AmeriPride® LINEN AND APPAREL SERVICES
519 E. 19th Street
Hibbing, MN 55746-1666
Phone 218/263-3611
Fax 218/263-3822

Thursday, March 08, 2007

To: Mr. Scott E. Ek, Principal Planner, MN Dept. of Natural Resources

From: Reggie J. Licari, General Manager, AmeriPride Linen & Apparel Services

Subject: Minnesota Steel Project

Dear Mr. Ek,

I am writing to you to pledge my support for the Minnesota Steel Project.

Having grown-up on the Iron Range in Biwabik, MN, I know first hand the impact the Iron Mining Industry has in NE Minnesota. I have seen the good times in the 1970's and the down times in the 1980's and 1990's. The Minnesota Steel Project represents the single largest plant project since the early days of mining. This project would add 700 full-time jobs as well as 2,100 spin-off jobs to our area! But more than that, this project represents renewed hope and a continued effort to strengthen and stabilize the economy of NE Minnesota. We have a lot of positive feeling and proactive action taking place on the Iron Range. The Minnesota Steel Project would go along way in renewing hope to an area of Minnesota that has seen its share of downturn and hard times. But, as our ancestors before us, we have persevered and found ways to keep our area moving forward as best we could.

As impressive as the employment numbers are, what is also very encouraging to all of us is the commitment from Minnesota Steel to be a good citizen with respect to technology and environmental controls. Minnesota Steel will be using modern, proven technology that meets or exceeds all state requirements with MACT and BACT. There will also be strict guidelines on permitted air emissions limits with continuous monitoring, ground water, stream and lake monitoring to assess and maintain the health of our water systems, no liquid discharge from the plant and seepage collection at the tailings pond. Being and employee of AmeriPride Services, Inc., I know first hand the commitment needed to maintain a healthy environment. This is very important to all of us who live in NE Minnesota.

I know and understand there is allot to consider with this project. I congratulate both of you and your agencies for doing your due diligence in making sure this project is done right. But I am also a believer that if we work together, we can come to solutions that will benefit everyone. This project is very important to the entire state of Minnesota. Please see to it that it moves forward to completion. Thank you for your time and continued success.

Sincerely,

Reggie J. Licari

From: <Kirk.Ilenda@Boldt.com>
To: <scott.ek@dnr.state.mn.us>
Date: 3/8/2007 1:41 PM
Subject: Minnesota Steel - Letter of Support - EIS
Attachments: MSI EIS Support Ltr 030807.pdf

CC: <jon.k.ahlness@mvp02usace.army.mil>

Scott, we have been active in following and budgeting for this project for several years and
are pleased to share our support for this project. As a construction firm we are very much
in support of sustainable projects. We work with clients in pre-construction and during construction
to minimize the built environments impact on our land. We have been active in constructing
alternative renewable energy projects, helping source and install sustainable materials to
recycling waste during construction.

I am attaching a separate letter declaring Boldt's support for this project.

Sincerely,

Kirk Ilenda, CSI, CDT
Business Development Manager

Oscar J. Boldt Construction
Minnesota Office
Phone 218-878-4529
Fax 218-879-5290
Cell 218-393-6672
E-Mail kirk.ilenda@boldt.com

BOLDT BUILDS
Oscar J. Boldt Construction

A Division of The Boldt Company

1001 Tall Pine Lane
P.O. Box 287
Cloquet, MN 55720-0287

218-879-1293 phone
www.boldt.com

March 8, 2007

Mr. Scott Ek
Principal Planner
MN Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4025

RE: Minnesota Steel Project, Nashwauk, MN

Dear Scott,

On behalf of Oscar J. Boldt Construction and the Iron Mining Association I would like to pledge our support for the Minnesota Steel Project in Nashwauk, MN. As a member in this industry we see this project as paramount to the continued viability of the iron mining and steel industry. This project represents our community's future in competing in this global market and over 700 jobs in Northeastern Minnesota.

It is of our opinion that Minnesota Steel Industries is striving on this project to minimize its impact on our environment by using state-of-the-art environmental controls to meet Minnesota's environmental requirements. Their commitment to reduce air emissions from the plant with the utilization of the best technology available only benefits future industrial plant expansions by continually striving and pushing the environmental controls to a higher level.

As a contractor, we see great benefits in working on projects with new environmental technology. They increase our awareness of compliance requirements, allow us an opportunity to install the new equipment and better understand what is required to maintain the environmental controls to their design standards.

In summary, we believe that Minnesota Steel Industries is acting as stewards of the environment by complying with current environmental standards and utilizing the latest technology. Further, the economic impact will continue to support the steel and mining industry in Minnesota and the many small northern communities where people live and count on the Mining and related industries for their future.

Sincerely,

Kirk Ilenda
Business Development Manager

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

Draft EIS Comment Form
Minnesota Steel Project

Name: ANDREW L KINGSBURY

Address: 15955 EASTWOOD RD 1

City: NASHWAUK State: MN ZIP: 55769

The following comments are on the Draft EIS for the Minnesota Steel Project (attach additional pages as necessary) The last day to submit comments on the Draft EIS is **4:30 p.m. on April 2, 2007**:

I was there representing Champion-Charter Sales & Service of Hibbing. I am a 1985 graduate of Nashwauk Keewatin High school. I think the draft EIS presentation was very good. I hope to god that this prodject is constructed so young people in the area do Not have to have the experiences I went through after graduation that I have, Thank you.

Signature: Andrew L Kingsbury Date: 3-14-07

Scott Ek
Minnesota Department of Natural Resources
Environmental Policy and Review
500 Lafayette Road, Box 25
Saint Paul, MN 55155-4025
Environmental.Review@dnr.state.mn.us

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
jon.k.ahlness@mvp02.usace.army.mil

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

Draft EIS Comment Form
Minnesota Steel Project

Name: Jim Loages - Champion Charter Sales

Address: 516 W. 23th St.

City: Hibbing State: MN ZIP: 55746

The following comments are on the Draft EIS for the Minnesota Steel Project (attach additional pages as necessary) The last day to submit comments on the Draft EIS is **4:30 p.m. on April 2, 2007**:

Being a life long resident of NE Minn. I am very excited over the opportunity of Mn. Steel being built here. This is a project which would bring benefits + opportunities to the Iron Range for years. Welcome to Northern Minn.

Signature: Jim Loages Date: 3-14-07

Scott Enk
Minnesota Department of Natural Resources
Environmental Policy and Review
500 Lafayette Road, Box 25
Saint Paul, MN 55155-4025
Environmental.Review@dnr.state.mn.us

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
jon.k.ahlness@mvp02.usace.army.mil

From: Environmental Review
To: Ek, Scott
Date: 3/29/2007 6:48 AM
Subject: Fwd: Minnesota Steel Public Comment

>>> "Gary Benjamin" <benjamin@championinc.com> 3/26/2007 2:35 PM >>>

Gentlemen: My name is Gary Benjamin, President of Champion, Inc. (family of Companies) www.championinc.com (http://www.championinc.com/) headquartered in Iron Mountain, MI. We have offices in Arden Hills & Hibbing MN. I have followed this project for several years and find it to be the most exciting opportunity that the State of Minnesota has had in decades. An integrated steel mining & manufacturing complex, designed with best available technology, in complete compliance with environmental requirements, and a planned production cost and market price that competes with the international price of slab steel, is absolutely remarkable! This positions Minnesota as the leader in North America as a prime source of slab steel to all North American markets. This is good for the Range, State of Minnesota, and the entire Country! I believe your conclusion will be that this facility will be the most environmentally friendly & compliant Steel & Mining Complex in North America and probably anywhere in the world. I support your continued review and ultimate decision to allow this project to proceed with construction in 2007. Thank you for receiving my comments. Sincerely, Gary R. Benjamin

CORNERSTONE

Steve Sorenson
ACCOUNT MANAGER
1202 Wilson Ave.
Cloquet, MN 55720

Jon K. Ahlness
U.S. Army Corps of Engineers
190 Fifth Street East, Suite 244S
St Paul, MN 55101-1638

Subject: MN Steel Draft EIS

Dear Mr. Ahlness,

As a major supplier of natural gas to Minnesota industrial and commercial industries, Cornerstone Energy attended with great interest the most recent presentation of the Minnesota Steel Draft EIS in Nashwauk.

As a key provider of natural gas supplies to Minnesota's taconite industry we were very pleased to observe that natural gas is listed as an important component of the EIS in helping to reduce plant emissions. In addition to the significant economic benefits provided by the Minnesota Steel project, the project developers have taken significant steps to ensure negative environmental impacts will be minimized.

Cornerstone Energy is in full support of the Minnesota Steel project and the EIS in its draft form.

Sincerely,

Steve Sorenson
Cornerstone Energy
Director of Business Development, Minnesota

CORNERSTONE ENERGY

Steve Sorenson
ACCOUNT MANAGER
1202 Wilson Ave.
Cloquet, MN 55720

Scott E Eck
Principal Planner
MN Department of Natural Resources
500 Lafayette Rd
St Paul, MN 55155-4025

Subject: MN Steel Draft EIS

Dear Mr. Eck

As a major supplier of natural gas to Minnesota industrial and commercial industries, Cornerstone Energy attended with great interest the most recent presentation of the Minnesota Steel Draft EIS in Nashwauk.

As a key provider of natural gas supplies to Minnesota's taconite industry we were very pleased to observe that natural gas is listed as an important component of the EIS in helping to reduce plant emissions. In addition to the significant economic benefits provided by the Minnesota Steel project, the project developers have taken significant steps to ensure negative environmental impacts will be minimized.

Cornerstone Energy is in full support of the Minnesota Steel project and the EIS in its draft form.

Sincerely,

Steve Sorenson
Cornerstone Energy
Director of Business Development, Minnesota

Cutler-Magner Company
12th Avenue West and Waterfront
P.O. Box 16807
Duluth, Minnesota 55816-0807

Phone (218) 722-3981
1-800-232-1302
FAX (218) 722-2667

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

Mr. Ek,

I am writing to urge the Department of Natural Resources to approve the permit for the proposed Minnesota Steel project envisioned near Nashwauk, Minnesota. It is my understanding that the facility will employ the latest achievable environmental control technology while at the same time reviving a previously mined area.

The concept of a steel mill at or near the source of the iron reserves has been examined for many years, and the current steel market now allows this concept to become an economic reality. The integrated nature of the mill insulates the final product from nearly all business cycle fluctuations and provides stable employment and steady economic conditions not only for northern Minnesota but also for companies such as ours. The economic value of Minnesota Steel is obvious.

From a global standpoint, a steel mill in northern Minnesota built with the environmental oversight of your department should be much preferred over a mill built elsewhere where there are more relaxed standards. Further, the plant is designed to employ natural gas as a fuel as opposed to coal, will have a closed loop water recycling system and has requested no variance to existing environmental regulations.

While expecting no shortcuts or partiality, please expeditiously examine and approve this very important permit. It is important for the vitality and future of our region.

Regards,

James Hecimovich
Vice President
Cutler Magner Company

Dixon Lake Resort
49442 Dixon Lake Resort Rd.
Squaw lake MN 56681
218-659-4612

3/6/07

To Whom it may Concern,

We have been business owners in Itasca County for eleven years and we have seen the area rise and fall due to the economy. One of us has lived on the iron range and has seen first hand the good economy because of the thriving steal mills as well has mining towns turning to ghost towns when mines are closed up. We support the Minnesota steal project and are sure it will have a great impact on the economy in the local area as well as the state. Employment opportunities as well as the fact of their exceeding all state Requirements makes this a true plus for the community. Please note we are behind this project 100%.

Thank you,
Lyle & Kathryn Wallentine
Dixon Lake Resort

GRAND·RAPIDS
STATE·BANK

P.O. Box 409 Grand Rapids, MN 55744-0409 Phone: 218-326-9414 Fax: 218-326-3569
email: bank@grsb.com web: www.grsb.com Member FDIC

March 14, 2007

Scott E. Ek
Principal Planner
Minnesota Department of Natural Resources
500 Lafayette Rd.
St. Paul, MN 55155-4025

Dear Mr. Ek:

I am writing this letter of support for the pending Minnesota Steel project.

I have examined several sources of information regarding the proposed Minnesota Steel project to be located in northern Minnesota, north of Nashwauk, Minnesota. As you know, this area has previously been mined, going all the way back to 1902. It is my understanding that there are many positive environmental aspects regarding the proposed project including; using proven technology, as well as meeting or exceeding all state requirements for the maximum available control technology, MACT, as well as BACT, the best available control technology. Provisions of the project include strict permitted air emission limits and continuous monitoring. Attention is being paid to ground water, as well as steam and lake monitoring, to continually access and maintain the health of our valued water system in northern Minnesota.

I believe that this project will have a positive impact on the economy of the local area, as well as the state of Minnesota. Since the expansion of the taconite industry, and the update of the Blandin Paper Company in the late 70's, our trade area has had very little positive news. Creation of the Minnesota Steel Project would certainly be perceived as a positive and lasting contributor to the economic wellbeing of our area. It is my understanding that there would be a tremendous employment opportunity during the construction phase of the project, as well as the permanent workforce. Additionally, the ancillary businesses related to the successful operation of the facility would produce additional workforce.

We will look with interest on the process, and the progress, that Minnesota Steel makes with their project. Thank you for your efforts with the project.

Sincerely,

Steven M. Wilcox
President

SMW/clb

GREAT NORTHERN IRON ORE PROPERTIES

SUITE 3090 FIRST NATIONAL BANK BUILDING

332 MINNESOTA STREET

SAINT PAUL, MINNESOTA 55101

JOSEPH S. MICALLEF
PRESIDENT OF THE TRUSTEES &
CHIEF EXECUTIVE OFFICER

TELEPHONE
(651) 224-1844
FAX
(651) 224-3328

March 19, 2007

Mr. Mark Holsten, Commissioner
Minnesota Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4040

Re: Minnesota Steel Industries, LLC ("MSI")

Dear Mr. Holsten:

It is our understanding that the Environmental Impact Statement for the MSI project was released for public display on February 12, 2007, and that the public comment period ends April 2, 2007.

As one of the larger fee owners on the Iron Range in northeastern Minnesota, we feel it is important to express our support of the MSI project. Great Northern Iron Ore Properties, headquartered in St. Paul, Minnesota, owns and manages over 67,000 acres of land (in various fee interests) in northeastern Minnesota. We are a publicly-traded trust on the New York Stock Exchange and just celebrated over 100 years of business this past year on December 7, 2006. Our certificate holders (shareholders) number in excess of 7,000 and we have 1.5 million certificates of beneficial interest (shares) issued and outstanding.

We have been working with MSI on a number of fronts, for a number of years, the culmination of which was the execution of three separate mining leases in November 2006. These leases represent over 3,000 acres of land (in various fee/ownership interests) and also represent nearly 50 million taconite pellet tons in reserves.

In our opinion, the economic benefit of such a project extends well beyond the Iron Range of Minnesota. From Great Northern Iron Ore Properties' perspective, additional revenues (royalties) will be generated at competitive rates and paid out in the form of distributions for the benefit of our numerous certificate holders during the term of the Trust (until April 6, 2015), and thereafter for the benefit of our reversioner (currently ConocoPhillips). The State of Minnesota also stands to benefit from royalties, as well as the various taxes that will be imposed, such as production taxes.

As you know, MSI's "permit to mine" area essentially encompasses the old Butler Taconite mine that was permanently closed in June of 1985 after operating for eighteen years. It is both encouraging and exciting to see this new development on the Iron Range, the first of this magnitude in many years. To again be able to utilize such a valuable ore reserve should benefit the overall local economy and employment on the Iron Range, a number of fee owners such as Great Northern Iron Ore Properties, numerous vendors and service providers, the State of Minnesota and various counties. With the demand for steel and taconite ore strong, it would appear that the timing for such a project is favorable.

In summary, we thank you for the opportunity to express our support of the Minnesota Steel Industries project and hope that the State of Minnesota remains committed and equally supportive of MSI for the benefit of many affected parties for years to come.

Respectfully,

Joseph S. Micallef

Chief Executive Officer and
President of the Trustees

cc: Hon. Governor Tim Pawlenty
Mr. Scott Ek, Principal Planner, MN Dept. of Natural Resources
Mr. John Elmore, Minnesota Steel Industries, LLC
Mr. Steve Hicks, Minnesota Steel Industries, LLC
Mr. Thomas Janochoski, Great Northern Iron Ore Properties
Mr. Roger Johnson, Great Northern Iron Ore Properties

INDUSTRIAL LUBRICANT COMPANY

March 26, 2007

Scott Ek
Minnesota Department of Natural Resources
Division of Ecological Services
Environmental Review Unit
500 Lafayette Rd., Box 25
St. Paul, MN 55110

Dear Scott,

Industrial Lubricant Company is writing to provide the following comments in support of the Minnesota Steel Project.

Industrial Lubricant Company whole heartedly supports a strong and healthy mining industry. Our business started and continues to thrive on Minnesota's Iron Range. We have been in business over sixty-five years. Our business and employee level goes up and down with the expansion and contraction of the mining industry. We recognize this as an opportunity for significant and long term growth for many businesses and families.

We believe that the expansion for Minnesota Steel is proposed in an environmentally friendly way and has taken into consideration all of the necessary environmental impacts of the area. We urge your support of the project which will benefit Northern Minnesota as well as the entire state.

Thank you for allowing us to submit these comments.

Very Truly Yours,

Gary Oja
President
Industrial Lubricant Company

Kathy Hoolihan
General Manager
Industrial Lubricant Co

Cc: Howard Hilshorst

35108 Hwy. 2 West • P.O. Box 70 • Grand Rapids, MN 55744-0070 • (218) 328-0602 • (218) 328-0259 Fax

JASPER ENGINEERING & EQUIPMENT CO

3800 West 5th Avenue Suite 1
Hibbing, MN 55746-2816
218/262-3421 • FAX 218/262-4936
Website: www.jaspereng.com

Ishpeming 906/485-6361
FAX 906/485-4803
Hopkins 952/938-6504
FAX 952/935-7772

March 30, 2007

Scott E. Ek
Principal Planner
MN Department of Natural Resources
500 Lafayette Road
St Paul, MN 55155-4025

Re: Minnesota Steel Project

Dear Mr. Ek:

I am writing this letter in support of the Minnesota Steel project. There are two basic reasons I am supporting this project. The first is economics. This will be the first project that will be a fully integrated steel making facility in the United States. It is my understanding that as a result it will result in a lower cost product and will reduce energy consumption as compared with the current methods to produce steel slabs. I believe the project will result in 700 new jobs and over 2000 spin off jobs. I also believe that it will provide some stability to a very cyclical Taconite Industry. It will also result in a new company in the industry that will help in terms of competition. Many of the jobs that will result will be professional level jobs and higher salaried jobs. This project will provide a major boost to the economy in the region.

My second basic reason is environmental. I am familiar with the previous Taconite plant that used to be at the site: Butler Taconite. Butler was constructed over 40 years ago utilizing technology from that era. This new plant will use the latest technology and methods to control emissions. Thus it will be an improvement over what was there before.

In closing, I am in full support of this project and encourage the MPCA to grant the environmental permits required to start construction.

Regards,

JASPER ENGINEERING & EQUIPMENT CO

Thomas D. Jamar, P.E.
President

B-14

OVER 100 YEARS OF SERVICE

LERCH BROTHERS INCORPORATED

GENERAL ANALYTICAL CHEMISTS

CONSULTING SERVICE — MINNESOTA, WISCONSIN AND CANADA

GENERAL OFFICES — CORNER N. 4th AVE. W. and GRANT STREET

MAIL ADDRESS — P.O. BOX 8 — PHONE (218) 262-0456 FAX (218) 262-5806

HIBBING, MINNESOTA 55746

March 30, 2007

Scott Ek, principal planner
Environmental Policy Review
Division of Ecological Services
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

Dear Mr. Ek:

Re: Minnesota Steel Project

Lerch Brothers, Inc. supports the proposal of Minnesota Steel to build an integrated complex near Nashwauk that includes iron ore mining and processing and steelmaking on one site.

Since Minnesota Steel's facility will be located on a site that was previously used for iron ore mining, it would appear that no unspoiled wetlands would be damaged. Also, they are committed to restoring 550 acres of wetlands in Aitkin County over a five-year-period.

Minnesota Steel has taken steps to ensure that they will meet or exceed all state and federal air and water quality standards. They are committed to ensure that emissions from this facility wouldn't harm the environment or the health of residents.

This project will have a positive impact on the economy of the Iron Range for many decades, and will contribute an estimated $18 million annually in royalties and various taxes to the state of Minnesota.

Sincerely,

Donald V. Larson

Donald V. Larson, President

Midwest Communications

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

March 28, 2007

Dear Mr. Ek

I am writing to you in regards to Minnesota Steel. The Minnesota Steel project is extremely important to the Arrowhead Region. It will provide much needed economic development growth that will reach far into the future of the region and provide employment opportunities for generations of area residents. It will also stimulate population growth and further business development opportunities. I'm all for the Minnesota Steel project.

Sincerely,

Kristi Garrity GM/GSM
Midwest Communications

807 W. 37TH ST.
HIBBING MN 55746
218 263-7531, 749-3000, 327-1194

minnesota power
AN ALLETE COMPANY

David J. McMillan, Executive Vice President
Fax 218-720-2508 / Cell 218-590-4287 / E-mail dmcmillan@allete.com

March 19, 2007

Scott E. Ek
Principal Planner
MN Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, MN 55145-4025

Re: Minnesota Steel Draft Environmental Impact Statement (DEIS)

Dear Mr. Ek:

Minnesota Power (MP) has reviewed the Minnesota Steel DEIS and submits the following comments:

Minnesota Power commends the Minnesota Department of Natural Resources (MNDNR) for its careful and comprehensive assessment of this major natural resource project. In our view, Minnesota's public planning process, as evidenced by the analysis, public communication and input associated with the review of this project, has significantly and appropriately advanced the environmental assessment process to the benefit of all Minnesotans.

Secondly, Minnesota Power understands that the project as described in the DEIS appears to use conventional, proven technology to enable Minnesota Steel to meet or exceed all federal and state Maximum Achievable Control Technology (MACT) and Best Available Control Technology (BACT) requirements. Minnesota Power has a long and successful record of exceeding similar environmental requirements and fully supports companies contemplating industrial projects in Northeastern Minnesota that do the same.

Minnesota Power recognizes the socioeconomic impacts to the region resulting from the Minnesota Steel project, which will be utilizing the area's native minerals. We believe the DEIS accurately reflects the positive impacts to the region resulting from the project and we fully recognize and appreciate the significant boost the project would give to all of the communities in the western Iron Range. We're very enthusiastic about the project's impacts to an area which has not seen this level of growth since the construction of Butler Taconite and National Steel Pellet Company in the 1960's.

In closing, Minnesota Power again commends the MDNR for their comprehensive DEIS and looks forward to having Minnesota Steel complete the permitting process. Minnesota Power will continue to work closely with all affected parties to provide electric service to Minnesota Steel, leveraging our expertise in supporting large industrial customers to ensure the successful implementation of the Minnesota Steel project.

Sincerely,

David J. McMillan

March 26 2007

NALCO

Scott Ek, Principal Planner
Environmental Policy & Review
Minnesota Department of Natural Resources
Division of Ecological Services
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025
Phone: (651) 259-5156

Nalco Company
1601 West Diehl Road
Naperville, IL 60563-1198
630 305 1000
www.nalco.com

Re: Minnesota Steel Industries, LLC Project Draft EIS Commentary

Dear Mr. Ek:

Nalco Company wholly endorses the plan by Minnesota Steel Industries, LLC to establish an integrated steel mill production facility at the Butler site near Nashwauk, Minnesota. This plan effectively balances the economic and productive development of an area previously used for mining with technically and environmentally progressive methods for mining ore, producing taconite pellets and ultimately producing slab and rolled steel.

This project provides significant economy-of-scope benefits. Specifically, locating the manufacturing operations near the mine minimizes their environmental impact, both by reducing the amount of energy and resources needed and reducing the emissions produced per unit of steel production. Economically, the project will generate long-term employment opportunities – jobs at the site itself, as well as jobs related to the servicing of the facility and its workers. Overall, the project provides the local area and the State of Minnesota the opportunity to realize the full economic value of its native ore – from mining through manufacturing and shipment.

A closer look at the project's features provides insight into how its environmental impacts will be minimized:

- Reduced usage of water through supply water pretreatment, tightly controlled and monitored process water operating schemes, and recovery/reuse of process wastewaters from the operations;
- The absence of production-related discharges of water from the mining, taconite pellet plant production, or steel manufacturing operations;
- The monitoring, collection and recovery of possible seepage from the tailings basin;
- The monitoring of surface and groundwater to assess and maintain water quality;
- Stringent controls and monitoring of air emissions for the operations at the site;
- Reduced energy usage and emissions due to the operation's economy of scope, use of natural gas as a fuel, and application of modern manufacturing technologies.

These features represent "leading-edge" technologies and approaches for steel production facilities, and they underscore both the innovative nature of the project and Minnesota Steel Industries, LLC's commitment to environmental responsibility.

If you have any questions regarding these comments, or if I can be of any other assistance, please contact me at (630) 305-1477.

Sincerely,

Stan Gibson

Stan Gibson
General Manager
Nalco Company
EISCOMMENT.doc

Nashwauk Area Chamber of Commerce
PO Box 156
Nashwauk MN 55769

March 9, 2007

Scott E. Ek
Principal Planner
MN Department for Natural Resources
500 Lafayette Road
St Paul, MN 55155-4025

Dear Mr. Ek:

The Nashwauk Area Chamber of Commerce is in full support for the Minnesota Steel project. The mine would have tremendous impact on the economy in our area. With its proven technology and air quality control, the mine would be a great asset to our community.

Sincerely,

Mike Olson

Mike Olson
President
Nashwauk Area Chamber of Commerce

Nashwauk Hardware Co.
PO Box 65
Nashwauk, MN 55769
March 28, 2007

Scott Ek
Principal Planner
Mn Dept for Natural Resources
500 LaFayette Rd
St. Paul, MN. 55155-4025

Mr. Ek;

We are writing in support of the Minnesota Steel project that is proposed for the Nashwauk area in Itasca County. This project will be not only a great economic boost for this area, but also increase revenue for the state.

Because of the detailed environmental study involved in the permitting process and the continued monitoring of the operations by the State, we feel that any negative impacts should be minimal.

We hope that this project will proceed and continue in the tradition of area mining which began in 1902. Northern Minnesota can continue to be an area of outdoor recreation and provide jobs for our citizens.

Paul Tweed

Paul Tweed, President

Elizabeth Voigt

Elizabeth Voigt, Sec.

NATERRA LAND
The Nature of Life

March 26, 2007

Mr. Mark Holsten, Commissioner
Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4040

Re: Minnesota Steel Facility in Nashwauk, MN

Dear Mr. Holsten:

I am writing this letter asking you to share in my support of the proposed Minnesota Steel Facility in Nashwauk, MN, scheduled to begin construction this summer.

This facility will be a state of the art, environmentally-friendly facility, providing jobs to over 700 full-time employees, 2,000 construction workers and 2,100 flow on jobs into an economically depressed region of the state. At the state level, this facility will pay over $18 million annually in taxes and royalties. Further, production from this facility will allow our nation to lessen our reliance on steel slab imports from countries such as Brazil, Mexico, Russia and China.

A Draft Environmental Impact Statement was released for public display on February 12th and the public comment period ends on April 2nd. Minnesota Steel hopes to obtain its environmental permits from the MDNR before June, and a $30 million bonding bill for the project infrastructure is in front of legislature now.

As a business developing recreational lands in Northern Minnesota, our Company places the highest priority on protecting the lands we develop. I appreciate knowing that Minnesota Steel has proposed a new facility that promotes responsible environmental stewardship, and at the same time benefits our local, state and national economies.

Please join me in support of this effort.

Sincerely,

Ron Schiferl
Chief Operating Officer

CC: Scott Ek, Minnesota Department of Natural Resources

43 Main Street S.E. | Suite 506 | Minneapolis, MN 55414
office: 612.331.6929 | F: 612.331.6922 | NaterraLand.com

NATERRA LAND
The Nature of Life

March 26, 2007

Mr. Mark Holsten, Commissioner
Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4040

Re: Minnesota Steel Facility in Nashwauk, MN

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I am writing this letter asking you to share in my support of the proposed Minnesota Steel Facility in Nashwauk, MN, scheduled to begin construction this summer.

This facility will be a state of the art, environmentally-friendly facility, providing jobs to over 700 full-time employees, 2,000 construction workers and 2,100 flow on jobs into an economically depressed region of the state. At the state level, this facility will pay over $18 million annually in taxes and royalties. Further, production from this facility will allow our nation to lessen our reliance on steel slab imports from countries such as Brazil, Mexico, Russia and China.

A Draft Environmental Impact Statement was released for public display on February 12th and the public comment period ends on April 2nd. Minnesota Steel hopes to obtain its environmental permits from the MDNR before June, and a $30 million bonding bill for the project infrastructure is in front of legislature now.

As a business owner developing recreational lands in Northern Minnesota, my Company places the highest priority on protecting the lands we develop. I appreciate knowing that Minnesota Steel has proposed a new facility that promotes responsible environmental stewardship, and at the same time benefits our local, state and national economies.

Please join me in support of this effort.

Sincerely,

Philip C. Taylor
President & Chief Executive Officer

CC: Scott Ek, Minnesota Department of Natural Resources

43 Main Street S.E. | Suite 506 | Minneapolis, MN 55414
office: 612.331.6929 | F: 612.331.6922 | NaterraLand.com

From: Environmental Review
To: Ek, Scott
Date: 3/29/2007 6:48 AM
Subject: Fwd: Minnesota Steel Project

>>> "John Ratelle" <jratelle@oswaldcompanies.com> 3/28/2007 7:46 AM >>>

I have been following the development of the Minnesota Steel Project for several years. This is a long-term opportunity for the State of Minnesota with sustainable natural advantages that is economically sound in all business cycles. The economic benefit to the Iron Range economy is significant both today and in the future. This depressed part of Minnesota needs support to recover from long term economic blight.
This economically sound project can weather the inevitable cycles in the steel industry. By employing the most environmentally friendly solution and using the best available commercial technology ensures this project will be good for the environment for future generations. In every choice made by the project the conservative approach deployed is to the benefit of the environment. The Minnesota Steel project will have a tremendous impact on theState and the rest of the steel industry as it will set the standard.
Currently, the demand for steel slab in the USA (the product produce by Minnesota Steel) is in excess of 10MT, all of which is produced by overseas sources (Brazil, Mexico, Russia and China). Minnesota Steel will beneficiate the natural resources of Minnesota, in the most environmentally sound manner and keeps jobs and revenue in the Minnesota while creating high paying, skilled jobs in an economically challenged area.
There are several key benefits of the Minnesota Steel Project:
Environment: State of the art, commercially proven technology
Integrated facility allows for considerable energy savings, up to 30% less than traditional steelmaking - **Stewardship**
Environmentally friendly process using natural gas and electricity as opposed to coal - **address the needs of the economy and minimizing global warming**
Mining will take place in a previously mined area which will minimize wetland impacts - **conservation**
Company meets or exceeds all the rules and regulations, no variances have been requested
Water will be recycled in a closed system, minimizing any potential release of pollutants

EconomicCreates wealth; over 700 full time employees, 2000 construction workers and 2100 flow on jobs into an economically depressed region of the State
$1.6 Billion private investment in manufacturing jobs in the State of Minnesota
Over $18 million paid annually to the State in taxes and royalties
Estimated $500M impact on a two county region of Northern Minnesota

I trust that that you are as excited and I am about the prospects of this project. The Minnesota Steel Project deserves your support.

John M Ratelle
Oswald Companies
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oswald
companies

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612 341 7859 *fax*
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March 28, 2007

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

RE: Minnesota Steel Industries

Dear Scott,

I have been following the development of the Minnesota Steel Project for several years. This is a long-term opportunity for the State of Minnesota with sustainable natural advantages that is economically sound in all business cycles. The economic benefit to the Iron Range economy is significant both today and in the future. This depressed part of Minnesota needs support to recover from long term economic blight.

This economically sound project can weather the inevitable cycles in the steel industry. By employing the most environmentally friendly solution and using the best available commercial technology ensures this project will be good for the environment for future generations. In every choice made by the project the conservative approach deployed is to the benefit of the environment. The Minnesota Steel project will have a tremendous impact on the State and the rest of the steel industry as it will set the standard.

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There are several key benefits of the Minnesota Steel Project:

oswald companies

50 South Sixth Street, Suite 990
Minneapolis, MN 55402
612 868 6496 *phone*
612 341 7859 *fax*
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Environment:

- State of the art, commercially proven technology
- Integrated facility allows for considerable energy savings, up to 30% less than traditional steelmaking - **Stewardship**
- Environmentally friendly process using natural gas and electricity as opposed to coal - **address the needs of the economy and minimizing global warming**
- Mining will take place in a previously mined area which will minimize wetland impacts - **conservation**
- Company meets or exceeds all the rules and regulations, no variances have been requested
- Water will be recycled in a closed system, minimizing any potential release of pollutants

Economic

- Creates wealth; over 700 full time employees, 2000 construction workers and 2100 flow on jobs into an economically depressed region of the State
- $1.6 Billion private investment in manufacturing jobs in the State of Minnesota
- Over $18 million paid annually to the State in taxes and royalties
- Estimated $500M impact on a two county region of Northern Minnesota

I trust that that you are as excited and I am about the prospects of this project. The Minnesota Steel Project deserves your support.

John M Ratelle
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usbank

211 East Howard Street
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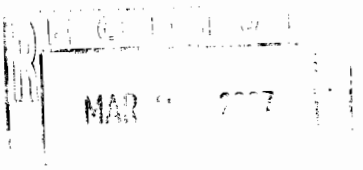
218-262-7156

Lynda J Bolf
(218) 262-7110



March 16, 2007

Jon K. Ahlness
U.S. army Corps of Engineers
190 Fifth Street East, Suite 244S
St. Paul, MN 55101-1638

RE: Minnesota Steel Project

Dear Mr. Ahlness:

I am writing this letter in support of the Minnesota Steel Project. This area has been mined since 1902 and would be a positive impact on the economy of our area and the state of Minnesota. It would provide employment of up to 700 jobs and up to 2,100 spin off jobs, which is much needed in northern Minnesota and the whole state. The project also meets or exceeds all state requirements with MACT (Maximum Available Control Technology) and BACT (Best Available Control Technology).

Respectfully,

Lynda J. Bolf

LYNDA J. BOLF
District Manager Northern Minnesota

rm

211 East Howard Street
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Lynda J Bolf
(218) 262-7110

March 16, 2007

Lynda Bolf
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Scott E. Ek
Principal Planner
MN Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4025

RE: Minnesota Steel Project

Dear Mr. Ek:

I am writing this letter in support of the Minnesota Steel Project. This area has been mined since 1902 and would be a positive impact on the economy of our area and the state of Minnesota. It would provide employment of up to 700 jobs and up to 2,100 spin off jobs, which is much needed in northern Minnesota and the whole state. The project also meets or exceeds all state requirements with MACT (Maximum Available Control Technology) and BACT (Best Available Control Technology).

Respectfully,

LYNDA J. BOLF
District Manager Northern Minnesota

rm

From: <bobprit@rangenet.com>
To: <environmental.review@dnr.state.mn.us>
Date: 3/15/2007 10:43 AM
Subject: Minnesota Steel

Dear Scott
I would like to take this opportunity to give my whole hearted support to the Minnesota Steel project. As General Manager of Viking Explosives and former General Manager Raw Materials LTV Corp.I believe this project is not only critical to the economic well being of Northern Minn. but it is also very important to the U.S. Industry to have steel slabs mfg. in the U.S.I believe that not only is this project economically feasible but it can be accomplished without any damage to the environment.

At Viking Explosives,if we were successful in being the explosive supplier we would add six to seven employees to our payroll.

R.E. Prittinen
General Manager Viking Explosives
4469 Highway 5
Hibbing Minn.55746

Responses to Comments

RESPONSES TO COMMENTS

GOVERNMENT AGENCIES

Itasca County
G-01.01
The Commentor's support for the proposed project is noted.
Section 6.14.2.1 of the Draft and Final EIS acknowledges that if the proposed project were not constructed that the projected economic benefits would not be realized.

United States Environmental Protection Agency (USEPA)

G-02.01
Section 6.4.1.2 of the Final EIS provides updated information on the status of the winter 2006-2007 lynx tracking study and the USACE/USFWS consultation process.

G-02.02
Discussion of in-pit stockpiling was included in the fisheries mitigation section noted by the commentor to provide further evidence of the potential benefits of in-pit stockpiling, if it is found to be feasible. Text has been added to Section 4.8.3 of the Final EIS to clarify the provisional status of potential use of in-pit stockpiling.

G-02.03
The impacts of the connected actions (infrastructure) are discussed in Section 6.13.2 of the Draft and Final EIS. In an effort to keep the EIS at a reasonable length it was determined that additional benefit is not gained by re-discussing these items in other sections of the EIS.

G-02.04
Table 6.2.1 (Cover Types) provides the wetland impacts for Connected Actions, sub-divided into previously-mined and not previously mined areas.

G-02.05
Table 4.1.10 has been added to Chapter 4 of the Final EIS (The table previously labeled 4.1.10 was renamed 4.1.11) including the Eggers and Reed classifications for the various project areas. The tables in Section 4.1.1 were updated to include the Eggers and Reed classifications for each individual wetland. A summary of the 5-year proposed mitigation wetland communities using the Eggers and Reed classifications has been included in Section 4.1.3.1.

G-02.06
Section 4.1.1.2 of the Final EIS includes definitions of natural and artificial wetlands, as suggested by the commentor. The tables in Section 4.1.1 have been updated to include the identification of each individual wetland as natural or artificial along with the level of disturbance in each wetland. In addition, the total acreage of natural and artificial wetlands within each project area was added to those tables in Section 4.1.1.

G-02.07
Comment noted. The wetland mitigation plan is in the process of being updated to reflect required mitigation ratios, based on wetland type replacement and timing, consistent with the USACE April 30, 2007 letter to Minnesota Steel regarding mitigation requirements (see Appendix H of the Final EIS). The final wetland mitigation plan would need to be provided to the USACE for review/approval prior to the USACE issuing a Section 404 permit for the Minnesota Steel project. Similarly, the MPCA reviews the mitigation plan as part of its Section 401 certification process.

G-02.08
Comment noted. The USACE will coordinate with EPA and MPCA (Section 401 permitting authority) staff regarding monitoring requirements during the Section 404 permit phase.

G-02.09
More detailed plans for the Aitkin mitigation sites would be provided by Minnesota Steel as part of Section 404 permit review/approval process. The USACE will provide EPA and MPCA (Section 401 certification agency) staff with additional information on the mitigation site design as it is submitted during the Section 404 permit phase. There was no wetland delineation prepared for the site, since the hydrology of the site is continually manipulated by the current property owner, who uses the property for agricultural production (changing hydrology as they change crops, e.g. from soybeans to wild rice).

G-02.10
Comment noted. The wetland mitigation plan is in the process of being updated to reflect required mitigation ratios and to account for partial credit allowances, such as those noted by the commentor. The final wetland mitigation plan would need to be provided to the USACE for review/approval prior to the USACE issuing a Section 404 permit for the Minnesota Steel project. Similarly, the MPCA reviews the mitigation plan as part of its Section 401 certification process.

G-02.11
Section 4.2.3 of the Final EIS has been revised to include the information suggested by the commentor.

G-02.12
Due to the distance from the pits to Pickerel Creek (approximately 1.5 miles) it is not anticipated that dewatering would impact this spring-fed creek. Due to its elevation and location, the spring water is believed to be derived from groundwater found in the surficial aquifer and not the deeper Biwabik Iron Formation (BIF) aquifer that is the primary source of groundwater to proposed mine Pits 5 and 6.

G-02.13
An on-site wastewater treatment system would be classified as a Class V injection well and subject to permitting by US EPA. However, the On-Site Wastewater Treatment Alternative is not included in the Preferred Alternative, so this permitting requirement is not discussed in Chapter 2.0 of the EIS.

G-02.14
As discussed in Section 4.2.2.2 of the Final EIS, the MPCA has determined that no NPDES permit is required for water transfers (initial mine pit dewatering) or for stream augmentation use. Factors considered by the MPCA in making this determination include: 1) the dewatering and augmentation flows would be conveyed from one 'water of the state' to another 'water of the state' without subjecting the water to intervening industrial, municipal or commercial use; 2) the mine pits to be dewatered (Pits 1, 2, 5 and Draper Annex) are currently overflowing into the water bodies that would be receiving the dewatering flows; and 3) dewatering and augmentation activities (prior to and after the initiation of mining at the facility) and any/all potential impacts to the physical integrity of Oxhide Lake/Creek and Snowball Lake/Creek would be controlled by a MNDNR Water Appropriation Permit. The DNR Water Appropriation Permit would limit the volume of water to be transferred during dewatering and would include geomorphic, hydrologic, and ecological monitoring requirements such as continuous monitoring of flow rates and volumes, regular water level measurements, macroinvertebrate studies and stream bank cross sectional analyses prior to and during dewatering activities.

G-02.15
Existing surface water quality for water resources involved in the project are documented in water quality monitoring reports from 2005 and 2006 (see listings in Appendix I of the Final EIS). Water quality in the Hill Annex Mine Pit is summarized in the Excelsior Energy NPDES permit application (available on the Minnesota Public Utilities website: http://energyfacilities.puc.state.mn.us/documents/16573/Supplement-Part-1(Sec1-1_1-8).pdf). Table 1.8-20 on page 204 of the document lists the water quality in the Hill Annex Mine Pit.

The Hill Annex Mine Pit water quality has been reviewed by MPCA staff and found to meet applicable water quality standards. Available water quality data for Pits 1 & 2 and Pit 5 also indicate this water would meet surface water quality standards. Water quality of Oxhide, Snowball and Swan Lakes has been evaluated in Section 4.5 of the Draft and Final EIS (details are provided in separate Technical Memoranda listed in Appendix I of the Final EIS). The evaluation of water quality changes resulting from proposed augmentation flows, assuming the water comes from the Hill Annex Mine Pit, showed a slight reduction in in-lake phosphorus concentrations as compared to the existing condition for all three lakes. As described Section 4.5 of the Draft and Final EIS, dewatering flows also result in no practical effect on water quality in these lakes.

Regarding sulfate, the Swan Lake Nutrient Study identified that sulfate is already present in Swan Lake and that the potential increase due to the project is small relative to the existing concentration and, therefore, sulfate should not have a secondary water quality effect. Since Oxhide Lake currently gets most of its inflow from Pit 5 it has sulfate present in its outflow at about 30 mg/L, and Snowball Lake has about 10 mg/L at its outflow. The sulfate concentrations in the Hill Annex Mine Pit water are about 60 mg/L, as compared to the 32 mg/L average in Pit 5 and Pits 1&2 (Swan Lake Nutrient Study). There is no surface water quality standard for sulfate for Class 2B waters (all of the waters within the project area that would receive dewatering and/or augmentation water are Class 2B).

Temperature was not identified in the Scoping Decision Document as a parameter of concern and was not analyzed in detail for the EIS. This issue was reviewed to respond to this comment and found to not likely be an issue, since the augmentation flows to Oxhide Creek and Snowball Lake are to be delivered by pumps placed on floating barges or rafts in Pits 1&2 and the Hill Annex Pit, and would withdraw surface water with temperature similar in temperature to the water currently discharging from surface overflows from Pit 5.

G-02.16
The wording of the Draft EIS did not clearly state the disposition of the storm water from the plant. The storm water from the plant site would be conveyed to a storm water pond created at the location of an existing wetland located southeast of the plant, not to a 'wetland.' (The direct project wetland impacts analysis in Section 4.1 of the Draft and Final EIS [see Table 4.1.6A and Figure 4.1.5] includes the entire area of the existing wetland in the impacts, which would be mitigated.) The discharges from the plant site to the newly-created storm water pond would not require an NPDES permit. The wording of this paragraph for the Final EIS was revised to clarify that the water would be conveyed to a storm water pond created at the location of an existing wetland.

Note that an NPDES permit application has been prepared for discharges to the Sullivan and Ann Pits which would receive surface water drainage from the storm water pond, as well as dewatering discharge from Pits 5 and 6 during operations.

G-02.17
The proposed increases and decreases in lake level are within the natural range of fluctuation experienced by Oxhide Lake in the recent past.

G-02.18
The text of Section 4.3.2.3 has been revised to clarify the anticipated future discharges from Pit 6 to Snowball Creek. As noted in the Final EIS text, the extent of post-mining Pit 6 discharges to Snowball Creek can be somewhat controlled by how an outlet channel from Pit 6 to Snowball Creek is constructed. This would be addressed in the mine closure plan.

G-02.19
If an outside source of water is necessary for augmentation, then Minnesota Steel has stated that they would seek to obtain a water appropriations permit for the use of the Hill Annex Pit water, and MNDNR staff concur that the proposed future use of Hill Annex water is the logical source for augmentation water. The need for additional augmentation water, if it is needed, would likely occur some time after Pit 5 dewatering is complete, and possibly not until the second steel production line is in operation. The discussion in Section 4.3.2.1 in the Final EIS has been revised to clarify the intent to use Hill Annex water in the future – to the extent that it is known; however, it should be noted that, the ultimate need for use of Hill Annex Pit water would be re-evaluated when the monitoring data that is collected during phase 1 of the project (i.e., initial dewatering and start-up operation of production line 1) has been evaluated.

Section 4.2.3.1 and Table 4.2.2 of the Draft and Final EIS include a discussion of possible impacts associated with use of Hill Annex Pit water for Minnesota Steel augmentation.

G-02.20
The commentor suggests that Minnesota regulators consider using 1×10^{-6} (rather than 1×10^{-5}) to characterize possible cancer impacts to subsistence fish consumers in the area of the project.

Long-standing public health practice in Minnesota has been to use an additional lifetime cancer risk of 1 in 100,000 (i.e., 1×10^{-5}) when evaluating potential environmental contaminant impacts on human health. An additional cancer risk of 1 in 100,000 means that if a population of 100,000 people were exposed to a specific concentration of a carcinogen, at most, one case of cancer would be expected to result from this exposure. Because the calculations to estimate cancer risks use a 95 percent confidence interval (as well as other public health protective methods to estimate cancer risk), the true cancer risk is likely to be lower.

To put this 1 in 100,000 risk in perspective, currently one of every two Minnesotans would have some type of cancer by the end of their lifetime (i.e., a cancer risk of 50,000 per 100,000). This is considered the background cancer risk in Minnesota and in the United States over all. The additional cancer risk level used to evaluate exposures to carcinogens released by this facility should be viewed in the context of total background cancer risk.

Note that the application or adoption of an additional cancer risk level is strictly a policy decision. As mentioned previously, the additional lifetime cancer risk level of 1 in 100,000 has been long-standing public health practice in Minnesota, and this policy has been adopted into Minnesota Rules **(**e.g., Water Quality Standards, Minnesota Rules Chapter 7050; Health Risk Limits for Contaminants in Groundwater: Parts 4717.7100 to 4717.7800**).** The current position of the Minnesota Department of Health (MDH) is that any change in Minnesota's additional lifetime cancer risk level would need to be a product of legislative action following stakeholder input. The MDH and Minnesota Pollution Control Agency consider the additional lifetime cancer risk level of 1 in 100,000 to be adequately protective of public health, and therefore, appropriate for the EIS evaluation of risks for subsistence fish consumers.

The Grand Portage Reservation and the proposed project are separated by a considerable distance. The chemical most associated with long range transport is mercury which is not carcinogenic and would not be compared to a cancer risk of 1×10^{-6}. Cancer risks for the subsistence fish consumer were driven by arsenic with a risk estimate of 5×10^{-6} at the property boundary. The properties of this metal lead the MPCA to conclude that potential cancer risks from arsenic emitted from the facility would dissipate with distance from the source.

The subsistence fish consumer risk is added to the residential receptor risks in accordance with EPA guidance. The Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities, 2005, Chapter 4, page 4-25 states that "For evaluating potential exposure routes other than the ingestion of fish, we consider it reasonable to assume that the Fisher and Fisher Child reside at the same exposure scenario locations as the Resident scenario." This approach was followed in the human health risk assessment.

G-02.21
The EIS did consider non-cancer impacts from mercury and all other Chemicals of Potential Interest (COPI) for which toxicity data were available. Table 4.7.20 includes both cancer and non-cancer impacts. Additional data were considered for mercury (variations in fish consumption) in Table 4.7.21 and 4.7.22. Table 4.7.21 and 4.7.22 in fact address only non-cancer impacts for mercury. Results in Table 4.7.20 include fish consumption at varying levels as noted for each receptor under "pathways assessed" in that table.

G-02.22
The USACE is continuing coordination with tribal representatives to define resources in the study area that are used as Traditional Cultural Properties and, therefore, that require protection. Section 6.10 of the Final EIS provides updated information on the status of this process.

G-02.23
The SO_2 and NO_x background concentrations used in Minnesota Steel's Air Quality Analysis were originally derived from ambient monitoring data collected in Northern Minnesota in the 1990's. In an air dispersion modeling analysis, the background concentration represents impacts from facility emissions not included in the model. The general level of SO_2 and NO_x in Northern Minnesota was not expected to be much different now than it was in the 1990's. An examination of available ambient monitoring data in northern Minnesota supports that conclusion. The annual NO_x background concentration shown in the EIS, 12 $\mu g/m^3$, is higher than the mean annual NO_x concentration measured at a representative monitor in Cloquet, Minnesota between 2002 and 2006: 6.8 $\mu g/m^3$. Monitored SO_2 concentrations from Carlton County, collected in 2002 and 2003 (available from the EPA website), are higher than those used in Minnesota Steel's analysis for the one-hour, 24-hour, and annual averaging periods. The mean three-hour monitored value is higher than the value used by Minnesota Steel (25 $\mu g/m^3$ in Minnesota Steel's analysis vs. 37 $\mu g/m^3$). It is important to note that the SO_2 and NO_x background concentrations shown in Table 4.7.9 of the EIS could be increased by several times their current values and the results of the Air Quality Analysis would still comply with the applicable Ambient Air Quality Standards.

G-02.24
After the publication of the Draft EIS, Minnesota Steel modified the air quality permit application to reduce the size of the vacuum degasser boiler to 99 MMBtu/hr. The company identified the natural gas-fired vacuum degasser boiler as an emission unit subject to the Boiler MACT, including a 400 ppm limit on carbon monoxide emissions.

The MPCA will address the compliance demonstration requirements for this emission unit in the Title V air quality permit.

G-02.25
Furnaces would use in-house scrap in addition to DRI. The use of in-house scrap was accounted for in the emission calculations and impact analyses for the proposed project.

G-02.26
The commentor is directed to Section 5.3 Mercury Emissions, Deposition and Bioaccumulation where a discussion on the fate of long range mercury deposition is provided.

G-02.27
Minnesota Steel has committed to using clean fuel technology in operational vehicles and equipment at the facility and this is identified in the EIS (Section 6.9.3). Due to the number of contractors and variety of equipment anticipated to be used during construction of the proposed project it is not possible to commit to using clean fuel technology during the construction. The commentor's point on including this in the record of decision has been noted.

G-02.28
Acenapthylene: A review of IRIS (4/14/2007) shows that acenaphthylene is listed as Class D – not classifiable as to human carcinogenicity. No slope factor or unit risk is presented. Therefore acenapthylene was not evaluated quantitatively for cancer impacts. Acenapthylene was also not evaluated quantitatively for non-cancer health risks because there is no toxicity value available for non-cancer assessment either.

Emissions data were not available to estimate emissions for ferrochromium, ferromanganese and ferrovanadium. The emissions from these Ferro compounds may be partially accounted for in the individual emissions estimated for iron compounds, chromium compounds, manganese compounds and vanadium compounds estimated for the EAF.

G-02.29
Manganese would be emitted from the pellet plant and it was evaluated in the risk assessment using the IRAP risk modeling software. This primarily evaluates potential risks from exposure through consuming foods, including fish that are contaminated with chemical emissions deposited from the facility. All metals assessed assumed 100% bioavailability which is likely an over-estimate of the potential for these chemicals to be taken up into plants that would be consumed.

G-02.30
The data suggested is included in the risk assessment, but the details were not included in the EIS document, in order to minimize the length of the EIS document. Lead was assessed both in IRAP and via the IEUBK model. No background blood lead levels were presented in the assessment. Results were 1.3 – 1.7 micrograms/deciliter (ug/dl) versus a level of concern of 10 ug/dl.

G-02.31
The Draft EIS had previously identified that the Proposed Project may include the construction of an on-site construction debris landfill. This item has since been deleted as an option. Minnesota Steel has indicated that they would use a licensed demolition disposal contractor to properly handle the disposal of construction generated waste.

G-02.32
Section 4.6.2. has been revised for the Final EIS to reflect which waste streams are exempt, based on user knowledge.

Section 4.6.3 of the Final EIS includes completion of a waste characterization study in the identified mitigation measures, to provide a mechanism to test the waste streams to confirm they are non-hazardous. The commentor's point on including this in the record of decision has been noted.

G-02.33
The Draft EIS had previously identified that the Proposed Project may include the construction of an on-site construction debris landfill. This item has since been deleted as an option. Minnesota Steel has indicated that they would use a licensed demolition disposal contractor to properly handle the disposal of construction generated waste.

G-02.34
The US Steel/Minntac and Mittal Steel projects were not listed in Table 5.3.1 for the following reasons.

1) The cumulative impacts assessment assessed historical emissions. The emission increase associated with the U.S. Steel/Minntac project occurred in the 1990s and these emissions are now part of the historical emissions. In addition, these emissions are also reflected in the existing facility's estimated emissions. Any local effects from these emissions are now part of background concentrations measured in precipitation, calculated deposition, and/or measured in fish. Therefore, because the scope of the analysis included an assessment of historical emissions, the U.S. Steel/Minntac mercury emissions are included in the cumulative impacts analysis although they are not directly identified.

2) The cumulative impact assessment for mercury included those projects with identified mercury emissions. The Mittal Steel project involves opening a new taconite ore pit because ore reserves are being depleted in the existing pit. Activities from the existing pit would transition to the new pit and operations at the new pit would replace the operations and emissions from the existing pit. However, the new pit does not create additional activities or emissions. The new pit does not increase taconite ore processing emissions. The typical activities associated with mine pit operations such as overburden removal and ore hauling is not expected to release mercury. Because the Mittal Steel project involves opening a new mine pit and does not create new or increased mercury emissions, the project was not included in the cumulative impacts analysis.

In summary, neither of these projects is planned to increase annual emissions over the time period of the cumulative impacts assessment period

G-02.35
The blacked out version of Table 5.4.1 experienced by the commentor appears to be an isolated occurrence – no other similar comments were received. The table is reproduced in the Final EIS document.
G-02.36
Comment noted. The Final EIS includes this correction in the Executive Summary and in Section 4.7.2.1.2.

Garrett Ous - Itasca Co Land Commissioner
G-03
Minnesota Steel's Ambient Air Quality boundary has been relocated north of the Mesabi Trail between Calumet and Nashwauk (see revised Figure 6.11.1 in the Final EIS). The ambient air modeling indicated that receptors along the Mesabi Trail showed attainment with the ambient air quality standards. Therefore, the Mesabi Trail would continue to be open for public use in the Minnesota Steel project area. Where appropriate along the Mesabi Trail, Minnesota Steel would post no trespassing signs and if necessary unpaved roads or trails leading into Minnesota Steel property would be bermed or fenced to prevent unauthorized access to Minnesota Steel property.

Wayne Dupuis; Fond Du Lac Environmental Program Manager

G-04.01

The air quality analysis for the Minnesota Steel EIS followed existing Federal Land Managers' AQRV Workgroup (FLAG) guidance. Since release of the Draft EIS, the MPCA has worked with Minnesota Steel and the Federal Land Managers to analyze impacts and propose mitigation measures for Minnesota Steel's potential impacts on visibility in Class I areas. The updated mitigation measures proposed for the Minnesota Steel project are described in the Summary of Mitigation Measures in Chapter 3 and discussed in Section 4.7 of the EIS. The updated visibility analysis described in Section 4.7 of the Final EIS indicated that the proposed project with mitigation would have no adverse impact on visibility in Class I areas.

Regarding regional visibility trends, the State of Minnesota is working to address concerns regarding visibility impairments to Minnesota's Class I areas. Minnesota will continue to work with neighboring states on issues related to regional haze and visibility through the Central Regional Air Planning Association (CENRAP), of which Minnesota is a member, and the Lake Michigan Air Directors Consortium (LADCO). As part of Minnesota's long term strategy for reducing regional haze, the state is working with the Federal Land Managers to set an emission reduction target for Northeast Minnesota, due to the proximity of air emissions sources to Class I areas. The emissions target is based on those sources' share of the visibility improvement needed to achieve regional haze goals, although additional reductions from sources outside Minnesota may also be needed. Planned analyses of visibility conditions and emissions in the future, especially as compared to the emissions reduction target, will include emissions from the proposed Minnesota Steel project. MPCA will continue to work with the Federal Land Managers on the development of the State Implementation Plan (SIP).

G-04.02

The State of Minnesota was also concerned with the potential for visibility impairments to Minnesota's Class I areas due to the proximity of the proposed Minnesota Steel project. The MPCA, Minnesota Steel, and the Federal Land Managers developed an appropriate methodology to analyze potential impacts on visibility in Class I areas and propose mitigation. The air quality analysis followed existing Federal Land Managers' AQRV Workgroup (FLAG) guidance. The current CENRAP and MRPO information was noted by the commentor as being something that should have been incorporated into the analyses. The information could not be utilized since it is not yet finalized and, therefore, was not available when the Minnesota Steel modeling was initiated. However, preliminary results of the new data indicate that the assumptions regarding contributions from out-of-state sources are within the range of what was assumed for the Minnesota Steel EIS analysis.

Minnesota continues to work with neighboring states on issues related to regional haze and visibility through the Central Regional Air Planning Association (CENRAP), of which Minnesota is a member, and the Lake Michigan Air Directors Consortium (LADCO). As part of Minnesota's long term strategy for reducing regional haze, the state is working with the Federal Land Managers to set an emission reduction target for Northeast Minnesota, due to the proximity of air emissions sources to Class I areas. The emissions target is based on those sources' share of the visibility improvement needed to achieve regional haze goals, although additional reductions from sources outside Minnesota may also be needed. Planned analyses of visibility conditions and emissions in the future, especially as compared to the emissions reduction target, will include emissions from the proposed Minnesota Steel project. MPCA will continue to work with the Federal Land Managers on the development of the State Implementation Plan (SIP).

G-04.03

Since the Draft EIS was published, Minnesota Steel refined the visibility analysis in response to Federal Land Managers comments. In addition, representatives of Minnesota Steel and MPCA met with the Federal Land Managers to review the Class I visibility analysis results and agree on mitigation for any potential impacts. Section 4.7.2.2.2 of the Final EIS presents the results of the additional visibility analysis and mitigation.

With respect to the analysis summarized in Table 4.7.14, the modeling used in the analysis used hourly meteorological data from a three-year period. Therefore, it included all seasons. The 'worst case' results for each year are presented in Table 4.7.14.

G-04.04

Since the Draft EIS was published, Minnesota Steel refined the visibility analysis in response to Federal Land Managers comments. In addition, representatives of Minnesota Steel and MPCA met with the Federal Land Managers to review the Class I visibility analysis results and agree on mitigation for any potential impacts. Minnesota Steel's mitigation measures would offset any predicted adverse impacts on visibility.

The visibility cumulative impacts assessment in Section 5.4 did not include modeling because 1) the combined increases and decreases in emissions listed in Table 5.4.1 indicates that overall, emission of pollutants related to visibility impacts would decrease over time and 2) to model cumulative impacts, a regional model would need to be used which is beyond the feasible scope of this EIS and which, based on the projected emission decreases over time, would not likely provide additional substantive information that would inform the Minnesota Steel EIS or permitting process.

G-04.05
The refined cumulative increment analysis in the Final EIS (and in the May 2007 Air Permit application update) includes the sources listed in the comment, as part of the inclusion of all sources within 300 kilometers of the proposed project. The refined analysis summarized in the Final EIS and permit application also included NO_x and SO_2 for secondary PM formation as well as a review of ambient monitoring data for inclusion in the refined modeling, as suggested by the commentor. The results of the refined analysis indicate that the increment would not be consumed. With respect to future growth in utility emissions, PSD regulations for increment modeling do not require an assessment of future emissions that are not related to the project or for which an air permit application has not been submitted. Further, it should be noted that CAIR will cap emissions and therefore the combined future growth in utility emissions would have to stay within the cap emission levels.

G-04.06
The proposed project has incorporated a water recycling/reuse system (no discharge of scrubber blowdown and contact cooling water) and a seepage collection system around the tailings basin to avoid a discharge to a listed water.

The MPCA plans to continue its mercury reduction efforts by capitalizing on opportunities at existing sources at which source reduction, pollution prevention and controls can reduce mercury emissions. The MPCA's statewide approach to the mercury TMDL is a first for the nation. While other states have tackled the mercury-pollution problem by having a separate TMDL for each impaired water, the MPCA is taking a statewide approach because approximately 90% of mercury comes from outside the state and atmospheric deposition of mercury is relatively uniform across the state. The MPCA's mercury TMDL goal is to reduce mercury emissions from human activities within the state by 93 percent from 1990 levels. Minnesota has, through both voluntary and regulatory approaches, reduced in state mercury emissions by approximately 70% since 1990. The state's mercury TMDL program and the voluntary mercury reduction strategy are elements of the MPCA's efforts to drive down mercury emissions. Even with short-term increases from sources such as the proposed project, the long-term trend will be downward.

G-04.07
Minnesota's SO_2 emissions have decreased over the same time period that emission reductions have occurred in such states as Illinois, Indiana, Ohio, Missouri, and Tennessee. Therefore, it is likely that the past proportionality of Minnesota's SO_2 emissions and expected contribution to acid deposition in Minnesota compared to SO_2 emissions from other eastern states and their contribution to acid deposition in Minnesota would be similar in the future. i.e., the amount of in-state versus out-state contributions have proportionally stayed about the same as described in Section 5.2.1.2 of the EIS. It should be noted that the overall reduction in generation of N and S air pollutants is more important than the proportional state vs. national production of these compounds, especially since SO_2 and NO_x are long-range transport pollutants.

G-04.08
The EIS statement that Minnesota's water bodies are well protected against acid deposition impacts is based on the following: In Minnesota, the most sensitive ecosystems to acidification are small headwater seepage lakes that receive the majority of their water from precipitation falling directly on the lake surface and have acid neutralizing capacities (ANC) less than 50 microequivalents per liter (µeq/L). Analysis performed by the MPCA (1985) indicated that while the seepage lakes have low ANC, they had sufficient inherent buffering capacity to withstand then-current acidic inputs with no adverse impacts expected to occur. Numerous studies conducted in the U.S. and elsewhere since the mid-1980s has not changed this effects threshold.

In summary, the MPCA's analyses found that Minnesota's critically sensitive seepage lakes (ANC < 50 µeq/L) in the Northern Lakes and Forest Ecoregion were not in immediate danger of being acidified (MPCA 1985). This information was incorporated into the MPCA's determination that a standard of 11 kg/ha/year wet sulfate deposition would protect the most sensitive Minnesota lakes (i.e., seepage lakes) from acidification. Overall, Minnesota's terrestrial ecosystems have more buffering capacity than aquatic systems and are less sensitive to acid deposition (MPCA 1985). Some of Minnesota's sandy outwash soils and shallow soils over bedrock have low ANC. However, separate analyses conducted by Bloom and Grigal (1983) and Grigal (1984) indicate that even these low ANC soils have sufficient inherent buffering capacity to withstand then-current levels of acid deposition.

These ANC characteristics have not likely changed since Minnesota adopted the acid deposition standard in 1986, when sulfate deposition was higher than current monitored levels. The current wet sulfate deposition of 5.87 kg/ha/year in the Central Lakes and Forest Ecosystem is below the state standard of 11 kg/ha/year and indicates that no adverse impacts from acid deposition are expected in this region. Reasonably foreseeable regulatory actions indicate that additional reductions in SO_2 emissions would likely occur in Minnesota and other eastern states (NAPAP 2005). These additional reductions in SO_2 emissions indicate that it is unlikely for wet sulfate deposition to increase significantly in the future in Minnesota. Therefore, it can be concluded that Minnesota's aquatic and terrestrial ecosystems are well protected against acid deposition impacts both from an inherent buffering capacity standpoint and from the current and expected future relatively low levels of acid deposition occurring in the state.

With respect to methylation of mercury in aquatic ecosystems, it is acknowledged that sulfate reducing bacteria that provide buffering capacity to lakes against acid deposition play an important role in mercury methylation. However, mercury methylation depends on the presence of multiple interacting reactants, including mercury, sulfate, reduced carbon (organic matter), and a suitable environment, including anoxic conditions and a suitable temperature. Each of

those variables can limit methylation, and probably do in specific instances. As the commentor noted, more study on methylation of mercury in water bodies is needed; however, it is a complex issue that will require extensive study over time – so additional study is beyond the feasible scope of this EIS.

G-04.09
Footnotes have been added to Table 4.7.12 in the Final EIS to clarify the findings.

G-04.10
The scoping process defined the projects to be included in each of the cumulative impacts analyses for the Minnesota Steel EIS, based on the criteria that 'foreseeable future projects' should include only projects that are reasonably assured of moving forward, i.e., those that were already in environmental review or in permitting. Based on these criteria, the status of each of the projects listed in the comment was reviewed, and none were found to be 'reasonably foreseeable.'

G-04.11
MPCA and EPA have established guidelines for BACT economic viability decisions that are applied consistently across all industries.

G-04.12
Comment noted. The integrated design of this facility, fuel choices and identified mitigation options reduce impacts both within and beyond Minnesota.

G-04.13
The 105 gallons per day was from a previous estimate and was incorrectly reported in Attachment 6A to the NPDES/SDS Permit Application. The correct seepage rates of water from the tailings basin to shallow groundwater below the tailings basin were calculated using actual porosity of the material in the current basin and the anticipated head of the future tailings basin. The 149 gpm represents the seepage during the first five years of operation, 372 gpm years 6 through 10 and the 758 gpm represents the seepage associated with the size and elevation of the tailings basin in years 11 to 20.

Regarding the dissolved solids loading and estimated concentrations in the tailings basin, the Draft and Final EIS (Table 6.7.1) and the November 2006 analysis of Revised Dissolved Solids Modeling of Tailings Basin (including Table 8: Expected Water Quality of Tailings Basin Water) included in the December 2006 State Disposal System (SDS) Permit Application submittal contained the correct values. Attachment 2A of the NPDES/SDS permit application contained incorrect values. The corrected Attachment 2A concentrations were transmitted to MPCA staff on April 12, 2007 (see listing in Appendix I of the Final EIS).

With the exception of total dissolved solids (TDS), the estimated water quality within the tailings basin (including sulfate) is expected to meet primary and secondary drinking water standards, which can be used as guidance in assessing potential impacts to groundwater quality. It should also be noted that the water quality data provided in Table 6.7.1 of the Draft and Final EIS is for water in the tailings basin. It is likely that some of the TDS would be reduced as water moves through the bottom of the tailings basin and through the soil material prior to reaching the ground water table. Groundwater monitoring would be included in the SDS permit for the tailings basin operation in order to protect beneficial present and future uses in accordance with Minn. R. 7060.0500 (Underground Waters – Nondegredation).

G-04.14
The analysis of cumulative impacts to threatened and endangered plant species, wetlands, and wildlife corridors included assessment of past, as well as foreseeable future, impacts, as described in Chapter 5.0 of the Draft and Final EIS.

In addition, it should be noted that the Minnesota mining regulations emphasize use and disturbance due to mining be located at the location of past disturbances, prior to disturbing new areas; thereby, minimizing new disturbances and additional cumulative impacts.

G-04.15
The reasonably foreseeable future projects included in the mercury cumulative impact analysis performed for the EIS did not include Mittal Steel or U.S. Steel-Minntac air emissions. The mercury cumulative impact analysis focused on foreseeable new air emission sources (including the proposed project). Since neither Mittal Steel nor U.S. Steel-Minntac were proposing to change the air component of their plant operations and the mercury cumulative analysis focused on foreseeable new air sources, they were not included in the analysis. Mercury related air emission from Mittal Steel and U.S Steel Minntac were considered however as part of the existing background and total statewide mercury emissions (Statewide emissions of 3,638 pounds/year from the MPCA's "2005 Mercury Reduction Progress Report to the Legislature".) upon which conclusions of the cumulative analysis were based.

As summarized in the draft EIS (Section 5.3) and as identified in Minnesota's Mercury TMDL that was recently approved by EPA, mercury is a long-range transport pollutant. A majority of the mercury being deposited in Minnesota is from air emission sources outside of the state. For those projects evaluated in the draft EIS (Section 5.3), the findings indicate that it is unlikely for mercury deposition to increase due to the proposed actions (reasonably foreseeable projects and regulatory actions) (Table 5.3.2) Section
5.2 (Acid Deposition) of the draft EIS indicates that wet sulfate deposition has decreased since the mid1980s and that it is unlikely that sulfate deposition will increase significantly due to the proposed actions.

As discussed in draft EIS Section 5.3.1.3.2 regarding the mercury methylation and bioaccumulation, "… Due to the importance of sulfate-reducing bacteria in mercury methylation, it may be possible to obtain reductions in methylmercury formation by decreases in sulfate deposition. Sulfate deposition trends in Minnesota and expected future emissions of sulfur dioxide (SO_2), on a local (four-county area), regional (Upper Midwest) and national basis are expected to decrease. …". The two findings that mercury deposition and sulfate deposition were not likely to increase significantly contributed to the conclusions in Section 5.3.2. that the proposed actions "… do not appear to have the potential to significantly cause or contribute to mercury deposition and/or bioaccumulation in fish in northeast Minnesota lakes or streams. …", including the St. Louis River watershed.

The intent of the mercury cumulative impacts study for the EIS was to assess mercury and related potential methylation impacts from air pollution – assessment of potential cumulative impacts from sulfate in industrial water discharges (such as from Mittal and Minntac) was not included in the scope of the assessment. It was logical to include the Arrowhead region in the cumulative impacts assessment as they are local and site-specific discharges within the St. Louis River watershed. Minnesota's recently approved TMDL identifies that atmospheric deposition is the most important contributor to surface waters in Minnesota, particularly those lakes and streams in northeastern Minnesota. Point-source discharges are not as critical for lakes and rivers in remote areas. Due to the importance of atmospheric deposition of mercury it seems most appropriate for the cumulative impact analysis to focus on potential atmospheric deposition from the proposed projects.

An additional consideration for not specifically evaluating direct discharges in the St. Louis River water is the fact that Minnesota Steel's proposed project is in the Mississippi River watershed. In addition, Minnesota Steel is planning to operate the tailings basin in a recycle/re-use management plan and is not expected to have a direct discharge of tailings basin water. Therefore, under EIS guidance, there was no demonstrated need for the project to assess the potential cumulative impacts of mining discharges to the Swan Lake/Swan River watershed or the larger Mississippi River watershed. In addition, because the Minnesota Steel project is within the Mississippi River watershed, there was no demonstrated need for the project to assess the potential for cumulative surface water discharges within the St. Louis River watershed.

G-04.16
The USACE is continuing coordination with tribal representatives to define resources in the study area that are used as Traditional Cultural Properties and, therefore, that require protection. Section 6.10 of the Final EIS provides updated information on the status of this process.

Bradley E. Frazier; Grand Portage Band of Chippewa Environmental Department

G-05.01
The commentor is directed to Section 4.7.2.4 (Human Health Screening Risk Assessment) and 4.7.2.5 (Ecological Risk Assessment) for information relating to mercury. These assessments indicate that the additional mercury added by the proposed project should not result in a detectable increase.

The human health screening risk assessment assessed the 'worst case' impacts from transport and consumption mechanisms of all pollutants analyzed, including mercury. The study methodology was developed to assess the highest impacts for those pathways of exposure nearby the facility where the highest air concentrations and resultant deposition rates occur. With respect to the specific issue raised in the comment, the impacts were modeled in a way that accounts for the uptake of mercury by foliage. It is understood that in montane areas of New England it is believed that deposited mercury somehow bioaccumulates to elevated concentrations in a particular species of insectivorous bird (Bicknell's thrush), but such a phenomenon has not been documented in the Great Lakes area or, in particular, for ruffed grouse. Please refer to Section 4.7.2.4 for more discussion of the human health risk assessment and results.

G-05.02
Critical pollutant loadings for sulfate and nitrate, and target emissions for SO_2 and NO_x, have been established for Minnesota. In addition, specific pollutant loadings for sulfur and nitrogen deposition have been set for the Class I areas in Minnesota.

A statewide critical load for wet sulfate deposition in Minnesota was set at 11 kilograms per hectare per year (kg/ha · yr) in 1986 through adoption of the Acid Rain Rule (Minn. Rule parts 7005.4010 – 7005.4050). Currently, wet sulfate deposition is estimated to be approximately 5.87 kg/ha/yr at the Marcell Experimental Forest (site M16, National Atmospheric Deposition Program) just to the north and west of Nashwauk. Wet sulfate deposition monitored at other locations in Minnesota is also below the 11 kg/ha · yr standard. As discussed in Section 5.2 of the Draft and Final EIS, the cumulative impact analysis for Ecosystem Acidification concluded that the Minnesota Steel project, and other reasonably foreseeable projects and actions, would likely not significantly increase wet sulfate deposition.

Critical loads for sulfur and nitrogen deposition have also been established for the Class I areas in Minnesota, the Boundary Waters Canoe Area Wilderness (BWCAW), and Voyageurs National Park (VNP). These critical loads are for individual project impacts. Section 4.7.2.2.2 of the Final EIS describes the deposition thresholds and modeled deposition impacts for the proposed Minnesota Steel project.

The Acid Rain Rule also capped statewide SO_2 emissions at 194,000 tons per year (tons/year). Section 5.2 of the EIS indicates that total statewide SO_2 emissions are currently estimated to be approximately 160,000 tons/year, with approximately 82% (130,000 tons/yr) from point sources. Section 5.2 of the EIS concludes that the cumulative emissions from the Minnesota Steel project and other reasonably foreseeable projects and actions are expected to result in an overall decrease in SO_2 and NO_x emissions. In particular the Clean Air Interstate Rule (CAIR) caps SO_2 and NO_x emissions in Minnesota at 38,000 tons/yr and 26,000 tons/yr, respectively, by 2015.

In summary, the EIS indicates that the potential sulfur and nitrogen emissions from the Minnesota Steel project and the other reasonably foreseeable projects would not result in an exceedance of critical deposition loads and that potential impacts from nitrogen and sulfur deposition are not expected to be significant.

G-05.03
Table 4.7.12 has been updated to include the correct DAT for Eastern parks and refuges.

G-05.04
The Draft EIS section referenced in the comment (including page 4-117, Table 4.7.21) does not provide percentage increase levels above existing values. It provides an increment analysis of mercury impacts from the project alone. Table 4.7.22 does indicate a hazard index of 1 for subsistence fishing at Snowball Lake. This result is only applicable to Snowball Lake. Other lakes in the area should be impacted at lower levels. Note that this data is updated in the Final EIS to reflect the final HHSRA updated analysis.

The discussion on this topic in the Draft and Final EIS states that mercury was evaluated using a model developed by the MPCA and designed to be a conservative estimate of exposure to mercury via fish consumption. The model assesses mercury deposition and contamination of fish at four separate water bodies. The results indicate that mercury deposition from emissions from the plant would contribute to a hazard quotient or incremental risk for subsistence fish consumers ranging from 0.15 to 0.19 depending on the lake assessed which does not exceed the health guideline of 1.0.

G-05.05
Chapter 3 of the EIS provides a summary of mercury mitigation measures (Table 3.1) In Table 3.1 the commentor is directed to rows 4.3 (Physical Impacts: Non Wetland), 4.5 (Wastewater/Water Quality) and 5.3 (Cumulative Mercury) for mitigation measures reducing the potential impact of mercury on Swan Lake.

G-05.06
The scoping process defined the projects to be included in each of the cumulative impacts analyses for the Minnesota Steel EIS, based on 1) the geographic extent for cumulative impact analysis, as determined for each subject area and 2) the criteria that 'foreseeable future projects' should include only projects that are reasonably assured of moving forward, i.e., those that were already in environmental review or in permitting. Based on these criteria, the status of each of the projects listed in the comment was reviewed with respect to the geographic limits defined for each cumulative impacts study and the definition of 'reasonably foreseeable,' and the EIS analyses were found to include all projects within these criteria.

G-05.07
As described in Section 6.7 in the Draft and Final EIS, no substantive impacts to groundwater quality or groundwater levels are anticipated to result from the proposed Minnesota Steel project.

G-05.08
The USACE is continuing coordination with tribal representatives to define resources in the study area that are used as Traditional Cultural Properties and, therefore, that require protection; especially those that may be affected from past and reasonably foreseeable future cumulative impacts. Section 6.10 of the Final EIS provides updated information on the status of this process.

G-05.09
As discussed in Section 4.2 of the Final EIS, if an outside source of water is necessary for augmentation, then Minnesota Steel has stated that they would seek to obtain a water appropriations permit for the use of the Hill Annex Pit water, and MNDNR staff concur that the proposed future use of Hill Annex water is the logical source for augmentation water. The need for additional augmentation water, if it is needed, would likely occur some time after Pit 5 dewatering is complete, and possibly not until the second steel production line is in operation.

Augmentation flows to Oxhide and Snowball Creek are proposed in the EIS and would be part of the proposed action. The proposed flows are acknowledged to be smaller than the existing flows. The subsequent reduction in flows to Swan Lake has been analyzed in terms of physical impacts (Draft and Final EIS Section 4.3) and water quality (Draft and Final EIS Section 4.5) and mitigation proposed where appropriate. Snowball augmentation flows are proposed to average about 70 percent of the flow diverted from the Snowball Lake watershed; the periods of zero augmentation flow proposed during dry years reflects the existing condition which includes extended periods of zero inflow to Snowball Lake. Snowball Lake water level monitoring would be included in the appropriations permit conditions, to provide data to be used to evaluate if there is a need to change augmentation rates.

G-05.10
Swan, Snowball and Oxhide Lakes are not listed as impaired waters for nutrients or dissolved oxygen. Due to the very low nutrients and low oxygen demand in pit water (from Hill Annex, Pit 5 or Pits 1&2), there is no danger of causing such listings.

Regarding mercury, the water in the Hill Annex Mine Pit meets surface water quality standards (see Excelsior Energy NPDES permit application; available on the Minnesota Public Utilities website: http://energyfacilities.puc.state.mn.us/documents/16573/Supplement-Part-1(Sec1-1_1-8).pdf). Table 1.8-20 on page 204 of 233 of the Excelsior permit application lists the water quality in the Hill Annex Mine Pit. The Hill Annex Mine Pit mercury concentration is less than that in Pit 5. Therefore, use of Hill Annex Mine Pit water for augmentation would tend toward a decrease in concentration in Oxhide Lake and reduced mercury loading in Swan Lake, compared to existing Pit 5 outflows.

Sulfate (which is not regulated by Class 2B surface water quality standards) concentrations in the Hill Annex Mine Pit are about twice those found in Pit 5. Use of Hill Annex Mine Pit water would likely cause an increase in sulfate concentrations in Snowball and Oxhide Lakes but would have a small effect on Swan Lake. Swan Lake internal loading of phosphorus was shown to be insensitive to sulfate concentrations in the Swan Lake Nutrient Study. Sulfate is already present in all three lakes.

Current water balance estimates for the project indicate that an additional source of water would likely be needed to meet total stream augmentation needs – the additional future source has been identified as the Hill Annex Pit (see Section 4.2.3.1 of the Final EIS). The MNDNR is unaware of the 'three other entities' requesting water allocation from Hill Annex referenced in the comment. As discussed in Section 4.2.3.1 of the EIS, there is sufficient water available from Hill Annex to accommodate the potential future augmentation needs of Minnesota Steel, even in extreme drought conditions similar to that of the 1930s dust bowl.

G-05.11
Snowball and Oxhide Lakes would not be in the flow path of seep water from the tailings basin that is transmitted to the surficial groundwater aquifer, so the commentor's recommendation for in-lake monitoring to detect potential tailings basin seep impacts would not be necessary.

In addition, monitoring of in-lake water quality in Swan Lake would not be warranted with respect to potential impacts from nutrients, sulfate and mercury in the tailings basin seep water. The tailings basin water chemistry balance shows an average phosphorus concentration in the tailings basin that would be less than the average concentration in surface runoff to Swan Lake. Phosphorus is prone to adhere to tailings, which would likely further reduce the phosphorous concentration in the seep water that reaches the ground water, further reducing the mass of phosphorus added to Swan Lake by tailings basin water loss to the groundwater compared to surface water discharges, for example.

As discussed in the Swan Lake Nutrient Study completed for the EIS (see listing in Appendix I of the EIS), sulfate from the tailings basin loss to groundwater is expected to reach Swan Lake over time. However, the additional sulfate loading from the tailings basin would cause small increases in Swan Lake sulfate concentrations, relative to the existing sulfate concentrations.

Attachment 2A of the NPDES/SDS permit (April 12, 2007 update – see Appendix I) identifies the mercury concentration of 2.0 ng/L as typical of tailings basin seep water. This mercury concentration is less than surface water quality standards and substantially below drinking water standards. At this concentration, and with the low inflow volume from the tailings basin groundwater loss relative to the total Swan Lake inflow volume, the effect the tailings basin on Swan Lake mercury concentrations would not be detectable.

It is unlikely that contaminants that may be introduced into local water bodies as a result of emissions from the Proposed Project would be detectable in water quality monitoring. The potential effects of air pollutants on water quality were modeled in the human health risk assessment and the ecological risk assessment analyses (Sections 4.7.2.4 and 4.7.2.5, respectively in the Draft and Final EIS); and no potential substantive impacts were identified in either of the analyses.

G-05.12
Analysis of cumulative wetland impacts in the EIS was performed consistent with the scoping decision document. The scoping documents describe the rationale for limiting assessment of cumulative wetland impacts to the Upper Swan River watershed. The rationale includes a watershed-based approach, since several of the primary functions performed by wetlands are directly related to watershed processes. The 3,000 acres of past wetland loss described in the EIS cumulative impacts analysis included Butler Taconite as well as other previous mining operations (including Keewatin Taconite (National Steel) and past natural ore operations) within the Upper Swan River watershed.

G-05.13
The commentor is correct in their understanding that the issue of financial assurance that adequate money would be available for post-mining reclamation is addressed by MNDNR as part of the Permit to Mine review/approval process. When needed, a performance bond or other security or assurances, acceptable to the MNDNR, is required to be posted

for the project by the Proposer prior to granting the Permit to Mine. Financial records submitted by the Proposer with their permit application are available for the public to review.

Catherine Mclynn/Itasca County

G-06.01

Comment and clarification noted. Updated information on the rail line status is provided in Section 6.1.3.2 of the Final EIS.

G-07.01

Minnesota Steel understands the City of Nashwauk is in the process of obtaining land adjacent to O'Brien Lake/Blue Lake for the purpose of constructing a public water access to O'Brien Lake/Blue Lake. The proposed Minnesota Steel project would not affect public access to the lake for on-water activities; however, Minnesota Steel would post their land on the shores of O'Brien/Blue Lake to prevent trespassing.

Dave Marshall

G-08.01

The 'Alborn Trail' was indicated as the 'Greenway Trail' in the Draft EIS text and Figure 6.11.1 – the Final EIS includes references to the trail as the Alborn Trail. The Alborn Trail, which passes through Pengilly, north of Swan Lake, would not need to be rerouted as a result of the proposed project. Section 6.11.2 of the Final EIS provides additional information on this issue.

G-08.02

Minnesota Steel is continuing to work with the snowmobile clubs on the re-routing of sections of the Lawron Trail, including the trail segment east of the tailings basin south of Highway 169. Minnesota Steel is cooperating with the MN DNR and Itasca County Trails by allowing the use of the land at the project boundary. Figure 6.11.1 in the Final EIS shows the alignment of the proposed Lawron Trail re-route, based on the information available at the time of the Final EIS publication.

G-08.03

MNDNR will take the lead in coordinating environmental review for Grant-In-Aid trail relocations associated with the Minnesota Steel project, consistent with state regulatory requirements, once the re-route alignments are defined.

U. S. Department of Interior

G-09.01

Estimates for an expanded list of tailings basin water constituents are included in Attachment 2A to the NPDES/SDS Permit Application [a revised Attachment 2A was transmitted to MPCA on April 12, 2007; see listing in Appendix I of the Final EIS]. The concentrations in Attachment 2A indicated that none of the constituents noted in the comment are expected to exceed primary or secondary drinking water quality standards with the exception of manganese, which exceeds the secondary standard. Secondary standards are guidelines that regulate contaminants that may cause cosmetic or aesthetic effects in drinking water. Manganese will be included in the SDS permit as a monitored parameter in the groundwater wells surrounding the tailings basin.

Brian Redshaw/City of Hibbing

G-10

The Commentor's support for the proposed project is noted.

Rick Wolff/City of Hibbing

G-11

The Commentor's support for the proposed project is noted.

David Lotti/City of Marble

G-12

The Commentor's support for the proposed project is noted.

Dept. of Employment and Economic Development

G-13

The Commentor's support for the proposed project is noted.

Joe Arthurs/Hibbing Public Schools

G-14

The Commentor's support for the proposed project is noted.

Robert Belluzzo/Hibbing Public Schools

G-15

The Commentor's support for the proposed project is noted.

David Lotti/Western Mesabi Mine Planning Board

G-16

The Commentor's support for the proposed project is noted.

INTEREST GROUPS

ATV Assoc. of Minnesota

IG-01.01
The Alborn Trail that passes through Pengilly, north of Swan Lake, would not be rerouted. Section 6.11.2 of the Final EIS provides additional information on this issue.

IG-01.02
The existing Lawron snowmobile trail within the Project Boundary east of O'Brien Lake (at the US Steel boundary) would be re-routed to the east for safety reasons. Minnesota Steel is cooperating with the MNDNR and Itasca County by allowing the use of the land at the project boundary. Figure 6.11.1 in the Final EIS shows the alignment of the proposed Lawron Trail re-route, based on the information available at the time of the Final EIS publication.

Itasca Economic Development Corporation
IG-02
The statistics provided by the commentor have been referenced in Section 6.14.2 in the Final EIS.

Jack Thronson/David Mlakan, USW 2660
IG-03.01
The MNDNR Is the lead state agency for the Minnesota Steel environmental review process, in accordance with Minnesota Rules part 4410.4408, subpart 8C. However, enforcement of environmental rules and regulations for construction and operation of the project will be the responsibility of various federal, state and local agencies (consistent with their regulatory authority) including, but not limited to, USACE, MPCA, MNDNR, MDH, etc.

Burle Ives, Itasca Co Trails Task Force

IG-04.01
The potential impacts to the Mesabi Bike Trail from the proposed road and railroad infrastructure have been added to Table 6.13.1 in Section 6.13 of the Final EIS.

IG-04.02
The existing Lawron recreational trail within the Proposed Project Boundary would be re-routed outside of the Project Boundary for safety reasons. Minnesota Steel is cooperating with the MN DNR and Itasca County Trails by allowing the use of the land at the project boundary. Figure 6.11.1 in the Final EIS shows the alignment of the proposed Lawron Trail re-route, based on the information available at the time of the Final EIS publication.
The Alborn Trail that passes through Pengilly, north of Swan Lake, would not be rerouted.
MNDNR will take the lead in coordinating environmental review for Grant-In-Aid trail relocations associated with the Minnesota Steel project, consistent with state regulatory requirements, once the re-route alignments are defined.

IG-04.03
Post-mining/post-reclamation use of the Minnesota Steel property would be addressed in the Mine Closure Plan. Potential post-reclamation uses that would be considered include wildlife habitat as well as the recreational uses suggested by the commentor.

Darren Vogt, David Woodward; 1854 Authority

IG-05.01
Mercury and other metals were evaluated in the Human Health Risk Screening Assessment (HHSRA) conducted as part of this EIS. The HHSRA evaluated potential health risks from inhalation of metal emissions as well as exposure pathways from ingestion of foods that could come in contact with deposited metal emissions. This includes exposure from consuming fish that is exposed to emissions deposited in area lakes. Risk estimates were calculated at or below the acceptable health guidelines for these exposure pathways.
The commentor is directed to Section 4.7.2.4 (Human Health Screening Risk Assessment and 4.7.2.5 (Ecological Risk Assessment) for information relating to mercury and other toxic pollutants.

IG-05.02
The proposed project has incorporated a water recycling/reuse system (no discharge of scrubber blowdown and contact cooling water) and a seepage collection system around the tailings basin to avoid a discharge to a listed water.

The MPCA plans to continue its mercury reduction efforts by capitalizing on opportunities at existing sources at which source reduction, pollution prevention and controls can reduce mercury emissions. The MPCA's statewide approach to the mercury TMDL is a first for the nation. While other states have tackled the mercury-pollution problem by having a separate TMDL for each impaired water, the MPCA is taking a statewide approach because approximately 90% of mercury comes from outside the state and atmospheric deposition of mercury is relatively uniform across the state. The MPCA's mercury TMDL goal is to reduce mercury emissions from human activities within the state by 93 percent from 1990 levels. Minnesota has, through both voluntary and regulatory approaches, reduced in state mercury emissions by approximately 70% since 1990. The state's mercury TMDL program and the voluntary mercury reduction strategy are

elements of the MPCA's efforts to drive down mercury emissions. Even with short-term increases from sources such as the proposed project, the long-term trend will be downward.

IG-05.03
Following completion of the Phase I cultural resources study, a copy of the report will be provided to the 1854 Treaty Authority, and appropriate tribal consultation will be performed.

Ronald Rich, Swan Lake Association

IG-06.01
The purpose of the EIS process is to evaluate potential environmental impacts and potential mitigation measures, to inform the permit review and approval process (see the 'Purpose and Need for EIS' Section of the Executive Summary of the Draft and Final EIS). The 'permits' referenced by the commentor (in their reference to the 'inconsistencies between the permits and the Draft EIS') are assumed to be the permit application documents submitted by the Project Proposer. No permits have been issued for the project yet, nor can they be issued until the environmental review process is complete. Specific examples of the 'inconsistencies' noted in the comment were not provided by the commentor.

IG-06.02
The evaluation of environmental impacts contained in the Draft EIS (and Final EIS) reflects the proposed project, as defined in the current permit applications submitted by the Project Proposer. The proposed project has not changed between the Draft and Final EIS documents, although some mitigation measures have been refined. The public was provided with an opportunity to review and comment on the Draft EIS pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4347 and Minnesota Rules, Chapter 4410. The comment period for the Draft EIS was open from February 12, 2007 to April 2, 2007.

IG-06.03
Section 1.1 of the Draft and Final EIS discusses the mine production period studied in this EIS, and provisions for assessing impacts beyond this production period.

IG-06.04
Reclamation would be required, consistent with state regulations for taconite and iron ore mineland reclamation (Minnesota Rules 6130), as noted in Section 6.15 of the Draft and Final EIS. The issue of financial assurance (that adequate resources would be available for post-mining reclamation) is addressed by MNDNR as part of the Permit to Mine review/approval process. When needed, a performance bond or other security or assurances, acceptable to the MNDNR, is required to be posted for the project by the Proposer prior to granting the Permit to Mine.

IG-06.05
Comments received during the public comment period for the Scoping EAW/draft scoping decision document and the Draft (and Final) EIS documents are reviewed, responded to and incorporated into environmental documents, consistent with state and/or federal regulatory requirements.

IG-06.06
See the response to comment 2 above: There have not been substantive changes to the Proposed Project between the Draft and Final EIS; therefore there is no rationale for releasing an 'interim final EIS' as suggested by the commentor. There is no provision or requirement for an 'interim final EIS' in the state or federal environmental regulations. A public comment period for the Final EIS will be provided, consistent with state and federal regulatory requirements.

IG-06.07
It is up to the project proposer, not the EIS, to determine the economic feasibility of the proposed project. However, if the commentor's concern is financial assurance that adequate resources would be available for post-mining reclamation, that issue is addressed by MNDNR as part of the Permit to Mine review/approval process. When needed, a performance bond or other security or assurances, acceptable to the MNDNR, is required to be posted for the project by the Proposer prior to granting the Permit to Mine. Financial records submitted by the Proposer with their permit application are available for the public to review.

IG-06.08
As noted in the Introduction to the Executive Summary, and in Section 1.5, of the Draft and Final EIS: 'The EIS is intended to provide information to units of government on the environmental impacts of a project before approvals or necessary permits are issued and to identify measures necessary to avoid, reduce, or mitigate adverse environmental effects. The EIS is not a means to approve or disapprove a project.' The mine plan and (in the future) the mine closure/final reclamation plans for Minnesota Steel would be finalized/approved after completion of the EIS process. The public has the opportunity to comment during the mine permitting and closure processes. Minnesota Rules 6130.4800 and 6130.5700 define the public noticing requirements for the permit application, substantial change permit amendments and closure plan documents. These documents must be noticed in a local newspaper and there is a 30-day public comment period during which the documents are available in the MNDNR Hibbing and St. Paul offices.

IG-06.09
A year-by-year water balance for the entire project has been undertaken (Attachment A to the NPDES Permit Application) by the Project Proposer with input and review from the MNDNR and the MNDNR's EIS consultant. The yearly water balance addresses specific process inputs to the tailings basin as well as tailings basin water losses.

The loss to groundwater in the water chemistry balance shows a greater variation than noted in the comment: 149 gpm for years 1 to 5, 372 gpm for years 6 to 10 and 758 gpm for years 11 to 20. Besides losses to groundwater, additional losses of water containing dissolved solids from the tailings basin include water consumed in the concentrator, water losses filling the void space within the deposited tailings, and water used for dust control. So, while loss to ground water helps limit the dissolved solids concentration, it is not the only factor reducing the dissolved solids concentration. As a percentage of dissolved solids loss, seepage to groundwater ranges roughly from 15 to 35 percent. Therefore, the concentration in the tailings basin water is not primarily dependent on the groundwater loss estimate.

The commentor requests a detailed groundwater flow model for the proposed tailings basin. The EIS already concludes that water lost to the groundwater would eventually reach Swan Lake. Section 6.7.3 of the Draft and Final EIS details mitigation regarding the tailings basin and water loss to the groundwater, including groundwater monitoring wells that would be required to be installed around the tailings basin as part of the SDS permit requirement. These wells would be used to monitor changes in groundwater chemistry from pre-project conditions. If groundwater chemistry changes of concern are identified, mitigation measures could be implemented to prevent impacted water from reaching nearby surface waters and/or nearby shallow residential wells.

IG-06.10
Reduction of the Swan Lake watershed by the tailings basin is addressed in the Swan Lake Nutrient Study (e.g., see Table 13 in the Study) performed as part of the EIS study process (see Appendix I of the Final EIS). The weir mentioned in the comment is already in existence and acts to maintain minimum water levels in Swan Lake. The EIS proposed a mitigation measure of installing an orifice in the weir to preserve flow in the Swan River in case of extreme low flow (Section 4.3.3)

The effects of the project on Swan Lake water elevations have been analyzed using daily data for the period of 1994 to 2006 as documented in Section 4.3.2 of the Draft and Final EIS and in the related technical memorandum (see Appendix I). Section 4.3.3 of the EIS explains the rationale for the orifice in the Swan Lake outlet weir as mitigation for reduced inflows due to the project.

IG-06.11
The Swan Lake Nutrient Study explored potential causes for the algal bloom in 1985, which was the impetus to two studies which began simultaneously in the spring of 1986. The historic analysis could not identify a connection between the Butler Taconite operation and the algal bloom of 1985. The conclusion of the historic analysis was that the most likely cause of the blooms in the 1980s was the discharges from the Nashwauk and Keewatin wastewater treatment plants. The plant discharge from Nashwauk had been diverted from Swan Lake's direct watershed in 1983 and the plant was replaced in 1989, as was the Keewatin plant. The loading from these plants was identified as providing a large portion of the loading to the lake in the MPCA / MNDNR report in its 1986 Swan Lake study. The gradual response of the lake occurred as would be expected for elimination of a large point source load of phosphorus.

The paleolimnologic investigation of lake sediments was not completed because it would not provide the resolution needed to improve the historic analysis, and it would not identify sources of higher loading, only trends in magnitude.

Some sedimentation at the mouths of Pickerel and O'Brien Creeks may have resulted from Butler reclamation activities (see Sections 2.4.2 and 2.4.3 and Appendix D in Swan Lake Nutrient Study). However, this cannot be confirmed or denied at this time.

It is important to note that the Proposed Project does not include any surface water discharge to Swan Lake or its watershed. Therefore, the Minnesota Steel project is substantially different from Butler Taconite with regard to Swan Lake and the experiences of the 1980s do not present a useful predictor for Swan Lake with the Minnesota Steel project.

IG-06.12
Red water complaints were common during the pre-Butler, natural ore mining. One possible red water problem happened after Butler constructed the Stage II (now "Blue Lake") outlet channel. They used a base material under larger rock riprap for the "rock drop" (cascade) area just upstream of where the outlet channel tied into the original O'Brien Creek. Some of the riprap didn't hold during subsequent high flows and the base material eroded, resulting in a red water discharge into Swan Lake. This was a short-term, temporary impact, which would not have been large enough to affect much of the lake, although it was noticed by some citizens and reported to MNDNR staff. This erosion was documented in Section 2.4.3 of the Swan Lake Nutrient Study. Note that the Proposed Project does not include any use or physical alteration of O'Brien Lake or its outlet.

IG-06.13
Performing the additional analyses proposed by the commentor would not provide conclusive information on the potential water quality of the tailings basin water or the seep water, since the analyses would not replicate conditions in the tailings basin. Since the tailings basin is not yet constructed, to obtain actual water quality data, the next best estimate of water

chemistry is provided through dissolved solids balance modeling, which was performed for seven water quality parameters (see Attachment 2A in Tab 1 of the NPDES/SDS permit application for the Minnesota Steel project). The best available information for water quality parameters that cannot be modeled is water quality sampling data from existing tailings basins that are similar to the proposed Minnesota Steel basin (the 'past experience' referenced in the comment).

Attachment 2A ('Estimate of Tailings Basin Seep Water Quality' in Tab 1 of the NPDES/SDS Permit Application) summarizes the water chemistry data (including heavy metals) collected for other tailings basins on the Iron Range or estimated by the dissolved solids balance modeling. [Note: Attachment 2A was updated and re-submitted to MPCA by Minnesota Steel on April 12, 2007 – see transmittal listing in Appendix I of the Final EIS.] The water chemistry data in Attachment 2A was also compared to available data from the National Steel (now U.S. Steel – Keewatin Taconite) tailings basin, since the Minnesota Steel ore body is similar to the National Steel ore body,. The National Steel water chemistry data is very similar to the data in Attachment 2A.

All of the Attachment 2A concentrations are below the USEPA drinking water standards except total dissolved solids, which is above the 500mg/L secondary standard for drinking water, and manganese, which is above the 0.05 mg/L secondary standard. Secondary standards are guidelines that regulate contaminants that may cause cosmetic or aesthetic effect in drinking water.

The concentrations of water quality parameters listed in Attachment 2A likely represent 'worst case' tailings water concentrations. Seepage into the groundwater through the stored fine tailings and through the underlying clay layer may attenuate metals by absorption onto the fine tailings or onto the clay material.

Based on evaluation of this data, release of heavy metals and other contaminants of potential concern into groundwater via tailings basin seep water is not anticipated to result from the Minnesota Steel tailings basin. Therefore, the commentor's request for additional analyses to be included in the EIS was determined to be unfounded. However, as noted in the Draft and Final EIS, Section 6.7.3, the MPCA plans to include a requirement for installation of groundwater monitoring wells around the tailings basin as part of the SDS permit conditions for the tailings basin, to aid in detection of releases, if they should occur in the future. Manganese will be included in the SDS permit as a monitored parameter in the groundwater wells surrounding the tailings basin.

IG-06.14
Nothing would be gained by assessing the paleolimnological sediments of Swan Lake for precipitates and/or heavy metals, as suggested by the commentor, for the following reasons:

1) The analysis of the sediments cannot be performed with sufficient accuracy to determine concentrations of materials for specific time periods – it would not provide a correlation of concentrations of metals, etc. with specific time periods, it would only point to general trends in magnitude of concentrations over time.
2) Nothing would be gained, even if the Butler-era sediments could be separated and analyzed. The Butler Taconite operation was different from the proposed Minnesota Steel operation, since Minnesota Steel's water management plan does not include any proposed surface discharges.

IG-06.15
Emissions were evaluated from multiple sources at the facility including the tailings basins and are reflected in the risk estimates presented in the EIS. Metals were addressed in the human health risk assessment and a list of these metals can be found in Table 4.7.18 of the EIS. This list also includes mercury emissions from the facility. All metals evaluated in the risk assessment were examined from both inhalation exposure, exposure through consumption of food that has taken up deposited metals, and consumption of fish that may contain metals deposited from the plant. In March of 2007, the U.S. EPA approved Minnesota's Statewide Mercury Total Maximum Daily Load (TMDL) plan. This plan sets a target for fish tissue concentration of mercury that is generally safe for human consumption, and translates the target to reduction goals for mercury sources. More information on the TMDL and its report can be found at http://www.pca.state.mn.us/water/tmdl/tmdl-mercuryplan.html#statewideplan. Note that air dispersion modeling used for this analysis specifically addressed nearby impacts (see Figure 4.7.2 of the Draft and Final EIS).

A separate analysis of the mineralogy and petrology data for the ore body to be mined was performed in order to identify the presence or absence of amphibole minerals or fibers. This information was reviewed by staff from the Minnesota Department of Health. A summary of that analysis can be found in Section 4.7.2.6 of the EIS.

IG-06.16
The particle size distribution of the tailings dust was determined through computer simulations of the tailings generation from the screening and flotation circuit of the concentrator. The particle size distribution data developed from this model were used to estimate wind erosion emissions using USEPA wind erosion predictive methodologies. Tailings basin wind erosion emissions were included in the particulate modeling required for the air permit application. The modeling showed attainment with ambient air quality standards at the ambient air boundary.

The particle size distributions for all sources were estimated using USEPA particle size distribution data for point and fugitive sources as shown in Table E-4 of the Class II Air Modeling Report (Appendix E of the Permit Application). The HAPs concentrations in the particulates were assumed to be the same as those for each of the representative material

that the dust is originating from (crude ore, waste rock, concentrate, DRI, slag). Concentrations of HAPs in these materials are based on laboratory analysis conducted on samples of the materials used or generated in pilot testing.

In addition, the Human Health Screening Level Risk Assessment (Section 4.7.2.4) evaluated the emission potential of 114 metals and nonmetals from the proposed facility associated with the proposed project.

IG-06.17
CO is initially produced inside the DRI reactor and is used to convert the iron oxide pellets to reduced iron pellets. In this reaction CO is converted to CO_2. On exiting the reactor, the spent reducing gas, which is a mixture of CO_2, H_2O, CO and H_2, enters the top gas purification system. The primary purpose of the top gas purification system is to remove CO_2 and water and recover CO and H_2 for reuse in the DRI reactor. In this purification process some CO dissolves into the cooling water. Direct contact cooling water releases dissolved CO when hot returning cooling water is cooled by the cooling towers. CO that evolves from the cooling water is released to the atmosphere intermittently from the cooling water system blowdown vents. CO emissions from the DRI cooling water blowdown vents were accounted for in the emission inventory and air quality analysis.

Given that CO is a process reactant (the reducing gas), it is undesirable to lose CO to the cooling water. The top gas purification system includes gas valves, seals and pipe fittings that could develop leakage if not properly maintained. Good operating and maintenance practices would minimize the amount of CO absorbed by the cooling water and lost to leakage.

The DRI transfer systems would use heated and compressed nitrogen as the conveying medium. Except for the combustion emissions from the transfer gas heater, there is no CO component to the material handling aspects of the DRI process. The CO from the transfer gas heater was accounted for in the emission inventory and air quality analysis.

IG-06.18
Traffic forecasts for Highway 65 south of Highway 169 (in Pengilly) indicate that average daily traffic (ADT) would increase from 5,200 vehicles in year 2002 to 7,150 vehicles in year 2008 to 9,150 vehicles in year 2029. These volumes include both car and truck traffic, including traffic due to the proposed Minnesota Steel project as well as normal annual traffic increases due to increasing population and through traffic trips unrelated to Minnesota Steel. Although truck volumes were not estimated, it is likely that heavy trucks destined for the Minnesota Steel site would more likely use Highway 169 than Highway 65.

The total increase in ADT between 2002 and 2029 is 3,950 vehicles per day, which is less than a doubling of the existing traffic volumes. As noted in Section 6.8.2.2 of the Draft and Final EIS, generally, a doubling of traffic volumes (with speed held constant) would be required before a 3 dBA (perceptible) increase in traffic noise would result. Therefore, the forecast traffic increases are not anticipated to be perceptible to nearby receptors.

No roadway improvements are planned on Highway 65 as a result of the Minnesota Steel project.

IG-06.19
The size, side slope angles and other design features of the proposed Minnesota Steel tailings basin are typical of other tailings basins on the Iron Range, so no 'special technology' or other design features are likely to be required. As described in Section 4.6 of the Draft and Final EIS, the MNDNR reviews the details of the tailings basin design and dam design with respect to safety as part of the Permit to Mine and Dam Safety Permitting review/approval processes.

The MNDNR has seen no evidence to support the commentor's claims regarding dam and dike failures and/or seepage of the Butler tailings dam. The tailings basin releases that occurred following Butler's closure were the result of intentional breaching of dikes and removal of culverts required to re-establish water routes after closure. If Minnesota Steel were to propose release of tailings basin water following completion of mining operations, the releases would be regulated by NPDES permit and/or other water quality regulations in effect at the time of closure.

IG-06.20
The commentor's arguments for use of the existing mine pits for tailings storage were reviewed and found to not warrant re-consideration of their proposed 'Alternative 3.' Responses to the commentor's four points are as follows:

(1.) The commentor does not take into consideration the post-mining condition, when Minnesota Steel would no longer be using water and therefore would not be creating a flow towards the tailings.
(2.) There is no defensible rationale for impacting and/or relocating existing residents on the east side of the Hawkins Pit in order to maintain the mine exclusion area requirements, especially when the Preferred Alternative tailings basin concept does not require similar relocations.
(3.) An assessment of the potential pit storage capacity and feasibility of using the existing volume within the Hawkins Pit to Pit 2 for tailings storage indicated that: (a) portions of the pit volume would be consumed for construction of the tailings starter dams, particularly the dike that would be required along the eastern end of the Hawkins pit to meet the 500 foot setback requirement, reducing the volume available for tailings storage, and (b) even if the exclusion area is not figured in to the storage concept, less than half of the 20-year tailings production would fit into this pit area, requiring use of an additional area (i.e., at a different location) for tailings disposal.

(4.) The EIS discussion of limitations to in-pit stockpiling of overburden materials (see Section 3.3.3.2 of the EIS) explains the timing and mineral ownership issues that would also prevent in-pit tailings storage. Based on the fact that (a) there are known taconite reserves in Pits 1 & 2 that were part of the Butler Taconite mining plan; and (b) the State of Minnesota and other interests own taconite resources proximate to the Hawkins pit, the presence of these reserves would make immediate use of these pits for tailings storage infeasible.

Consideration of the factors described above lead to the conclusion that use of the existing mine pits for tailings storage is not feasible at this time. However, as pit areas are exhausted of ore resources in the future, they would be re-evaluated for potential use for both in-pit stockpiling of overburden waste and for tailings disposal.

IG-06.21
The mitigation measures to be used to minimize tailings basin dust generation are described in the Fugitive Dust Plan submitted as part of the Air Permit application. A copy of the Fugitive Dust Plan (updated in April 2007) is provided in Appendix K and is also discussed in Section 4.7.3 of the Final EIS.
Also, as noted in the response to comments 13 and 14 above, the risk assessments conducted for the EIS included impacts from tailings basin dust in the calculation of risks to human health and ecology.

Minnesota Center for Environmental Advocacy

IG-07.01
Analysis of impacts and alternatives in the EIS was performed consistent with the scoping decision document. Where applicable, regulatory thresholds were used as a reference point for assessing project impacts and as a basis for developing mitigation strategies. Consistent with state (Minn Rules 4410.2400) and federal (40CFR Part1500.4) regulations, the bulk of the EIS was reduced by providing summaries of detailed analyses in the EIS document. The corresponding detailed technical analyses listed in Appendix I are 'reasonably available for inspection by interested persons,' via submittal of a request to the MNDNR Project Manager, even though they were not posted on the internet. All project documents are available for public review consistent with the state of Minnesota Data Practices Act.

IG-07.02
The commentor's questions regarding consistency of the proposed project water management plan (which includes dewatering of flooded mine pits to enable access to the ore) with state and federal laws relate to two areas: water quality and physical integrity due to changes in water levels. As described in detail in Section 4.2.2.2 of the Final EIS, MNDNR and MPCA staff have reviewed the water management plan and found it to be consistent with state and federal laws in their respective regulatory areas. A summary of their rationale for this finding follows:

Water Quality – The MPCA regulates water quality through its NPDES program. The NPDES program regulates discharges of pollutants into waters of the state. The NPDES program does not regulate appropriation or transfer of state waters unless that appropriation or transfer results in a discharge of pollutants into lakes or streams from industrial, municipal or commercial activities. The MPCA has determined that no NPDES permit is required for the initial mine pit dewatering for the proposed project as a result of the dewatering discharges because that appropriation or transfer would not result in any discharge of pollutants. Factors considered by the MPCA in making this determination include: 1) the dewatering flows would be conveyed from one 'water of the state' to another 'water of the state' without subjecting the water to intervening industrial, municipal or commercial use; 2) dewatering activities (prior to and after the initiation of mining at the facility) and any/all potential impacts to the physical integrity of Oxhide Lake/Creek and Snowball Lake/Creek would be controlled by a Water Appropriation Permit to be issued to Minnesota Steel from the MNDNR; 3) the mine pits to be dewatered (Pits 1, 2, 5 and Draper Annex) are currently overflowing into the water bodies that would be receiving the dewatering flows; and 4) water quality information shows that the water transfer would not negatively impact the receiving waters (and may improve the receiving waters).

Section 4.5.1 in the EIS identifies the need for an NPDES / SDS permit for all maintenance dewatering and storm water associated with mining activity to be collected and stored in the Ann or Sullivan Pits, the process water supply reservoirs for the facility. The NPDES permit application for this discharge has already been submitted as noted in the EIS.

Physical Integrity – The MNDNR regulates physical changes to waters of the state (including water transfers) under Minnesota Rule 6115 (public water resources). Most abandoned mine pits -- including Pit 5, Pits 1&2 (and the connected pits), Draper Annex and Hill Annex -- are not designated as Public Waters and can therefore be dewatered without a Public Waters permit from the DNR under Minnesota Rule 6115. However, dewatering of ground or surface waters, including mine pit dewatering, is subject to MNDNR water appropriation requirements under Minnesota Rule 6115.0710. Minnesota Steel has submitted a water appropriation permit application for the proposed dewatering at Pits 1&2 (including the connected Hawkins, Harrison and Halobe Pits), 5, and 6.

IG-07.03
The potential impacts from the projected Minnesota Steel water use are described in the Draft EIS sections corresponding to specific subject areas. Draft and Final EIS Section 4.2.2 quantifies the projected water use for the project. Section 4.1.9 describes the potential impacts to wetlands from anticipated watershed changes. Section 4.3 describes the anticipated physical impacts to non-wetland water resources (e.g., flow changes, geomorphology changes, lake level changes). Section 4.5 describes the anticipated water quality impacts. Section 4.8 describes the anticipated fisheries and aquatic ecology impacts.

Regarding the amount of water consumed, Section 4.2 of the Draft EIS documents the estimated project water consumption - including water for augmentation. The primary source of water proposed for the project is groundwater presently discharging from the Biwabik Iron Formation (BIF) to Pits 1&2, Pit 5, future Pit 6 and the Hill Annex Mine Pit. This pit water becomes a surface discharge (overflow or pumped) from these pits. Since the BIF is only connected to area surface waters by the pits, this water source is in excess of the natural surface water supplies in the area. So while the processes would consume an average of 4,910 gallons per minute (Table 4.2.1 in the Draft and Final EIS), the majority of this is water which would not discharge to the surface without the presence of the pits. (Water for augmentation does not represent true consumption since it "replaces" water that is consumed in the process.) The remainder of the source water for the project would mostly be runoff from project site areas and areas upstream of the project in the Oxhide Creek watershed.

IG-07.04
The intent of the EIS preparers in organizing and writing the EIS documents was to provide a document that provides a 'full and honest picture of the Project's environmental impacts,' while at the same time not being so detailed in presenting analyses as to be confusing to the average reader. Also, consistent with state (Minn Rules 4410.2400) and federal (40CFR Part1500.4) regulations, the bulk of the EIS was reduced by providing summaries of detailed analyses in the EIS document. The sections of the EIS documents reference the special studies, technical memoranda and permit application documents that contain the detailed analyses supporting the findings summarized in the EIS, so that the reader who desires additional information can request them. These documents are listed in Appendix I, which also notes that the documents are available upon request from the MNDNR Project Manager. Together, the EIS and the supporting technical documents make up a transparent, full environmental record for the Proposed Project studied in the EIS. All project documents are available for public review, consistent with the state of Minnesota Data Practices Act.

IG-07.05
Draft EIS Section 4.2.3.1 explains why the EIS analyses focused on the Hill Annex Mine Pit as the likely future source for additional augmentation water if it is needed (i.e., as the current water balance indicates that additional water would be needed). Section 4.2.3.1 of the Draft EIS, page 4-36, describes that potential additional sources for augmentation water, including Swan Lake, were considered.

The November 3, 2006 e-mail referenced in the MCEA comments was written prior to development of the final water management plan. The water management plan under consideration as of November 3, 2006 would have required additional water for plant operations during an extreme drought condition similar to that of the 1930's dust bowl. At that time the availability of Hill Annex Mine Pit water was not certain, and an appropriation from Swan Lake (or its tributaries) was being proposed to supply the demand under such extreme drought conditions. During November and December 2006 the present water management plan was developed with input from MNDNR and the EIS consultant which conserved stored water and allowed the project to avoid appropriation of waters outside its boundaries for process water supply.

Following development of the final water management plan (as documented in the Draft and Final EIS), Swan Lake was dropped from consideration as a source of process and/or augmentation water supplies. That is why the commentor did not find references to Swan Lake as a water source in the EIS or in the technical memoranda referenced in the EIS. [The Final EIS specifically identifies the Hill Annex Mine Pit as the source of water for streamflow augmentation in the future, if needed.]

IG-07.06
As described in the Physical Impacts Memo (see list in Appendix I of the EIS), Upper Oxhide Creek includes the portion of creek upstream of, and tributary to, Pits 1&2, as well as the portion which flows from Pit 5 to Oxhide Lake. The portion upstream of Pits 1&2 would not be altered by the project. As noted in Section 4.3.1 of the Draft and Final EIS, the portion of Oxhide Creek between Pit 5 and Oxhide Lake has been altered previously by mining and other disturbances such that its character no longer resembles that of a natural channel; therefore the analysis of impacts in the EIS focused on the lower, less-disturbed portion of the creek. Also, augmentation flows would be introduced to Oxhide Creek near the present Pit 5 overflow so that the reach between Pit 5 and Oxhide Lake would also benefit and be preserved by the augmentation flows.

IG-07.07
The comment points out that the "structure and function of riverine systems are based on five riverine components: hydrology, biology, geomorphology, water quality and connectivity." The EIS analysis was based on the principle that hydrology drives the other components of stream health pointed out in the comment. Streamflows affect geomorphology and can alter the banks and bed of the stream. Changes in flow, bed and banks can affect the type and quantity of habitat. So the EIS approach concurs with the intention expressed in this comment and, therefore, focuses on changes in instream flow rates.

Impacts other than geomorphology were assessed in the Draft and Final EIS. Section 4.3.2.1 describes stream stability, which is related to stream sedimentation. Section 4.8 describes the existing fisheries, potential fisheries and aquatic species impacts, and potential mitigation for impacts to Oxhide Creek. Mitigation (described in Section 4.3.3) includes provision of stream augmentation flows (including variable flows noted by the commentor as being important to ecosystem function) and monitoring of macroinvertebrate populations. Note that the present flow regime greatly exceeds the flow that would be present in Oxhide Creek if the pits did not exist. However, the variability in the Pit 5

outflow is less than would occur in the pre-mining Oxhide Creek. The MNDNR Augmentation Plan and the Alternative Augmentation Plan both include variability in augmentation flows based on the variability of the present flow regime.

IG-07.08
The Alternative Augmentation Plan is not an attempt to restore Oxhide Creek to a pre-mining condition. The challenge of determining an appropriate augmentation flow regime can be seen as estimating what reduction can be tolerated by the stream with minimal impacts to stream health. However, the present outflow from Pit 5 has a much higher average flow rate, and lower variability than a natural stream in the area would have. Therefore, the EIS analyses took a different approach in determining the Alternative Augmentation Plan. The approach to the analysis was to recommend an augmentation flow regime based on the channel shape and capacity that exists today. The analysis determined that today's channel is most likely similar to that which existed prior to mining alterations (Physical Impacts Memo -- see listing in Appendix I in the EIS), based on an estimate of the pre-mining flow regime.

IG-07.09
The concerns raised in this comment as the rationale for suggesting that an NPDES permit should be required for the proposed Minnesota Steel “augmentation” discharges (in which the commentor appears to include both dewatering and augmentation flows) relate to the protection of: 1) water quality (non-degradation), 2) physical integrity and 3) “ensur(ing) a flow rate that is consistent with water quality and existing uses…”

The MPCA does not believe that the dewatering or augmentation flows create a threat to water quality in the receiving streams and lakes as a result of the quality of the water being removed from the mine pits. The potential effects of dewatering and augmentation flows on Snowball Lake and Oxhide Lake water quality were evaluated in the EIS in Section 4.5.2 and found to be inconsequential. Also, as noted in response to comment IG-7.02 and described in detail in Section 4.2.2.2 of the Final EIS, the MPCA does not find that an NPDES permit is required for the dewatering and augmentation flows because the dewatering and augmentation flows would be conveyed from one ‘water of the state’ to another ‘water of the state’ without subjecting the water to intervening industrial, municipal or commercial use.

The MPCA’s rationale regarding the second and third concerns raised in the comment – physical integrity/existing uses – was also explained in the response to comments IG-7.02 and IG-7.08. The MPCA does not anticipate any impacts to the physical integrity of the water bodies and their existing plant and animal communities because potential physical impacts would be controlled by a Water Appropriation Permit from the MNDNR. The water appropriation permit regulates the discharge to ensure that dewatering or appropriation flows do not alter normal stream processes.

IG-07.10
Because of its present quality and identification as a trout stream, the Proposed Project has purposefully avoided direct impacts to Pickerel Creek and its watershed. The one percent loss in watershed area (as indicated in Section 4.3.2.6 of the Draft EIS) is of no practical consequence to water quantity or quality (including temperature) in Pickerel Creek, especially considering that much of the creek’s flow is from groundwater. Also, Section 6.7.3 of the Draft and Final EIS notes that groundwater monitoring wells would be required to be installed around the tailings basin as part of the SDS permit requirement. These wells would be used to monitor changes in groundwater chemistry from pre-project conditions. If groundwater chemistry changes of concern are identified, mitigation measures could be implemented to prevent impacted water from reaching Pickerel Creek.

IG-07.11
Section 6.7 of the Draft and Final EIS documents contains information on the chemical constituency of water in the tailings basin. Based on this information, and the relatively small amount of seep water that would likely reach O'Brien Lake, no water quality impacts are anticipated to result from the seep water. However, as noted in Section 6.7.3, groundwater monitoring wells will be required to be installed as part of the SDS permit conditions, so that if changes in groundwater chemistry results from the Minnesota Steel project, they can be identified and addressed.

Analysis performed for the EIS of other lakes with projected watershed losses similar to the 18 percent for O'Brien Lake, indicated that substantial reductions in lake level were not anticipated; substantial reductions in water level are therefore not expected for O'Brien Lake. Tailings basin water losses to groundwater would tend to compensate for the lost watershed area. Since the loss to groundwater should be a more constant inflow to the system, it would compensate more at base flow conditions (Maximum estimated base flow reduction: 2.3 cfs to 1.8 cfs), which could be more sensitive to the loss in watershed area.

IG-07.12
As described in the Draft EIS Section 4.3.2.1 and in response IG-7.08 above, the proposed 'alternative augmentation plan' was developed to identify flow rates that match the existing channel dimensions and, therefore, would likely represent a good approximation of the flows that should be maintained through stream augmentation during post-dewatering project conditions. Also as described in the Draft EIS, monitoring of macroinvertebrate organisms before and during the project would provide information on whether the health of the stream ecosystem is being maintained by the augmentation flows, so that if stream ecology is being harmed, additional mitigation can be implemented. Therefore, MNDNR could issue a permit based on the water use and augmentation strategies described in the EIS, including monitoring requirements for flow and stream ecology to track future impacts and monitor permit conditions accordingly, if needed. As noted in the response to comment #23 below, it is not reasonable to include an estimate of potential future climate that could result from global warming, therefore, the water impacts analyses in the EIS represent the best

available information for assessing project impacts and developing mitigation and monitoring recommendations. The water analyses in the EIS utilized approximately 70 years of climatic data, including wet and drought years – including climatic data from the 'Dust Bowl' drought era.

IG-07.13
Section 4.2.3.1 of the Final EIS provides additional discussion regarding the discharge of water from Hill Annex Pit to Panaca Lakes, including information on a time period of three years when no water was discharged from Hill Annex to Panaca Lakes that demonstrates that delivery of water from Hill Annex pit to Panaca Lakes is not a 'given.' As noted in the EIS, based on reasonably available information, substantial impacts to Panaca Lakes are not anticipated to result from appropriation of a portion of the excess Hill Annex Pit discharge for use as part of the proposed Minnesota Steel project.

IG-07.14
Section 4.2.3.1 of the EIS discusses the use of Hill Annex water and potential conflicts of multiple users (demands) placed on the existing water supply. It concluded that Minnesota Steel could proceed in planning to utilize a portion of the water yield from the Hill Annex Mine Pit. According to the water balance calculations undertaken for the Minnesota Steel project, it would need roughly half of the available yield from the Hill Annex Mine Pit. Minnesota Steel supports the Alternative Augmentation Plan and the use of Hill Annex Mine Pit water to help meet the total water demand for their project. Since the publication of the Draft EIS, the uncertainties surrounding the Excelsior Energy project have increased, and the potential for conflict over use of the Hill Annex Mine Pit water has decreased. The Minnesota Steel EIS is utilizing the best, reasonably available information to assess potential water demand and supply information to assess potential impacts.

IG-07.15
The Minnesota Steel project water needs, based on the best available information currently available, including process water and water needed for mitigation (augmentation) purposes, are documented in the Draft and Final EIS. No additional demands are known or planned at this time.

IG-07.16
The MPCA acknowledges the significance of global warming as a serious environmental problem and believes that it must be addressed holistically and not just by an individual facility. The State of Minnesota has also assembled the Minnesota Climate Change Advisory Group to develop state-level policy recommendations for reducing or sequestering greenhouse gas emissions and to identify opportunities to promote energy efficient technologies and renewable energy resources.

The Proposed Project would contribute CO_2 and greenhouse gases to the atmosphere. Minnesota Steel has provided a document titled "Minnesota Steel Industries CO_2 Emission Footprint and Comparison" in an effort to provide information regarding greenhouse gas emissions. A copy of this document is provided under Appendix O of the Final EIS. It should be noted to the commentor that currently there are no regulations governing CO_2 or greenhouse gas emissions. When future regulations are promulgated this proposed project as well as other applicable entities would be required to meet those regulations. Note that the integrated design (mining through steel production) and energy choices result in energy conservation and therefore a reduction in the amount of greenhouse gases that would be produced using more traditional, non-integrated methods.

IG-07.17
Climate change is not accounted for in the data used for the modeling described above. This modeling is done using an existing data set that has undergone review and quality assurance measures and it can not be readily modified to address various projected scenarios due to climate change. The MPCA acknowledges the significance of global warming as a serious environmental problem and believes that it must be addressed holistically and not just by an individual facility. To that end, the State of Minnesota is developing strategies for addressing climate change on a statewide basis

IG-07.18
The MPCA acknowledges the significance of global warming as a serious environmental problem and believes that it must be addressed holistically and not just by an individual facility. The State of Minnesota has also assembled the Minnesota Climate Change Advisory Group to develop state-level policy recommendations for reducing or sequestering greenhouse gas emissions and to identify opportunities to promote energy efficient technologies and renewable energy resources.

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IG-07.19
Information on how the vegetative diversity/integrity was rated at each wetland was added to Section 4.1.1.4 of the Final EIS.

IG-07.20
The introductory paragraphs of Section 4.1.2.8 of the Draft and Final EIS describe the potential physical and hydrologic changes considered in assessing indirect impacts. Potential measures to avoid/minimize indirect impacts would be the same as those described for the direct wetland impacts, since the entire area within the Project Impact Areas was used as the basis for estimating watershed area losses for the indirect wetland impacts assessment. As noted in the direct project impacts discussion, the EIS assumed a 'worst case' of all wetlands and other areas within the Project Impact Area boundaries being totally impacted. If the direct impact areas decrease in size as a result of future design improvements, the direct and indirect wetland impact areas could decrease. The MNDNR and USACE believe that the level of analysis performed for the EIS is consistent with the requirements of federal regulations and Minnesota Rules 4410.2300.H, and that additional analyses would not likely provide substantially more accurate information upon which to assess project impacts and/or appropriate mitigation.

IG-07.21
Collection of the wetland monitoring well data started in 2005, was continued in 2006 and would be continued in the future as part of an on-going data collection effort to assess changes in water levels in the wetlands over time -- before, during and after the Minnesota Steel project. Assessment of factors affecting changes in water levels observed over time would include consideration of climatic conditions over the time period, as well as correlating water level changes to physical changes (e.g., dewatering, runoff, etc) related to the Minnesota Steel project. The wetland monitoring well data was used in the EIS process primarily to assess whether the wetlands would likely be affected by pit dewatering, i.e., whether the wetlands are hydraulically connected to the surficial or deep groundwater system. For this assessment, the fluctuations in monitoring well water levels that would result from climatic variations such as drought, mentioned by the commentor, would not affect the findings.

IG-07.22
The old Butler plant site was excluded as a plant site alternative because it is located on an ore body leased by Minnesota Steel. In addition, the plant location is restricted by the proposed iron mining areas, stockpile locations, Highway 169, the remains of demolition material from the Butler buildings and the iron formation boundary. Additional discussion regarding the consideration of the Butler site is included in Appendix G of the EIS.

IG-07.23
The MNDNR/USACE do not disagree with the commentor that economic considerations alone do not demonstrate the lack of a feasible and prudent alternative. However, when selecting alternatives for consideration, the RGUs may reject alternatives on economic grounds if the available evidence demonstrates that the alternatives would not meet the underlying goal of the project. If the economics of an alternative make it economically infeasible, especially if there are other feasible alternatives that are being considered with similar environmental impacts, then the 'economics' can be used as a valid reason for dismissing an alternative. It is not inappropriate to reject an alternative as too remote, speculative, or impractical or ineffective due to its high costs. Such an alternative would not be 'prudent.' The technical memorandum: Processing Plant Alternatives Development (see listing in Appendix I of this EIS) provides a detailed discussion of the rationale for eliminating Alternative I from further consideration in the EIS process.

IG-07.24
The In-Pit Stockpiling Alternative was studied in the EIS, as required by the scoping decision document. Section 3.3.3.2 of the Draft and Final EIS describes factors that must be considered in locating stockpiles that are feasible for efficient lining production. These factors limit options for relocation of stockpiles out of high quality wetland areas. It should also be noted that some of the high quality wetlands are located in areas impacted by former mining.

The technical memorandum, *Stockpile Alternatives Development* (listed in Appendix I) describes efforts to avoid/minimize wetland impacts during the development and evaluation of stockpiling alternatives.

IG-07.25
The In-Pit Stockpiling Alternative was studied in the EIS, as required by the scoping decision document. Section 3.3.3.2 of the Draft and Final EIS describes the reasons why in-pit stockpiling may not be feasible in the future. However, as noted in Section 3.5: 'The In-Pit Stockpiling Alternative concept provides benefits such as reducing the area of wetlands filled by stockpiles and providing an opportunity to create shallow lacustrine wetland areas within the mine pits. However, this sub-alternative cannot be recommended for inclusion in the Preferred Alternative at this time, since it would not be known for certain that in-pit stockpiling is feasible unless/until the footwall has been established at the base of the ore deposit (as described in Section 3.3.3.2). Use of in-pit stockpiling is recommended as a mitigation measure to be implemented in the future, if feasible.' Note that, as required by state mining regulations, the permit to mine application must consider in-mine disposal (Minnesota Rules 6130.1400) and a discussion of in-mine disposal must be included in the mining and reclamation plan (Minnesota Rules 6130.4300, Subp. 7.B.1).

IG-07.26
The 'Mine Area' discussion in Section 4.1.2.8 concluded that substantial indirect wetland impacts resulting from mine pit dewatering are not likely. Therefore, no avoidance/minimization discussion related to this issue was included in the EIS.

The majority of indirect wetland impacts described in the EIS are related to potential changes in wetland hydrology due to loss of watershed area draining to wetlands outside of the direct project impact area. Assessment of the potential impacts assumed that the entire project impact area would be diverted from draining to the wetlands (outside of the project area). Avoidance/ minimization of these indirect wetland impacts would require 1) decreasing the project footprint and/or 2)changing the storm water drainage routing. Decreasing the project footprint is addressed by the early project alternatives evaluation process described in Appendix G of the EIS and consideration of sub-alternatives described in Section 3.3 of the EIS. Changing storm water routing is not an option for avoidance/ minimization of indirect wetland impacts since the proposed storm water management plan is based upon eliminating discharges from the project impact areas (i.e., conveying storm water from the project area to storm water basins, for use/re-use in project processing). This is why the EIS discussion was limited to describing only use of culverts and/or ditches as potential avoidance/minimization/mitigation measures.

If indirect wetland impacts could result from blockage of flow-through drainage as a result of site grading (e.g., see 'Plant Area' discussion in Section 4.1.2.8), use of ditches and/or culverts to maintain drainage flows could avoid or minimize those hydraulic impacts (as discussed in Section 4.1.3.2 of the EIS), consistent with sequencing requirements. However, since project plans are not currently detailed enough to identify if/how extensive impacts may be, no details regarding culvert use are provided in the EIS. If, in the future, indirect wetland impacts are determined to occur as a result of drainage changes made during project construction, Minnesota Steel would be required to provide additional compensatory wetland mitigation for those impacts.

IG-07.27
In its comment, the commentor argues that the EIS is insufficient because the analysis of cumulative wetlands impacts is "constrained." The commentor argues that by looking at cumulative impacts on a watershed basis, the EIS has only looked at the MSI project area. The commentor argues that a larger area should have been looked at within the Mississippi Headwaters. The commentor also implies that the analysis was deficient for failing to look at impacts from projects other than mining projects.

In response to this comment, the MNDNR/USACE note that the analysis of cumulative wetland impacts in the EIS was performed consistent with the Final Scoping Decision Document. The scoping document described the rationale for defining the area for assessing cumulative wetland impacts as the Upper Swan River watershed. A watershed-based approach was used because several of the primary functions performed by wetlands are directly related to watershed processes. Since Swan Lake is the first large waterbody downstream from the project area (and is, therefore, most directly affected by wetland changes in its watershed), the Upper Swan River watershed that primarily feeds to Swan Lake is a logical watershed subdivision to assess wetland impacts. The Scoping EAW (page 92) and Draft and Final EIS (Section 5.6.1.2) also describe the rationale for not expanding the cumulative impacts study area to include the Prairie River watershed. As noted in the Scoping EAW, the area of analysis includes 81.5 square miles, and the analysis of impacts within this area included impacts from all known past, present and reasonably foreseeable future impacts, not just mining projects.

With regard to impacts from future projects, the study methodology attempted to include all future reasonably foreseeable development impacts, not just mining impacts, within the watershed area. However, 'foreseeable future projects' included in the EIS analyses included only those projects that were reasonably assured of moving forward, i.e., those that were already in environmental review or in permitting. Because no specific future commercial development projects are 'foreseeable' within the study area, the Draft EIS included estimates of 'reasonably foreseeable' future commercial development impacts were estimated based on planned economic development sites identified by the cities within the watershed study area. No 'reasonably foreseeable' residential development areas were identified using this method so none were included in the analyses. It is worth noting that the technical memorandum for the wetland cumulative impacts analysis (dated January 29, 2007) included assessment of the different types of land disturbance that have occurred in the cumulative impacts assessment area (Figure 5 in the technical memorandum). Mining accounts for the vast majority of the past disturbance in the watershed and, given the relatively small areas of other development (commercial and residential), it is likely that mining would continue to be the primary cause of wetland losses in the future.

Based on the considerations enumerated above, the MNDNR/USACE disagree with the commentor's assertion that the Draft EIS' analysis was inadequate with regard to the cumulative impact on wetlands. That the EIS analysis was adequate is bolstered by the fact that expanding the study area and/or increasing the assumed area of impacts by assuming some additional area of residential and commercial development would occur in the study area (although the exact location of these assumed impacts would still not be known) would not likely change the findings and/or the recommended mitigation strategies from those that resulted from the analysis provided in the EIS. The essential finding (i.e., continuing loss of natural Type 6, 7 and 8 wetlands and replacement with constructed or incidental Type 1-2 and 3-5 wetlands with less diversity) would not be changed. Also, the essential mitigation strategy finding (see paragraph that follows) would likely be unchanged if the study area and/or assumed extent of development impacts was expanded.

Mitigation:

"Wetland regulations emphasize 'sequencing' in project planning within the watershed, to minimize wetland impacts. Consideration of possible strategies for avoiding/minimizing impacts to wetland types that have been lost in greater percentages in the past (e.g., Type 6-8 forested wetlands, bogs, and 'natural' wetlands) could be included in project planning, in order to minimize cumulative impacts. Additionally, resource agencies could, as opportunities arise, attempt to identify any degraded (e.g., by logging) or drained former, relatively undisturbed Type 6-8 areas within the watershed that could be enhanced or restored as possible mitigation areas for mining impacts."

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IG-07.28

Analysis of cumulative wetland impacts in the EIS was performed consistent with the Final Scoping Decision Document. Given the extent and the timeframe included in the cumulative impacts analysis, it was not reasonable/feasible to attempt to define the specific roles of individual wetland basins with respect to wildlife habitat, water quality, etc. Therefore, defining wetland impacts over time based on wetland Type is a reasonable approach to assessing the extent of cumulative wetland impacts for this EIS.

The findings re: cumulative wetland impacts by Type could be used to generalize the implications of the wetland impacts on wetland-dependent wildlife, aquatic life, etc. That is, the essential finding of the wetland Type impacts (i.e., continuing loss of natural Type 6, 7 and 8 wetlands and replacement with constructed or incidental Type 1-2 and 3-5 wetlands with less diversity) would mean that wildlife and aquatic life dependent on undisturbed Type 6-8 wetlands could have been and may continue to be more adversely affected than wildlife/aquatic life that can live in Types 1-5 and/or disturbed wetlands. It would be difficult to generalize the potential water quality and or floodplain impacts that could result from the cumulative wetland impacts, since the effectiveness of wetlands in containing and/or treating surface waters varies with the area, volume, outlet characteristics, etc., and the data is not available to that level of detail. In general, though, there has been an overall decrease of approximately 3,000 acres of wetland in the watershed over time, which likely resulted in a decrease in water quality treatment functions (although the deep water mine pits do perform a surface water retention function for flood control).

IG-07.29

Although there is general agreement in the scientific community that global climate change is occurring, there is not a consensus on what the specific results of climate change would be on the local climate in the vicinity of the project area. Since the future climate cannot be predicted, the EIS studies, including the cumulative wetland impacts analysis, did not attempt to speculate what the long-term impacts of global climate change would be in the study area. Rather, the analyses focused on reasonably foreseeable events, such as reasonably foreseeable future projects.

IG-07.30

The goal of the 5-year wetland mitigation plan is to restore the functions of the ditched and drained natural wetlands and to reintegrate them back into the natural ecosystem to the extent possible. The majority of the wetland restoration area borders a large wetland complex. The natural hydrologic connection between that natural wetland system and the altered wetlands would be restored. By connecting these wetlands into this large, undisturbed ecosystem, many of the natural hydrological and ecological processes would be reestablished along with the wildlife habitat benefits. The implementation goal is to ensure the development of diverse, native wetland communities and to replace the wetland functions and values lost due to project impacts.

The complex of deep and shallow marsh habitats with adjacent wet and sedge meadows, shrub swamps, and forested habitats in the restored wetlands would provide a variety of habitats suitable for supporting wildlife and waterfowl. These wetland communities would also provide suitable habitat for a variety of amphibians and reptiles such as frogs, toads, salamanders, and turtles. Finally, the restored wetlands would be protected with the recording of a Permanent Conservation Easement on the restored wetlands to ensure their long-term sustainability.

IG-07.31

The intent of the project schedule is to conduct the wetland restoration as soon as legally and physically possible after the plans are approved, and therefore, ahead of the impacts to the extent practicable.

IG-07.32

Section 6.4.12 of the Final EIS provides updated information on the status of the winter 2006-2007 lynx tracking study and the USACE/USFWS consultation process.

IG-07.33

Section 6.4.12 of the Final EIS provides updated information on the status of the winter 2006-2007 lynx tracking study and the USACE/USFWS consultation process, which will include a determination regarding the potential for adverse impacts to lynx and, if applicable, appropriate mitigation.

IG-07.34

The determination of potential impacts to lynx will be made by USFWS staff, in consultation with USACE staff. Section 6.4.12 of the Final EIS provides updated information on the status of the winter 2006-2007 lynx tracking study and the USACE/USFWS consultation process, which will include a determination regarding the potential for adverse impacts to lynx (including impacts to movement/travel corridors) and, if applicable, appropriate mitigation.

IG-07.35
Section 6.13.2 of the Draft and Final EIS describes the environmental impacts of the connected actions associated with the proposed Minnesota Steel project. As noted in Section 7.2: "The impacts described in Section 6.13 are based on the best information currently available regarding the location and extent of the proposed infrastructure facilities; however, as plans for each infrastructure component are refined, the anticipated impacts may change. If the re-assessment of impacts based on refined infrastructure plans results in increases in the extent of impacts from those documented in this EIS, a supplemental EIS would be prepared, consistent with Minnesota Rules, part 4410.3000."

IG-07.36
As described in Section 6.13.2.6 of the Draft and Final EIS: "… any new power production facilities would not be a direct result of the Proposed Project and would be built (or not built) independently of the decision on the feasibility of the Proposed Project." Further information on this issue can be found in Section 6.13.2.6.

IG-07.37
The proposed project has incorporated a water recycling/reuse system (no discharge of scrubber blowdown and contact cooling water) and a seepage collection system around the tailings basin to avoid a discharge to a listed water.

The MPCA plans to continue its mercury reduction efforts by capitalizing on opportunities at existing sources at which source reduction, pollution prevention and controls can reduce mercury emissions. The MPCA's statewide approach to the mercury TMDL is a first for the nation. While other states have tackled the mercury-pollution problem by having a separate TMDL for each impaired water, the MPCA is taking a statewide approach because approximately 90% of mercury comes from outside the state and atmospheric deposition of mercury is relatively uniform across the state. The MPCA's mercury TMDL goal is to reduce mercury emissions from human activities within the state by 93 percent from 1990 levels. Minnesota has, through both voluntary and regulatory approaches, reduced in state mercury emissions by approximately 70% since 1990. The state's mercury TMDL program and the voluntary mercury reduction strategy are elements of the MPCA's efforts to drive down mercury emissions. Even with short-term increases from sources such as the proposed project, the long-term trend will be downward.

Mercury and other metals were evaluated in the Human Health Risk Screening Assessment (HHSRA) conducted as part of this EIS. The HHSRA evaluated potential health risks from inhalation of metal emissions as well as exposure pathways from ingestion of foods that could come in contact with deposited metal emissions. This includes exposure from consuming fish that is exposed to emissions deposited in area lakes. Risk estimates were calculated at or below the acceptable health guidelines for these exposure pathways.

IG-07.38
Through the EIS process it was determined that electrical generation is not considered a connected action to the proposed project. This is based on the fact that an adequate supply of electrical power is available through the transmission grid system to operate the proposed project without requiring the construction of a new electrical generation facility. Furthermore, electrical generation whether connected to this proposed project or not is still governed by the same mercury reduction policy goals as are other sources which have the potential to release mercury.

IG-07.39
Mercury and other metals were evaluated in the Human Health Risk Screening Assessment (HHSRA) conducted as part of this EIS. The HHSRA evaluated potential health risks from inhalation of metal emissions as well as exposure pathways from ingestion of foods that could come in contact with deposited metal emissions. This includes exposure from consuming fish that is exposed to emissions deposited in area lakes. Risk estimates were calculated at or below the acceptable health guidelines for these exposure pathways.

Section 4.7.2.3.5 of the Final EIS provides a summary of mercury mitigations for Minnesota Steel's proposed project. The mercury mitigations for the proposed project are projected to result in 92% lower mercury emissions compared to other traditional mining/steel making operations.

IG-07.40
The Final EIS states that a waste characterization study would be completed. The EIS has tried to provide as much information as possible based on generator knowledge and information gathered from other operating facilities (Table 4.6.2 provides a summary of the waste streams and disposal methods), but it is difficult to truly characterize (test/analyze) a waste that is not yet being generated. As the commentor may already be aware of, the purpose of a waste characterization study is to not only provide additional information on the characteristics of the waste streams (ultimately providing necessary information to provide for proper storage, handling and disposal), but to also examine the possibilities of whether the waste streams can be recycled or re-used.

The proposed project would produce a variety of waste streams. Some of these waste streams can be recycled/reclaimed back through the facility (for example waste streams that have an iron ore component warranting recycling), others have the potential to be re-used (aggregate, cement additive, etc.). Only those materials that are inert would be stored outside. The proposed project does include the collection of on-site storm water, for use as facility process water, so potential storm water impacts from the storage of inert materials would be reduced.

Information regarding the character of the waste streams is provided in Table 4.6.2. To the extent that information was reasonable available, this table has been updated to provide information on the sources of wastes generated, their estimated quantities and their proposed method for disposal. Only those materials that are inert would be stored outside. The proposed project does include the collection of on-site storm water, for use as facility process water, so potential storm water impacts from the storage of inert materials would be reduced. Some wastes will need to be characterized after they are generated and the company will be required to do this prior to disposal or beneficial use according to Minnesota Rules 7035 and 7045.

IG-07.41
The Proposed Project is subject to Prevention of Significant Deterioration (PSD) review for emissions of PM/$PM_{10,}$ NO_x, SO_2, CO, VOC, lead, fluorides, sulfuric acid mist, and hydrogen sulfide (H_2S). Regulations required Minnesota Steel to conduct a case-by-case Best Available Control Technology (BACT) analysis for each emission source associated with the Proposed Project that has the potential to emit air pollutants at levels greater than established thresholds. The BACT report, submitted to MPCA as part of the Air Permit Application, contains an analysis of several NO_x control technologies for the pellet plant. Table 4.7.5 of the EIS shows the technology that was selected through the BACT analysis.

IG-07.42
PM_{10} includes all particulates 10 microns in diameter and smaller. It does not exclude those less than 2.5 microns. The underlying assumption in the HHSRA section of the EIS was that the $PM_{2.5}$ fraction of PM_{10} emissions would be relatively small based on the nature of the material. A significant portion of PM_{10} is expected to be from fugitive dust which is not expected to generate a large amount of $PM_{2.5}$. Therefore, assuming all PM_{10} emissions to consist of $PM_{2.5}$ was done as a conservative estimate of emissions and not as a substitute for PM_{10}. The analysis only quantified or evaluated direct $PM_{2.5}$ and not fine particulate emissions formed away from the emission sources.

IG-07.43
The Mesaba Energy Plant was included in the PM_{10} cumulative impacts analysis, as noted in Section 5.1.1.2 of the Draft EIS. Existing neighboring plants were evaluated in the Class II modeling of the facility. Impacts from existing facilities were not significant near Minnesota Steel. The final modeling results included background concentrations and predicted contributions from existing facilities when appropriate.

IG-07.44
The commentor is correct in stating that fine particles ($PM_{2.5}$) are associated with adverse respiratory and cardiovascular effects, and premature death – particularly in susceptible populations such as older adults, people with heart and lung disease, and children. A summary of health effects associated with fine particles is presented in Section 4.7 of the Draft and Final EIS. More detailed information about fine particle health effects is available in: EPA's recent "Air Quality Criteria Document for Particulate Matter" (http://cfpub2.epa.gov/ncea/cfm/recordisplay.cfm?deid=87903), EPA's general websites on particulate matter at: http://www.epa.gov/pm/ and http://www.airnow.gov/index.cfm?action=particle.cover and on the Minnesota Department of Health web site: http://www.health.state.mn.us/divs/eh/air/pm.htm

In 2006 the US Environmental Protection Agency lowered the National Ambient Air Quality Standard (24-hour) for $PM_{2.5}$ from 65 to 35 micrograms per cubic meter of air. This is a health-based standard that is supported by a substantial body of scientific research. Implementation of this revised standard would eventually increase public health protection across the US, including Minnesota.

Minnesota currently complies with all National Ambient Air Quality Standards, including the revised $PM_{2.5}$ standard. Compliance with the standard is monitored data obtained from an ambient monitoring network that is maintained by the Minnesota Pollution Control Agency (MPCA). These data reflect fine particle concentrations in ambient air – concentrations of fine particles from multiple sources, including facilities, trucks, autos, wildfires, as well as impacts from other local and regional $PM_{2.5}$ sources.

The Draft and Final EIS analysis assumes that $PM_{2.5}$ direct emissions from the proposed facility would be equal to coarse particle (PM_{10}) emissions. This assumption is used to be protective of the public in the vicinity of the facility since all of the $PM_{2.5}$ is included within the PM_{10} emission estimate. In addition, dispersion of these particles would be similar to that of the air toxics assessed in the risk assessment, resulting in similar maximally impacted individuals. It is likely that actual $PM_{2.5}$ emissions would be considerably less than PM_{10} emissions, so making this assumption for direct PM emissions is likely conservative in the health-protective sense. The Draft and Final EIS analysis indicates that direct emissions of fine particles would be below the federal $PM_{2.5}$ standards.

Based on information provided in the Draft and Final EIS and knowledge of ambient concentrations of $PM_{2.5}$, the MPCA expects that Minnesota would continue to be in compliance with the federal health-based standards for $PM_{2.5}$ (even with the additional $PM_{2.5}$ emissions from the proposed facility).

The commentor should note that regulations have been promulgated based on standards or threshold criteria established to protect the entity, media or resource for which they were established. In addition, studies, analyses and technical review have been undertaken in an effort to provide information as well as identify/quantify (analyze) impacts. The commentor is directed to Appendix I - List of EIS Special Studies, Technical Memorandums, and Permit Application Submittals to further illustrate this point.

IG-07.45
The particle size distribution of the tailings dust was determined through computer simulations of the tailings generation from the screening and flotation circuit of the concentrator. The particle size distribution data developed from this model were used to estimate wind erosion emissions using USEPA wind erosion predictive methodologies. Tailings basin wind erosion emissions were included in the particulate modeling required for the air permit application. The modeling showed attainment with ambient air quality standards at the ambient air boundary.

An updated Fugitive Dust Control Plan was provided by Minnesota Steel April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

APEX
IG-08
The Commentor's support for the proposed project is noted.

George Thompson/Blandin Foundation
IG-09
The Commentor's support for the proposed project is noted.

Patrick Kane & Troy Anderson/GABA
IG-10
The Commentor's support for the proposed project is noted.

Bud Stone/Grand Rapids Chamber of Commerce
IG-11
The Commentor's support for the proposed project is noted.

A. Borland, L. Fedo, & J. Minne/Hibbing Chamber of Commerce
IG-12
The Commentor's support for the proposed project is noted.

Iron Range Resources
IG-13
The Commentor's support for the proposed project is noted.

Minnesota Chamber of Commerce
IG-14
The Commentor's support for the proposed project is noted.

INDIVIDUALS

Marilayne Bailey
I-01.01
The Alborn Trail that passes through Pengilly, north of Swan Lake, would not be rerouted. Section 6.11.2 of the Final EIS provides additional information on this issue.

John Vernon
I-02.01
The reduction to the Big Sucker Lake watershed would be 12 percent and would cause a reduction in water level, though it is likely to be imperceptible. For example, the potential reduction to Little Sucker Lake (which has a 20 percent reduction in watershed area) was estimated to be 0.05 inch.

I-02.02
The 12 percent reduction in Sucker Lake watershed area (all upstream of Little Sucker Lake) would reduce both the inflow water volume and phosphorus loading to the lake. Due to the relatively small reduction in watershed area and the fact that phosphorous loading would also be reduced, the water quality of Big Sucker Lake is not expected to change perceptibly. As a point of reference, the Snowball Lake analysis of watershed reduction (50 percent reduction in inflow volume, without the proposed augmentation) resulted in a predicted increase in lake total phosphorus from 20 to 21 ug/L, which would be imperceptible aesthetically or ecologically.

Shawne Wright
I-03.01
The impact on local property values that would result from the proposed Minnesota Steel project is not predictable. Although the commentor believes that their property value would decrease due to the presence of the mine/plant operation nearby, there are other who predict that property values in the area would increase due to the creation of jobs

and resulting need for housing in the area to serve future Minnesota Steel employees. The EIS did not address this issue because there is no analysis that can reliably predict future property values in this area.

Chris Wright

I-04.01

There are two main sources of groundwater for drinking water supply wells in the vicinity of the proposed project area. Groundwater flowing into the mine pits comes primarily from the Biwabik Iron Formation (BIF), a deep groundwater aquifer. Based on a review of the County Well Index, the majority of the nearest private wells draw groundwater from the surficial aquifer located above the BIF. Figure 4.2.1 in the Final EIS identifies the location of residential drinking water wells, based on information from the County Well index. Figures 4.2.2 and 4.2.3 provide a groundwater cross sectional view of the private drinking water wells near Snowball Lake. These figures help to visually illustrate the location of drinking water wells in relation to the Proposed Project and the potential impact that dewatering may have on the nearest private wells.

Historically while Butler Taconite was operating and dewatering pits, lake levels and public and private wells did not experience documented impacts due to drawdown.

To avoid potential impacts to drinking water wells due to dewatering, monitoring wells (piezometers) would be installed to detect if drawdown is occurring in the surficial aquifer. In addition, Minnesota Statutes (103G.261) identify state water allocation priorities, with the number one priority being the protection of 'domestic water supply' and Minnesota Rules (6115.0730) provide requirements for "negotiating a reasonable agreement" between the water appropriations permit holder and an affected party. An example of negotiating a reasonable agreement would be replacing/re-drilling a well that is experiencing impacts due to dewatering.

Section 4.2.3 of the Final EIS provides additional information on the topic of impacts to public and private wells.

I-04.02

An updated Fugitive Dust Control Plan was provided by Minnesota Steel April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

Craig Nelson

I-05.01

Analysis of potential blasting impacts and mitigation are included in Draft and Final EIS Sections 4.10.2.2 and 4.10.3.2, respectively, including measures that would be taken to prevent property damage from blasting. If a property owner experiences property damage due to blasting vibration, the MNDNR has the authority to investigate complaints and require the mine operator's cooperation in installing seismic monitoring on the property.

Craig Nelson

I-06.01

The local governing agency is the Minnesota Pollution Control Agency (MPCA). The contact information for the Duluth branch of the MPCA is provided: 525 Lake Avenue S., Suite 400, Duluth, MN 55802, Phone No. 218-723-4660

Craig Nelson

I-07.01

There are two main sources of groundwater for drinking water supply wells in the vicinity of the proposed project area. Groundwater flowing into the mine pits comes primarily from the Biwabik Iron Formation (BIF), a deep groundwater aquifer. Based on a review of the County Well Index, the majority of the nearest private wells draw groundwater from the surficial aquifer located above the BIF. Figure 4.2.1 in the Final EIS identifies the location of drinking water wells, based on information from the County Well index. Figures 4.2.2 and 4.2.3 provide a groundwater cross sectional view of the private drinking water wells near Snowball Lake. These figures help to visually illustrate the location of drinking water wells in relation to the Proposed Project and the potential impact that dewatering may have on the nearest private wells.

Historically while Butler Taconite was operating and dewatering pits, lake levels and public and private wells did not experience documented impacts due to drawdown.

To avoid potential impacts to drinking water wells due to dewatering, monitoring wells (piezometers) would be installed to detect if drawdown is occurring in the surficial aquifer. In addition, Minnesota Statutes (103G.261) identify state water allocation priorities, with the number one priority being the protection of 'domestic water supply' and Minnesota Rules (6115.0730) provide requirements for "negotiating a reasonable agreement" between the water appropriations permit holder and an affected party. An example of negotiating a reasonable agreement would be replacing/re-drilling a well that is experiencing impacts due to dewatering.

Section 4.2.3 of the Final EIS provides additional information on the topic of impacts to public and private wells.

Lou Benepe

I-08.01

The Alborn Trail and on-water use of Blue Lake would both remain available for recreation if the Minnesota Steel project is approved. The Alborn Trail that passes through Pengilly, north of Swan Lake, would not be rerouted. Section 6.11.2 of the Final EIS provides additional information on this issue. The City of Nashwauk is in the process of obtaining land adjacent to O'Brien Lake/Blue Lake for the purpose of constructing a public water access to O'Brien Lake/Blue Lake. The proposed Minnesota Steel project would not affect public access to the lake for on-water activities; however, Minnesota Steel would post their land on the shores of O'Brien/Blue Lake to prevent trespassing.

Maria Kautto

I-09.01

County Road 58 would be closed. The road would remain open until fall of 2008 to accommodate Itasca County's road work necessary to reroute traffic from CR 58. Section 6.8.2.2 of the Draft and Final EIS describes the increased circuity that would result from closure of CR 58 through the plant site.

I-09.02

The commentor's concerns are acknowledged. No specific issues were raised that can be responded to.

Maria Kautto

I-10

The MPCA acknowledges the significance of global warming as a serious environmental problem and believes that it must be addressed holistically and not just by an individual facility. The State of Minnesota has also assembled the Minnesota Climate Change Advisory Group to develop state-level policy recommendations for reducing or sequestering greenhouse gas emissions and to identify opportunities to promote energy efficient technologies and renewable energy resources.

The Proposed Project would contribute CO_2 and greenhouse gases to the atmosphere. Minnesota Steel has provided a document titled "Minnesota Steel Industries CO_2 Emission Footprint and Comparison" in an effort to provide information regarding greenhouse gas emissions. A copy of this document is provided under Appendix O of the Final EIS. It should be noted to the commentor that currently there are no regulations governing CO_2 or greenhouse gas emissions. When future regulations are promulgated this proposed project as well as other applicable entities would be required to meet those regulations. Note that the integrated design (mining through steel production) and energy choices result in energy conservation and therefore a reduction in the amount of greenhouse gases that would be produced using more traditional, non-integrated methods.

Roger Kowalsky

I-11.01

The impact on local property values that would result from the proposed Minnesota Steel project is not predictable. Although the commentor believes that their property value would decrease due to the presence of the mine/plant operation nearby, there are others who predict that property values in the area would increase due to the creation of jobs and resulting need for housing in the area to serve future Minnesota Steel employees. The EIS did not address this issue because there is no analysis that can reliably predict future property values in this area.

I-11.02

The potential for 'nuisance' noise levels to increase due to mining operations and traffic is acknowledged, as described in Section 4.10.2 and 6.8.2.2 of the Final EIS; however, the increases would not likely exceed state noise regulatory thresholds.

Analysis of potential blasting impacts and mitigation are included in Draft and Final EIS Sections 4.10.2.2 and 4.10.3.2, respectively. Minnesota Steel has indicated that blasting is anticipated to occur only once a week. Although the nuisance factor related to blasting is acknowledged, the limited frequency of blasts (plus the other blasting mitigation strategies described in Section 4.10.3.2 of the Final EIS) may lessen to overall nuisance effect.

I-11.03

As described in Section 6.8.2.1 of the Draft and Final EIS, the local roads would still be low volume roadways, including the township road near Little McCarthy Lake that would be improved between CR 58 and CR 8. The forecast year 2029 ADT volume for that roadway is 600 vehicles per day which, based on other traffic noise modeling studies, would not generate traffic noise that would exceed state noise regulatory thresholds.

The potential for 'nuisance' noise levels to increase due to roadway and snowmobile traffic is acknowledged, but the increases would not be considered to be 'major' (i.e., exceeding state noise regulatory thresholds warranting noise analyses and/or mitigation).

I-11.04

The 15 percent reduction in watershed area for Little McCarthy Lake (discussed in Section 4.3.2.10 of the EIS) would reduce both the inflow water volume and phosphorus loading to the lake. Due to the relatively small reduction in watershed area and the fact that phosphorous loading would also be reduced, the water quality of Little McCarthy Lake is not expected to change perceptibly. As a point of reference, the Snowball Lake analysis of watershed reduction (50

percent reduction in inflow volume, without the proposed augmentation) resulted in a predicted increase in lake total phosphorus from 20 to 21 ug/L, which would be imperceptible aesthetically or ecologically.

I-11.05
The opinion expressed by the commentor has been noted, however, no specific examples of impacts were provided to support the assertion regarding 'adverse impacts.'

I-11.06
An estimate of the Little McCarthy Lake watershed that would be impacted by the proposed project was made; and it was determined that the lake's watershed area would be reduced by approximately 15 percent. Note that the 30 percent reduction in watershed area referenced by the commentor (based on data provided in Table 4.1.10 in the Draft EIS) is based on analysis of the sub-watershed for a wetland within the Little McCarthy Lake watershed, not on the impact to the total Little McCarthy Lake watershed. The estimate of Little McCarthy Lake level changes based on a comparison to Little Sucker Lake is reasonable (see response I-11.04 above), given the similarity of the two lakes and their potential watershed impact areas.

Since the watershed reduction is only 15 percent and Little McCarthy Lake would not receive any discharge from mine pit dewatering, no substantial impacts to water quantity or quality of the lake are anticipated to result and no mitigation is required.

The commentor stated that Section 4.5.1 (wastewater/water quality) should include a discussion of impacts to Little McCarthy Lake. However, based on the results of the water quality analyses for the three lakes analyzed for the EIS (Swan, Oxhide and Snowball Lakes), that would be affected by the proposed project to a greater extent than Little McCarthy but which did not show likely impacts to lake water quality, it is reasonable to conclude that no water quality impacts to Little McCarthy Lake would result from the proposed project.

Section 3.3.3.3 of the Final EIS discusses the on-site sanitary wastewater treatment plant alternative to disposal at the Nashwauk Wastewater Treatment Plant, which discharges in the Swan Lake watershed. This alternative was added to the scope of the EIS during the scoping process specifically to address potential nutrient impacts to Swan Lake. However, the on-site wastewater treatment plant design would have no surface water discharge and therefore would not cause nutrient loading to Swan, Little McCarthy, or any other lake.

I-11.07
The passage referenced by the commentor was located within the wetland impacts section of the Draft EIS. Section 4.6 describes existing wildlife conditions and project-related impacts and mitigation.

I-11.08
The USACE has indicated that they plan to include in the Section 404 permit for the Minnesota Steel project a requirement for installation of additional monitoring wells at areas defined by the EIS as having the potential for indirect wetland impacts. Similarly, the MPCA will review the monitoring plan as part of its Section 401 certification process.

I-11.09
There are two main sources of groundwater for drinking water supply wells in the vicinity of the proposed project area. Groundwater flowing into the mine pits comes primarily from the Biwabik Iron Formation (BIF), a deep groundwater aquifer. Based on a review of the County Well Index, the majority of the nearest private wells draw groundwater from the surficial aquifer located above the BIF. Figure 4.2.1 in the Final EIS identifies the location of residential drinking water wells, based on information from the County Well index. Figures 4.2.2 and 4.2.3 provide a groundwater cross sectional view of the private drinking water wells near Snowball Lake. These figures help to visually illustrate the location of drinking water wells in relation to the Proposed Project and the potential impact that dewatering may have on the nearest private wells.

Historically while Butler Taconite was operating and dewatering pits, lake levels and public and private wells did not experience documented impacts due to drawdown.

To avoid potential impacts to drinking water wells due to dewatering, monitoring wells (piezometers) would be installed to detect if drawdown is occurring in the surficial aquifer. In addition, Minnesota Statutes (103G.261) identify state water allocation priorities, with the number one priority being the protection of 'domestic water supply' and Minnesota Rules (6115.0730) provide requirements for "negotiating a reasonable agreement" between the water appropriations permit holder and an affected party. An example of negotiating a reasonable agreement would be replacing/re-drilling a well that is experiencing impacts due to dewatering.

Section 4.2.3 of the Final EIS provides additional information on the topic of impacts to public and private wells.

I-11.10
An updated Fugitive Dust Control Plan was provided by Minnesota Steel April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

I-11.11
Potential air emissions from the backup generators are small compared to other air emissions from Minnesota Steel. Backup generators are used for backup power generation in the event of plant upsets. When operating upsets occur and backup power generation is needed, the total plant emissions are lower than when the plant is operating at full production. The air quality analysis included emissions for all Minnesota Steel process equipment and fugitives, the "worst-case" scenario for potential air emissions. The results of the analysis demonstrate that Minnesota Steel's emissions would not lead to violations of the National or Minnesota Ambient Air Quality Standards (NAAQS and MAAQS), as shown in Table 4.7.9 of the Draft and Final EIS.

I-11.12
Table 4.7.9 listed pollutants for which there are either state or federal ambient air quality standards, a health-based threshold for criteria pollutants. PM emissions were not specifically listed in these tables because there is no ambient standard for PM, only for PM_{10} and $PM_{2.5}$ (fine and ultrafine particles). Fine and ultrafine particles have greater surface area than larger particles of the same mass and they are generally considered to be more toxic. PM emissions are listed in Table 4.7.3 and the PM is a pollutant that is subject to Best Available Control Technology (BACT).

I-11.13
An air quality impact analysis was completed for the EIS and air permit. The analysis utilized air dispersion modeling for predicting ambient air pollutant concentrations in the vicinity of the site. Predicted concentrations of criteria pollutants were below applicable National and Minnesota Ambient Air Quality Standards. See Table 4.7.9 of the Draft and Final EIS for further detail. The facility also evaluated air toxic emissions and potential inhalation health risks. The results of these evaluations indicated that these items would remain below health guidelines.

Emission monitoring and compliance details would be included in the air permit that will be placed on public notice. Section 4.7.2.1.3 of the Draft and Final EIS contains information on control and minimization of hazardous air pollutant emissions. As with any permitted facility in the state, Minnesota Steel would be subject to routine compliance inspections and any potential enforcement action that should result from non-compliance.

I-11.14
Since the Draft EIS was issued, a re-evaluation of risks at receptor 13 was performed and risk has, in fact, increased for cancer impacts. The updated value is at the Minnesota Department of Health's guideline level for cancer risk. The commentor is directed to the HHSRA 4.7.2.4 for more detail. However, non-cancer impacts have decreased (see Section 4.7.2.4 of the Final EIS for updated data for receptor 13). Subsistence fish consumption may take place at any number of water bodies in the area and individual receptors are chosen based on projected maximum air concentrations of chemicals. They are intended to represent potential risks from this activity across the larger area but are not necessarily applicable only to one lake.

It is important to note that the health guidelines to which risk estimates are compared are not regulatory limits or "bright lines." Rather, they are an indication of a point above which further evaluation may be appropriate. For this facility, given the extent of the assessment at this point, this increase in risk is not significant enough to change the conclusions of the Final EIS with regard to the risk to human health.

I-11.15
MPCA and EPA have established guidelines for BACT economic viability decisions that are applied consistently across all industries.

I-11.16
As described in Section 4.7, the proposed project is required to meet state and federal air standards and would be required to implement project mitigation measures identified in Section 4.7.3. MPCA and EPA have established guidelines for BACT economic viability decisions that are applied consistently across all industries.

I-11.17
Section 4.7.2.5 of the EIS describes the Ecological Risk Assessment analysis and findings.

I-11.18
The USACE is continuing its consultation process with USFWS staff regarding threatened and endangered species, which included the wolf, to assess potential impacts and, if necessary, proposed mitigation. However, since the preparation of the Draft EIS, the wolf has been de-listed by the federal government.

I-11.19
As described in Section 6.8.2.1 of the Draft and Final EIS, the local roads would still be low volume roadways, including the township road that would be improved between CR 58 and CR 8. The forecast year 2029 ADT volume for that roadway is 600 vehicles per day, compared to an estimated ADT of 1,800 on the new access road and 3,250 vehicles per day on Highway 65 in Nashwauk. The township road/CR 8 intersection would not be considered to be a 'major intersection' warranting noise, dust or traffic operations analyses, when the higher volume intersections in Nashwauk were projected to have acceptable levels of operation.

I-11.20
Minnesota Steel is working with the local snowmobile clubs and MNDNR Trails staff on trail re-routing.

I-11.21
The opinion expressed by the commentor has been noted.

Jim Fetzik

I-12.01
An updated Fugitive Dust Control Plan was provided by Minnesota Steel April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

I-12.02
Section 3.5 of the Draft EIS identifies some of the reasons for selecting the Proposed Tailings Basin location over the Alternative Tailings Basin location. The additional considerations raised by the commentor were considered. However, if the Alternative site were utilized, the potential dust-generation issue would just be moved to another location, affecting a different group of people.

With respect to the issue of the public land at the Proposed Tailings Basin location, Itasca County plans to purchase other lands within the county, using proceeds from the land sale, to replace the county lands Minnesota Steel would use for mining and processing.

I-12.03
The Alborn Trail that passes through Pengilly, north of Swan Lake, would not be rerouted. Section 6.11.2 of the Final EIS provides additional information on this issue.

I-12.04
Minnesota Steel understands the City of Nashwauk is in the process of obtaining land adjacent to O'Brien Lake/Blue Lake for the purpose of constructing a public water access to O'Brien Lake/Blue Lake. The proposed Minnesota Steel project would not affect public access to the lake for on-water activities; however, Minnesota Steel would post their land on the shores of O'Brien/Blue Lake to prevent trespassing. No surface water discharges are proposed from the tailings basin, so no potentially contaminated water would be released to Blue Lake.

Charles D. Ross

I-13.01
The potential for 'nuisance' noise levels to increase due to mining operations and traffic is acknowledged, as described in Sections 4.10.2 and 6.8.2.2 of the Final EIS; however, the increases would not likely exceed state noise regulatory thresholds.

I-13.02
Air Quality General
The air quality of the proposed project is required to meet both state and federal air standards and monitoring would be required as part of the proposed project's air permit.

Tim Hickey/Mary Zanoni

I-14.01
Comment noted. Section 6.8.2.2 of the Draft and Final EIS describes the increased circuity that would result from closure of CR 58 through the plant site.

Mary Mueller

I-15.01
The Commentor's opposition to the proposed project is noted. Minnesota Steel would not likely be proposing this project if there were not a continuing need for iron ore mining and processing.

Frank Weber

I-16.01
Sections 4.7.2.3, 4.7.2.4, 4.7.2.5, and 5.3 of the Draft and Final EIS address mercury issues.

I-16.02
Air emissions and tailings basin seep issues identified by the commentor are addressed in Sections 4.7.2.4 and 4.7.2.5 and in Section 6.7.2, respectively.

I-16.03
Section 1.1 of the Draft and Final EIS discusses the mine production period studied in this EIS, and provisions for assessing impacts beyond this production period.

I-16.04
The opinion expressed by the commentor has been noted.

I-16.05
At this time there is limited data to evaluate the possible relationship between mining activities and adverse health effects in workers. The Minnesota Department of Health (MDH) has proposed two new health studies addressing potential health concerns in northeastern Minnesota. One of the studies would focus on the health of mine workers in the region. The other would assess the potential health impact of specific types of airborne mineral fragments generated by ore processing activity on the east end of the Range. The assessment would then be used to set regulatory exposure limits for those materials.

The MDH plans to seek federal funding for the study of mine workers from the National Institute for Occupational Safety and Health and other sources. Once funding is obtained, the study is expected to take several years to complete.

The proposed study of mine workers would expand and build on an earlier (2003) study, which was the first to ever conclusively document the occurrence of mesothelioma in Minnesota mine workers. Mesothelioma is a rare, fatal form of cancer seen almost exclusively in people who have been exposed to asbestos.

With respect to the proposed facility, the EIS concluded that it is unlikely that asbestos or amphibole minerals would be released to air or water from the ore deposit that would be mined by Minnesota Steel. Fibers-related data from several sources indicate that the identity of the minerals from ore and tailing samples from the western part of Minnesota's Iron Range is vastly different from samples from the east end of the Range. Mineralogical and microscopic analyses show that coarse taconite tailing sample composites from five western Range taconite mines did not contain any of the six regulated asbestos minerals, nor did they contain amphibole minerals. In addition, analyses of the former Butler Taconite ore deposit indicated that neither the ore nor the tailing samples contained asbestos or amphibole minerals (see study listed in Appendix I of the Final EIS).

I-16.06
The opinion expressed by the commentor has been noted.

Rich Libbey

I-17.01
The commentor is directed to Section 4.7.2.6 (Mineralogical Data and Studies) for information pertaining to the presence of asbestos mineral, amphibole minerals and asbestiform fibers from the proposed project.

I-17.02
Section 1.1 of the Draft and Final EIS discusses the mine production period studied in this EIS, and provisions for assessing impacts beyond this production period.

I-17.03
The City of Nashwauk is in the process of obtaining land adjacent to O'Brien Lake/Blue Lake for the purpose of constructing a public water access to O'Brien Lake/Blue Lake. The proposed Minnesota Steel project would not affect public access to the lake for on-water activities; however, Minnesota Steel would post their land on the shores of O'Brien/Blue Lake to prevent trespassing. The Proposed Project Boundary and AAQB have been revised since the Draft EIS to reflect the proposed City public access at the northwest end of Blue Lake -- as shown in Figure 6.11.1 in the Final EIS.

I-17.04
Itasca County plans to exchange 6,400 acres of county land outside of the Minnesota Steel project with Blandin for 7,800 acres of Blandin land inside the Minnesota Steel project area. Immediately after the County/Blandin land exchange, Itasca County would sell the 7800 acres of land inside the Minnesota Steel project area to Minnesota Steel. With the proceeds from the 7,800 acre sale, Itasca County would purchase other lands within the County to replace the County lands Minnesota Steel would use for mining and processing.

I-17.05
Lighting issues and mitigation are addressed in Sections 6.13.2 and 6.13.3 in the Draft and Final EIS.

I-17.06
As noted on page 4-47 of the Draft EIS, there is a possibility of a small increase in flow to Snowball Lake/Creek following mine closure, due to increased ground water captured by Pit 6 and discharged to the lake/creek. The extent of this potential increase can be somewhat controlled by how an outlet channel from Pit 6 to Snowball Lake is constructed. Any potential increase in flow from ground water may be offset by losses to surface water evaporation from the water-filled Pit 6, thus very little difference in Snowball Creek flow or levels is anticipated once Pit 6 reaches hydrologic equilibrium. A contingency for providing post-mining flow to Snowball Lake/Creek, during the time it takes Pit 6 to fill and come to hydrologic equilibrium, would be one of the issues addressed in the mine closure plan. Minnesota Steel would be responsible for all costs surrounding mine closure and reclamation, including construction of an overflow that effectively manages excess water from Pit 6, if needed.

I-17.07
Since there are no surface discharges from the tailings basin (tailings basin seeps would be collected and returned to the basin) mercury in the tailings basin slurry would be retained in the tailings basin. Mercury tends to adhere to the tailing particles in the basin and have a low likelihood of being discharged with the tailings basin losses to groundwater. Additional information on typical mercury concentrations in tailings basin waters is included in Attachment 2A of the NPDES/SDS permit (April 12, 2007 update – see Appendix I), which identifies a mercury concentration of 2.0 ng/L as typical of tailings basin water. This mercury concentration is less than surface water quality standards and substantially below drinking water standards.

I-17.08
Section 4.2.3.2 of the Final EIS describes the relationship of the mine pits to the groundwater aquifers. Presently groundwater from the Biwabik Iron Formation aquifer (BIF) discharges to Pit 5 and comprises a large portion of the inflows to the pit. Following dewatering and during development of Pits 5 and 6, the inflow from the BIF is expected to increase due to the lowering of the water level in the pits. Therefore, the groundwater flow direction is from the BIF into the pits and any pollutants in the pits would be removed with dewatering discharges and would not enter the BIF. The proposed project does not include backfilling the pits, unless in-pit stockpiling is found to be feasible. Since in-pit stockpiling would only utilize overburden and waste rock (i.e., uncontaminated material), contaminants would not be introduced into post-mining pit groundwater.

C. Scott Jeffers

I-18.01
Analysis of potential blasting impacts and mitigation are included in Draft and Final EIS Sections 4.10.2.2 and 4.10.3.2, respectively. Minnesota Steel has indicated that blasting is anticipated to occur only once a week. Although the nuisance factor related to blasting is acknowledged, the limited frequency of blasts plus the other blasting mitigation strategies to minimize potential dangers and structural damage impacts due to blasting described in Section 4.10.3.2 of the Final EIS would lessen the overall potential impacts to nearby residents.

I-18.02
Minnesota Steel would be required to take precautions to protect people and structures from potential injury from blast materials, including, but not limited to, clearing the blast area (including all areas that could experience fly rock) prior to setting blasts and monitoring the blast perimeter to keep people from entering potentially dangerous areas. In the past, the clearing process has included stopping road traffic and clearing pit lakes of fishermen.
Also, the MNDNR regulates (Minnesota Rules 6130.3900) blasting through the Permit to Mine and has the authority to investigate complaints received from the public.

I-18.03
An updated Fugitive Dust Control Plan was provided by Minnesota Steel April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

I-18.04
The potential for 'nuisance' noise levels to increase due to mining operations and traffic is acknowledged; however, as described in Section 4.10.2 of the Final EIS, the increases would not likely exceed state noise regulatory thresholds mitigation.

I-18.05
The opinion expressed by the commentor has been noted.

Louis Baumchen & Amy Drake-Baumchen

I-19.01
Section 4.7.2.2.1 of the Draft EIS describes the results of air quality analyses modeling conditions at receptors in the vicinity of the proposed project -- including the plant, mining and tailings basin operations. This modeling indicates that the maximum increases in pollutants generated would be below regulatory thresholds.

An updated Fugitive Dust Control Plan was provided by Minnesota Steel in April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

I-19.02
The commentor's concerns are acknowledged. No specific issues were raised that can be responded to.

Leonard Anderson

I-20.01
The zone of interest that the commentor refers to is the 10 km radius from the facility which was evaluated in the HHSRA. This distance is recommended in the U.S. EPA guidance document Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities (2005) which states that ". . . most significant deposition occurs within a 10 km radius . . . of the facility being assessed." The project proposer and the MPCA chose this area in accordance with federal risk assessment guidance.

Further, most mercury emitted from the facility is expected to remain in the atmosphere for a significant period of time. It is unlikely that much of the mercury emitted would be deposited close to the plant, even within 100 km. The amount of mercury deposited in Lake Superior that could be attributed to this source would not be discernable from other mercury deposition possibly occurring in the lake.

I-20.02
One of the advantages of implementing the LoTox technology (if feasible) is that it has the possibility to also reduce mercury emissions. Since LoTox has not been used for this type of application process it can not be stated definitively that it would have the ability to reduce mercury emissions.

One of the advantages of implementing the LoTox technology (if feasible) is that it has the possibility to also reduce mercury emissions. Since LoTox has not been used for this type of application process it can not be stated definitively that it would have the ability to reduce mercury emissions.

The commentor is directed to Section 4.7.2.4 (Human Health Screening Risk Assessment and 4.7.2.5 (Ecological Risk Assessment) for information relating to the overall potential for mercury impacts. These assessments indicate that the additional mercury added by the proposed project should not result in a detectable increase.

Also, a couple of points can be clarified. First, the four pounds per year of oxidized mercury represents the maximum amount that could be released to the air should LoTOx not be used by Minnesota Steel or if LoTOx has no effect on mercury emissions. Second, the US Steel-Minntac Water Quality application for a discharge of tailings water indicates that there would be no increase in the mass of sulfate discharged from Minntac.

I-20.03
Items falling under the two categories ('Significant Impacts Not Expected' and 'Potentially Significant Impacts May Result') were identified through the scoping decision process and identified into those categories in the scoping decision document. Although certain topics may have been decidedly placed into different categories, the EIS has strived to provide factual information and analyses to inform the reader on the topic being discussed.

With respect to mercury deposition within 100 km of the proposed project, the human health screening risk assessment assessed the ‘worst case’ impacts from transport and consumption mechanisms of all pollutants analyzed, including mercury. The study methodology was developed to assess the highest impacts for those pathways of exposure nearby the facility where the highest air concentrations and resultant deposition rates occur. The HHSRA evaluated potential health risks from inhalation of metal emissions as well as exposure pathways from ingestion of foods that could come in contact with deposited metal emissions. This includes exposure from consuming fish that is exposed to emissions deposited in area lakes. Risk estimates were calculated at or below the acceptable health guidelines for these exposure pathways.

I-20.04
The proposed project has incorporated a water recycling/reuse system (no discharge of scrubber blowdown and contact cooling water) and a seepage collection system around the tailings basin to avoid a discharge to a listed water.

The MPCA plans to continue its mercury reduction efforts by capitalizing on opportunities at existing sources at which source reduction, pollution prevention and controls can reduce mercury emissions. The MPCA's statewide approach to the mercury TMDL is a first for the nation. While other states have tackled the mercury-pollution problem by having a separate TMDL for each impaired water, the MPCA is taking a statewide approach because approximately 90% of mercury comes from outside the state and atmospheric deposition of mercury is relatively uniform across the state. The MPCA's mercury TMDL goal is to reduce mercury emissions from human activities within the state by 93 percent from 1990 levels. Minnesota has, through both voluntary and regulatory approaches, reduced in state mercury emissions by approximately 70% since 1990. The state’s mercury TMDL program and the voluntary mercury reduction strategy are elements of the MPCA’s efforts to drive down mercury emissions. Even with short-term increases from sources such as the proposed project, the long-term trend will be downward.

Greg & Barb Walker/Leon & Shelley Rasche

I-21.01
The opinion expressed by the commentor has been noted. This issue would be addressed during the powerline routing permit approval process.

I-21.02
Stone Road would remain open. Aerial photos indicate Stone Road presently stops north of the Minnesota Steel property line, however, the plat map indicates a dotted line extension (trail) from Stone Road to an area inside the Minnesota Steel property line. If a trail enters onto Minnesota Steel property, the trail would be bermed off and the property line would be clearly posted as no trespassing.

Ed and Sue Stish

I-22.01
The MPCA acknowledges the significance of global warming as a serious environmental problem and believes that it must be addressed holistically and not just by an individual facility. The State of Minnesota has also assembled the Minnesota Climate Change Advisory Group to develop state-level policy recommendations for reducing or sequestering greenhouse gas emissions and to identify opportunities to promote energy efficient technologies and renewable energy resources.

The Proposed Project would contribute CO_2 and greenhouse gases to the atmosphere. Minnesota Steel has provided a document titled "Minnesota Steel Industries CO_2 Emission Footprint and Comparison" in an effort to provide information regarding greenhouse gas emissions. A copy of this document is provided under Appendix O of the Final EIS. It should be noted that currently there are no regulations governing CO_2 or greenhouse gas emissions. When future regulations are promulgated this proposed project as well as other applicable entities would be required to meet those regulations. Note that the integrated design (mining through steel production) and energy choices result in energy conservation and therefore a reduction in the amount of greenhouse gases that would be produced using more traditional, non-integrated methods.

I-22.02
Mercury and other metals were evaluated in the Human Health Risk Screening Assessment (HHSRA) conducted as part of this EIS. The HHSRA evaluated potential health risks from inhalation of metal emissions as well as exposure pathways from ingestion of foods that could come in contact with deposited metal emissions. This includes exposure from consuming fish that is exposed to emissions deposited in area lakes. Risk estimates were calculated at or below the acceptable health guidelines for these exposure pathways.
The commentor is directed to Section 4.7.2.4 (Human Health Screening Risk Assessment and 4.7.2.5 (Ecological Risk Assessment) for information relating to mercury and other toxic pollutants.

I-22.03
Current standards and regulations for mining processes are different than past mining practices. More stringent standards and better technology allow mining and steel processes to operate with less risk for adverse health effects to workers and nearby residences. OSHA and other employee safety regulations have improved working conditions and minimized impacts to workers. The Human Health Screening-Level Risk Assessment (HHSRA) prepared for the Minnesota Steel project presents the potential incremental risk to the public that may be associated with emissions from the proposed facility. The findings of the HHSRA were that cancer risk did not exceed Minnesota Department of Health (MDH) guidelines. In conclusion, based on the results of the HHSRA and the information that is available from previous health studies conducted in the mining industry, no adverse respiratory or other health effects (including cancer) associated with the proposed Minnesota Steel facility for residents living in the vicinity of the proposed project are expected.

The commentor is directed to Section 4.7.2.6 (Mineralogical Data and Studies) of the EIS for information pertaining to the presence of asbestos mineral, amphibole minerals and asbestiform fibers from the proposed project.

I-22.04
The opinion expressed by the commentor has been noted

Amanda Nesheim

I-23.01
The closest city water supply wells to the Minnesota Steel project area are in Nashwauk. Minnesota Department of Health (MDH) staff working on the wellhead protection plan for the Nashwauk wells stated that since the groundwater gradient within the Biwabik Iron Formation (BIF) aquifer that supplies the wells is from east to west, the pits associated with the proposed Minnesota Steel project would not flow towards the City of Nashwauk wells.

I-23.02
The water management plan for the Minnesota Steel project (see Section 4.2.1 of the Draft and Final EIS) proposes only conveyance of storm water from undisturbed areas to Pits 1&2 for storage, for use as a supplemental processing water source. No processing water would be conveyed to Pits 1&2 – since water used in the Minnesota Steel steel-making processes would be recycled and re-used and ultimately consumed with no discharge.

I-23.03
Attachment 2A ('Estimate of Tailings Basin Seep Water Quality' in Tab 1 of the NPDES/SDS Permit Application) summarizes the water chemistry data (including heavy metals) collected for other tailings basins on the Iron Range or estimated by the dissolved solids balance modeling. [Note: Attachment 2A was updated and re-submitted to MPCA by Minnesota Steel on April 12, 2007 – see transmittal listing in Appendix I of the Final EIS.] All of the Attachment 2A concentrations are below the USEPA drinking water standards except total dissolved solids, which is above the 500mg/L secondary standard for drinking water and manganese which is above the 0.05 mg/L secondary standard. Secondary standards are guidelines that regulate contaminants that may cause cosmetic or aesthetic effects in drinking water.

The concentrations of water quality parameters listed in Attachment 2A likely represent 'worst case' tailings water concentrations. Seepage into the groundwater through the stored fine tailings and through the underlying clay layer may attenuate metals by absorption onto the fine tailings or onto the clay material.

Based on evaluation of this data, release of contaminants at concentrations of concern into groundwater via tailings basin seep water is not anticipated to result from the Minnesota Steel tailings basin. However, as noted in the Draft and Final EIS, Section 6.7.3, the MPCA plans to include a requirement for installation of groundwater monitoring wells around the tailings basin as part of the SDS permit conditions for the tailings basin, to aid in detection of releases from the tailings basin to the shallow groundwater, if they should occur in the future. Manganese will be included in the SDS permit as a monitored parameter in the groundwater wells surrounding the tailings basin.

I-23.04
There is no known pathway for tailings particles to be introduced to drinking water wells through the groundwater. Total dissolved solids in seep water from the tailings basin would be reduced as water flows through the fine materials at the bottom of the tailings basin and through soil below the tailings basin prior to reaching ground water.

I-23.05
The water management concept for the proposed Minnesota Steel project was developed to avoid ground and surface water discharges, as suggested by the commentor. Water used in the Minnesota Steel steel-making processes would be recycled and re-used and ultimately consumed with no discharge. The only discharge of water used in the pellet-making process (crusher/concentrator) would be leakage from the bottom of the tailings basin into the shallow groundwater. As described in Final EIS and the previous responses, no potential groundwater contamination impacts are anticipated, and monitoring wells would be installed around the tailings basin as part of the SDS permit conditions for the tailings basin, to aid in detection of releases from the tailings basin to the shallow groundwater, if they should occur in the future.

I-23.06
Metals were addressed in the human health risk assessment and a list of these metals can be found in Table 4.7.18 of the Draft and Final EIS. This list also includes mercury emissions from the facility. All metals evaluated in the risk assessment were examined from both inhalation exposure, exposure through consumption of food that has taken up deposited metals, and consumption of fish that may contain metals deposited from the plant. Note that air dispersion modeling used for this analysis specifically addressed nearby impacts (see Figure 4.7.2 of the Draft and Final EIS).

In March of 2007, the U.S. EPA approved Minnesota's Statewide Mercury Total Maximum Daily Load (TMDL) plan. This plan sets a target for fish tissue concentration of mercury that is generally safe for human consumption, and translates the target to reduction goals for mercury sources. More information on the TMDL and its report can be found at http://www.pca.state.mn.us/water/tmdl/tmdl-mercuryplan.html#statewideplan. The proposed project has incorporated a water recycling/reuse system (no discharge of scrubber blowdown and contact cooling water) and a seepage collection system around the tailings basin to avoid a discharge to a listed water.

The proposed project has incorporated a water recycling/reuse system (no discharge of scrubber blowdown and contact cooling water) and a seepage collection system around the tailings basin to avoid a discharge to a listed water.

The MPCA plans to continue its mercury reduction efforts by capitalizing on opportunities at existing sources at which source reduction, pollution prevention and controls can reduce mercury emissions. The MPCA's statewide approach to the mercury TMDL is a first for the nation. While other states have tackled the mercury-pollution problem by having a separate TMDL for each impaired water, the MPCA is taking a statewide approach because approximately 90% of mercury comes from outside the state and atmospheric deposition of mercury is relatively uniform across the state. The MPCA's mercury TMDL goal is to reduce mercury emissions from human activities within the state by 93 percent from 1990 levels. Minnesota has, through both voluntary and regulatory approaches, reduced in state mercury emissions by approximately 70% since 1990. The state's mercury TMDL program and the voluntary mercury reduction strategy are elements of the MPCA's efforts to drive down mercury emissions. Even with short-term increases from sources such as the proposed project, the long-term trend will be downward.

I-23.07
Emission monitoring and compliance details would be included in the air permit that will be placed on public notice. Section 4.7.2.1.3 of the Draft and Final EIS contains information on control and minimization of hazardous air pollutant emissions. As with any permitted facility in the state, Minnesota Steel would be subject to routine compliance inspections and any potential enforcement action that should result from non-compliance.

I-23.08
The MPCA acknowledges the significance of global warming as a serious environmental problem and believes that it must be addressed holistically and not just by an individual facility. The State of Minnesota has also assembled the Minnesota Climate Change Advisory Group to develop state-level policy recommendations for reducing or sequestering greenhouse gas emissions and to identify opportunities to promote energy efficient technologies and renewable energy resources.

The Proposed Project would contribute CO_2 and greenhouse gases to the atmosphere. Minnesota Steel has provided a document titled "Minnesota Steel Industries CO_2 Emission Footprint and Comparison" in an effort to provide information

regarding greenhouse gas emissions. A copy of this document is provided under Appendix O of the Final EIS. It should be noted that currently there are no regulations governing CO_2 or greenhouse gas emissions. When future regulations are promulgated this proposed project as well as other applicable entities would be required to meet those regulations. Note that the integrated design (mining through steel production) and energy choices result in energy conservation and therefore a reduction in the amount of greenhouse gases that would be produced using more traditional, non-integrated methods.

I-23.09
At this time there is limited data to evaluate the possible relationship between mining activities and adverse health effects in workers. The Minnesota Department of Health (MDH) has proposed two new health studies addressing potential health concerns in northeastern Minnesota. One of the studies would focus on the health of mine workers in the region. The other would assess the potential health impact of specific types of airborne mineral fragments generated by ore processing activity on the east end of Minnesota's Iron Range. The proposed project is located on the western edge of the Iron Range.

A report about fibers was completed in preparation for the EIS. The commentor is directed to Section 4.7.2.6 (Mineralogical Data and Studies) for information pertaining to the presence of asbestos mineral, amphibole minerals and asbestiform fibers from the proposed project. Fibers-related data from several sources indicate that the identity of the minerals from ore and tailing samples from the western part of Minnesota's Iron Range is vastly different from samples from the east end of the Range. Mineralogical and microscopic analyses have shown that coarse taconite tailings sample composites from five western Mesabi Range taconite mines did not contain any of the six regulated asbestos minerals, nor did they contain amphibole minerals.
To evaluate the former Butler Taconite ore deposit, ore samples also were analyzed and examined for the presence of fibers (e.g., amphibole minerals). This analysis concluded that neither the ore nor the tailings samples showed evidence of asbestos or amphibole minerals (Barr Engineering, 2006). Given this information, it seems unlikely that amphibole minerals would be released from ore or taconite processing in the area for the former Butler Taconite mine.

I-23.10
The economic study performed by the University of Minnesota – Duluth for the EIS did not specifically include or exclude a factor for loss of tourist economic benefits, probably because such impacts are difficult to predict. The study did include increase economic activity for the other types of businesses identified by the commentor, as more jobs and more spin-off jobs are predicted to occur as a result of the Minnesota Steel project.

I-23.11
The Human Health Screening-Level Risk Assessment (HHSRA) prepared for the Minnesota Steel project presents of potential incremental risk to the public that may be associated with emissions from the proposed facility. The findings of the HHSRA were that cancer risk did not exceed Minnesota Department of Health (MDH) guidelines. In conclusion, based on the results of the HHSRA and the information that is available from previous health studies conducted in the mining industry, no adverse respiratory or other health effects (including cancer) associated with the proposed Minnesota Steel facility for residents living in the vicinity of the proposed project are expected.

It is beyond the capability of this EIS to evaluate the overall potential health care cost (relating to under/uninsured, expenditure correlation to disposable income, work day loss and productivity loss) that could be associated with the proposed project, since the findings of the HHSRA did not identify potential incremental health risks in the project vicinity.

I-23.12
The opinion expressed by the commentor has been noted; however, given the number of socioeconomic factors that cannot be quantified (e.g., see the responses to the previous two comments) it is not feasible to provide a definitive socioeconomic cost-benefit analysis.

I-24 - R.D. Learmont
The Preferred Alternative in the Draft and Final EIS does not include storage of tailings in mine pits. The tailings are proposed to be stored in a tailings basin, as shown in Figure 1.2 in the Draft and Final EIS.

I-25 - Lori Houwman
The MNDNR Project Manager called the commentor to provide the information requested regarding the status of the process.

I-26 - Greg Andrews – The Commentor's support for the proposed project is noted.
I-27- Steve Arbour – The Commentor's support for the proposed project is noted.
I-28 - Frank Bennett – The Commentor's support for the proposed project is noted.
I-29 - Thomas Bennett – The Commentor's support for the proposed project is noted.
I-30 - Robert Besful – The Commentor's support for the proposed project is noted.
I-31 - Jonathan Bunkowske – The Commentor's support for the proposed project is noted.
I-32 - Steven Crouch – The Commentor's support for the proposed project is noted.
I-33 - Thomas Deluca – The Commentor's support for the proposed project is noted.
I-34 - Donald C. Downs Sr. – The Commentor's support for the proposed project is noted.
I-35 - Larry and Elizabeth Doyle – The Commentor's support for the proposed project is noted.
I-36 - Eric Erkkila – The Commentor's support for the proposed project is noted.

I-37 - Larry Furlong – The Commentor's support for the proposed project is noted.
I-38 - Douglas Hanson – The Commentor's support for the proposed project is noted.
I-39 - Al Hilde, Jr. – The Commentor's support for the proposed project is noted.
I-40 - Don Hilligoss – The Commentor's support for the proposed project is noted.
I-41 - David Johnson – The Commentor's support for the proposed project is noted.
I-42 - Kathryn Johnson – The Commentor's support for the proposed project is noted.
I-43 - Kathleen D. Kirchner– The Commentor's support for the proposed project is noted.
I-44 - David Latvala – The Commentor's support for the proposed project is noted.
I-45 - Mark Mandich – The Commentor's support for the proposed project is noted.
I-46 - Leif Nelson – The Commentor's support for the proposed project is noted.
I-47 -Terry Nevalainen – The Commentor's support for the proposed project is noted.
I-48 - Drew Prochazka – The Commentor's support for the proposed project is noted.
I-49 - Terry Rupar – The Commentor's support for the proposed project is noted.
I-50 - Larry Salmela – The Commentor's support for the proposed project is noted.
I-51 - Joe Sertich – The Commentor's support for the proposed project is noted.
I-52 - Ed Shaughnessy – The Commentor's support for the proposed project is noted.
I-53 - Norman & Elizabeth Voigt – The Commentor's support for the proposed project is noted.
I-54 - Walleyebrooks@aol.com – The commentor's concerns are acknowledged. No specific issues were raised that can be responded to.
I-55 - Jeff Welcher – The Commentor's support for the proposed project is noted.
I-56 - Dr. Ernest Williams, Jr. – The Commentor's support for the proposed project is noted.

TRANSCRIPT COMMENTORS

Alden Judnitsch
T-01
The air quality of the proposed project is required to meet both state and federal air standards and monitoring would be required as part of the proposed project's air permit. An updated Fugitive Dust Control Plan was provided by Minnesota Steel in April 2007. A copy of the Fugitive Dust Plan is provided in Appendix K and is also discussed in Section 4.7.3. The public will have an opportunity to comment on the Fugitive Dust Plan as part of the Air Permit review process.

Ronald Rich/Swan Lake Association
T-02
See responses to the Swan Lake Association comment letter (especially responses IG-6.3, IG-6.13, and IG-6.15)

T-03
The issue of financial assurance (that adequate money would be available for post-mining reclamation or clean-up) is addressed by MNDNR as part of the Permit to Mine review/approval process. When needed, a performance bond or other security or assurances, acceptable to the MNDNR, is required to be posted for the project by the Proposer prior to granting the Permit to Mine.

T-04
See response to comment IG-6.20.

Tarry Eddington, Itasca County Housing & Redevelopment Authority
T-05
The statistics provided by the commentor have been referenced in Section 6.14.2 in the Final EIS.

Tom Pearson
T-06
Draft and Final EIS Section 4.2.3.1 explains why the EIS analyses focused on the Hill Annex Mine Pit as the likely future source for additional augmentation water if it is needed (i.e., as the current water balance indicates that additional water would be needed). Section 4.2.3.1 of the Draft EIS, page 4-36, describes that potential additional sources for augmentation water, including Swan Lake, were considered.

The November 3, 2006 e-mail referenced in the MCEA comments was written prior to development of the final water management plan. The water management plan under consideration as of November 3, 2006 would have required additional water for plant operations during an extreme drought condition similar to that of the 1930's dust bowl. At that time the availability of Hill Annex Mine Pit water was not certain, and an appropriation from Swan Lake (or its tributaries) was being proposed to supply the demand under such extreme drought conditions. During November and December 2006 the present water management plan was developed with input from MNDNR and the EIS consultant. This plan would conserve stored water and allowed the project to avoid appropriation of waters outside of its boundaries for process water supply.

Following development of the final water management plan (as documented in the Draft and Final EIS), Swan Lake was dropped from consideration as a source of process and augmentation water supplies. [Section 4.2 of the Final EIS identifies the Hill Annex Mine Pit as the proposed source of water for streamflow augmentation in the future, if needed.]

T-07
As designed the tailing basin has enough capacity for at least 20 years. It would likely have capacity for greater than 20 years but this depends on factors such as ultimate dam stability achieved, pumping requirements, operational efficiency, and actual tailing deposition behavior. Conservative assumptions have been made relative to these factors for a 20 year design. Geotechnical information on the basin dams after 20 years is necessary to determine the ultimate capacity of the basin after 20 years. The tailing basins height would be approximately 70 feet. The height is dependent on the existing topography in the immediate area. The elevation would range from 1475 to 1510 feet after 20 years of operation.

Peter McDermott (IEDC)

T-08
The statistics provided by the commentor have been referenced in Section 6.14.2 in the Final EIS.

T-09
The statistics provided by the commentor have been referenced in Section 6.14.2 in the Final EIS.

T-10
The statistics provided by the commentor have been referenced in Section 6.14.2 in the Final EIS.

ELECTED OFFICIALS

E-01 **Tom Anzelc – SR –** The Commentor's support for the proposed project is noted.
E-02 **Senator Norm Coleman –** The Commentor's support for the proposed project is noted.
E-03 **Tom Saxhaug - SS–** The Commentor's support for the proposed project is noted.
E-04 **Loren Solberg - SR–** The Commentor's support for the proposed project is noted.

BUSINESSES

B-01 **Tony Wedell/AMEC –** The Commentor's support for the proposed project is noted.
B-02 **Ameripride, Reggie Licari –** The Commentor's support for the proposed project is noted.
B-03 **Boldt Construction, Iron Mining Assoc. –** The Commentor's support for the proposed project is noted.
B-04 **Andrew Kingsbury/Champion Charter Sales&Service –** The Commentor's support for the proposed project is noted.
B-05 **Jim Liagges; Champion Charter Sales –** The Commentor's support for the proposed project is noted.
B-06 **Gary Benjamin/Champion Inc. –** The Commentor's support for the proposed project is noted.
B-07 **Cornerstone Energy –** The Commentor's support for the proposed project is noted.
B-08 **Cutler-Magner Company –** The Commentor's support for the proposed project is noted.
B-09 **Lyle and Kathryn Wallentine; Dixon Lake Resort –** The Commentor's support for the proposed project is noted.
B-10 **Grand Rapids State Bank –** The Commentor's support for the proposed project is noted.
B-11 **Great Northern Iron Ore Properties –** The Commentor's support for the proposed project is noted.
B-12 **Gary Oja & Kathy Hoolihan/Industrial Lubricant Company –** The Commentor's support for the proposed project is noted.
B-13 **Thomas Jamar/Jasper Engineering –** The Commentor's support for the proposed project is noted.
B-14 **Donald V. Larson/Lerch Brothers Inc. –** The Commentor's support for the proposed project is noted.
B-15 **Kristi Garrity/Midwest Communications –** The Commentor's support for the proposed project is noted.
B-16 **David McMillan/Minnesota Power –** The Commentor's support for the proposed project is noted.
B-17 **Stan Gibson/NALCO –** The Commentor's support for the proposed project is noted.
B-18 **Nashwauk Chamber of Commerce –** The Commentor's support for the proposed project is noted.
B-19 **Paul Tweed, Nashwauk Hardware –** The Commentor's support for the proposed project is noted.
B-20 **Ron Schiferl & Philip Taylor/Naterra Land –** The Commentor's support for the proposed project is noted.
B-21 **John Ratelle/Oswald Companies –** The Commentor's support for the proposed project is noted.
B-22 **US Bank – Hibbing –** The Commentor's support for the proposed project is noted.
B-23 **R.E. Prittinen - Viking Explosives –** The Commentor's support for the proposed project is noted.