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## **Appendix I**

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### **List of EIS Special Studies, Technical Memorandums, and Permit Application Submittals through January 22, 2007**

## **EIS Special Studies, Technical Memorandums, and Permit Application Submittals Through 1-22-07**

The following is a list of special studies, technical memoranda, and permit applications that were completed specifically for the proposed Minnesota Steel project near Nashwauk, Minnesota. These documents were used in the development of the Minnesota Steel DEIS along with many additional references, which can be found in Chapter 10 – References. Copies of these special studies are available for review upon submittal of a request to the MNDNR Project Manager.

### **AIR**

#### **Permit Applications**

Application for Permit to Construct and Operate an Integrated Steel Plant – Minnesota Steel Industries, LLC., Nashwauk, Itasca County, Minnesota. Barr Engineering Company. September, 2006.

Summary of Emission Inventory Revisions Since the September Application Update Submittal. Barr Engineering Company. November, 2006.

#### **Ecological Screening Level Risk Assessment**

Ecological Screening – Level Risk Assessment. Barr Engineering Company. August 2006.

Supplemental Information to the August 2006 Ecological Screening-Level Risk Assessment. Barr Engineering Company. November, 2006.

#### **Human Health Risk Assessment**

Human Health Screening – Level Risk Assessment. Barr Engineering Company. May, 2006.

Supplemental Information to the May 2006 Human Health Screening-Level Risk Assessment. Barr Engineering Company. November, 2006.

Supplemental Qualitative Information to the May 2006 Human Health Screening – Level Risk Assessment. Barr Engineering Company. December, 2006.

#### **Cumulative Impacts Analysis**

Cumulative Impacts Analysis: Minnesota Iron Range Industrial Development Projects – Assessment of Potential Visibility Impacts in Federal Class I Areas in Minnesota. Barr Engineering Company. November, 2006.

Cumulative Impacts Analysis: Minnesota Industrial Development Projects – Ecosystem Acidification. Barr Engineering Company. August, 2006.

Cumulative Impacts Analysis: Minnesota Iron Range Industrial Development Projects – Evaluating Particulate Matter (PM<sub>10</sub>) Air Concentrations in Federal Class I Areas in Minnesota and Implications for Prevention of Significant Deterioration (PSD) Air Quality Increment. Barr Engineering Company. November, 2006.

Cumulative Impacts Analysis: Minnesota Iron Range Industrial Development Projects – Mercury Deposition and Bioaccumulation in Fish in Northeast Minnesota. Barr Engineering Company. October, 2006.

### **Other**

Mercury Air Pollution Control Assessment at Minnesota Steel. Barr Engineering Company. October, 2006.

Mercury Overview: A Summary of Mercury Releases and Potential Impacts to the Environment. Barr Engineering Company. October, 2006.

Report: *Review of Fibers-Related Data for the West End of the Mesabi Iron Range and the Former Butler Taconite Ore Deposit*. Barr Engineering Company. July, 2006.

### **ALTERNATIVES DEVELOPMENT AND EVALUATION**

Technical Memo: *Alternative Tailings Basin Sub-Alternatives Development*, Wenck Associates, Inc. October, 2006.

Technical Memo: *Alternative Pellet Furnace Evaluation*, Wenck, Associates, Inc. December, 2006.

Technical Memo: *Processing Plant Alternatives Development*, Wenck Associates, Inc. September, 2006.

Technical Memo: *Stockpile Alternatives Development*, Wenck Associates, Inc. September, 2006.

Technical Memo: *On-Site Sanitary Wastewater Treatment Alternatives Development*, Wenck Associates, Inc. June, 2006.

Technical Memo: *Tailings Basin Alternative Study*, Nashwauk, Minnesota. Barr Engineering Company. July, 2005.

### **ENVIRONMENTAL REVIEW**

Minnesota Steel Industries, LLC. Taconite Mine, Concentrator, Pellet Plant, Direct Reduction Iron Plant, and Steel Mill Project - Scoping Environmental Assessment Worksheet (EAW) and Draft Scoping Decision Document. Minnesota Department of Natural Resources (DNR). July, 2005.

Minnesota Steel Industries, LLC. Taconite Mine, Concentrator, Pellet Plant, Direct Reduction Iron Plant, and Steel Mill Project - Final Scoping Decision Document. Minnesota Department of Natural Resources (DNR). October, 2005.

### **INFRASTRUCTURE**

Draft Report: MSI Infrastructure Improvements, Wetland and Natural Heritage Data Assessment and Avoidance Potential for Linear Alignments. Short Elliot Henderson (SEH), Inc. January, 2005.

Itasca County Public Infrastructure Improvement Study: Railroad, Roadway, Gas Pipeline, Fresh Water Supply, Wastewater Treatment. Short Elliot Henderson (SEH), Inc. December, 2005.

Preliminary Engineering Report – City of Nashwauk: Water and Sanitary Sewer Infrastructure Improvement to Minnesota Steel (Appendix A of Itasca County Public Infrastructure Study). RLK. August 2005.

Technical Memo: Results of the Nashwauk Area Traffic Analysis – MSI Infrastructure Improvement Project (Appendix E of Itasca County Public Infrastructure Study). SEH, Inc. January 28, 2005.

## **MINING**

Preliminary Report: Dam Safety Permit Application for Proposed Tailings Basin. Barr Engineering Company. November, 2006.

Technical Report: *Taconite Ore Body Located at the Former Butler Taconite Mining Operation, West of Nashwauk, Minnesota*, Volume VIII – Permit to Mine Application. Barr Engineering Company. December, 2006.

Technical Report: *Taconite Ore Body Located at the Former Butler Taconite Mining Operation, west of Nashwauk, Minnesota*. Volume VII: Preliminary Tailings Basin Design. Barr Engineering Company. January, 2007.

## **MISCELLANEOUS**

*The Economic Impact of Constructing and Operating Minnesota Steel Industries LLC in Itasca County, Minnesota*. University of Minnesota – Duluth Labovitz School of Business and Economics, Bureau of Business and Economic Research. April, 2006.

## **NOISE**

Technical Memo: *Minnesota Steel – Blasting Impact Assessment*, David Braslau and Associates, Inc. January 16, 2007.

Technical Memo: *Minnesota Steel – Haul Truck Noise Assessment*, David Braslau and Associates, Inc. January 16, 2007.

## **PLANTS AND WILDLIFE**

### **Plants**

Botanical Survey. Barr Engineering Company. August, 2005.

Endangered Species Takings Permit Application for Minnesota Steel Industries, LLC. Barr Engineering Company. March, 2006.

Minnesota Steel *Botrychium* Transplant Strategy. Barr Engineering Company. September, 2006.

Technical Memo: *Cumulative Impacts – Threatened and Endangered Plant Species*, Wenck, Associates, Inc. November, 2006.

### **Wildlife**

2006 Canada Lynx Assessment – Final Interim Report for Minnesota Steel Industries, LLC. Nashwauk, Minnesota. ENSR Corporation. June, 2006.

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

## **WATER**

### **Permit Application**

Combined Application for Water Appropriations Permits and Work in Public Waters Permits. Barr Engineering Company. November, 2006.

NPDES/SDS Permit Application Revisions for the Minnesota Steel Industries Proposed Taconite Processing and Steel Mill Operations. Barr Engineering Company. December, 2006.

Water Appropriations and Work in Public Waters Permit Application Revisions. Barr Engineering Company. December, 2006.

### **Hydrology**

Minnesota Steel Industries: Lake and Stream Hydrologic Impacts Evaluation. Barr Engineering Company. January, 2006.

Minnesota Steel Industries Surface Water and Groundwater Yield Near Nashwauk, Minnesota. DNR – Gleason. October, 2006.

Technical Memo: *Physical Impacts to Non-Wetland Water Resources*. Wenck, Associates, Inc. January, 2007.

### **Water Quality**

Laboratory-Based Rates of Phosphorus Release as a Function of Initial Sulfate Concentration for Profundial Sediments of Swan Lake, Minnesota. US Army Corps of Engineers. Spring Valley, Wisconsin. Engineer Research and Development Center (ERDC) Equ Galle Aquatic Ecology Laboratory. April, 2006.

Modeling of Phosphorus Transport in Swan Lake. University of Minnesota - St. Anthony Falls Laboratory. August, 2006.

Oxhide Lake Water Quality Evaluation (31-106P). Itasca County, Minnesota. Technical Memorandum prepared for: Minnesota Department of Natural Resources in cooperation with the Minnesota Pollution Control Agency. Wenck Associates, Inc. January 2007.

Snowball Lake Water Quality Evaluation (31-108P). Itasca County, Minnesota. Technical Memorandum prepared for: Minnesota Department of Natural Resources in cooperation with Minnesota Pollution Control Agency and for Minnesota Steel Industries, LLC. Wenck Associates, Inc. January 2007.

Swan Lake Nutrient Study (31-0067), Itasca County, Minnesota. Prepared for: Minnesota Department of Natural Resources in cooperation with the Minnesota Pollution Control Agency. Wenck Associates, Inc. December, 2006.

## **Monitoring**

2005 Water Monitoring Plan for Minnesota Steel Industries. Barr Engineering Company. April, 2005.

2005 Surface Water Monitoring Report. Barr Engineering Company. January, 2006.

Invertebrate Monitoring of Streams – Minnesota Steel Industries, LLC. Project. Barr Engineering Company. February, 2006.

Surface Water Quality Monitoring Within and Downstream of the Minnesota Steel Industries Project Area: Swan Lake, Tributary Streams and Mines Pits. Barr Engineering Company. January, 2007.

## **WETLANDS**

### **Permit Application**

Wetland Delineation and Wetland Functional Assessment Report. Minnesota Steel Industries, LLC. Barr Engineering Company. January, 2006.

Wetland Permit applications. Minnesota Steel Industries, LLC. Barr Engineering Company. August, 2005. [Includes January 2005 submittal and June and August 2005 revisions]

### **Mitigation Plan**

Preliminary Wetland Mitigation Plan, Minnesota Steel Industries, LLC. Barr Engineering Company. May, 2006.

Revised 5-year Mitigation Plan for Sites 229 and 248 in Aitkin County. Barr Engineering Company. November, 2006.

Revised 20-year Wetland Mitigation Plan. Barr Engineering Company. November, 2006.

Revised Wetland Impacts and Mitigation Plan. Barr Engineering Company. December, 2006.

Wetland Mitigation Plan Update: Revised 5-year Wetland Mitigation Plan. Barr Engineering Company. November, 2006.

### **Hydrology and Monitoring**

Revised Wetland Hydrology Study Plan. Barr Engineering Company. April, 2006.

Wetlands Hydrology Monitoring Report. Barr Engineering Company. January, 2006.

### **Cumulative Impacts**

Technical Memo: *Cumulative Impacts – Wetlands*, Wenck, Associates, Inc. November, 2006.