schedule include the following:

- Monitoring/sampling of both the existing dewatering discharge from the Laurentian Mine and the proposed dewatering discharge(s) from the East Reserve Mine twice a month for the life of the permit for total mercury and total suspended solids (TSS).

- Submittal for MPCA approval of a 'Mercury Treatability Evaluation Plan' which will include a complete list of proven and experimental technologies to remove mercury from water that will be evaluated and the protocol by which each will be evaluated.

- Submittal for MPCA approval of a 'Mercury Treatability Evaluation Report" which will include the results of the technology evaluation, a discussion of the potential applicability of each technology to Mittal's dewatering discharges, and a recommendation to pilot scale test at least one of the evaluated technologies.

- Completion of pilot scale testing and submittal for MPCA approval of a 'Mercury Treatability Pilot Scale Test Report' which will provide the operational and analytical testing results of the pilot scale testing program.

- Submittal for MPCA approval of final plans and specifications for the mercury removal procedures or technology, if determined to be feasible, to be implemented at Mittal.

- Compliance with the mercury effluent limitations by the end of the five year permit term; or, if compliance cannot be obtained, submittal of an application for variance from water quality standards prior to expiration of the permit.

Currently, feasible mercury removal technologies capable of achieving compliance with the 1.3 ng/L water quality standard have not been demonstrated for the type and volume of Mittal's dewatering discharges. A primary objective of the proposed Compliance Schedule is to provide the regulatory incentive for Mittal to research, and if feasible, develop and implement innovative or emerging mercury removal technologies in the context of a five year permit timeline. At the same time, the components of the Compliance Schedule provide a means for Mittal to document to the extent required by MPCA rules that, should mercury removal to the required levels be technologically infeasible, a variance may be approved. (MPCA rules on variances require that treatment capable of achieving water quality standards be demonstrated to be technologically or economically infeasible before a variance can be granted.)

The approach taken in the five year compliance schedule is consistent with the draft statewide total maximum daily load (TMDL) for mercury. The draft TMDL is focused on reductions in air emissions. The TMDL does not supersede or conflict with the Great Lakes Initiative (GLI) requirement for dischargers to meet the 1.3 ng/L water quality standard. *(Response to EPA Comment #3 continued on next page).*

EIS. This would promote a full understanding of how and when the measures will be implemented and the appropriate recourse if compliance is not achieved. The draft EIS briefly discusses Total Maximum Daily Loads (TMDLs) and state-listed impaired waters with respect to mercury. Included in this section is the draft statewide TMDL for mercury. Further explanation of the relationship of TMDLs to the five year compliance schedule would be helpful in understanding the interaction of these different requirements.

3 (continued)

In general, the draft EIS indicated that quality of the water to be discharged will be similar to waters discharged from the Laurentian Mine. To address the possibility that the new mine may have different water quality characteristics, the draft EIS stated that an adaptative management approach should be developed. EPA supports the development and use of an adaptive management plan to protect the water quality, aquatic life and wildlife in the project area. Adaptative management will allow for flexible application of the appropriate technologies, Best Management Practices (BMPs), and/or mitigation measures to ensure that the water resources are adequately protected. Therefore, we strongly encourage the mining company to commit to develop and implement such a plan. This commitment should identify the process, data needs, and key steps that will be used in adaptive management to protect water quality. This plan should be presented in the final EIS and included in the Record of Decision (ROD).

4

Cumulative Impacts

The final EIS needs to provide additional analysis and more discussion on cumulative impacts. The cumulative impact analysis focused on the future activities that could cause wetland loss, habitat loss and fragmentation. To provide a fuller understanding of these impacts, this analysis needs to also include similar past and present activities. Water quality should be included in this expanded analysis. This analysis could also be valuable in achieving the statewide TMDL, and Great Lakes Initiative for mercury.

5

6

We recognize that draft EIS attempted to utilize the cumulative impact analysis in management decisions. By designating habitat corridors between mining pits and overburden storage areas, we acknowledge that the company is attempting to reduce the project's overall impact to habitat connectivity. We encourage consideration of other possible actions to further minimize the cumulative impacts that will occur to these resources. The analysis should be summarized and the appropriate additional commitments included in the ROD.

7

Tribal Rights

The proposed mine is located within the territory ceded by the Chippewa Tribes under their 1854 treaty with the United States. The draft EIS indicated that several Tribes were invited to consult on their hunting and fishing rights for the ceded territory. However, the draft EIS did not capture the outcome of this consultation or potential direct and cumulative affects that this project may have on these hunting and fishing rights. The final EIS needs to include the results of

8

Reductions in air emissions, as recommended in the draft TMDL, are expected to result in decreased atmospheric deposition of mercury and, therefore, reduced concentrations in surface waters, such as the pits proposed for dewatering in this EIS.

Response 4: The NPDES/SDS permit issued by the MPCA will be the primary regulatory document that addresses the water quality of the dewatering discharges from the proposed project. The MNDNR Water Appropriation permit will address water quantity issues and associated monitoring of the streams that receive dewatering flows. These permits by their nature incorporate some of the basic aspects of the adaptive management philosophy. For example, the NPDES/SDS permit is proposed to contain a requirement for enhanced short-term (two year) monitoring of the mine pit dewatering discharge after which time the results of the monitoring will be evaluated with future actions being contingent upon the results of that evaluation. Furthermore, Mittal Steel USA is expected to incorporate this basic philosophy as it addresses other environmental issues that may not be directly regulated by permits.

Comment Noted. Chapter 4, Section 4.2.2.2.3, Mitigation Opportunities, of the DEIS describes the adaptive management plan and monitoring/management plan for selected dewatering stream(s) that should be developed by the project proponent and approved by the MNDNR in the Water Appropriation Permit.

Response 5: The Cumulative Wetland Effect Analysis East Reserve Mining Project report dated July 2006 (located in Appendix M of DEIS) included discussion of past and present changes in wetland habitat in the affected subwatershed areas. The assessment includes an estimate of pre-settlement wetlands and comparison to the National Wetlands Inventory and wetland delineations as well as a description of the changes from pre-settlement to the present and from the proposed project.

A report entitled "Cumulative Effects Analysis on Wildlife Habitat and Travel Corridors in the Mesabi Iron Range and Arrowhead Regions of Minnesota", May 2006, tracks cumulative impacts to wildlife habitat and corridors across the entire Iron Range. This report is cited and referenced in Section 4.8.3 of the DEIS. However, the report does not include information on the mitigating effects of mineland reclamation. Reclamation of disturbed areas will minimize the cumulative impacts that will occur to wildlife habitat and travel corridors. No further analysis is necessary.

Response 6: The cumulative effects on increased water flow and volume in the receiving streams include mining and dewatering at the Laurentian Mine and other anthropogenic impacts, including residential development and infrastructure construction. Effects from past and present activities include dewatering from the Laurentian Mine which currently flows to White Lake and then through an unnamed stream to a point approximately 2.5 miles upstream of the 'Central Discharge Route' Stream, and then to the Embarrass River. Therefore, the Central Discharge Route is the primary receiving stream affected by the East Reserve also affected by the Laurentian Mine operations. Initiation of dewatering at the East Reserve will increase flow in the Central Discharge Route. However, the combined dewatering discharges will be limited to the same volumes as currently permitted by the existing Water Appropriation Permit for the Laurentian Mine. Once mining operations cease at the Laurentian Mine and later at the East Reserve, dewatering from these mine pits will also cease and the pits will fill over an undetermined time period. The flow in the unnamed streams and the Central Discharge Route will be reduced as the pits fill with water. Once the pits are full of water and begin to naturally discharge, the flow regime and water quality parameter levels would be expected to return to a near pre-mining condition.

As indicated in the Hydrology and Hydraulics Memo from Barr (DEIS Appendix F, Section 4.5, Page 9), impacts on the Embarrass River flow regime as a result of the East Reserve project would be negligible. Other past and current activities affecting the Embarrass River include a small and intermittent discharge from the Babbitt Wastewater Treatment Plant, nonpoint and seepage discharges from the closed Cliffs Erie (former LTV Steel Mining Company) tailings basin, forest harvesting and the impacts of rural residential development in Embarrass Township. Most other existing mining-related discharges for Northshore Mining Company and Cliffs Erie are not to the Embarrass River watershed but to the Partridge River watershed.

The only reasonably foreseeable project having the potential to affect the Embarrass River is the proposed PolyMet NorthMet project. Depending on the final facility configuration, PolyMet may have a point discharge of industrial wastewater to the Embarrass River (via Trimble Creek) from their processing and tailings basin facility. Trimble Creek enters the Embarrass River several miles upstream of where the Central Discharge Route enters the Embarrass River. The Embarrass River flows through five lakes between the two points including Sabin, Wynne, Embarrass, Cedar Island, and Esquagama Lakes. The Scoping EAW prepared for the PolyMet project indicates that the potential discharge to the Embarrass River watershed is expected to be relatively small in volume and can be timed to coincide with the most appropriate flow conditions in the Embarrass River. Considering the relatively minimal discharges for each operation, the distance between the discharge points, and the number of water bodies between discharge points, the cumulative impacts to water flow/volume in the Embarrass River will be negligible.

While the discharge of mercury from mine dewatering may periodically exceed the 1.3 ng/L GLI water quality standard, it is not expected to increase ambient concentrations of mercury in the receiving streams. Therefore, cumulative impacts related to the discharge of mercury are expected to be negligible. Similarly, the changes in water quality, both from the proposed East Reserve discharges and other projects, are expected to be minor and not result in a measurable cumulative effect.

Response 7: The DEIS recognized in several chapters the potential disruption of wildlife habitat and travel corridors as a result of mining operations. However, the separation of the mining areas and stockpile areas to maintain the existing drainage (Belgrade Sink) will serve to minimize impacts on the wildlife travel corridor. Furthermore, reclamation would be completed in accordance with Minnesota Rules 6130 and areas disturbed by the development of the East Reserve *(Response to EPA Comment #7 continued on next page).*

Mine site would be reclaimed as they become inactive and in accordance with the Plan for Deactivation. Reclamation standards for placement of surface overburden, grading, revegetation, erosion control, dust control, and other reclamation activities will meet the requirements of Minnesota Rules 6130.4100. As a result, the completion of required reclamation will mitigate the impacts to wildlife habitat and wildlife travel corridors that would result from mining activities.

Response 8: Afforded efforts and opportunities for government-to-government consultation were initiated by the USACE. In May 2006, the USACE distributed a letter to Northern Minnesota Tribes soliciting interest for formal consultation. Two tribes, the Fond du Lac Band of Lake Superior Chippewa and the Red Lake Band of Chippewa Indians, requested to consult with the USACE regarding the Mittal project. Copies of the Scoping EAW and the Final Scoping Decision Document (SDD) were sent to the Tribal Government contact list in August 2005 requesting their review and comments. The DEIS did not discuss the results of consultation with the Tribes because no tribal comments on the SEAW or the project in general were received prior to publication of the DEIS. Copies of the DEIS were distributed to the Tribal Government contact list in September 2006. Comments received from tribal agencies on the DEIS have been responded to in this FEIS. Additional government-to-government consultation and cultural resource investigations have occurred since publication of the DEIS and is discussed in Chapter 2 on page 6 above.

the Tribal consultation and the impact analysis. This information will promote a comprehensive understanding of the potential impacts, to hunting and fishing rights, associated with the proposed action.

Asbestos and Asbestiform Material

The Minnesota Pollution Control Agency (MPCA) and EPA have documented that asbestos and asbestiform material can be present in taconite ore bodies in the Northeastern area of Minnesota. The possible presence of asbestos and asbestiform materials in any ore body that will be subjected to blasting and rock crushing is a potential environmental and human health risk. Because the proposed mine is close to the Duluth Complex geological formation, we recommend that the ore body be evaluated for asbestos and asbestiform material and those findings be disclosed in the final EIS. The particular sampling protocol and analysis should be further discussed with the appropriate principal parties. If asbestos or asbestiform materials are found, appropriate BMPs can be determined and incorporated into the operation plan for the proposed mine. We also recommend that the MPCA be contacted to provide assistance in the development of the appropriate BMPs.

Thank you for the opportunity to review and provide comments on the draft EIS for the proposed Mittal mining project If you have any questions or would like to discuss our concerns and recommendations, please contact me at 312-353-1441 or Al Fenedick of my staff at either fenedick.al@epa.gov or (312) 886-6872.

Sincerely yours,

Jerri-Anne Garl, Director
Office of Science Ecosystems and Communities

Enclosure

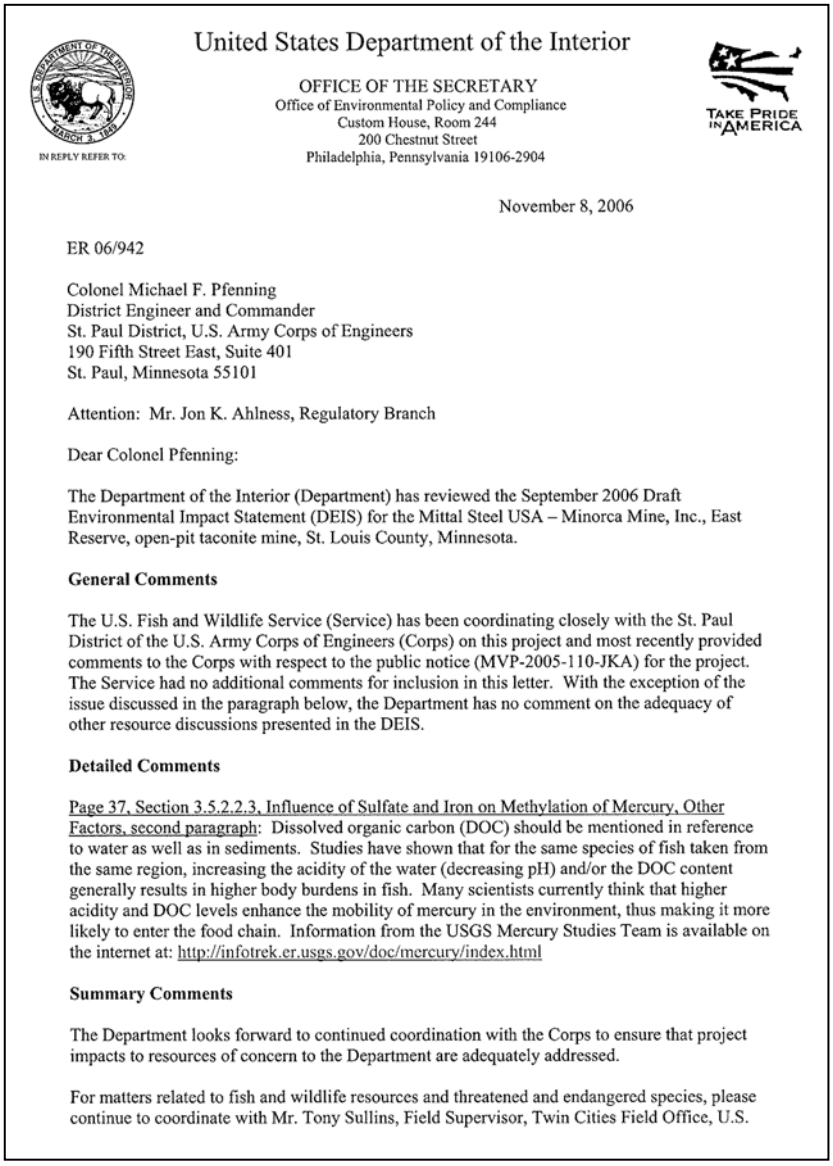
8 (continued)

9

Response 9: Previous studies[1,2] have mapped two primary locations where fibrous amphiboles have been found in iron ore on the Mesabi Iron Range. The closest known, but less widespread, occurrence is found within a narrow band (the contact aureole) of the Aurora Sill. This sill, is an unusual, small alkalic intrusive unit that cuts through the Biwabik Iron Formation near the City of Aurora, MN. The mineral of concern is Crocidolite, a sodium bearing iron amphibole that requires high temperatures and a fluid source rich in sodium to form. These conditions were present only in the parts of the iron formation immediately adjacent ("contact metamorphism") to the Aurora Sill, which is located several miles east of the East Reserve Project site (French, p. 14). Therefore, the occurrence of Crocidolite in the portion of the Biwabik Iron Formation that comprises the East Reserve Project mine site is not expected. The better known and more highly publicized occurrence of fibrous amphiboles occurs where the iron formation is truncated by the Duluth Complex. This occurrence generates the mineral grunerite/cummingtonite, which extends through the Peter Mitchell Pit currently still being mined by Northshore and intersects some of the easternmost pits in the former LTV mining property. This mineral is not truly "asbestos" in habit since it breaks upon grinding to very fine particles, typically less than 5 microns in length. The high temperature conditions needed to convert iron formation assemblages to grunerite/cummingtonite were present near the Duluth Complex[2] during and following intrusion of the Duluth complex as the associated heat was dissipated. However, such conditions were never achieved in the area of the East Reserve Project mine site, which is located west of the Duluth complex and approximately 11.5 miles west of the closest area where grunerite/cummingtonite assemblages have been field observed. There are a few intrusive units located north of the East Reserve Mine site suggesting high heat was encountered at some time in the past, however, all of these igneous intrusions predate the Biwabik Iron Formation by approximately 800 million years. The geologic conditions needed to convert minerals in the Biwabik Iron Formation to amphiboles have not been encountered in the East Reserve mine site since before the formation existed. There is little, if any reason, therefore, to suspect the deposit poses any asbestos-related health concerns.

[1]White, DA, 1954, Stratigraphy and Structure of the Mesabi Range, MN, Minnesota Geologic Survey Bulletin, Volume 38.
[2] French, BM 1968, Progressive Contact Metamorphism of the Biwabik Iron Formation, Mesabi Range, MN, Minnesota Geologic Survey Bulletin Volume 45.

4.2 United States Fish and Wildlife Service (USFWS)



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

November 8, 2006

ER 06/942

Colonel Michael F. Pfenning
District Engineer and Commander
St. Paul District, U.S. Army Corps of Engineers
190 Fifth Street East, Suite 401
St. Paul, Minnesota 55101

Attention: Mr. Jon K. Ahlness, Regulatory Branch

Dear Colonel Pfenning:

The Department of the Interior (Department) has reviewed the September 2006 Draft Environmental Impact Statement (DEIS) for the Mittal Steel USA – Minorca Mine, Inc., East Reserve, open-pit taconite mine, St. Louis County, Minnesota.

General Comments

The U.S. Fish and Wildlife Service (Service) has been coordinating closely with the St. Paul District of the U.S. Army Corps of Engineers (Corps) on this project and most recently provided comments to the Corps with respect to the public notice (MVP-2005-110-JKA) for the project. The Service had no additional comments for inclusion in this letter. With the exception of the issue discussed in the paragraph below, the Department has no comment on the adequacy of other resource discussions presented in the DEIS.

Detailed Comments

Page 37, Section 3.5.2.2.3, Influence of Sulfate and Iron on Methylation of Mercury, Other Factors, second paragraph: Dissolved organic carbon (DOC) should be mentioned in reference to water as well as in sediments. Studies have shown that for the same species of fish taken from the same region, increasing the acidity of the water (decreasing pH) and/or the DOC content generally results in higher body burdens in fish. Many scientists currently think that higher acidity and DOC levels enhance the mobility of mercury in the environment, thus making it more likely to enter the food chain. Information from the USGS Mercury Studies Team is available on the internet at: http://infotrek.er.usgs.gov/doc/mercury/index.html

Summary Comments

The Department looks forward to continued coordination with the Corps to ensure that project impacts to resources of concern to the Department are adequately addressed.

For matters related to fish and wildlife resources and threatened and endangered species, please continue to coordinate with Mr. Tony Sullins, Field Supervisor, Twin Cities Field Office, U.S.

1

Response 1: The MDNR acknowledges that dissolved organic carbon (DOC) concentration in water, and not only in sediments, is a contributing factor with respect to the mobility and bioavailability of mercury. The mine pit dewatering discharges associated with the proposed project, however, are expected to have low DOC concentrations and low acidity (pH concentrations of approximately 8.0 or in the slightly alkaline range) which would present relatively unfavorable conditions for enhanced mercury mobility. Furthermore, the NPDES/SDS permit and the DNR Water Appropriation permit are proposed to contain a requirement that the overflow or discharge from the McKinley Mine Pit Lake be conveyed via pipeline or ditch to a point on the Central Discharge Route that would minimize the mixing of the low DOC discharge with wetland waters having higher DOC and acidity levels. This would reduce the risk of the discharge encountering the physical and chemical conditions that are most favorable for the methylation of mercury.

Fish and Wildlife Service, 4101 East 80th Street, Bloomington, Minnesota 55425-1665, telephone (612) 725-3548, and/or Mr. Paul Burke, project biologist, at (612) 725-3548 extension 205.

If you have questions concerning the detailed comments above, please contact Lloyd Woosley, Chief of the US Geological Survey Environmental Affairs Program, at (703) 648-5028 or at lwoosley@usgs.gov.

We appreciate the opportunity to review the document and provide comments.

Sincerely,

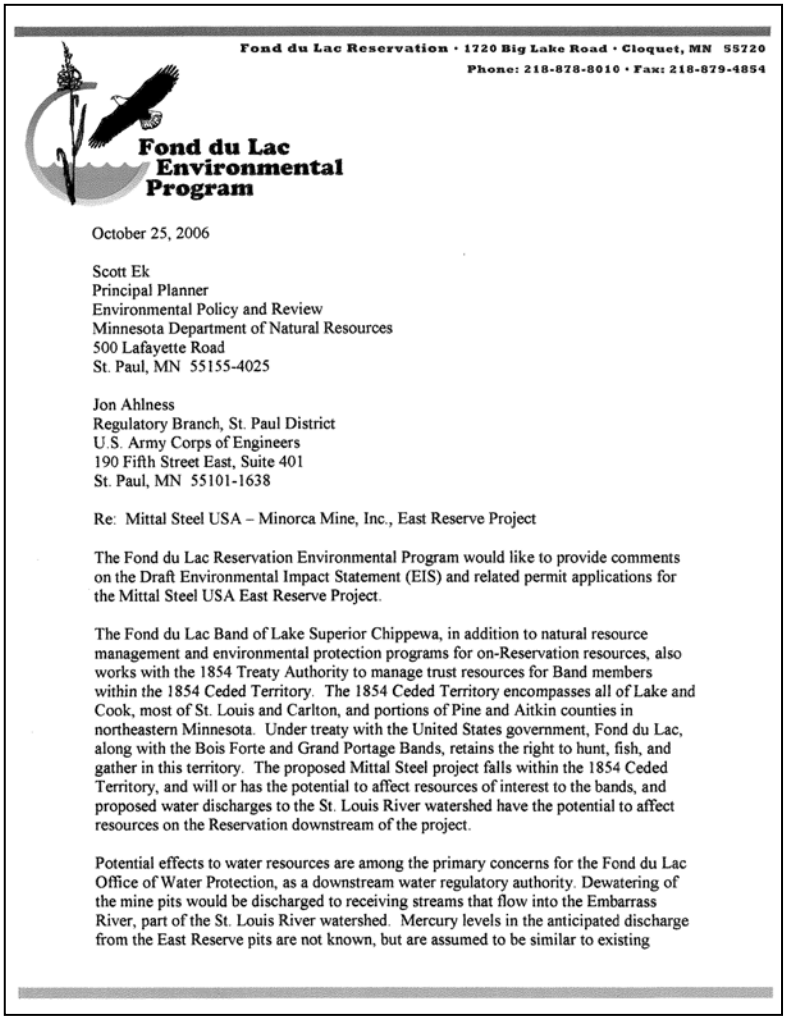
Michael T. Chezik
Regional Environmental Officer

REFERENCE

Krabbenhoft, D.P., and Rickert, D.A., 1995, Mercury Contamination of Aquatic Ecosystems, U.S. Geological Survey Fact Sheet FS-216-95, 4 p. Also available on the internet at: http://wi.water.usgs.gov/pubs/FS-216-95/

cc:
T. Sullins, FWS, Bloomington, MN
L. MacLean, FWS, Fort Snelling, MN
L. Woosley, USGS, Reston, VA

4.3 Fond du Lac Reservation Environmental Program



Fond du Lac Reservation · 1720 Big Lake Road · Cloquet, MN 55720
Phone: 218-878-8010 · Fax: 218-879-4854

Fond du Lac Environmental Program

October 25, 2006

Scott Ek
Principal Planner
Environmental Policy and Review
Minnesota Department of Natural Resources
500 Lafayette Road
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: Mittal Steel USA – Minorca Mine, Inc., East Reserve Project

The Fond du Lac Reservation Environmental Program would like to provide comments on the Draft Environmental Impact Statement (EIS) and related permit applications for the Mittal Steel USA East Reserve Project.

The Fond du Lac Band of Lake Superior Chippewa, in addition to natural resource management and environmental protection programs for on-Reservation resources, also works with the 1854 Treaty Authority to manage trust resources for Band members within the 1854 Ceded Territory. The 1854 Ceded Territory encompasses all of Lake and Cook, most of St. Louis and Carlton, and portions of Pine and Aitkin counties in northeastern Minnesota. Under treaty with the United States government, Fond du Lac, along with the Bois Forte and Grand Portage Bands, retains the right to hunt, fish, and gather in this territory. The proposed Mittal Steel project falls within the 1854 Ceded Territory, and will or has the potential to affect resources of interest to the bands, and proposed water discharges to the St. Louis River watershed have the potential to affect resources on the Reservation downstream of the project.

Potential effects to water resources are among the primary concerns for the Fond du Lac Office of Water Protection, as a downstream water regulatory authority. Dewatering of the mine pits would be discharged to receiving streams that flow into the Embarrass River, part of the St. Louis River watershed. Mercury levels in the anticipated discharge from the East Reserve pits are not known, but are assumed to be similar to existing

1

Response 1: see Response 3 to EPA letter on page 11 and page 12 above.

discharges. Coupled with this unknown, it must be noted that the median existing discharges from the Laurentian Mine are above 1.3 ng/L, the GLI (Great Lakes Initiative) action level. It is proposed to put into place a five-year compliance schedule to meet this requirement, and then potentially pursue a variance for the mercury release after that time if necessary. We are concerned about such a process that might allow for continued elevated mercury releases, particularly to waters that are already on the state of Minnesota's 303(d) list of impaired waters because of fish consumption advisories for mercury. We are also concerned about the combined effects of the mine pit dewatering: additional mercury releases, hydrologic changes (inundation of riparian wetlands), and sulfate releases to receiving waters that eventually flow into the Embarrass River and ultimately the St. Louis River. These combined effects are not discussed or even acknowledged in the draft EIS. **1 (continued)**

The release of sulfates needs to be more fully addressed than it has been in the draft EIS, and feasible control technologies investigated. The proposed project will result in continued releases of higher levels of sulfates (approximately 80-90 mg/L). There is strong evidence for elevated sulfate concentrations increasing the rate of methylation of mercury, further impacting contaminant bioavailability and the safe consumption of fish. **2**

Elevated sulfate levels are also a concern for wild rice, with 10 mg/L considered the threshold limit for good production. The St. Louis River does have significant wild rice stands that are utilized by wild rice harvesters, with the best beds located upstream from the proposed project's releases. The draft EIS also states that a portion of the site (stockpile area and haul road) drains to the Pike River. Two lakes (Hay and Rice) immediately downstream along the Pike River contain wild rice, as does the river itself in various locations. Impacts to these resources should be avoided. Additionally, in relation to wild rice and other aquatic resources, potential relocation of County Road 715 is of concern. This road provides access to the Pike River (and Hay and Rice lakes). Realignment of this road could affect access of band members exercising treaty rights and the general public as well. **3**

It is unclear what effects that increased discharges and changes to water quantity have on the downstream systems. The draft EIS states that additional baseflow may provide habitat for some species, but may have adverse impacts on others. It also states that critical fish habitat would decrease with increased flow and siltation, and may further reduce suitable spawning habitat. Yet, the document concludes the fish community would adjust to conditions that are present. It appears that the ultimate effect on the system is not well understood. Water quantity (and water quality) issues after the project is completed should also be a consideration. **4**

The draft EIS states that approximately 94 acres of wetlands will be directly impacted from the project, with wetlands in both the St. Louis River and Vermilion River watersheds being affected. In addition, 29 additional acres of wetlands will be indirectly impacted. The project proposes to initially utilize 108 acres of mitigation credit in the Aitkin County bank to provide for a portion of the replacement at a 1:1 ratio. Planning for the remaining mitigation will occur in the future. We question the location and **5** **6** **7**

Response 2: While the discharge of mercury from mine dewatering may periodically exceed the 1.3 ng/L GLI requirement, it is not expected to measurably increase concentrations of mercury in the receiving streams. Concentrations of mercury in the discharges are not expected to increase from current levels and the total volume of mine pit water to be discharged is expected to remain below currently permitted levels, even with the development of the proposed mine pits. As such, the mercury loading is not expected to significantly increase. In addition, the draft NPDES/SDS includes a proposed compliance schedule with the goal of reducing mercury concentrations and loads from current levels.

The draft statewide TMDL for mercury has identified air emissions as the primary contributor to mercury impairments in surface waters in the state and has established reduction goals for those air emissions. Such reductions would be expected to result in reduced mercury concentrations in the proposed mine pits and in future dewatering discharges from those pits. The draft TMDL does not establish reductions in dischargers beyond the requirement to meet the 1.3 ng/L standard.

Response 3: The dewatering discharge from the proposed East Reserve Mine is expected to have similar sulfate concentrations as currently experienced in the dewatering discharge from the Laurentian Mine, typically in the 80 to 90 mg/L range. As a result, the concentration of sulfate in the Central Discharge Route and the Embarrass River downstream of the discharges are also expected to be similar to current levels. Although the details of mercury *(Response to Fond do Lac Comment #3 continued on next page).*

methylation in the environment are not well understood, there is concern that in certain environments elevated sulfate concentration has the potential to increase the methylation of mercury. This is of particular concern in reducing, high organic type environments such as wetlands.

To reduce the potential for an increase in mercury methylation downstream, the NPDES/SDS permit and the MDNR Water Appropriation permit are proposed to contain a requirement that the overflow or discharge from the McKinley Mine Pit Lake be conveyed via pipeline or ditch to a point on the Central Discharge Route that will prevent any temporary or seasonal inundation of wetlands. Such a point would be where the stream is sufficiently channelized so that any additional flow in the stream would not result in overbank flow. This would minimize the interaction between the sulfate containing water and the reducing conditions of a wetland environment thereby reducing the potential for an increase in mercury methylation. The NPDES/SDS permit is also proposed to include monitoring of both the effluent and downstream waters for sulfate, among other parameters, on a routine basis.

Response 4: Impacts on wild rice as a result of the proposed project are expected to be negligible. Wild rice stands are not known to exist in waters immediately downstream of the proposed discharge. Furthermore, the proposed discharge is not expected to substantially increase sulfate concentrations beyond existing ambient concentrations in waters further downstream, such as the St. Louis River where wild rice stands may exist. The Pike River is expected to receive only minimal storm water runoff impacted by mining activities. Runoff will be controlled by BMPs and increases to sulfate concentrations in the Pike River or Hay and Rice Lakes and subsequent impacts on wild rice stands are expected to be negligible.

Response 5: The MNDNR and USACE recognize the fact that access needs to be maintained to lands north of the East Reserve Mine Site. When County Road 715 is relocated it is assumed that the portions of the road north of the mine site would remain inplace and continue to provide access to areas such as Hay Lake and Rice Lake. The specific location of the realigned roadway would be the responsibility of St. Louis County.

Response 6: The modified hydrology associated with the proposed action will impact the geomorphology of the receiving streams over time. The rate and scale of these modifications is dependent upon numerous spatially and temporally variable factors including soil properties, vegetation, and rainfall patterns. The impact of these changes in geomorphology to receiving stream resident biota and downstream systems will also vary over time. The ecological impacts will vary due to the aforementioned changes in the geomorphology and the proposed changes in dewatering operations.

The potential project effects described in the DEIS are based on the data available from a 1998 survey completed by the MPCA. The available data on fish and macroinvertebrates was limited to the confluence of the discharge routes and is influenced by the presence of the Embarrass River immediately downstream. The species that were identified in the 1998 survey, combined with the habitat available in the upper reaches and the likely assemblages given the flow and associated land cover, were used to extrapolate and make assumptions of the species likely to be present in the upper reaches. Since publication of the DEIS, additional survey work was performed to identify the species present in the discharge streams. The results of those studies are included in **Appendix B** and **Appendix C** of this FEIS.

In general, the fish collected confirmed the assumptions used to draw the conclusions stated in the DEIS. The only variation is the identification of black bullhead in the uppermost reach and a refinement of the generic "minnow species" to include brassy minnow, common shiner, fathead minnow, and pearl dace. However, most of these additional species were not sampled with great frequency. The new data also showed that the Johnny darter and mottled sculpin were not present as anticipated, largemouth bass were sampled further upstream than expected, and white sucker were present. Overall however, the species that were identified are consistent with the assumptions in the DEIS. Therefore, the anticipated effects described in the DEIS remain valid.

Similarly, macroinvertebrates collected also confirmed the assumptions made in the DEIS. Excluding the Embarrass River sample sites, the majority of the species collected in all the reaches are Diptera and most, as expected, are Chironomids. Mayflies were the second most abundant and include a mixture of run and riffle-loving species. Caddisflies, beetles, and dragonflies are also encountered with some frequency. As expected, Oligocheata were abundant in most of the reaches sampled. One of the taxa not identified specifically in the DEIS is the mollusca. Both snails and fingernail clams are more abundant than were identified in the DEIS. Overall the species collected represent well the primary habitat of the reach sampled. The results of the macroinvertebrate sampling suggest that these reaches
(Response to Fond do Lac Comment #6 continued on next page).

are primarily composed of species that are accustomed to run habitat with a sandy substrate. This is expected to remain the primary habitat with the increases in baseflow. Therefore, the anticipated project effects described in the DEIS are unchanged.

The additional information provided by the fish and macroinvertebrate studies confirm the assumptions made in the DEIS and result in no changes in the anticipated project effects. However, the physical changes that will result to the receiving streams remain difficult to quantify. Therefore, the monitoring requirements and adaptive management plan included in the conditions of the Water Appropriation Permit will be used to identify physical changes in the streams and the proper management and mitigation measures required depending on the project effects. Please also see Response 4 to the EPA letter on page 12 regarding the adaptive management plan.

Response 7: See Response 2 to the U.S. Environmental Protection Agency letter on pages 10 and 11 above.

replacement ratio for the mitigation; mitigation should occur near the site and within the watersheds affected if possible. With multiple large scale mining projects affecting many wetland acres in the St. Louis River watershed, and with most of the mitigation credits being sought outside the watershed, these mitigation credits do nothing to help the resources in the watershed within which they are impacted.

Regarding the proposed delay in planning for remaining mitigation, it should be noted that regional opportunities for mitigation will become less and less over time, given the number of other major projects under review at this time. If Mittal Steel is allowed to wait several years before identifying mitigation projects to compensate for the remainder of their requirements, it may become prohibitively difficult to identify and implement appropriate projects.

7 (continued)

Cumulative impacts from this project, others already occurring, and other potential projects in the region are not adequately addressed in this draft EIS. With numerous proposed projects in the area to go along with current operations, the potential exists for significant impacts to the resources. Cumulative impacts should be further analyzed, including impacts to wildlife habitat and wildlife travel corridors.

8

Any earth disturbing activities within the territory ceded to the United States in the Treaty of 1854 is of concern to Fond du Lac because they have the potential to disturb important cultural resources. The proposed project lies within the area that was traditionally used by the Lake Superior Chippewa. Much of northeastern Minnesota has been used and is currently being used by band members to practice their culture. The Army Corps' public notice dated September 28, 2006 states that; "any unknown archaeological, scientific, or historical data could be lost or destroyed by the work described in the permit application." It also states that the most recent version of the National Register of Historic Places has been consulted and that no listed properties were found within the project boundaries. Most sites that are eligible for inclusion on the National Register of Historic Places have not been nominated. It is not known or stated to what extent the area of potential effect has been previously surveyed, so it is unknown what cultural resources are located within the project area. The Army Corps' permit application states that the draft EIS will address the potential impacts to historical/ archaeological sites. However, the draft EIS fails to do this. The only mention we find of archaeological or historic sites in the draft EIS is in Figure 11-1 and in Appendix D, which lists the previously known resources found in the State Historic Preservation Office database. It does not address locating unknown cultural resources. Since there is a potential for site disturbance, it is recommended that a full Phase I survey (pedestrian and shovel testing) be completed by qualified individuals prior to any earth disturbing activities. It is also recommended that the Fond du Lac Reservation be consulted with when the survey is initiated and completed.

9

Finally, we must remind you that tribes are sovereign nations, and must be consulted with on a government-to-government basis. Recent steps have been made to improve this relationship with state agencies. In addition, the Army Corps of Engineers did contact bands requesting consultation on this and other projects, with the Fond du Lac Band

10

Response 8: Also see Response 5 to EPA letter on page 13 above.

Response 9: It is our understanding that the cultural resource concerns primarily pertain to the potential for effects on archaeological resources. Since publication of the DEIS and receipt of comments from tribal agencies, the USACE has initiated a project review pursuant to Section 106 of the National Historic Preservation Act. This has included an archaeological survey of the project area, consultation with the Minnesota State Historic Preservation Office (SHPO), and tribal consultation to identify other properties that may be considered significant by the tribes. Additional information regarding cultural resource investigations has been included in Chapter 2 on pages 3-6 of this FEIS. Any properties identified as a result of these investigations or future investigations will be further evaluated to determine eligibility status for listing on the National Register of Historic Places (NRHP).

Response 10: Comment noted. The USACE and MNDNR will work to continue to improve their government-to-government consultation for the remainder of this project and on future efforts.

along with other bands requesting such consultation. However, we question what constituted consultation for this project. Tribes must be offered early and meaningful input on projects, during the planning and development of the draft EIS. Only providing notification and allowing for comment on the public release of documents is not proper consultation with tribes.

Thank you for your consideration of our comments.

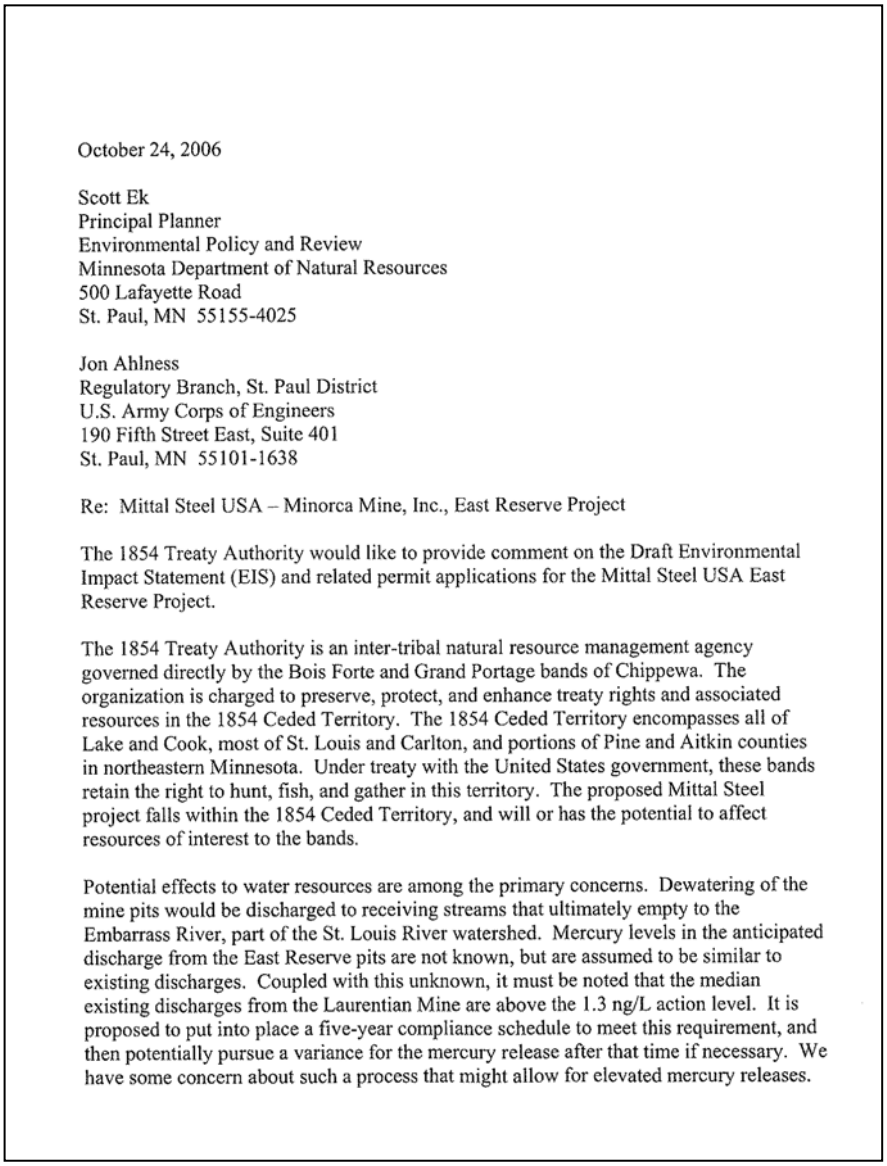
Sincerely,

Nancy J. Schuldt,
Water Projects Coordinator

Richard D. Gitar,
Water Regulatory Specialist

10 (continued)

4.4 1854 Treaty Authority



October 24, 2006

Scott Ek
Principal Planner
Environmental Policy and Review
Minnesota Department of Natural Resources
500 Lafayette Road
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: Mittal Steel USA – Minorca Mine, Inc., East Reserve Project

The 1854 Treaty Authority would like to provide comment on the Draft Environmental Impact Statement (EIS) and related permit applications for the Mittal Steel USA East Reserve Project.

The 1854 Treaty Authority is an inter-tribal natural resource management agency governed directly by the Bois Forte and Grand Portage bands of Chippewa. The organization is charged to preserve, protect, and enhance treaty rights and associated resources in the 1854 Ceded Territory. The 1854 Ceded Territory encompasses all of Lake and Cook, most of St. Louis and Carlton, and portions of Pine and Aitkin counties in northeastern Minnesota. Under treaty with the United States government, these bands retain the right to hunt, fish, and gather in this territory. The proposed Mittal Steel project falls within the 1854 Ceded Territory, and will or has the potential to affect resources of interest to the bands.

Potential effects to water resources are among the primary concerns. Dewatering of the mine pits would be discharged to receiving streams that ultimately empty to the Embarrass River, part of the St. Louis River watershed. Mercury levels in the anticipated discharge from the East Reserve pits are not known, but are assumed to be similar to existing discharges. Coupled with this unknown, it must be noted that the median existing discharges from the Laurentian Mine are above the 1.3 ng/L action level. It is proposed to put into place a five-year compliance schedule to meet this requirement, and then potentially pursue a variance for the mercury release after that time if necessary. We have some concern about such a process that might allow for elevated mercury releases.

1

2

Response 1: See Response 1 to the Fond du Lac Environmental Program letter on page 18 above.

Response 2: See Response 2 to the Fond du Lac Environmental Program letter on page 19 above.

The release of sulfates should be addressed and controlled if possible. The proposed project will result in continued releases of higher levels of sulfates (around 100 mg/L). Elevated sulfate concentrations are believed to increase the rate of methylation of mercury, further impacting contaminant levels and safe consumption of fish. Elevated sulfate levels are also a concern for wild rice, with 10 mg/L considered the threshold limit for good production. The St. Louis River does have significant wild rice stands which are utilized by wild rice harvesters, with the best beds located upstream from the proposed project's releases. The draft EIS also states that a portion of the site (stockpile area and haul road) drains to the Pike River. Two lakes (Hay and Rice) immediately downstream along the Pike River contain wild rice, as does the river itself in various locations. Impacts to these resources should be avoided. Additionally, in relation to wild rice and other aquatic resources, potential relocation of County Road 715 is of concern. This road provides access to the Pike River (and Hay and Rice lakes). Realignment of this road could affect access of band members exercising treaty rights and the general public as well. **3** **4** **5**

It is unclear what effects that increased discharges and changes to water quantity have on the downstream systems. The draft EIS states that additional baseflow may provide habitat for some species, but may have adverse impacts on others. It also states that critical fish habitat would decrease with increased flow and siltation, and may further reduce suitable spawning habitat. Yet, the document concludes the fish community would adjust to conditions that are present. It appears that the ultimate effect on the system is not well understood. Water quantity (and water quality) issues after the project is completed should also be a consideration. **6**

The draft EIS states that approximately 94 acres of wetlands will be directly impacted from the project, with wetlands in both the St. Louis River and Vermilion River watersheds being affected. In addition, 29 additional acres of wetlands will be indirectly impacted. The project proposes to initially utilize 108 acres of mitigation credit in the Aitkin County bank to provide for a portion of the replacement at a 1:1 ratio. Planning for the remaining mitigation will occur in the future. We question the location and replacement ratio for the mitigation. We believe that such mitigation should occur near the site and within the watersheds affected if possible. **7**

Cumulative impacts from this project, others already occurring, and other potential projects in the region are not adequately addressed. Little information is provided in the draft EIS. With numerous proposed projects in the area to go along with current operations, the potential exists for significant impacts to the resources. Cumulative impacts should be further analyzed. **8**

Any earth disturbing activities within the territory ceded to the United States in the Treaty of 1854 is of concern to Bois Forte and Grand Portage because they have the potential to disturb important cultural resources. The proposed project lies within the area that was traditionally used by the Lake Superior Chippewa. Much of northeastern Minnesota has been used and is currently being used by band members to practice their culture. The Army Corps' public notice dated September 28, 2006 states that; "any unknown **9**

Response 3: See Response 3 to the Fond du Lac Environmental Program letter on page 19 and page 20 above.

Response 4: See Response 4 to the Fond du Lac Environmental Program letter on page 20 above.

Response 5: See Response 5 to the Fond du Lac Environmental Program letter on page 20 above.

Response 6: See Response 6 to the Fond du Lac Environmental Program letter on page 20 and page 21 above.

Response 7: See Response 7 to the Fond du Lac Environmental Program letter on page 21 above.

Response 8 See Response 8 to the Fond du Lac Environmental Program letter on page 22 above.

Response 9: See Response 9 to the Fond du Lac Environmental Program letter on page 22 above.

archaeological, scientific, or historical data could be lost or destroyed by the work described in the permit application." It also states that the most recent version of the National Register of Historic Places has been consulted and that no listed properties were found within the project boundaries. Most sites that are eligible for inclusion on the National Register of Historic Places have not been nominated. It is not known or stated to what extent the area of potential effect has been previously surveyed, so it is unknown what cultural resources are located within the project area. The Army Corps' permit application states that the draft EIS will address the potential impacts to historical/ archaeological sites. However, the draft EIS fails to do this. The only mention we find of archaeological or historic sites in the draft EIS is in Figure 11-1 and in Appendix D, which lists the previously known resources found in the State Historic Preservation Office database. It does not address locating unknown cultural resources. Since there is a potential for site disturbance, it is recommended that a full Phase I survey (pedestrian and shovel testing) be completed by qualified individuals prior to any earth disturbing activities. It is also recommended that the Grand Portage Reservation, Bois Forte Reservation, and 1854 Treaty Authority be consulted with when the survey is initiated and completed.

9 (continued)

Finally, we must remind you that tribes are sovereign nations, and must be consulted with on a government-to-government basis. Recent steps have been made to improve this relationship with state agencies. In addition, the Army Corps of Engineers did contact bands requesting consultation on this and other projects, with the 1854 Treaty Authority along with other bands requesting such consultation. However, we question what constituted consultation for this project. Tribes must be offered early and meaningful input on projects, during the planning and development of the draft EIS. Only providing notification and allowing for comment on the public release of documents is not proper consultation with tribes.

10

Thank you for your consideration of our comments.

Sincerely,

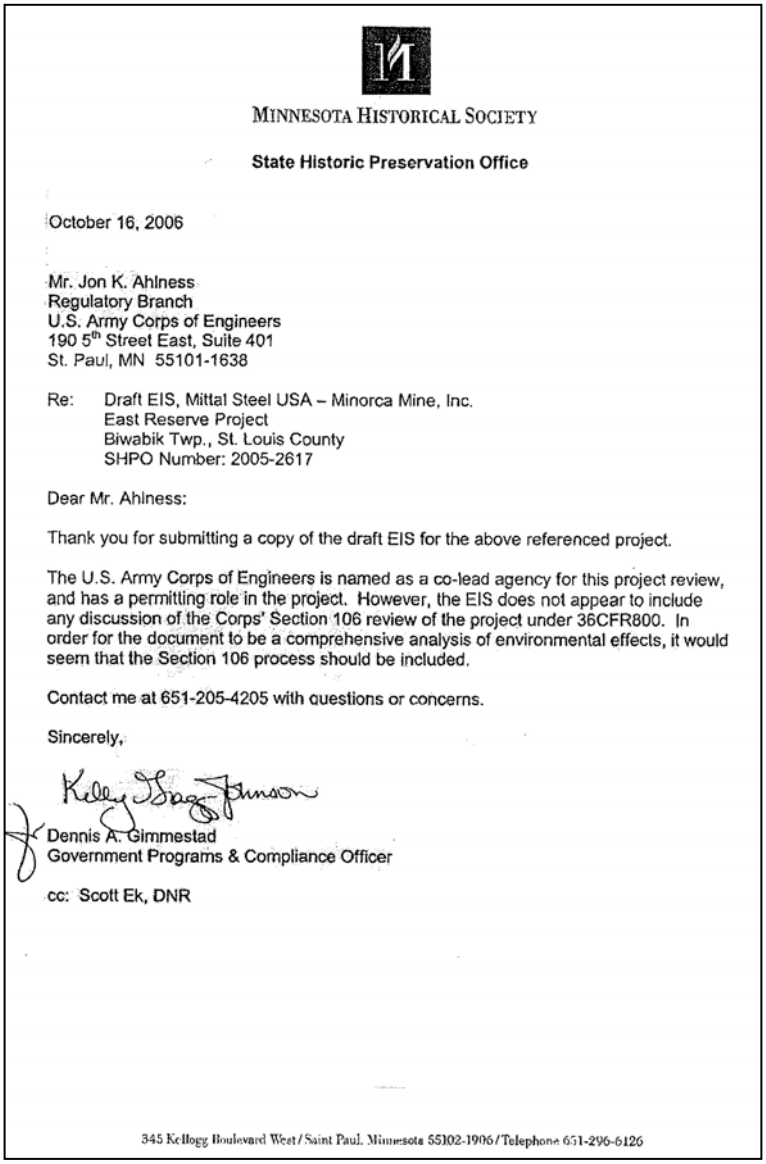
Darren Vogt
Environmental Biologist

David Woodward
Cultural Resource Specialist

CC: Curtis Gagnon, Grand Portage Reservation
Corey Strong, Rose Berens, Bois Forte Reservation

Response 10: See Response 10 to the Fond du Lac Environmental Program letter on page 22 above.

4.5 Minnesota State Historic Preservation Office (SHPO)



MINNESOTA HISTORICAL SOCIETY

State Historic Preservation Office

October 16, 2006

Mr. Jon K. Ahlness
Regulatory Branch
U.S. Army Corps of Engineers
190 5th Street East, Suite 401
St. Paul, MN 55101-1638

Re: Draft EIS, Mittal Steel USA – Minorca Mine, Inc.
East Reserve Project
Biwabik Twp., St. Louis County
SHPO Number: 2005-2617

Dear Mr. Ahlness:

Thank you for submitting a copy of the draft EIS for the above referenced project.

The U.S. Army Corps of Engineers is named as a co-lead agency for this project review, and has a permitting role in the project. However, the EIS does not appear to include any discussion of the Corps' Section 106 review of the project under 36CFR800. In order for the document to be a comprehensive analysis of environmental effects, it would seem that the Section 106 process should be included.

Contact me at 651-205-4205 with questions or concerns.

Sincerely,

Dennis A. Gimmestad
Government Programs & Compliance Officer

cc: Scott Ek, DNR

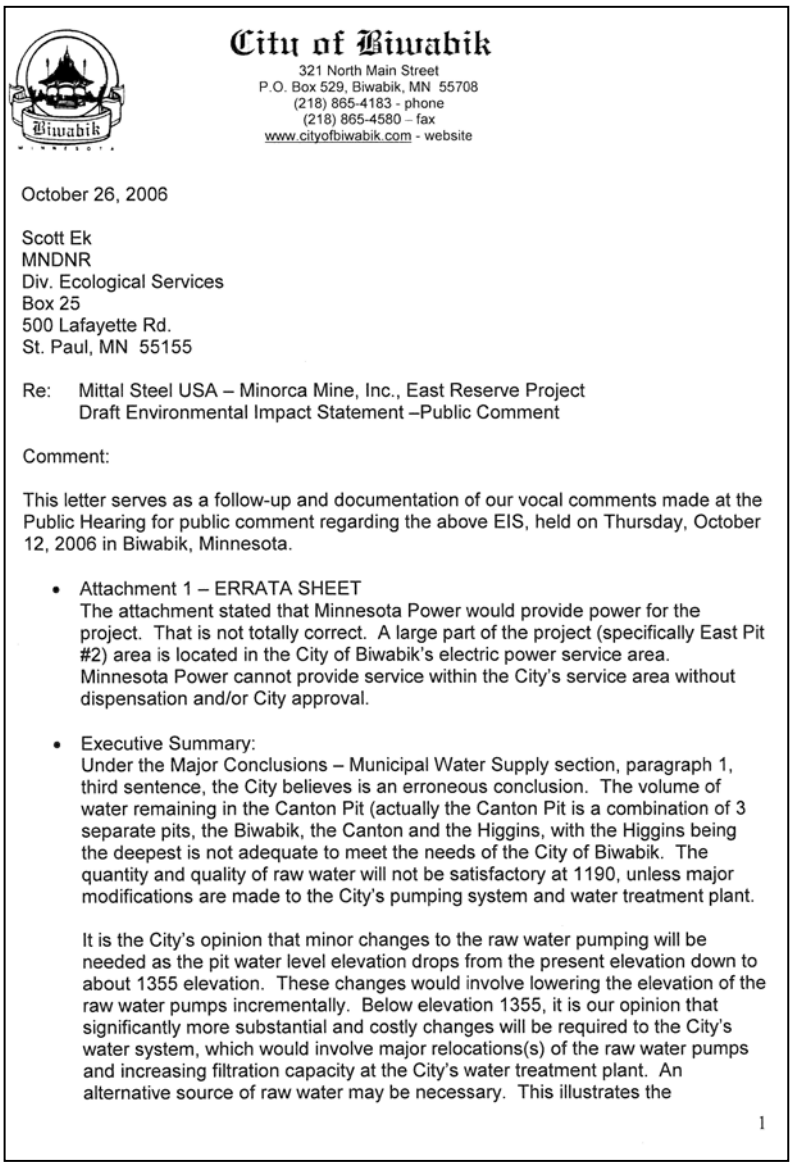
345 Kellogg Boulevard West / Saint Paul, Minnesota 55102-1906 / Telephone 651-296-6126

1

Response 1: To address the Corps' responsibilities under Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's regulations, 36CFR Part 800, implementing Section 106, the Corps has entered into consultation with the SHPO regarding potential effects on historic properties. See Chapter 2 on page 6 for a description of future consultation efforts. Responsibilities under Section 106 pertain only to federal undertakings, which in this case would be the issuance of a Department of the Army permit for the discharge of dredged or fill material into waters of the U.S.

4.6 City of Biwabik

Several of the City of Biwabik's comments were asked and discussed at the Public Hearing on October 12, 2006. The reader is encouraged to review Chapter 3 of this FEIS for additional information regarding the City's comments and responses.



City of Biwabik

321 North Main Street
P.O. Box 529, Biwabik, MN 55708
(218) 865-4183 - phone
(218) 865-4580 – fax
www.cityofbiwabik.com - website

October 26, 2006

Scott Ek
MNDNR
Div. Ecological Services
Box 25
500 Lafayette Rd.
St. Paul, MN 55155

Re: Mittal Steel USA – Minorca Mine, Inc., East Reserve Project
Draft Environmental Impact Statement –Public Comment

Comment:

This letter serves as a follow-up and documentation of our vocal comments made at the Public Hearing for public comment regarding the above EIS, held on Thursday, October 12, 2006 in Biwabik, Minnesota.

- Attachment 1 – ERRATA SHEET
  The attachment stated that Minnesota Power would provide power for the project. That is not totally correct. A large part of the project (specifically East Pit #2) area is located in the City of Biwabik's electric power service area. Minnesota Power cannot provide service within the City's service area without dispensation and/or City approval.

- Executive Summary:
  Under the Major Conclusions – Municipal Water Supply section, paragraph 1, third sentence, the City believes is an erroneous conclusion. The volume of water remaining in the Canton Pit (actually the Canton Pit is a combination of 3 separate pits, the Biwabik, the Canton and the Higgins, with the Higgins being the deepest is not adequate to meet the needs of the City of Biwabik. The quantity and quality of raw water will not be satisfactory at 1190, unless major modifications are made to the City's pumping system and water treatment plant.

  It is the City's opinion that minor changes to the raw water pumping will be needed as the pit water level elevation drops from the present elevation down to about 1355 elevation. These changes would involve lowering the elevation of the raw water pumps incrementally. Below elevation 1355, it is our opinion that significantly more substantial and costly changes will be required to the City's water system, which would involve major relocations(s) of the raw water pumps and increasing filtration capacity at the City's water treatment plant. An alternative source of raw water may be necessary. This illustrates the

1

1

2

Response 1: Comment noted. No response necessary.

Response 2: As stated in the DEIS, the volume of water that would remain in the Canton Pit is based on information contained in a technical memorandum (see Appendix E of the DEIS).

Modifications will be required to the City's raw water intake as the water level decreases in the pit. Section 4.6.1.2.1 of the DEIS discusses these changes in detail. It is agreed that below elevation 1,355 more substantial changes to the intake would be required. Change in water quality as the water level in the pit decreases was discussed in Section 4.6.1.2.1 of the DEIS. In the past, the existing water treatment plant effectively treated water from the pit at an elevation of 1,355. Therefore, it is assumed that the plant will be able to treat water from the pit at least until it reaches the 1,355 elevation. *(City Comment #2 and response continued on next page).*

importance of developing a satisfactory contingency plan and establishing a funding mechanism in order to accomplish the necessary changes to the City's water system in a timely and cost-effective manner.

The last sentence in that paragraph uses words that seem to be a "softer, gentler" way to describe would could be a significant impact that dewatering most likely would have on the City's water supply. The selection of words "would likely" and "could require" should be replaced with stronger words such as "will most likely ". Given the history of the impact dewatering has on the water level of affected pits in the vicinity of the project, and the expertise of water quality professionals who know the impacts on water quality in mine pits when dewatered, the City believes the stronger choice of verbiage is warranted. Given that EIS's state a range of possibilities, from worst-case scenario to best-case scenario, choosing words that seem to imply the best case as the probability is misleading and should be changed.

2 (continued)

- Table S-1, page S-16, Affected Environment, Municipal Water Supply, paragraph 2, reports that Mittal would be financially responsible for changes listed in the contingency plan (a plan not yet developed nor approved that identifies action regarding the City's drinking water when impacted by dewatering). During the public meeting, it was stated that under Minnesota law, the mining company has an obligation to keep the City's water supply "whole" should the water supply be impacted due to an action of the mining company. The City thinks it is important to state that in the EIS. In addition, any permit for dewatering is most likely transferable to any assigns (Mittal bought by another company) and given the law, that financial responsibility gets transferred as well. Often those transfers take time and could result in a period of transition that leaves the City with a financial responsibility that belongs to the mining company, but the mining company isn't prepared to provide financial support. Given that possibility, the City will advocate for a "trust fund" to be established and held by the State for a sum of money that will insure any financial impacts will be addressed immediately and not subject to disputes or uncertainty on the part of the mining company or the City as to financial responsibility. The citizens will want and are entitled to drinking water, even if the parties responsible for costs incurred disagree on payment terms and conditions.

3

- 4.6.1.2 Proposed Action, 4.6.1.2.1 City of Biwabik, page 80. The next to last sentence in the first paragraph is a serious misstatement and conclusion, given evidence provided earlier and based on the location of the wall of East Pit #2 in relationship to the wall of the Canton Pit. Because mining operations will result in the mine wall being shear rather than sloped, and the fact that the rock formation is and will be fractured when blasting occurs, and the closeness of the pit walls of the Canton and East Pit #2 (only 200 feet separate the two), a conclusion that reports, "The 1,197 feet amsl water level is a worse-case scenario and the Groundwater Study indicates that it is **highly unlikely** that dewatering the East Reserve Mine would cause a draw-down in the adjacent pits to this elevation because of hydraulic resistance of the rock that separates the pits" is a conclusion that is not supported by the evidence and the conclusion should be

4

Response 2 (continued):.It is agreed that levels of certain contaminants will increase as the level decreases and that treatment changes may be required at the plant. If water quality changes as the water level drops below the 1,355 elevation, a change in the treatment process may be required. Such changes may include switching the type of chemicals used or a new type of pretreatment or filtration system. However, an increase in filter capacity would not be required. Increasing the filter capacity would increase the quantity of water the treatment plant can effectively treat, but it would not address changes in water quality.

As stated in Section 4.6.1.2.1 of the DEIS, a detailed contingency plan is important to ensure an uninterrupted water supply of equal quality and quantity to the City's current supply. The Contingency Plan will establish a monitoring schedule for water elevation and quality that will be used to determine changes in the water supply and will establish either water levels and/or quality characteristics that would prompt specific mitigation actions for the raw water intake or treatment process.

Response 3: Mittal is developing a contingency plan with the City of Biwabik for inclusion into the MNDNR Water Appropriation Permit. The contingency plan is being prepared for the East Reserve Project to mitigate negative impacts to the City's water supply from dewatering. In accordance with the provisions of *Minnesota Rule 6115.0730 Well Interference Problems Involving Appropriation, subpart 1*, the contingency plan will consist of two parts: a short-term mitigation plan to address any immediate impacts to domestic or public water supplies within the areas of influence caused by dewatering activities and a long-term mitigation plan in the event that impacts from dewatering render an existing domestic or public water source unusable. *(Response to City Comment #3 is continued on the next page).*

restated, to indicate that is likely the de-watering will cause a draw-down, perhaps even to the level of 1,197 feet.

In paragraph 5 of that same section, the last sentence sets the National Primary Drinking Water Standards as the standard that would apply as a "trigger" for measurement of mining impacts. This too is not acceptable to the City of Biwabik. Biwabik's current drinking water standards are **better** than those federal standards, and the current City standards should be the "trigger' measurement for mining impacts. Anything less is disrespectful of our efforts to provide premium quality water to our citizens and any loosing of those standards, albeit, federal standards, is unacceptable.

It is the City's understanding that no de-watering permit will be issued until and unless the City and Mittal have prepared a detailed contingency plan for addressing impacts on the City's water supply. It is the City's responsibility to clearly state its expectations of this plan, given our civic responsibilities. It is also understood that any deviation from that agreed upon plan by the mining company (although not likely at this point) will result in withdrawal of that dewatering permit until the matter is resolved between the City and the mining company.

It is also the City's opinion that impacts on the City's water supply are measured from the full water allocation the City is permitted from the Canton Pit, and not limited to the historic volumes currently known, albeit, close to the allocation. Those future water uses should also be considered as part of any contingency plan between Mittal Steel and the City of Biwabik.

Thanks for the opportunity to comment on the Draft EIS. Our comments are meant to be constructive, however our first obligation is always to our citizens and the preservation of our drinking water supply.

Respectfully,

Michele D. Woods
Mayor

David Sherek
Chairman, Biwabik Public Utilities Commission

4 (continued)

Response 3 (continued): The short-term contingency plan will include the installation of data loggers at the Canton Pit (Biwabik municipal water supply), McKinley Pit, and Mary Ellen Pit prior to pumping so that baseline water elevations can be accurately determined and fluctuations in water levels can be monitored. Trigger elevations will be established so that mitigation measures (i.e. pipe extensions) can be implemented to ensure no disruption occurs on the water supply to the city and its residents. Water quality will also be monitored to assess whether or not changes in water elevation adversely impacts water quality. Costs incurred as a result of these mitigation measures will be the responsibility of Mittal. The long-term mitigation part of the contingency plan will consist of identifying at least two alternative water sources that could replace the existing water source should it become unusable. Baseline water quality samples will be taken from these sources to ensure they have a comparable water quality to the existing source. Also, the volume of water from these alternative sources must be adequate to provide the City of Biwabik with the amount of water needed at the time dewatering begins. A preliminary engineering study will be completed for the water source alternatives to determine infrastructure needs (i.e. pump sizes, piping), land ownership, etc., and will be included in the long-term plan. The costs of long-term mitigation, should the existing source (Canton Pit) become unusable, will be the responsibility of Mittal. The MNDNR shall not issue the permit until Mittal agrees to exercise any of the options presented in the contingency plan.

Response 4: Dewatering of the East Reserve Mine will likely result in some degree of drawdown on adjacent pits, perhaps even to the 1,197 elevation. However, the hydraulic resistance of the rock that separates adjacent pits makes it difficult to determine the extent of water level changes on these adjacent pits. Also, see response 2 for comments related to municipal drinking water standards and likely provisions of the project contingency plan.