TO: Jeff Smyser, AICP (Jeff.Smyser@state.mn.us) Principal Planner Minnesota Environmental Quality Board 520 Lafayette Road North St. Paul, MN 55155-4194 Phone/: (651)757-2873

### CITIZEN PETITION FOR ENVIRONMENTAL ASSESSMENT WORKSHEET Submitted September 25, 2012

### **RE:** Minnesota Department of Natural Resources October 2012 Auction of Mineral Leases

### Petition for Environmental Assessment Worksheet

The undersigned more than 140 citizens, all of whom live in and/or own property in the State of Minnesota and most of whom reside in Minnesota's Arrowhead region, request that the Minnesota Department of Natural Resources ("MDNR") prepare an Environmental Assessment Worksheet ("EAW") prior to the MDNR's proposed October 2012 auction of state mineral leases. The undersigned also request an immediate postponement of the Oct. lease sale until the issues raised in this petition are addressed and that a timely citizen hearing be conducted.

This Petition narrative, Attachments 1 through Attachment 15 that are supplied with the Petition and the signatures of more than 140 Minnesota citizens demonstrate the appropriateness of requiring an EAW under Minnesota Rules 4410.1100, which provides that citizens can request the preparation of an EAW by providing evidence that because of the nature or location of the proposed project the project may have the potential for significant environmental effects.

### Petitioners' Representative

The representative of the petitioners is Matthew Tyler, a consulting forester with six years of field experience in the Finland area, with an address of 6722 Park Hill Road in Finland, Minnesota 55603-4036, an email address of tyle0045@gmail.com and a phone number at 218-353-7374.

### **Project Description**

The Minnesota Department of Natural Resources proposes its 33<sup>rd</sup> auction of State mineral leases for October 2012, as reflected in the MDNR Notice of Intent to Hold State Metallic Minerals Lease Sale, copied as Attachment 1. Leases are for 50-year term and include rights to explore and mine. The nature of the activities that would be allowed by these leases -- mineral exploration as well as mining -- have the potential for significant adverse environmental effects on natural resources. An EAW should be prepared to analyze, prevent and minimize those potential impacts.

The proposed October 2012 mineral lease auction areas cover portions of Aitkin, Lake and Saint Louis Counties, as roughly mapped by the MDNR in Attachment 2. More specific legal descriptions of the proposed mineral leases were released to public on September 17, 2012 (Attachments 11-13). Mineral exploration as well as mining in the areas up for auction may have

the potential to impact groundwater near existing drinking water wells, popular recreational trails, and sensitive natural resources, such as designated trout streams, wetlands, and areas of high biological diversity. Even before drilling begins, the auction of mineral leases may create adverse socioeconomic effects on property rights and property values due to the threat of eminent domain of private property to allow mining companies to gain access to subsurface minerals.

### Potential Environmental and Water Resources Effects from the Project

The MDNR's October 2012 auction sites contain important and sensitive natural features and valuable ecological resources, as reflected in Attachment 3, Attachment 4, Attachment 6, Attachment 7 and Attachment 8 prepared by the petitioners' representative from the MDNR auction area maps and various state and county layers of GIS information. These auction sites also impinge on homes and private drinking water wells as reflected in Attachment 3, Attachment 3, Attachment 4, Attachment 6 and Attachment 7. Some of the potential resources impacted by the auction sites are identified below:

Area West of Tettegouche State Park (T56N R8W - Attachment 3 Map)

- Approximately 6.6 miles of the C.J. Ramstad and Red Dot/Moosewalk snowmobile trails
- About 6.7 miles of designated trout streams (East Branch Beaver River and Little Thirty-Nine Creek).
- About 3.2 miles of tributaries to designated trout streams (East Branch Beaver River and Little Thirty-Nine Creek).
- At least 300 acres of wetlands.<sup>1</sup>
- Four parcels of property owned by private individuals either completely or partially surrounded by proposed mineral leases.
- At least 116 private homes within 3 miles of the proposed mineral leases.
- One inner wellhead management zone (Lax Lake Resort) within 2 miles of the leases.
- More than 37 residential drinking water wells within 3 miles of the proposed leases, with at least 1 residential drinking water well within 3/4 of a mile of the proposed leases<sup>2</sup>.

Area South of Hoyt Lakes (T56-58N R14W; T58N R15W - Attachment 4, Attachment 5 and Attachment 6 Maps)

- About 220 parcels owned by private individuals, totaling approximately 1,179 acres.
- About 1103 acres within the Hoyt Lakes municipal area, including at least 109 homes.
- At least 6 drinking water wells within the lease area, with at least 22 additional drinking water wells within 1/2 mile of the leases.
- Approximately 3.6 miles of snowmobile trails (East Range Trails 2.5 mi; Pequaywan/Brimson Trails 1.1 mi)
- Approximately 23.7 miles of rivers and streams, including 2.8 miles of the Partridge River and 6.9 miles of the St. Louis River, an Aquatic Resource of National Importance.
- Approximately 4,499 acres of wetlands.
- Approximately 1,592 acres of MCBS sites of high biological diversity (Allen Junction

<sup>&</sup>lt;sup>1</sup> Estimate of wetlands on MN DNR lands only, based on MN DNR FIM data. There are likely more wetlands on county, federal, and private lands. See Attachment 10 for analysis methodology.

<sup>&</sup>lt;sup>2</sup> Based on MN Well Index GIS, USE = DO. There are may be older wells in this area that are not in the index.

Fen - 251 ac; Hush Lake Peatlands - 1,155 ac; N Branch Whiteface River - 186 ac)

• Approximately 1,700 acres of Federal Land within the Superior National Forest, which may be subject to additional protection of the land surface under the Weeks Act<sup>3</sup>

Aitkin County Area (T46N R22-23W; T47N R23W - Attachment 7 and Attachment 8 Maps)

- More than 2,000 acres of privately owned lands<sup>4</sup>.
- At least 50 residential drinking water wells<sup>5</sup>.
- At least 3 inner wellhead management zones within 1/2 mile of the proposed leases. (Jack's Shack, Jackson's Hole, Rice Lake National Wildlife Refuge Contact Station)
- Approximately 14.7 miles of snowmobile trails (Tamarack Trail 10.9 mi; Palisade Trail - 0.4 mi; Moosehorn Trail - 2.6 mi; Kettle River Trail - 0.8 mi).
- About 560 acres within the Rice Lake National Wildlife Refuge.
- Approximately 3,926 acres of preliminary MCBS sites of high biological diversity (Rice Lake Uplands, Lee 35).
- Approximately 11,175 acres of wetlands<sup>6</sup>.

State mineral leases will last for 50 years and include the rights to prospect for minerals and to mine. Significant adverse environmental impacts that may result from the auction of state mineral rights as proposed by this project, even prior to development of any mining project include:

- Contamination of drinking water wells with brines from unsealed deep exploration borings.
- Impairment of trout streams with sediment.
- Contamination of wetlands, rivers, trout and other streams, and riparian areas with sulfates and toxic metals from exploration sumps.
- Loss of access to trout streams, snowmobile trails, and hunting areas due to mineral exploration.
- Impairment of wetlands and other sensitive ecological land types from drilling and road construction activities.
- Changes in wetland water levels due to drainage into unsealed deep exploration borings.
- Degradation of areas of high biological diversity, including introduction of invasive species, from drilling and road construction activities.
- Loss of property rights and property values due to the threat of eminent domain posed by mineral leases under privately owned land.

Significant environmental impacts that may result from the auction of state mineral rights and the development of a sulfide-mining district include:

<sup>&</sup>lt;sup>3</sup> Based on analysis of St. Louis County Parcel Database GIS records.

<sup>&</sup>lt;sup>4</sup> See Attachment 8 map. While Aitkin County Parcel GIS layers were not freely available at the time of this filing, the extent of public and private lands in Aitkin County are available on the Aitkin County Website, http://gisweb.co.aitkin.mn.us/wf2\_aitkinpublic/Default.aspx

<sup>&</sup>lt;sup>5</sup> Based on MN Well Index GIS, USE = DO. There are may be older wells in this area that are not in the index.

<sup>&</sup>lt;sup>6</sup> Based on National Wetland Inventory shapefiles obtained from MN DNR Data Deli.

- Toxic pollution of surface waters, streams and fishing lakes for centuries, impairing aquatic life and angling and increasing mercury contamination of remaining fish.
- Destruction and impairment of thousands of acres of wetlands.
- Contamination of groundwater, including drinking water in private wells, and wells, reservoirs and aquifers that provide municipal drinking water
- Degradation or destruction of areas of high biological diversity and impairment of habitat for species of concern, endangered and threatened species.

### Additional Material Evidence of Potential for Significant Environmental Effects Due to Nature and Location of Project

Maps (Attachments 3 – Attachment 8) showing the unique and sensitive environmental features in the proposed project locations and the proximity to private property and drinking water wells are attached to this petition.

The potential for significant environmental effects due to the nature of minerals exploration was recently demonstrated by the decision of the United States Forest Service ("USFS") to require an environmental impact statement ("EIS") for 29 prospecting permits. The USFS required an EIS to consider alternatives to the 29 prospecting permits proposed in this project. In addition to evaluating alternatives to minimize impacts on natural resources, as a result of the EIS the USFS set conditions to protect sensitive ecological land types, natural stands of wild rice, streams, riparian areas and prevent contamination of drinking water wells with brines as a result of this environmental impact Statement Executive Summary May 2012, containing a link to the complete FEIS, and the Ecological Stipulations and Monitoring Requirements determined in the USFS Record of Decision are contained in Attachment 9.

The potential for significant environmental effects of sulfide mining are undisputed. The areas where the MDNR proposes to auction state mineral leases have not been evaluated through any environmental review and an EAW would not duplicate any other environmental analysis that has been performed.

### MDNR Mineral Lease Auctions are Part of a Phased and Cumulative Project that Has Not Been Assessed for Environmental Impacts

The proposed project is the State's 33<sup>rd</sup> sale of metallic minerals exploration and mining leases. The State could potentially place any or all of these acres of mineral leases up for auction. In providing Notice of the upcoming sale, the MDNR explained that there is increased interest being shown by industry in mining throughout Minnesota so that even lands that had been previously offered for lease and had had no takers were now being reoffered for metallic prospecting and exploration.

The State controls mineral leases below 13.5 million acres in Minnesota – nearly one fourth of the State. Selling mineral leases out from under private property in today's rush to prospect for copper, nickel and gold could adversely effect environmental resources and the businesses that depend on Minnesota's high quality of life and could put private property rights across the State at risk of devaluation and loss.

The State of Minnesota is proceeding with plans that would allow foreign companies to develop an extensive copper-sulfide mining district in areas in the Lake Superior Basin, as well as in areas that drain into the Boundary Waters Canoe Area Wilderness without evaluating potential cumulative harms to clean water in streams and lakes, fishing, wild rice, biological diversity, clean drinking water in municipal systems and private wells and private property values.

The MDNR auctioned mineral leases in June 2012 without any environmental assessment of potential impacts. Citizens who participated in the Executive Council process for approving mineral leases were told that the Executive Council had no discretion to deny or condition approval of leases.

Other than the public notice (Attachment 1) when mineral leases are put up for auction by the State, there is no public notice when leases are actually signed, and there is no public notice or public process to determine what conditions should be applied to protect sensitive environmental resources or private drinking water wells before prospecting begins. Requesting an EAW before the leases are auctioned is therefore the only reasonable way for citizens to have input into the approval or conditioning of mineral leases.

### Citizen Petitions

Petitions signed by more than 140 citizens requesting that an EAW be prepared are included as Attachment 15.

On behalf of each citizen who signed these attached petitions requesting an EAW as well as on my own behalf, I request that the MDNR prepare an EAW to assess the potential for significant and cumulative environmental impacts from the October 2012 auction of state mineral leases. We also request an immediate postponement of the Oct. lease sale until the issues raised in this petition are addressed and that a timely citizen hearing be conducted.

I have provided Randall Doneen at the MDNR (<u>Randall.Doneen@state.mn.us</u>) with a letter providing notice that we have filed this petition for environmental review of the October 2012 auction of state mineral leases.

Date: September 25, 2012

Matthew Tyler 6722 Park Hill Road Finland, Minnesota 55603-4036 Email: <u>tyle0045@gmail.com</u> Phone: 218-353-7374

### NOTICE OF INTENT TO HOLD STATE METALLIC MINERALS LEASE SALE

#### State Lands to be Offered for Metallic Minerals Exploration

The Minnesota Department of Natural Resources announces that plans are being developed to hold the state's 33rd sale of metallic minerals exploration and mining leases. The sale is tentatively scheduled for October 2012. The lease sale plans are being announced at this time in order to give mining companies, public interest groups and all other interested parties additional time to review the areas under consideration.

The purpose of Minnesota's metallic minerals rules (Minnesota Rules, parts 6125.0100 - .0700) is to promote and regulate the exploration for, mining and removal of metallic minerals on stateowned and state-administered lands. These rules, and the leases issued under these rules, authorize exploration and development of these minerals and impose certain requirements on the lessee. The requirements include: the payment of rentals that increase with the passage of time, the payment of royalty for all ore mined and removed, the submission of data and other reports, and the addressing of environmental considerations. In addition, the state lessee must comply with all applicable regulatory laws.

The areas under consideration for the lease sale cover portions of Aitkin, Lake and Saint Louis Counties. Some of the lands being considered have been offered in previous metallic minerals lease sales, but based upon the interest shown by industry, new geologic data, and exploration techniques developed during the past few years, it is felt that within these lands there is significant potential for the discovery of mineral resources. Certain new lands of interest are also being considered for the lease sale.

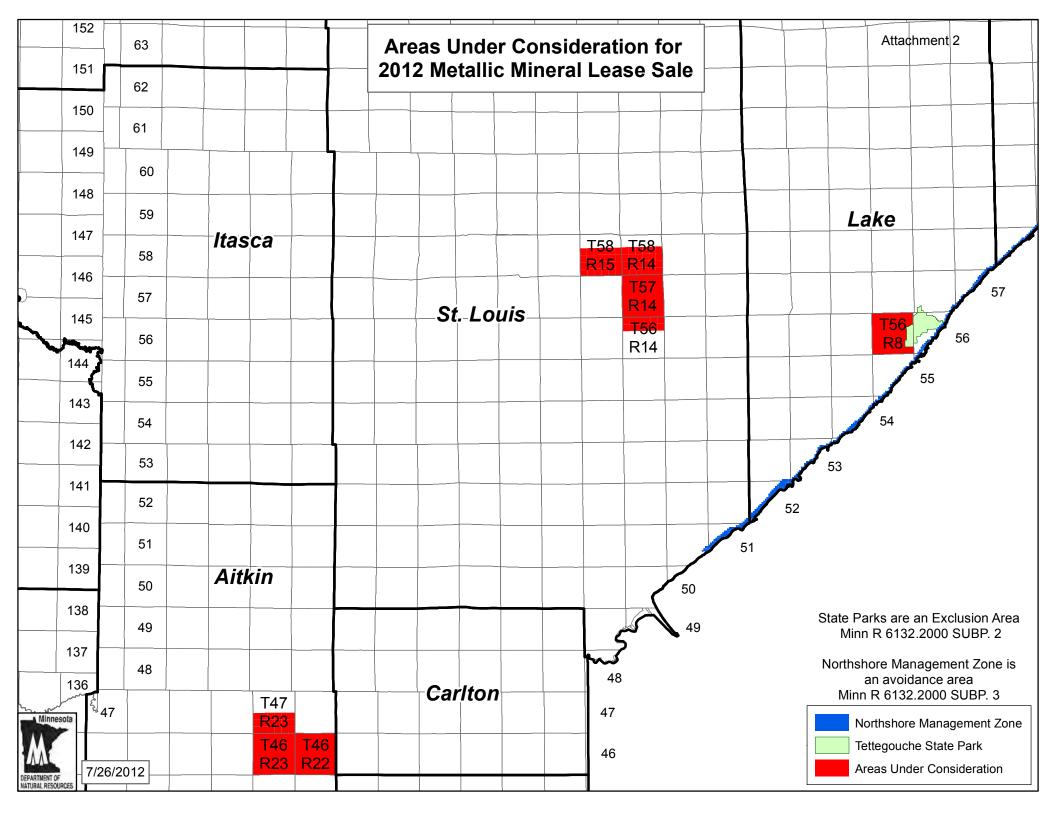
The exact time and place of the lease sale will be announced by legal notice at least thirty (30) days prior to the sale. Mining unit books, listing the state lands to be offered at the lease sale, will be available for inspection or purchase at that time.

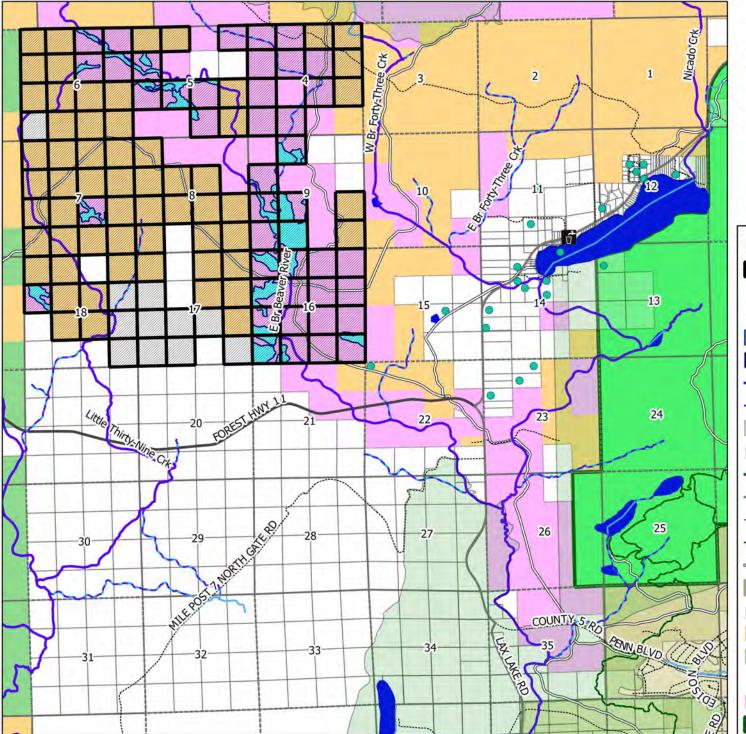
A map showing the general areas under consideration may be obtained from the Division of Lands and Minerals, Box 45, 500 Lafayette Road, Saint Paul, MN 55155-4045, telephone 651-259-5959, or by visiting the DNR website at <u>www.dnr.state.mn.us</u>.

Dated: July 16, 2012

Bv:

Larry R. Kramka, Director Division of Lands and Minerals



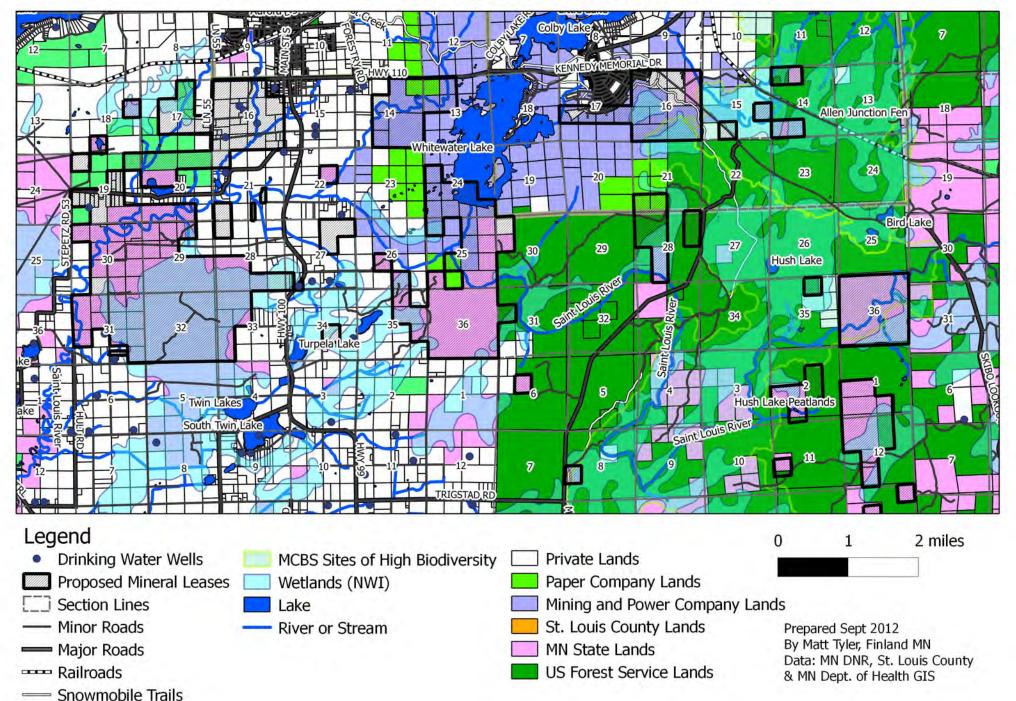


## Attachment 3: Map of Proposed MN DNR Oct 2012 Mineral Leases in Lax Lake Area

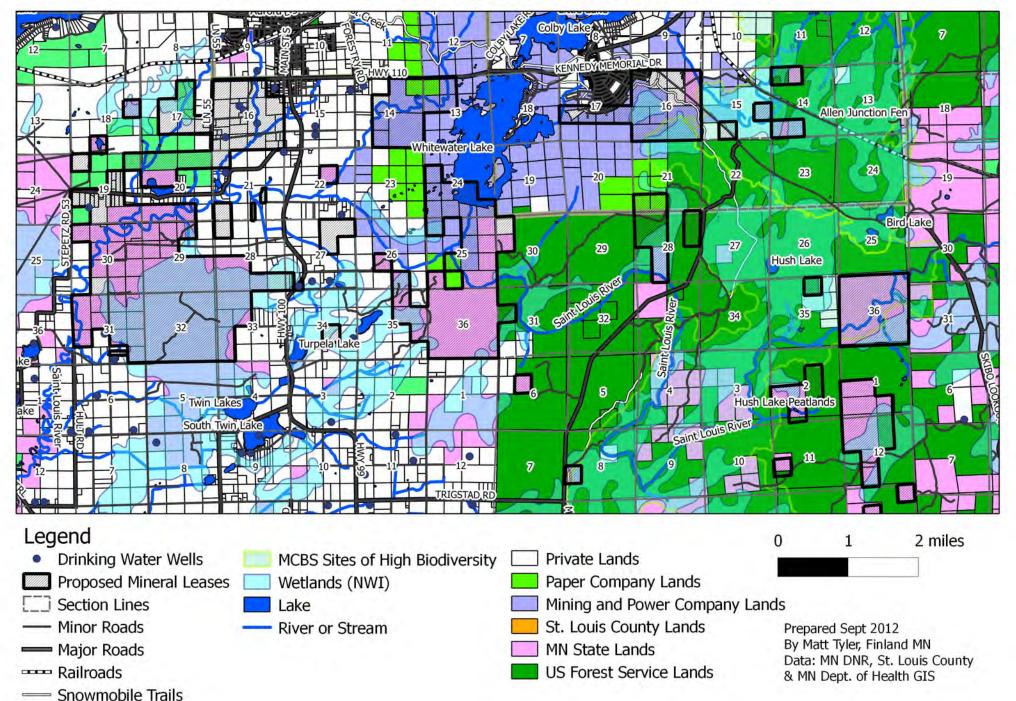
Map prepared Sept. 2012 by Matt Tyler, Finland MN Data: MN DNR, Lake County, & MN Dept. of Health GIS

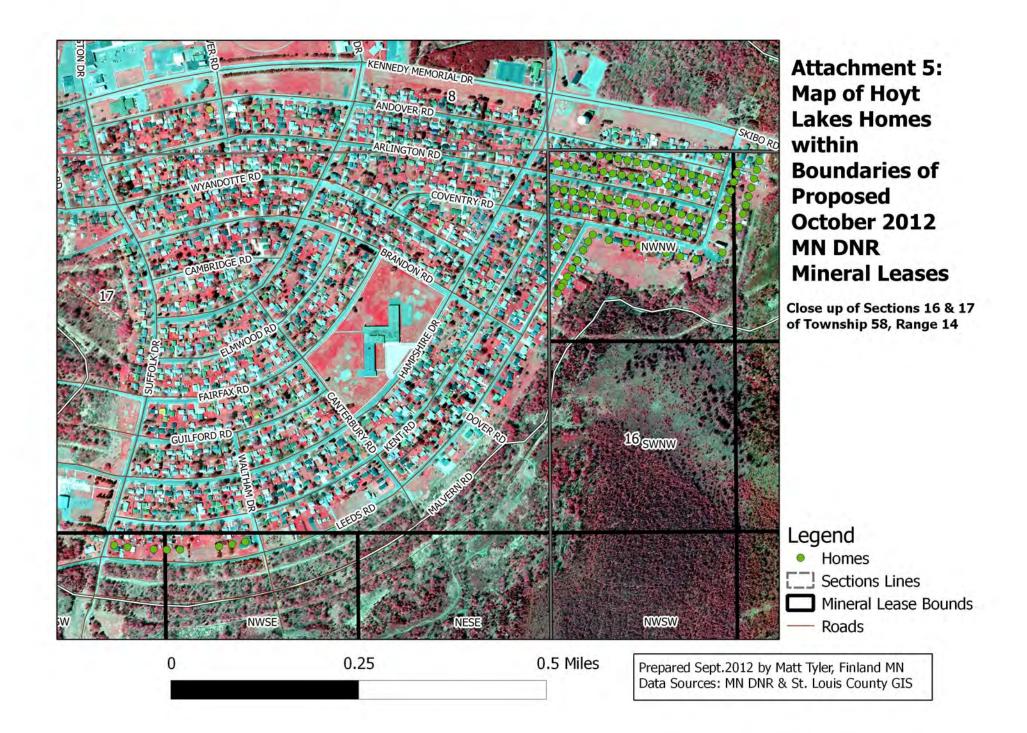


## Attachement 4: Map of Proposed Oct 2012 State Mineral Leases South of Hoyt Lakes (Part A, Northern Portion)

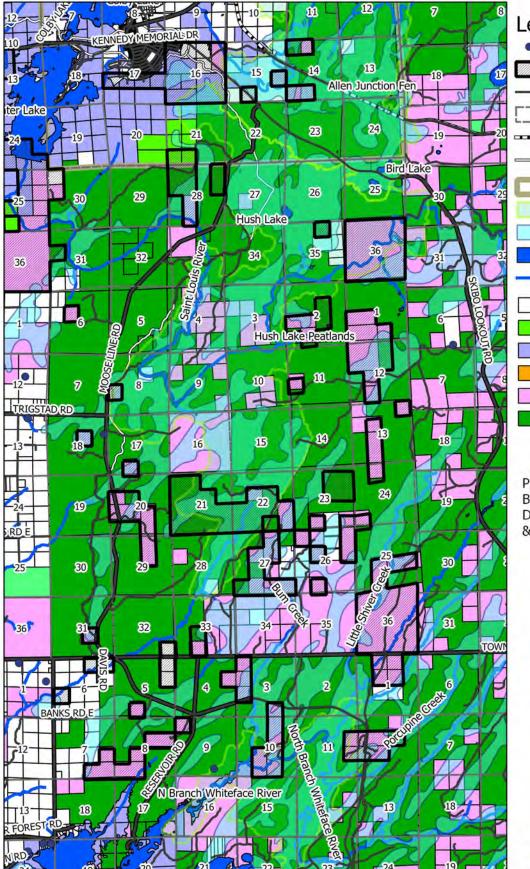


## Attachement 4: Map of Proposed Oct 2012 State Mineral Leases South of Hoyt Lakes (Part A, Northern Portion)



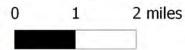


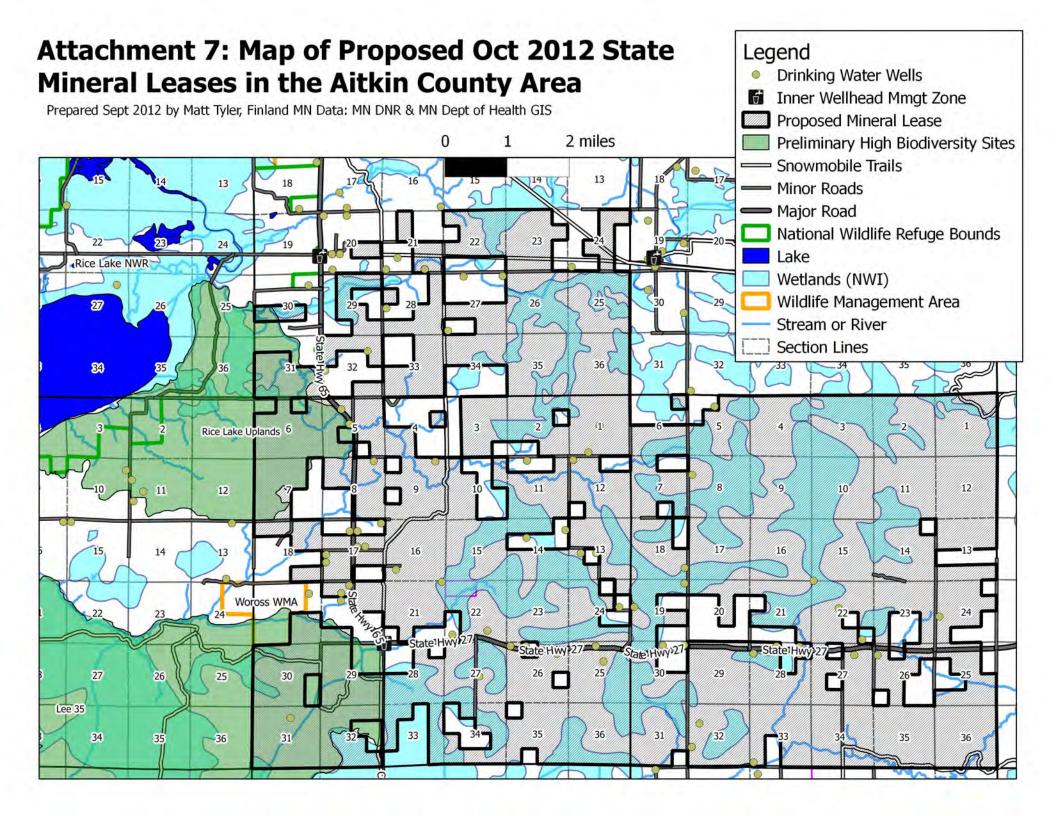
## Attachment 6: Map of Proposed Oct 2012 State Mineral Leases South of Hoyt Lakes (Part B, Southern Portion)

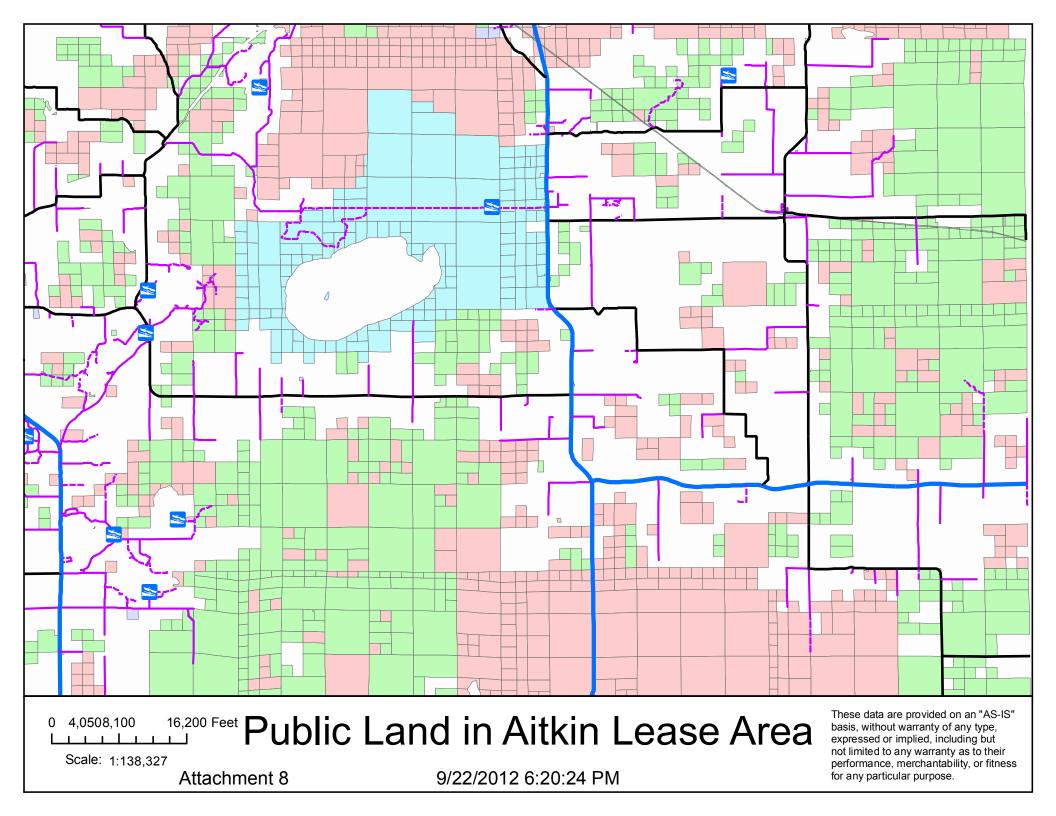


Legend **Drinking Water Wells** 0 State Mineral Leases Minor Roads Section Lines ----- Railroad **Snowmobile Trails Municipal Boundaries** MCBS High Biodiversity Sites Wetlands (NWI) Lake River **Private Lands** Paper Company Lands Mining and Power Company St. Louis County Lands State Lands **US Forest Service Lands** 

Prepared Sept 2012 By Matt Tyler, Finland MN Data: MN DNR, St. Louis County & MN Dept. of Health GIS







### Federal Hardrock Mineral Prospecting Permits Project

### Final Environmental Impact Statement

### **Executive Summary**

May 2012

The USDA Forest Service is proposing minerals management activities on National Forest System land in the Federal Hardrock Mineral Prospecting Permits Project. The USDI Bureau of Land Management is a cooperating agency for this Environmental Impact Statement.

The activities in the Federal Hardrock Mineral Prospecting Permits Project are intended to implement some objectives of the Superior National Forest Land and Resource Management Plan (Forest Plan). The activities would contribute to allowing for minerals exploration in an environmentally sound manner. Proposed activities would include:

- Minerals exploration activities for federal minerals in 29 permit areas on the Superior National Forest. This could include geophysical surveys, temporary road construction and reconstruction, drill pad clearing, core drilling, and reclamation activities.
- Temporary road construction and decommissioning under special use permits in locations outside the 29 permit areas.
- Monitoring the use and effects of the minerals exploration.

The Final Environmental Impact Statement (EIS) describes five alternatives and their effects in detail. The action alternatives address issues identified through scoping, meeting the purpose and need to allow for minerals exploration in an environmentally sound manner. Alternative 1, no action, provides a baseline for comparison with the action alternatives. The USDA Forest Service identified Alternative 4 as the preferred alternative; this alternative best achieves Forest Plan direction and the Project's purpose and need while considering public comments.

Electronic versions of the Final EIS are available on the Superior National Forest web site at <u>www.fs.usda.gov/goto/superior/projects</u>. Copies of the Final EIS can be obtained from the Forest Headquarters by calling (218) 626-4300. The contact person for the Final EIS is Peter Taylor, Project Coordinator, who may be reached at (218) 626-4368. Tim Dabney, Acting Forest Supervisor, is the official responsible for the Final EIS.

## Attachment 2: Stipulations Federal Hardrock Minerals Prospecting Permits Forest Service Record of Decision

## **Prospecting Permit Stipulations**

## 1.1 Forest Service Stipulations

The following are Forest Service requirements that apply to my decision to select Alternative 4. These stipulations define and describe processes for permit administration and coordination.

- All work and any operations authorized under this permit shall be done according to a BLM approved operating plan on file with the Forest Supervisor at 8901 Grand Avenue Place, Duluth, MN 55808-1102. Plans generally require a minimum of 45 days for Forest Service review. The Bureau of Land Management must also review and approve the plan.
- 2. The Operating Plan will contain information the Forest Officer determines reasonable for assessment of (1) public safety, (2) environmental damage, and (3) protection for surface resources. The content of such plans will vary according to location and type of activity and may contain:
  - a. Steps taken to provide public safety.
  - b. Location and extent of areas to be occupied during operations (including GPS coordinates of drill holes located to an accuracy of 1 meter or less).
  - c. Operation methods including size and type of equipment.
  - d. Capacity, character, standards of construction and size of all structures and facilities to be built. [No structures or facilities are proposed.]
  - e. Location and size of areas where vegetation will be destroyed or soil laid bare.
  - f. Steps taken to prevent and control soil erosion.
  - g. Steps taken to prevent water pollution.
  - h. Character, amount, and time of use of explosives or fire, including safety precautions during their use. [Explosives and fire are not proposed.]
  - i. Program proposed for rehabilitation and revegetation of disturbed land.
  - j. An estimated time frame for any construction or drilling requests so that coordination between other) permit holders or contract holders for surface uses can be established.
- 3. The permittee shall submit copies of all applicable State and Federal agency permits to the Forest Service prior to starting operations. If permit(s) are not required, the permittee shall submit proof or documentation that a permit is not required.
- 4. The Forest Supervisor or his/her designated agent has authority to temporarily suspend or modify operations in whole or in part due to emergency forest conditions such as high fire danger or other unsafe situations. The permittee must keep the District Ranger informed about the progress of operations to the extent reasonably necessary for assuring public safety. This is especially important with geophysical inventory and testing activities because of their mobile nature. The District Ranger

will alert the permittee to circumstances which may affect safe and efficient conduct of work activities. The Forest Supervisor or his/her designated agent will inform BLM such circumstances exist.

- 5. The District Ranger shall be given advance notification of any activity that could involve hazards to public safety and suitable action will be taken to protect the public.
- 6. The District Ranger shall be notified at least 2 weeks in advance of the start up of all activities under the operating plan. This includes all activities in future years such as permanently sealing drill borings, geophysics, road work/closures, site maintenance, and final reclamation.
- 7. The District Ranger shall be notified yearly on the company's intent to permanently seal drill borings and when final reclamation will take place.
- 8. The permittee shall coordinate with Forest Service Officials to complete pre-construction field review on an approved operating plan to ensure placement of roads and drill sites is consistent with prospecting permit stipulations and operating plan conditions, and provide for resource protection.
- 9. Pursuant to the provisions of the act of March 4, 1917 (16 USC 520), Section 402 of the Reorganization Plan No. 3 of July 16, 1946 (60 Stat. 1097, 1099), the Act of August 7, 1947 (30 USC 352), and the National Environmental Policy Act of 1969 (42 USC 4321 et seq.) as said authorities have been or may hereafter be amended, no mineral development of any type is authorized hereby, and consent to the issuance of this prospecting permit as required by law and regulation (43 CFR 3507.11 (d)) and 43 CFR 3507.19(c)) is given subject to the express stipulation that no mineral lease may be issued for the land under permit without the prior consent of the Forest Service, USDA and the proper rendition of an environmental analysis in accordance with the National Environmental Policy Act of 1969, the findings of which shall determine whether and under what terms and conditions for the protection of the land involved the lease may be issued.
- 10. The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the prospecting permit. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of the Interior, (2) uses of all existing improvements, such as Forest development roads, within and outside the area permit/operating plan approved by the Secretary of the Interior. All matters related to this stipulation are to be addressed to Superior National Forest Supervisor at 8901 Grand Ave. Place, Duluth, MN 55808-1122, telephone number (218) 626-4300, who is the authorized representative of the Secretary of Agriculture.
- 11. Terms of the permit are considered violated if not done according to all stipulations.

## 1.2 Resource Stipulations

This section lists stipulations that are included as part of Forest Service consent on a prospecting permit, or that the FS may recommend the BLM include on a permit. These stipulations are derived in part from requirements in the Forest Plan direction regarding physical, social and biological resources (these are noted with a citation to the Forest Plan location), other stipulations or operating conditions may be derived from species conservation agreements, or be developed as a result of individual resources analysis. This section includes direction that is not found within the Forest Plan but will ensure resource protection and safe operations during mineral exploration activities.

The following stipulations are designed into selected Alternative 4. As noted in the below tables, several stipulations may include modifications or waivers based on site specific proposals that are submitted and analyzed, as long as the objective is met. The Forest Service would identify the applicable stipulations for each of the 29 prospecting permits, for example where no surface occupancy, timing restrictions or other protections would be required.

When an operating plan is proposed, it must be designed to be consistent with the protection in the prospecting permit. The BLM and FS will review these plans, and assess if the plans are consistent, in which the FS may make recommendations to BLM on the surface use and reclamation aspects of a plan. These restrictions and protections are shared with the BLM, who has the authority to approve operating plans. The location of proposed sites may be modified slightly in cooperation with the surface managers recommendations.

Administration		
Best management practices		
GA-1 Stipulation Conditions of Approval (CoA's) drill sites and road access.	<ul> <li>Additional mitigation and best management practices requirements may be added to any prospecting permit or operating plan by the agencies if an environmental analysis, permitting process, or permit/operating plan administration shows there is a need for improved resource management.</li> <li>No waivers or modifications.</li> <li>Best management practices shall be followed that include but are not limited to the following list: <ul> <li>a. Surface disturbance from drilling shall be minimized to the extent possible. Drilling will involve some surface disturbances because of the need to prepare drill sites (including sumps for water re-circulation and settling out of drill cuttings) and the need to construct new access roads.</li> <li>b. In the construction of new access roads and drill pad sites, all effort shall be made to avoid cutting of timber.</li> <li>c. Removal or cutting of trees and vegetation shall be kept to a minimum. The permittee shall acquire a timber sale permit prior to any tree cutting. All woody vegetation must be cut parallel with the ground surface to prevent sharp points and as close to the ground as possible. Slash, brush, tree limbs, seedlings and saplings cut to clear temporary roadways, shall be disposed of or stored along the edges of the cleared temporary roadways such that the larger debris is easily accessible during reclamation.</li> <li>d. Any piled trees cut or pushed over along with slash shall be no higher than 3 feet high. This material shall be utilized in rehabilitating the temporary roads and drill pad sites once drilling operations are complete. For this reason, chipping of timber and slash shall not be utilized.</li> <li>e. Also, avoid felling trees into non-forested wetlands.</li> <li>f. No trees over 5 inches in diameter at breast height of 4 feet 5 inches above the surface (DBH) may be pushed over, they must be cut. Stumps shall be left no higher than 10 inches above ground. Any slash piles shall be no higher than 3 feet high.</li> <li>g. The top 12 inches of t</li></ul></li></ul>	
Objective Source	Permit activities in a way that protects forest resources and assists in project administration.	
GA-2	SNF minerals program management.No drilling will be allowed within Forest Service mineral material guarry permit areas unless	
GA-2 Stipulation CoA Unique to a quarry	the Forest Service and contractor both agree the activities will not interfere with the contract operations and will not damage the stone deposit.	
Objective	Ensure that hardrock prospecting does not interfere with mineral material quarry contract permittee operations or other FS gravel quarries.	
Source	SNF minerals program management.	

### 1.2.1.1 General Administration

Record of Decision

Attachment 9

Administration	
GA-3 Stipulation CoA's drill sites and road access	Permittees may perform activities that accelerate the ground to freeze when operations are limited to frozen ground conditions. Activities to achieve frozen ground access will be identified in the Operating Plan approval process.
Objective	Develop frozen ground conditions at the earliest time during the year to extend the winter drilling season.
Source	SNF minerals program management.
GA-4 Stipulation CoA's drill sites and road access.	For all exploration holes drilled on the SNF, the permittee shall submit a carbon copy of an exploratory boring sealing report at the same time it is submitted to the State of Minnesota in accordance with Minnesota Department of Health, Explorers and Exploratory Borings, rule 4727.0920. The report shall be sent to the SNF authorized officer.
Objective	To assure drill bore hole abandonment is completed in accordance with Minnesota state rules.
Source	SNF minerals program management.
Health and Safety	
GA-5 Stipulation CoA's drill sites and road access	<ul> <li>Health and safety precautions should be followed, including, but not limited to the following list:</li> <li>a. BLM prospecting permit sec.1 (d). In the interest of safety and to the extent practical, unauthorized personnel shall be discouraged from entering operations areas. The permittee shall discuss options for this with the Authorized Officer and implement the requirements.</li> <li>b. Road signs shall be installed for vehicle and public safety and shall be approved by the Authorized Officer prior to installation.</li> <li>c. Other appropriate signing may be required and permitted as long as first approved by a Forest Service Official.</li> <li>d. The District Ranger shall be given advance notification of any activity that could involve hazards to public safety and suitable action shall be taken to protect the public.</li> <li>e. Vehicles and drills shall be equipped with fire-fighting equipment.</li> <li>f. No explosives or firearms shall be permitted on the project by the permittee.</li> <li>g. During drilling operations, trash shall be stored in suitable containers and removed from the site for disposal</li> <li>h. Fires are permitted only in specific heating devices (salamanders, cook stoves, etc.) and all state and federal fire laws and regulations shall be observed to prevent and suppress fires in the areas of operation.</li> <li>i. Sump pits shall be fenced off during drilling operations if drill site is unattended by company representatives or drill rig operators to provide for public safety.</li> </ul>
Objective	To protect health and safety of operators and publics.

### 1.2.1.2 Location and extent of areas to be occupied

	Location and extent of areas to be occupied	
Minimizing impacts		
	LOC-1 Stipulation CoA's drill sites and road access	All roads, trails, drill pads and other disturbance features shall be staked or flagged on the ground for agency review during the Operating plan approval phase and prior to implementation of the operating plan.
	Objective	Provide proposed and permitted disturbance features locations for agency administrative review purposes to determine applicable stipulations.
	Source	SNF minerals program management.

Attachment 9

R	esearch Natural Areas	5
	LOC-2 Stipulation CoA's apply to permits with CRNA's	No Surface occupancy is allowed within Candidate Research Natural Areas and Research Natural Areas (locations are identified in Map 2)
	Objective	Maintain the role of these Management Areas in ecological research and serve as baseline or reference areas for comparison to other similar ecosystems that are subject to a wider range of management activities.
	Source	Forest Plan S-RNA-13
U	nique Biological Area	s
	LOC-3 Stipulation CoA's apply to permits with UBA's	No Surface occupancy is allowed within unique biological areas as defined by the Forest Plan (locations are identified in Map 2)
	Objective	To protect unique biological resources
	Source	Forest Plan S-UB-6
W	ild and Scenic Rivers	
	LOC-4 Stipulation CoA's apply to permits with Wild designation river segments	No permit, lease, or other authorization will be issued for exploration or development of minerals owned by the United States within wild sections of designated Wild & Scenic Rivers. These areas include a ¼ mile corridor on each side of a river (locations are identified in Map 2).
Ī	Objective	To protect the characteristics for which the river was designated wild.
	Source	Forest Plan S-WSR-11

### 1.2.1.3 Heritage Resources

	Heritage Resources	
Unknown locations		
HR-1 Stipulation CoA's drill sites and road access	No earth-disturbing activities shall occur prior to completion of a survey in areas where heritage resource surveys have not been completed and the area proposed for ground disturbing activities is determined by the Forest Archaeologist to have a medium-high potential for historic properties.	
Objective	Identify, evaluate, protect, monitor, and preserve heritage resources	
Source	Forest Plan O-HR-1	
HR-2 Stipulation CoA's drill sites and road access	If the permittee decides to provide a heritage resource survey and report, the permittees archaeological contractor must contact the SNF Archaeologist and acquire all necessary permits. The permit must be obtained prior to the initiation of any heritage resource investigations on the SNF. The archaeological contractor will submit the report on the investigations to the SNF Archaeologist following the conditions of the permit, and the SNF will initiate and carry to completion all regulatory consultation with the Minnesota State Preservation Officer and Tribal Historic Preservation Officers within the ceded (1854) territory as required by the National Historic Preservations Act of 1966, as amended through 1992, and the accompanying regulations as found in 36 CFR 800. MN State Historic Preservation Office; 36 CFR 800	
Objective	Identify, evaluate, protect, monitor, and preserve heritage resources	
Source	Forest Plan O-HR-1	

	Heritage Resources	
Sites found during imp	lementation	
HR-3 Stipulation CoA's drill sites and road access	If heritage resources are discovered during the implementation of exploration activities, the project must halt at that location and the Forest Archaeologist must be notified. The SNF Archaeologist may notify the Tribal Historic Preservation Officer and the MN State Historic Preservation Office.	
Objective	Identify, evaluate, protect, monitor, and preserve heritage resources	
Source	Forest Plan O-HR-1 also reference BLM Prospecting Application and Permit, Sec.11	
Known locations		
HR-4 Stipulation CoA's drill sites and road access	Historic properties will have no surface occupancy both within the site and a buffer of one chain (66.5 feet) beyond known site limits.	
Objective	Identify, evaluate, protect, monitor, and preserve heritage resources	
Source	Forest Plan S-HR-9	
HR-5 Stipulation CoA's drill sites and road access	Any heritage resource sites located prior to prospecting activities shall be no surface occupancy and boundary identified on the ground. Protection measures shall be developed by the Forest Archaeologist, through collaboration with the State Historic Preservation Officer and Tribal Historic Preservation Officers within the ceded (1854) territory (SHPO/THPO).	
Objective	Identify, evaluate, protect, monitor, and preserve heritage resources	
Source	Forest Plan O-HR-1	

### 1.2.1.4 Recreation, Noise and Visuals

		Recreation, Noise and Visuals
N	loise Abatement	
	RV-3 Stipulation <sup>1</sup>	<ul> <li>Reduce sound levels emitted by drilling reaching receptors:</li> <li>to an L50 level of 30 dBA and an L10 level of 35 dBA at the boundary of the BWCAW.</li> <li>This may be accomplished with measures such as installing baffling around the engine,</li> </ul>
		adjusting the location of drilling, or other measures that may be identified during implementation. Note that Minnesota Rules on Noise also apply to project activities.
	Objective	Reduce level of effects to opportunities for solitude in the BWCAW.
	Source	Issue identified for the Federal Hardrock Minerals Prospecting Permit EIS
	RV-4 Stipulation	Receptors that are likely to be in the flight path of helicopters on repeated occasions would be identified in operating plans and alternate flight paths or elevations would be identified as needed to minimize effects to the extent possible while maintaining the safety and efficiency of helicopter operations.
	Objective	Reduce level of annoyance for Forest recreation users, and effects to solitude for wilderness users.
	Source	Issue identified for the Federal Hardrock Minerals Prospecting Permit EIS
		Visual Integrity
H	ligh Scenic Integrity (	Objective (SIO) areas
	RV-5	
	<b>Stipulation</b> CoA's drill sites and road access in	Staking, paint, flagging, equipment, maintenance, and staging areas should be minimized, removed or cleaned up within one month following project completion.

<sup>1</sup> This stipulation is numbered RV-3 to maintain consistent reference between the Final EIS and ROD. RV-1 and RV-2 are not included in this ROD.

		Recreation, Noise and Visuals
ΗT	High SIO	
	Objective	Minimize evidence of temporary activities and ensure cleanup is concurrent with project completion.
	Source	Forest Plan G-SC-4, page 2-48 (map of SIO areas)
Мо	oderate and High SI	D areas
	RV-6 Stipulation CoA's drill sites	Adjust the location of the activities if the mechanized activities can be viewed from travelways, recreation sites and bodies of water with access. Adjustments may move a drill site up to 100 feet to avoid high visibility areas.
	Objective	Minimize evidence of management activities
	Source	Forest Plan G-SC-6
	<b>RV-7</b> <b>Stipulation</b> CoA's drill sites and road access	Generally obliterate roads and trails that are decommissioned and reclaimed according to road stipulations under section 1.2.1.8 and 1.2.1.12.
	Objective	Restore roads and trails to a natural appearance (See Appendix D for example drawing).
	Source	Forest Plan G-TS-15
Lię	ghting	
	RV-8 Stipulation CoA's drill sites	Reduce light pollution generated at drill sites by pointing lighting sources for drill rigs downwards and/or shielding lighting as feasible while completing safe drilling operations
	Objective	Reduce light pollution impacts to recreation users and residences.
$\square$	Source	Forest Plan G-TS-15
	Modification or Waiver	Lights may be modified to the extent necessary to provide for safe operations or to protect public safety.
De	veloped Recreation	Areas
	RV-9 Stipulation NSO identified on a map CoA's drill sites and road access	No surface occupancy inside developed recreation sites (for example, campgrounds, parking areas and trail heads).
[	Objective	To reduce conflicts to the recreation users and avoid damage to infrastructure.
	Source	Forest Plan, G-Rec-2

### 1.2.1.5 Threatened and Endangered Wildlife Species

	Threatened and Endangered Species	
		Canada Lynx
	Den Sites	
	TES-1 Stipulation	Protect known active Canada lynx den sites during the denning season (May 1-July 31) with a buffer of 660 feet (1/8 mile). Site conditions such as topography and vegetation cover may be used by a SNF biologist to refine site-specific distance.
	Objective	To reduce human influences on mortality risks
	Source	Forest Plan G-WL-1 and G-WL-2, LCAS Project planning guideline F. 1, (Ruediger et al. 2000, page 86),
Ve	ehicles Traveling on	Roads
TES-2 activities shall retain in all vehicles information to allow them to identify Canada lynx		Prospecting permit employees and subcontractors who will drive on roads during project activities shall retain in all vehicles information to allow them to identify Canada lynx. The Forest Service will provide this information to permit holders. Any lynx mortality resulting from project activities shall be reported per this information.
	Objective	To reduce human influences on mortality risks
	Source	USDI Fish and Wildlife Service Biological Opinion dated March 22, 2012: Reasonable and Prudent Measure #1, Term and Condition #2

In addition to TES-2 my decision also includes the following actions that the Forest Service will take to fulfill the terms and conditions in the Biological Opinion:

- "Place "Caution!! Entering Wildlife Crossing Area" or similar signs along the stretches of Forest Road 424 and Forest Road 377 identified in the attached Biological Assessment in any areas where lynx crossing may be most likely. Signs may be removed when the traffic volume returns to relatively normal levels (i.e., after year 9 of project implementation). Similar signs may be placed along the stretches of State Highway 1 and State Highway 1/169 identified in the attached Biological Opinion where lynx crossing may be likely and where the Forest has jurisdiction. The signs should adhere to Forest Service sign guidelines."
- "Mortality reports should be provided to the Service by December 31 of each calendar year the Revised Forest Plans are implemented. Reports should include, to the extent known, the cause of mortality, location, and sex of lynx. This report can be in conjunction with reporting for other concurrent projects on the Superior National Forest."
- "Rather than establishing a discrete field monitoring effort to document lynx mortality, contribute to the currently established reporting system maintained by the U.S. Fish and Wildlife Service. The Forest Service should coordinate with partners in state, tribal, county, municipal law enforcement, wildlife management agencies, lynx researchers, and the public to collect information necessary for this reporting system. Information voluntarily provided by these agencies, researchers, and others and compiled by the U.S. Fish and Wildlife Service would fulfill the requirements of the reasonable and prudent measure."

# 1.2.1.6 Terrestrial Wildlife Species, including Regional Forester's Sensitive Species (RFSS)

The following stipulations for the regional forester's sensitive species and other species are designed to meet the Forest Plan objective to maintain, protect, or improve habitat for sensitive species through site-level management strategies (O-WL-18): addressing species' needs by managing specifically for high quality habitat or known locations of sensitive species. The stipulations reflect management approaches and protective measures that are either Forest Plan standards or guidelines or methods that SNF biologists have applied and found to protect each particular species depending on the species' habitat requirements and distribution, individual site conditions, and expected management impacts (G-WL-12).

	RFSS and other species of interest	
	General requirements of known locations	
RFSS-1 Stipulation	Avoid or minimize negative impacts to known occurrences of sensitive species using buffers of 10 to 660 feet (1/8 mile). Site conditions such as topography and vegetation cover maybe used by a SNF biologist to refine site-specific distance.	
Objective	Maintain and protect sensitive species habitat and reduce adverse effects to species	
Source	Avoidance is a standard SNF site-level management strategy used to meet Forest Plan G-WL-11.	
RFSS-2 Stipulation	Minimize negative impacts to known sensitive species from management activities that may disturb pairs in their breeding habitat during critical breeding season (varies by species) using buffers of 10 to 660 feet (1/8 mile). Site conditions such as topography and vegetatio cover may be used by a SNF biologist to refine site-specific distance.	
Objective	Maintain and protect sensitive species habitat and reduce adverse effects to species	
Source	Forest Plan G-WL-12	

**Record of Decision** 

	RFSS and other species of interest
	Sites found during implementation
RFSS-3 Stipulation	If a new nest is found for bald eagle, osprey, goshawk, boreal owl, or great gray owl, during project implementation, activities would be temporarily halted in the area. The District Biologist would be consulted and appropriate mitigation measure would be promptly designed and carried out prior to restarting operations.
Objective	Reduce breeding season disturbance to RFSS. This is a SNF site-level management strategy routinely used to meet Forest Plan G-WL-12.
Source	Forest Plan G-WL-12 b.
	Survey requirements for unknown locations
RFSS-4 Stipulation	Because all listed plant locations or nest and/or den sites are not known, survey needs shall be determined by a SNF biologist, using approved protocols in suitable habitat, to determined occupancy in the areas where exploration activities are planned. The suite of species in need of surveys may change as the sensitive species list is updated or new information on species or survey protocol warrants surveys.
Objective	Contribute to the conservation of sensitive species and the habitats upon which these species depend and conserve the genetic variability of species.
Source	Forest Plan D-WL-3d and D-WL-3i. This is a standard, SNF site-level management strategy used to meet Forest Plan G-WL-12 b
	Gray Wolf (also a Management Indicator Species)
	Den Sites
RFSS-5 Stipulation	Provide for the protection of known active gray wolf den sites during the denning season (April 1-May 30).This equates to No Surface Occupancy during the timeframe given within a buffer of 660 feet (1/8 mile). Site conditions such as topography and vegetation cover may be used by a SNF biologist to refine site-specific distance.
Objective	To limit disturbance by humans during denning season
Source	Forest Plan G-WL-10.
	Bald Eagle (also a Forest Plan Management Indicator Species):
lests	
RFSS-6 Stipulation	Maintain a buffer of 660 feet (1/4 mile) between the activities and the nest (including active and alternate nests) from January 15 – July 31. This equates to No Surface Occupancy in the timeframe and location given.
Objective	To limit disturbance by humans during breeding and nesting
Source	National Bald Eagle Management Guidelines (USDI Fish and Wildlife Service 2007)
RFSS-7 Stipulation	Avoid cutting or removal of overstory trees within 330 of the nest at any time.
Objective	To protect nesting habitat
Source	National Bald Eagle Management Guidelines (USDI Fish and Wildlife Service 2007)
RFSS-8 Stipulation	Do not fly within 1000 feet (305 meters) of the nest, except where eagles have demonstrate tolerance for such activity. Tolerance will be determined by a SNF biologist.
Objective	To avoid disturbing nesting bald eagles and their young
Source	National Bald Eagle Management Guidelines (USDI Fish and Wildlife Service 2007)
	Wood Turtles
Breeding locations	
RFSS-9	A setback of at least 100 feet shall be maintained for drill pad disturbance from perennial
Stipulation	streams and rivers
Objective	To minimize human disturbance to breeding and nesting turtles
Source	Forest Plan G-WL-19, WAT-8 Stipulation
	Boreal Owl
lests and Breeding H	labitat
RFSS-10 Stipulation	Prohibit management activities within 300 feet of known boreal owl nest sites. This equates to No Surface Occupancy in the location given.

	RFSS and other species of interest
Source	Forest Plan S-WL-6
	Great Gray Owl
ests and Breeding H	
RFSS-11	Prohibit management activities within 660 feet of known great gray owl nest sites. This
Stipulation	equates to No Surface Occupancy in the location given.
Objective	Limit disturbance to breeding and nesting birds
Source	Forest Plan G-WL-14
	Three-toed Woodpecker
lests	
RFSS-12 Stipulation	Protect known three-toed woodpecker nest sites within 200 foot radius until young have fledged (estimated to occur May 15-July 31). This equates to No Surface Occupancy in the timeframe given.
Objective	Limit disturbance to breeding and nesting birds
Source	Forest Plan G-WL-17
	Sensitive Butterflies
reeding habitat	
RFSS-13 Stipulation	Protect known locations for: taiga alpine, Freija's grizzled skipper, and Nabokov's northern blue with a 200 foot buffer. If a known location is along an existing road consult with a SNF biologist to define protective timing and/or extent.
Objective	Minimize disturbance to breeding habitat and individual butterflies
Source	Forest Plan S-WL-7
	Northern Goshawk (also a Management Indictor Species)
lests	
RFSS-14 Stipulation	At northern goshawk nest sites with an existing nest structure, prohibit or minimize, to the extent practical, activities that may disturb nesting pairs in an area of 50 acres minimum (860 ft. radius) during critical nesting season (March 1 – August 30).
Objective	Minimize disturbance of nesting pairs
Source	Forest Plan S-WL-10
reeding habitat	
SRFSS-15 Stipulation	At northern goshawk nest sites in an area of 50 acres minimum (860 ft. radius), to the extent practical, allow only those activities that protect, maintain, or enhance high quality habitat conditions: 100% mature forest (>50 years old) with continuous forest canopy (>90% canopy closure) and large trees with large branches capable of supporting nests.
Objective	Maintain high quality breeding habitat
Source	Forest Plan S-WL-10
ost fledging areas	
RFSS-16 Stipulation	Within northern goshawk post-fledging areas, as determined by a SNF biologist, minimize activities, to the extent practical, that may disturb nesting pairs during critical nesting season (March 1 – August 30) and, to the extent practical, within a 500 acre area encompassing all known nest areas within the territory.
Objective	Limit disturbance during critical nesting season and fledging period
Source	Forest Plan G-WL-22
1 1	Osprey
lests	• •
RFSS-17 Stipulation	No drilling within 330 feet (1/8 mile) of an osprey nest from April 1 through August 15 of each year. No drill sites or roads are allowed within 660 feet of an osprey nest at any time. This equates to No Surface Occupancy in the timeframe and location given.
Objective	Minimize activities that may disturb nesting pairs of osprey
Source	Forest Plan G-WL-24, G-WL-25
	Great Blue Heron
olonies	

**Record of Decision** 

	RFSS and other species of interest		
	RFSS-18 Stipulation	Prohibit management activities within 330 feet from active great blue heron colonies. Prohibit management activities from 330 to 660 feet from March 1 through August 31. This equates to No Surface Occupancy in the timeframe and location given.	
	Objective	Limit disturbance to breeding and nesting birds	
	Source	Forest Plan G-WL-26	
	Common Loon		
Ne	sts		
	RFSS-19 Stipulation	No Surface Occupancy within 300 feet of a loon nest site between May 15 and July 1.	
	Objective	Limit disturbance to breeding and nesting birds	
	Source	Forest Plan G-WL-28	

### 1.2.1.7 Soils

Ecological Land Types (ELTs) associated with the proposed exploration activities are mapped and identified in the Project File. Table G-WS-8b in the Forest Plan provides a brief description of ELTs on the SNF identified in the measures below (Forest Plan, p. 2-18). Since equipment and techniques for drilling can vary, case by case exceptions or modifications can be granted for meeting the Forest Plan requirements in this table upon review of proposed equipment and activities by a SNF soil scientist, hydrologist, geologist or ecologist for consistency with Forest Plan requirements. While ELT mapping on the Forest is considered accurate there may be some instances where on the ground conditions may differ from what is mapped (typically these are small areas considered inclusions too small to map and manage practically at the landscape scale). In those cases, with a review by a SNF soil scientist, hydrologist, geologist, exploration activities could occur outside of the guidance established by the following stipulations where and when it is deemed appropriate by agency staff. Those operations would be subject to any alternative stipulations considered applicable by the soil scientist, hydrologist, geologist.

Soils			
	General Soils		
SOIL-1 Stipulation CoA's drill sites and road access	Salvage and reuse topsoil for site rehabilitation during construction projects or other land use activities including road access, work areas and drill sites where there is soil disturbance. When topsoil is unsuitable for reuse, other methods or tools such as sodding, hydro-seeding, fertilization, or erosion-resistant matting may be used to help rehabilitate disturbed areas.		
Objective	To maintain site productivity and minimize erosion		
Source	Forest Plan S-WS-3		
Modification or waiver	None		
Ecological Land Typ	e (ELT) Restrictions (mapping for locations is available in the project file, too large to include within the FEIS)		
On ELTs 1, 2, 3, 4, 5	and 6		
SOIL-2 Stipulation CoA's drill sites and road access with these ELT's	Drilling and access are limited to frozen soil (frozen to a depth that will support equipment that is being used and no rutting and compaction occurs).		
Objective	To maintain soil structure and prevent displacement		
Source	Forest Plan Page 2-16 G-WS-8, p. 2-17 Table G-WS-8a		

	Soils
Modification or waiver	Since equipment and techniques for drilling can vary, case by case exceptions or modifications can be granted for meeting the Forest Plan requirements in this table upon review of proposed equipment and activities by a SNF soil scientist or hydrologist for consistency with Forest Plan requirements.
On ELTs 10, 14, 15, 7	16 and 17
SOIL-3 Stipulation CoA's drill sites and road access	Drilling and access are limited to frozen soil (frozen to a depth that will support equipment that is being used and no rutting and compaction occurs) or the normal dry period
Objective	To prevent rutting and compaction
Source	Forest Plan Page 2-16 Table G-WS-8 p. 2-17 Table G-WS-8a
Modification or Waiver	Activity could take place during non-frozen conditions or outside of the normal dry period if techniques and/or equipment designed to eliminate rutting and compaction are utilized.
On ELTs 9, 12, and 1	8
SOIL-4 Stipulation CoA's drill sites and road access	Drilling would not be allowed.
Objective	Maintain site productivity
Source	Forest Plan Page 2-16 Table G-WS-8 p. 2-17 Table G-WS-8a.
Modification or Waiver	Since equipment and techniques for drilling can vary, case by case exceptions or modifications can be granted for meeting the Forest Plan requirements in this table upon review of proposed equipment and activities by a SNF soil scientist or hydrologist for consistency with Forest Plan requirements.
On ELTs 12 and 18	
SOIL-5 Stipulation CoA's drill sites and road access	New access roads would not be authorized. This equates to No Surface Occupancy in these ELTs.
Objective	Maintain site productivity
Source	Forest Plan Page 2-16 Table G-WS-8 p. 2-17 Table G-WS-8a.
Modification or Waiver	None
etland Soils	
SOIL-6 Stipulation CoA's road access	On access routes, appropriate water diversion structures (such as water bars) to reduce erosion shall be installed and so that surface water diverted from roads into filter strips or vegetative area, rather than directly into streams, lakes, open water wetlands, etc.
Objective	To minimize erosion and rutting.
Source	As recommended in Part 3 of Sustaining Minnesota Forest Resources: Voluntary site-level Management Guidelines, Forest Soil Productivity section.
Modification or waiver	None
SOIL-7 Stipulation CoA's road access	Use of wetlands under frozen ground conditions for temporary roads and skid trails will generally be permitted as long as no fill is placed in the wetland and no rutting occurs. Thes roads or trails will be blocked to discourage vehicle use under unfrozen conditions.
Objective	To maintain hydrologic function and minimize rutting and compaction (see WAT Objectives)
Source	Forest Plan Page. 2-15, G-WS-12
Modification or waiver	None

### 1.2.1.8 Roads

	Roads		
Temporary roads construction a	porary roads construction and closure		
RDS-1 Stipulation CoA's road access	Any lapse in exploration activities at a given drill site greater than two weeks requires temporary access road closure. Road closure must effectively prevent access from motorized traffic. The point at which the temporary road is closed shall be determined on a site-specific basis.		
Objective	To limit the amount of human interaction with lynx and wolves		
Source	Forest Plan S-TS-3		
RDS-2 Stipulation CoA's road access	<ul> <li>New roads built to access land for resource management will be temporary and not intended for public motorized use. Temporary roads will be decommissioned and reclaimed after their use is completed. As soon as access use is completed, stabilize temporary roads and effectively close them to motorized traffic.</li> <li>Roads and trails designated for decommissioning and reclamation will generally be subject to the following: <ul> <li>a. The road or trail will be rendered unusable by motorized vehicles by the placement of scattered large rocks (1 CY or greater) and boulders and the transplanting of small trees and brush to match the surrounding area to help the road disappear to passing motorists (See Appendix D).</li> <li>b. Stream crossing structures will be removed and the stream riparian buffer restored.</li> <li>c. Road and trail fills will be removed from flood prone and wetland areas to restore stream and wetland crossings to original contours.</li> <li>d. Removed fill will be used to recontour the "cut" section that it was removed from along the road. (i.e. recontour to pre-existing site conditions)</li> </ul> </li> </ul>		
Objective	To limit the amount of human interaction with lynx and wolves		
Source	Forest Plan G-TS-14, Forest Plan G-TS-16		
RDS-3 Stipulation CoA's road access	On existing OML 1 roads, an effective barrier will generally be installed as needed to prevent use by highway-licensed vehicles or Off road vehicles (ORVs). All terrain vehicle (ATV) and Off highway motorcycle (OHM) use may continue to be allowed on some existing OML 1 roads.		
Objective	To maintain required habitat components in wolf habitat and to limit the amount of human interaction with lynx and wolves		
Source	Forest Plan S-TS-12		
RDS-4 Stipulation CoA's road access	Slash, brush, tree limbs, seedlings and saplings cut to clear temporary roadways, shall be pushed a minimum distance for safe and efficient use of access. This slash material shall be utilized in rehabilitating the temporary roads and drill pad sites once drilling operations are complete or during final reclamation. For this reason, chipping of timber and slash shall not be utilized.		
Objective	Limit disturbance outside of the road prism and utilize woody materials for reclamation.		
Source	SNF mineral program management		

	Roads		
General Roa	eneral Road use		
	RDS-5 Stipulation CoA's road access	<ul> <li>Low Standard access roads used by permittees (temporary, OML-1 and OML-2) shall be maintained commensurate with the permitted use. The permittee is responsible for maintenance during all project activities and up until Forest Service has accepted final reclamation and the reclamation bord is released.</li> <li>h. Maintenance activities may include, but are not limited to, grading, installing or replacing road closure and erosion control or sediment capturing devices.</li> <li>i. Access roads may be temporarily closed if conditions result in evidence of road damage as required by the Authorized Officer.</li> <li>j. Allow for aquatic organism passage in perennial streams.</li> <li>k. When rutting exceeds 6 inches in depth for continuous distances greater than 300 feet on any portion of roads, cease equipment operations on that portion of road. Resume operations only when conditions are adequate to support equipment or other mitigation has been approved by the Authorized Officer (MFRC guidelines)</li> <li>l. Fill in ruts and holes that develop during road use. Use a suitable material (such as gravel or compacted fill), and fill as soon as possible to reduce the potential for erosion. Any importation of fill must first be approved by the Authorized Officer.</li> <li>m. When applicable, specific areas shall be identified in the road maintenance plan for disposal of borrow or quarry sites, stockpiles, or other uses that are needed for the project.</li> <li>n. Minimize the use of gravel to construct temporary roads. Unless approved in an operating plan, the Authorized Officer must be notified before the use of gravel to construct temporary roads. Any gravel placed when constructing temporary roads shall be removed by the permittee at final closure and reclamation. Royalties may be charged for FS gravel used.</li> </ul>	
	Objective	To mitigate against soil erosion and to protect water quality.	
	Source	SNF Transportation Management and MFRC guidelines	
	RDS-6 Stipulation CoA's road access.	All permittee caused resource damage on National Forest System Roads (OML 1- 5), including rutting, is the responsibility of the permittee and shall be repaired at permittees expense.	
	Objective	To mitigate against soil erosion and to protect water quality.	
	Source	SNF Transportation Management	

### 1.2.1.9 Water

	Water Quality	
Wetlands (see also soil stipulation	ons for restrictions in lowland Ecological Land Types (wetlands))	
WAT-1 Stipulation CoA's Drill sites & road access	No fuel storage within a wetland. Fuel storage containers should be kept on an upland site. Absorbent mats or other absorbent material shall remain under the drilling rig and extra mats shall remain on site at all times to clean up any small spills from refueling. Any spills or releases of oils, fuels, or other toxic or hazardous material must be reported and remediated per applicable State and Federal Laws. For spills that are five or more gallons, the permit holders are required to contact the MPCA State Duty Officer.	
Objective	Reduce risk of fuel release near water resources	
Source	SNF hydrology program management.	
WAT-2 Stipulation CoA's Drill sites & road access	Avoid felling trees or depositing woody material from clearing operations into wetlands.	
Objective	Avoid changing the structure and functions of wetlands	
Source	Forest Plan G-WS-14	

	Water Quality		
Drilling			
WAT-3 Stipulation CoA's Drill sites & road access	If a drill hole boring is to be temporarily sealed, State of Minnesota regulations shall be followed. They include that the casing and cap must extend at least five feet above the potential high water within the regional flood level. High water levels would be identified and established on a case by case basis and determined by on the ground evidence of past high water		
Objective	Prevent surface and ground water interaction within the bore hole.		
Source	State of Minnesota Rules Section 4727		
WAT-4 Stipulation CoA's Drill sites & road access	Drilling shall be under the supervision of a licensed well driller in accordance with State regulations. The only additives to the drilling water shall be those permitted by the State of Minnesota. Each site shall be restored through surface grading, as needed.		
Objective	Ensure state and federal guidelines are understood and followed to ensure minimal effect of drilling activity		
Source	State of Minnesota Rules Section 4727, SNF minerals program management.		
Sumps and drafting			
WAT-5 Stipulation CoA's Drill sites & road access	Water cannot be withdrawn from streams that have less than 1 cubic feet per second flow rate. Cumulative withdrawal rates from streams shall be no more than 10% of the flow at the time of withdrawal. Cumulative withdrawal from wetlands, ponds, or lakes, cannot result in more than a 2-inch decrease in the water surface elevation in a season. Water intakes shall have a sieve opening no larger than 1/4 –inch to minimize impact to aquatic organisms.		
Objective	Maintain natural seasonal flow and volume of water resources; prevent uptake of organisms		
Source	SNF hydrology program management.		
WAT-6 Stipulation CoA's Drill sites & road access	Sumps to treat the water used in the drilling process shall be constructed (see FEIS Figure 3) as surface conditions allow. These sumps (as described FEIS Section 2.1.1.5) would contain and effectively treat the pump water. Drill cuttings and additives shall be allowed to sufficiently settle out of the drill water prior to backfilling the sump. No sump pits shall be allowed for drilling in wetlands and re-circulation tanks would be required. Recirculation tanks shall also be required where sumps cannot be constructed (such as in bedrock).		
Objective	Reduce the risk of untreated drill water from interacting with wetlands or water resources		
Source	State of Minnesota Rules Section 4727, SNF hydrology program management.		
WAT-7 Stipulation CoA's Drill sites & road access	Streams shall not be dammed or dredged or otherwise modified for drafting purposes.		
Objective	Maintain water flow and avoid in-stream erosion and sedimentation		
Source	SNF hydrology program management		
ad construction and use			
WAT-8 Stipulation CoA's Drill sites & road access	Log mats placed for the crossing of wetlands (if used) shall be removed once they are no longer needed. A setback of at least 100 ft shall be maintained for drill pad disturbance from all lakes, open water wetlands, and perennial streams and rivers.		
Objective	Prevent erosion, compaction, and rutting in wetlands that could lead to water quality impairments		
Source	SNF hydrology program management.		

Water Quality			
В	rackish water		
Stipulation		Boreholes within 500 feet of an existing well that is completed in bedrock shall be permanently abandoned in accordance with Minnesota Department of Health (MDH) regulations within one week of removing the core.	
	Objective	Avoid introduction of high saline waters to ground water resources used for residential water supply.	
	Source	SNF hydrology program management	
	Modification or Waiver	Option #1: The hole can be temporarily abandoned in accordance with MDH regulations if it is tested for chloride after the core is removed and found to contain chloride levels below 250 mg/L. If chloride levels above 250 mg/L are found, the hole shall be permanently abandoned in accordance with Minnesota Department of Health (MDH) regulations within one week of removing the core. <u>Option #2:</u> The hole can be temporarily abandoned in accordance with MDH regulations if it is cased to an elevation 50 ft below the deepest well that is located within 500 ft of the subject hole.	
A/:1	d Diaa		
Wild Rice WAT-10 Stipulation CoA's road access		<ul> <li>Minimize impacts to wild rice during landing construction by moving landings to avoid concentrations of wild rice.</li> </ul>	
	Objective	Reduce risk of impacts to wild rice	
	Source	SNF botany program management	
	WAT-11 Stipulation CoA's Drill sites	Water for drilling operations shall not be withdrawn from lakes less than 50 acres if the lake is an inventoried wild rice lake.	
	Objective	Reduce risk of impacts to wild rice	
	Source	SNF botany program management	
Stream Crossings			
WAT-12 Stipulation CoA's road access		tioodplain fill shall be completely removed upon final reclamation.	
	Objective	Assure that organisms, water, sediment, and debris freely and naturally move through a stream crossing during and after operations	
Source		SNF hydrology program management.	

Attachment 9

	Aquatic Species		
Non	Non-native invasive species		
	AQS-1 Stipulation CoA's water sources	<ul> <li>The following measures to control or prevent the spread of non native invasive aquatic species shall be followed:</li> <li>a. There shall be no back-flushing water from the draft tank back into water source to avoid cross-contamination of aquatic invasive species. If there is a need to empty the draft tank, it may be permitted in an upland area, where no overland surface flow reaches water bodies or wetlands during back-flushing.</li> <li>b. Do not dump water from one stream or lake into another.</li> <li>c. Avoid sucking organic and bottom material into water intakes when pumping from streams or ponds</li> <li>d. Minimize driving equipment through or wading across water bodies whenever possible</li> <li>e. If a water source is known to have NNIS present, that water source shall be avoided. Water sources need to be approved by the SNF prior to use to avoid spread of NNIS</li> </ul>	
	Objective	Prevent or slow the spread of aquatic invasive species to non-infested water	
	Source	SNF fisheries program management.	
	AQS-2 Stipulation CoA's water sources	<ul> <li>Disinfect all pump and water tank equipment prior to entry on the SNF as well as before moving to a new site on the SNF.</li> <li>a. Sanitation will consist of a 5 percent solution of quaternary ammonium compounds (6.4 oz per gallon of water) or its equivalent will destroy most if not all target invasive organisms.</li> <li>b. Quaternary ammonium compounds are safe for gear and remain effective for at least a day if not overly diluted or muddied.</li> <li>c. Use sprayers or similar cleaning devises to clean all water tanks and sump liners. The quaternary ammonium solution must be in contact with the surface being sanitized for at least 10 minutes and then rinsed.</li> <li>d. For water pumps circulate through a 5 percent solution of quaternary ammonium compounds from a disinfected tank for 10 minutes.</li> </ul>	
	Objective	Eliminate aquatic invasive species that linger on or in equipment	
	Source	SNF fisheries program management.	

### 1.2.1.11 Non-native Invasive Species

Non-native invasive species	
isturbance	
NNIS-1 Stipulation CoA's Drill sites & road access	Where possible, core drilling sites and road access shall be confined to areas of previous disturbance. Retain shade and native vegetation in and around prospecting activity to the maximum extent possible to suppress non-native invasive plants and prevent their establishment and growth.
Objective	During project implementation, reduce the spread of non-native invasive species.
Source	Forest Plan G WL-23
NNIS-2 Stipulation CoA's Drill sites & road access	Gravel sources shall be approved by the SNF prior to use to avoid spread of NNIS.
Objective	To reduce the introduction and spread of NNIS
Source	Forest Plan O-WL-37

	Non-native invasive species		
Equipment cleaning req	Equipment cleaning requirements		
NNIS-3 Stipulation CoA for all heavy equipment and vehicles	<ul> <li>For external equipment surfaces: <ul> <li>a. Prior to movement onto the SNF, all off-road equipment (bulldozers, excavators, drill rigs) shall be cleaned such that the equipment is free of non-native invasive species, soil, seeds, vegetative matter, non-native invasive species or their propagation structures (spores, eggs, etc.)</li> <li>b. Prior to moving equipment from a drill site known to be infested with NNIS to a new drill site, equipment shall be cleaned as described above.</li> <li>c. The companies shall contact the SNF to verify this has been completed and give them the opportunity to complete an inspection of heavy equipment before they are transported onto National Forest System lands. For internal equipment surfaces:</li> </ul> </li> <li>d. Sweep vehicle cabs and deposit refuse in waste receptacles prior to movement onto the SNF.</li> </ul>		
Objective	To minimize the introduction of NNIS		
Source	Forest Plan O-WL-37		
Revegetation			
NNIS-4 Stipulation CoA's Drill sites & road access	If seeding for revegetation is required, only native or desired non-native species that are certified noxious weed free seed shall be planted.		
Objective	To minimize the introduction of NNIS		
Source	Forest Plan G-WS-1, G-WL-23		

### 1.2.1.12 Reclamation Requirements

Reclamation		
eneral		
RECL-1 Stipulation CoA's Drill sites & road access	All final reclamation, including permanent abandonment of drill holes and final reclamation and closure of access routes and drill pads, must be completed by the end of the prospecting permit's six year total timeframe and not extended into the lease application phase.	
Objective	To assure reclamation is completed during the life of a permit's timeframe of a total of 6 years.	
Source	SNF mineral program management	
Modification or waiver	The agencies may extend final reclamation if a lease application is submitted which would also trigger additional NEPA analysis.	

Reclamation		
Interim Reclamation		
RECL-2 Stipulation CoA's Drill sites & road access	<ul> <li>This reclamation is completed at the end of the yearly drilling season or when the work is completed and the sites are no longer needed, whichever comes first.</li> <li>a. Remove all equipment, trash, and other materials;</li> <li>b. Temporarily seal the exploratory borings in accordance with state regulations.</li> <li>c. Collect all drill cuttings and place them in the sump pits before they are backfilled.</li> <li>d. Backfill sump pits (no recirculation tank was used), with stockpiled soil.</li> <li>e. The topsoil, typically the upper six inches of soil, must be removed and stockpiled separately when constructing the sump pits. The reserved topsoil must be replaced over the disturbed area as the final step in returning the surface to its original contours. Stockpile topsoil where leveling temporary roads deeper than six inches. Use proper erosion control methods as needed for the stockpiles. BMP.</li> <li>f. Re-contour the disturbed sites to blend in with the natural topography and to stabilize the soils; and apply stockpiled topsoil as required.</li> <li>g. Remove invasive plants present on the site.</li> <li>h. Pull back brush and slash and spread it over all disturbed sites.</li> <li>i. Seed disturbed areas, if deemed necessary by the Authorizing Officer, with a native plant seed mix made up of grasses, shrubs, and forbs.</li> <li>j. Maintain access routes and other disturbed sites to assure the soils are stabilized and erosion will not occur during interim closure.</li> <li>k. Close temporary road entrances with methods that restrict access by motorized vehicles (examples: gates and boulders are acceptable, but berms of soil material are not allowed for access closures). All other site access, including barge landings, snowmobile and ATV access and vegetation clearing for geophysics or other mineral investigation, shall follow Forest Plan direction on temporary roads and road decommissioning (Forest Plan, page 2-50) and as illustrated in Appendix D as much as possible so the access is not open t</li></ul>	
Objective	To protect forest resources	
Source	SNF mineral program management.	

Reclamation		
Final Reclamation		
RECL-3 Stipulation CoA's Drill sites & road access	<ul> <li>Final reclamation This reclamation is completed when the sites are no longer needed and before the prospecting permit expires.</li> <li>a. Remove all equipment, trash, and other materials;</li> <li>b. All stakes and flagging used to mark gridlines or other locations must be removed after they are no longer needed.</li> <li>c. Permanently seal borings as per Minnesota Department of Health Rules.</li> <li>d. Collect all drill cuttings and placing them in the sump pits before they are backfilled;</li> <li>e. The topsoil, typically the upper six inches of soil, must be removed and stockpiled separately when constructing the sump pits. The reserved topsoil must be replaced over the disturbed area as the final step in returning the surface to its original contours. Stockpile topsoil where leveling temporary roads deeper than six inches. Use proper erosion control methods as needed for the stockpiles. BMP</li> <li>f. Backfill sump pits (if no recirculation tank was used) with stockpiled soil;</li> <li>g. Re-contour the disturbed sites to blend in with the natural topography and to stabilize the soils;</li> <li>h. Remove invasive plants present on the site</li> <li>i. Pull back brush and slash and spread it over all disturbed sites;</li> <li>j. Seed disturbed areas, if deemed necessary by the Authorizing Officer, with a native plant seed mix made up of grasses, shrubs, and forbs;</li> <li>k. As soon as access use is no longer needed, reclaim temporary roads with methods that effectively eliminate access by motorized vehicles, stabilize soils, re-establish drainages, and follow Forest Plan direction (Forest Plan, page 2-50) and as illustrated in Appendix D. Effective decommissioning should blend in and not stand out with the surroundings. At a minimum, the sight distance of the road shall be obliterated and woody vegetation plantings should be included. Berms of soil material are not allowed for access including barge landings, snowmobile and ATV access and vegetation clearing for geophysics or other mineral in</li></ul>	
Objective	To protect and restore forest resources	
Source	SNF mineral program management.	

### 1.3 Forest Service Stipulations for Special Use Permits

The following stipulations would apply to special use permits issued by the Forest Service for temporary road construction and management in areas outside the prospecting permits. The Standard Terms and Conditions in Form FS 2700-4c (v. 05/09) would apply. In addition, the following special terms and conditions from the Superior National Forest would apply to minimize impacts from temporary road construction and use:

1. The Forest Service may suspend all or any part of the construction/reconstruction activities and/or revoke or terminate the special-use authorization without administrative proceedings upon breach of any of the conditions herein.

Prior to the suspension, revocations, or termination, the Forest Service shall give the Holder written notice of the grounds for such action and reasonable time to cure any noncompliance. However, the Forest Service may require immediate temporary suspension of all or any part of the activities when the Forest Service determines it is necessary to protect the public health, safety, or the environment. If requested by the Holder, the superior to the officer ordering the suspension, revocations, or termination shall arrange within 10 days of the request for an on-the-ground review of the conditions with the Holder. The superior shall affirm, modify, or cancel the temporary suspension as soon after the review as possible.

- 2. The Holder shall take reasonable precautions to protect all public land survey monuments and accessories, private property corners, and forest boundary markers. In the event that any such land markers or monuments are damaged or destroyed, the Holder shall re-establish or reference the corner in accordance with directions and procedures to be furnished by the Forest Service.
- 3. The Holder shall maintain a muffler or spark arrester satisfactory to the Forest Service on the exhausts of all trucks and tractors or other internal combustion engines used in connection with this project.
- 4. During the fire season, as determined by the Forest Service, the Holder shall furnish and maintain in serviceable condition a fire-tool box and fire tools to be used only for suppression of forest fires. The toolbox shall be located at the site and shall contain the tools necessary for fire suppression as agreed upon by the Holder and the Forest Service.
- 5. The Holder shall equip each gasoline power saw at all times with a spark-arresting muffler, in good working condition and adapted to that machine. During periods of dangerous fire weather, as determined by the Forest service, the holder must transport and keep with each power saw at all times such fire tools and portable extinguishers as specified and to take other precautionary measures as may be required by the Forest Service.
- 6. The Forest Supervisor has determined that at this time no performance bond will be required for this permit; provided, however, that at such time as the Forest Supervisor determines that bonding is needed to protect the resources, not to exceed \$1,000.00 within 30 days of notification by certified mail. Failure to post the required bond or cash in lieu of bond within the required 30 days will result in the termination of the authorizing permit.
- 7. To insure against unauthorized public use of the permitted road without interference with the Government's use for administrative purposes, the permittee is authorized to install and/or sign a gate in accordance with design and location approved in advance by the Forest Officer in charge. Once installed, the custody, control, and safety maintenance of said gate is the sole duty and responsibility of the holder.
- 8. Prior to any road clearing/construction, the USDA Forest Service must assess the timber value, and payment must be made by the permittee.
- 9. The road design specification, construction and use shall comply with the following stipulations listed in Section 2.4.3 as they apply to temporary road management: GA-1, GA-5, LOC-1 through LOC-4, RDS-1, 2, 4 and 5, RV-9, HR-1 through HR-5, SOIL-1, 2, 3, 5, 6, and 7, TES-1 and 2, RFSS-1 through RFSS-19, NNIS-1 through NNIS-4, WAT-8, WAT-12, RECL-2 and RECL-3.

## 1.4 Bureau of Land Management

The following are BLM requirements considered in the EIS. These are not included as a decision made in this Forest Service Record of Decision but are displayed here for the reader's convenience.

1. Bond. The permittee shall file with the appropriate BLM office a permit bond prior to permit issuance in the amount of \$1,000 for the use and benefit of the United States to ensure surface and sub-surface reclamation. An increase in the amount of the permit bond maybe required upon approval of a final operating plan or at any other time during the life of the permit, to reflect changed conditions.

- 2. Extension. To qualify for an extension of the permit, the permittee must drill or excavate at least one exploration hole, trench or test pit, or perform other comparable exploration, e.g., substantial amounts of work described in stipulation No. 4. The requirements may be waived by the Authorized Officer if the permittee is unable to comply due to conditions beyond the permittee's control or for other reason provided by 43 CFR 3562.9-1.
- Supervision. The Authorized Officer (Field Manager) located at the BLM- Eastern States, Northeastern States Field Office, 626 East Wisconsin Avenue, Suite 200, Milwaukee, Wisconsin 53202-4617, is responsible for the review and approval of operating plans and modification thereof, inspection and enforcement of requirements, and is the recipient of quarterly reports.
- 4. Exploration Resulting in No Surface Disturbance. Prior to conducting activities on the permit area which do not disturb the surface or surface resources, e.g., geological mapping, geochemical surveys, ground and aerial geophysical surveys, and sampling of outcrops and old workings, the permittee shall notify the Authorized Officer, in writing, when such activities will commence, and thereafter furnish the Authorized Officer quarterly reports on the progress and results of such activities, including maps, narrative, and analyses as available on the date of the reports.
- 5. Exploration Resulting in Surface or Surface Resource Disturbance. Prior to conducting activities which disturb the surface and surface resources on the permit area, the permittee will submit to the Authorized Officer for review and approval two copies of an operating plan or of additional information which, when added to the exploration plan submitted prior to issuance of the permit, will provide the Bureau of Land Management with sufficient information to show in detail the proposed exploration, prospecting, or testing to be conducted. After the operating plan is approved, the permittee shall furnish the Authorized Officer a written notice of when the approved activities will commence, and thereafter furnish the Authorized Officer annual reports on the progress and results of the exploration. The annual reports shall include maps, logs, analyses, cross sections, or other graphic illustrations showing the geologic and physical mode of occurrence of the deposit as available on the date of the report period. Operating plans may be changed by mutual consent of the Authorized Officer and the operator at any time to adjust to changed conditions or to correct an oversight. To obtain approval of a changed or supplemental plan, the operator shall submit a written statement of the proposed changes or supplement and the justification for the changes proposed. If circumstances warrant, or if development of an operating plan for the entire operation is dependent upon unknown factors which cannot or will not be determined except during the progress of the exploration, a general plan may be approved and supplemented from time to time with site-specific information. The operator shall not, however, perform any exploration except under an approved operating plan.
- 6. Discovery Data. In the event permittee applies for a noncompetitive or preference right lease, the said quarterly reports and supplementary data required by the Authorized Officer will be used to determine whether or not the permittee has discovered a valuable deposit. The supplementary data will indicate the extent of the deposit, the physical and geological mode of occurrence, the average grade as established prior to permit exploration, the anticipated mining and processing methods, the anticipated location, kind and extent of necessary surface disturbance and measures to be taken to reclaim that disturbance. Valuable deposit is a deposit of character that further expenditure of labor means is justified with a reasonable expectation, not necessarily a demonstrated certainty, of success in developing a valuable mine.
- 7. The permittee shall file a report with the BLM upon the conclusion of all work, specifying the methods and materials used to properly plug and abandon any drill holes and/or the types of material and methods used to restore any other excavations required to be restored by law, regulation, stipulation or permit provision. In addition, the permittee shall provide in the report the name and telephone number of the person to contact in order to arrange for an on-site inspection of the

permitted area. A negative report is required and an inspection is required regardless of the amount and type of work performed.

- 8. Any modifications to the operating plan, including timeframes for operations, must be submitted to the BLM for concurrence prior to implementation.
- 9. BLM concurrence of a permit or operating plan does not relieve the company of their responsibility to comply with applicable state, federal or local laws, rules, or regulations or ordinances.
- 10. Modification of approved drill sites, access road locations and other surface disturbing activities in the operating plan may be modified after Forest Service consultation and BLM review and approval.

# Attachment 3: Monitoring and Evaluation Federal Hardrock Minerals Prospecting Permits Forest Service Record of Decision

# Introduction

Monitoring of activities would be implemented while the prospecting permits are active and after reclamation where specifically stated. Monitoring would occur as permitted by personnel, budget and time available.

Monitoring and evaluation would help ensure that stipulations and required mitigation are carried out; that the goals and objectives of the proposal are achieved; and that assumptions and models used in the analysis remain valid. Monitoring would generally occur during project activities, and at final reclamation to ensure that necessary stipulations for both of these phases are met. Pre-exploration data collection may be necessary for some resources to assess baseline conditions.

# Monitoring Items

There are nine monitoring items associated with the project. In addition to these nine items, the ongoing Superior NF monitoring program will also provide useful information to assess the implementation of this project. Scheduling of all monitoring activities, including monitoring and evaluation of minerals exploration activities, would occur at the beginning of each calendar year.

# Noise

# Objectives

Document sound levels at receptor locations including in the BWCAW that may be affected by drilling noise. Include monitoring for compliance with Stipulation RV-3 in Attachment 2.

# Protocols and Methods

# Parameters

Collect background and activity sound levels at known distances between sound source and receptor (e.g. campground, residence, wilderness boundary).

# Methodology

Use sound monitoring equipment to measure ambient sound levels and sound levels introduced by project activities, for multiple day and night recordings when possible. Attempt to monitor multiple times to capture weather and location variability.

Complete measurements with consideration of methods described in Minnesota Rules on Noise at 7030.0060 Measurement Methodology. When measuring drill rig sound levels at the source, measure drill rigs at four 50 foot measurements, evenly spaced at 90 degrees as allowed by site conditions.

# Location

Receptors located near drilling sites, including developed campgrounds, resorts, residences, dispersed campsites, and campsites in the BWCAW (see FEIS Section 3.1 for location of receptors and potential distances from drill site to receptor to evaluate for compliance with Stipulation RV-3).

## Frequency/duration

As needed in locations with the potential for noise impacts. Attempt to monitor multiple times to capture weather and location variability and changes in vegetation (e.g. leaf on/leaf off).

#### Data Storage District and Supervisor's Office files

Analysis Report Field documentation and in the SNF Monitoring Report

### Personnel

Biological Technicians, Geologist and/or Monitoring Coordinator

# Responsible Individual

Geologist or Monitoring Coordinator

### Adaptive Management

Change monitoring sites and techniques based on new information in order to better capture potential sound impacts. Work with operators as needed to achieve required mitigations.

# Soil and Water

# Objectives

Document impacts of minerals exploration activities (if any) to soil and water resources per SOIL and WAT stipulations in Attachment 2.

# Protocols and Methods

# Parameters

Visual evidence of correct sump operation and effectiveness, and potential rutting or erosion from temporary road construction and use. Volume of water from streams, lakes and ponds for drilling operation. Flow in streams used for source water. Water chemistry of the borehole and / or sump chemistry. Inspection of the exploratory borehole to ensure it is not a flowing artesian hole.

### Methodology

Photo documentation would occur with field visits to drill pads and temporary roads. The number of field visits each year is variable but often is at least once per month. Volume of water used for drilling operation will be important to monitor when smaller (not Birch Lake or South Kawishiwi River, etc.) is used as a source. The source being used will be confirmed. Flow in smaller streams will be measured or visually inspected to confirm flow is in excess of 1 cfs. Water chemistry including the pH, conductivity, and chloride concentration may be collected during the site visit. This water quality information will be used as general information in the project file.

### Location

Drill pads and temporary roads where project activities would occur. Flow rates of streams would be confirmed by visits to the source stream.

## Frequency/duration

Monitoring would occur during drilling project activities, and when drilling is complete to inspect interim and final reclamation.

## Data Storage

District and Supervisor's Office files

## Analysis Report

Field documentation and on-site photographs before drill pad or temporary road construction, during implementation and after final reclamation.

### Personnel

Hydrologic Technician, Biological Science Technician, Ecologist, Soil Scientist and/or Geologist.

### Responsible Individual

SNF Geologist, Soil Scientist, Hydrologist or Ecologist.

### Adaptive Management

Work with operators to minimize and eliminate any soil or water resource damage discovered during project activities to ensure compliance with stipulations (SOIL and WAT Stipulations in Attachment 2).

# Road/Trail Closure Effectiveness

# Objectives

Determine the implementation and effectiveness of road closures and reclamation and practices in prohibiting illegal motorized use per RDS Stipulations in Attachment 2.

# Protocols and Methods

# Parameters

(a) Visual evidence that road closure practices such as signing, gating, rock placement, and other travel barriers are implemented. (b) Visual evidence that road decommissioning practices as outlined in Appendix F-1 of FEIS and Forest Plan G-TS-16 are implemented. (c) Visual evidence that unauthorized motorized travel is not occurring on closed or decommissioned roads.

### Methodology

Monitoring will be accomplished through field verification of the planned road closures including:

- Establish photo points at beginning, mid way, and termination of closed or reclaimed road.
- Visually document implementation or establishment of closure practices (gates, berms, rocks, etc) or road decommissioning practices as described under Forest Plan G-TS-16 and Appendix F pages F-15through F-17.
- Visually document if closures and/or decommissioning is preventing motorized travel on road. If unauthorized travel is occurring, document tracks and resource vegetation with photos and notes.

## Location

Temporary roads constructed or utilized in this project. Pay particular attention to any segments within  $\frac{1}{2}$  mile of the wilderness.

## Frequency/duration

Monitor during project implementation, and after project activities are complete. Attempt to assess closure/reclamation effectiveness prior to hunting season as the majority of recreation motor vehicle (RMV) travel occurs during this period.

Data Storage District and Supervisor's Office files

### Analysis Report

Prepare progress report at end of each calendar year.

Personnel Bio-Technician and/or Geologist

Responsible Individual Geologist or Recreation Program Manager or Forest Monitoring Coordinator

### Adaptive Management

If road closure or decommissioning practices are determined to be unsuccessful or ineffective, they will be redone or revised (RDS Stipulations in Attachment 2).

# Non Native Invasive Species (NNIS)

Establishment and spread of NNIS infestations, particularly routes adjacent to the BWCAW

### Objectives

Avoid or minimize the establishment and spread of non-native plant and aquatics infestation in the project area per NNIS and AQS stipulations in Attachment 2.

### Protocols and Methods

### Parameters

(a) Visual evidence of new and expanding NNIS populations (b) Visual evidence of subsequent corrective actions (pulling, spraying etc) (c) Compliance of cleaning heavy equipment per stipulation NNIS-3.

### Methodology

Conduct baseline or pre-activity and post activity Monitor a sample of roads and drill pads to assess establishment and spread of NNIS attributed to mining activities. Focus on roads near BWCAW. Treat NNIS if found and monitor effectiveness of treatments.

### Location

(1) Known problem areas (2) Within the vicinity of roads and drill pads particularly near the BWCAW.

### Frequency/duration

Annually for at least 3 years after drill pads and temporary roads are built, and after reclamation.

Data Storage District and Supervisor's Office files

Analysis Report Prepare progress report at end of each fiscal year.

Personnel Bio-technicians and Geologist

#### Responsible Individual

Geologist or Forest Plant Ecologist or Biological Technician

#### Adaptive Management

If NNIS establishment and expansion resulting from minerals exploration becomes a management issue, corrective actions will be pursued (e.g. pulling and spraying weeds). (NNIS Stipulations in Attachment 2)

# Safety

## Objectives

Ensure implementation of safety measures by mineral exploration operators as defined in the stipulations (Attachment 2, Stipulation GA-5).

### Protocols and Methods

### Parameters

Visual and documentary evidence that safety measures (e.g. signage, fire control measures and keeping unauthorized personnel out of drilling sites) are being implemented appropriately

### Methodology

Monitoring of drill pads and temporary roads during project activities during field visits (usually at least once per month). Monitor for proper signage used per Stipulation GA-5.

#### Location

Drill pads and temporary roads where project activities occur.

### Frequency/duration

When project activities are occurring, usually once a month, as needed.

#### Data Storage Forest and district files

### Analysis Report

Progress report will be completed at the end of each fiscal year.

## Personnel

Engineering technicians and/or Geologist

## Responsible Individual

Geologist, Forest Monitoring Coordinator, Forest Safety Officer or Zone Engineers

# Adaptive Management

Forest personnel will adapt safety measures depending on public input and if safety issues arise. Ensure Stipulation GA-5 is implemented.

# Threatened, endangered, and sensitive wildlife species

# Objectives

Avoid or minimize disturbance to threatened, endangered, sensitive, and other species of interest and their breeding locations within the project area per TES and RFSS Stipulations in Section 2.4.3.

# Protocols and Methods

## Parameters

(a) Visual evidence of new and existing large raptor nests (b) Visual evidence of breeding activity.

# Methodology

Use the Forest Service's current survey protocol for each species.

## Location

(1) Known breeding locations and territories (2) Surveys for unknown breeding locations in suitable habitat to at least 660 feet from project activities.

# Frequency/duration

The breeding season prior to permit operations and annually during the breeding season while the permit is active.

### Data Storage

District and Supervisor's Office files

### Analysis Report

Report breeding season sightings within 24 hours to District biologist. Prepare progress report at end of each fiscal year.

Personnel Wildlife technicians and/or biologists

# Responsible Individual

Geologist or District Wildlife Biologist

## Adaptive Management

Mitigate effects through timing or location of activities to avoid disturbance (TES and RFSS Stipulations in Chapter 2).

# Visuals

# Objectives

Minimize impacts to visual resources per Stipulations RV-3 through RV-6.

# Protocols and Methods

# Parameters

Monitor removal of equipment, flagging, tools, etc at the completion of exploratory drilling activities. Monitor location of drill site in relation to any mitigation for visual impacts approved in operating plans.

## Methodology

## Location

In High and Moderate Scenic Integrity Objective Areas, and at drill sites. Focus on drill sites near visual resources of particular interest (e.g. scenic trails, campgrounds, adjacent to BWCAW).

*Frequency/duration* Sample of drill sites each year.

Data Storage District and Forest monitoring files

Analysis Report Summary in Forest Monitoring Report

*Personnel* Recreation technicians, monitoring technicians

Responsible Individual Geologist

Adaptive Management Work with permitees to meet the objectives of stipulations if deviations are found during monitoring.

# Heritage

# Objectives

Ensure compliance with HR Stipulations in Attachment 2 to avoid impacts to heritage resources.

# Protocols and Methods

# Parameters

Known locations, unknown locations, and sites found during implementation per HR Stipulations in Attachment 2.

# Methodology

Known site locations will be field verified and boundary flagged prior to implementation. High probability locations will be surveyed prior to implementation, and if located, sites will be boundary flagged for avoidance. If new heritage resources are discovered during implementation, the Forest Archaeologist will be notified and appropriate mitigations will be developed.

# Frequency/duration

For known and unknown locations, before ground disturbing activities occur. For sites discovered during implementation, as needed.

Data Storage Forest Archaeology Files

Analysis Report SHPO Report, summary in Forest Monitoring Report

Personnel Archaeologist, Archaeologist Technician

Responsible Individual Archaeologist

# Adaptive Management

Stipulation HR-3 (Sites found during implementation) provides methodology for adaptive management to avoid impacts to heritage resources.

# Location and Extent of Areas to be Occupied

# Objectives

Follow LOC stipulations in Attachment 2 for location and extent of areas to be occupied. This may be relevant for any permits that include acreage that contains Research Natural Areas (RNA), Unique Biological Areas (UBA). In addition, consider permits adjacent to the Boundary Waters Canoe Area Wilderness (BWCAW), Mining Protection Area (MPA) and Wild River Segments. Finally, this is relevant for developed recreation facilities where No Surface Occupancy is allowed (Stipulation RV-7).

# Protocols and Methods

# Parameters

Identify location of surface occupancy by permittees in relation to RNA, UBA, BWCAW, MPA, Wild River Segments and developed recreation facilities.

# Methodology

Monitor surface occupancy locations with Global Positioning System (GPS) devices and/or surveying equipment.

### Location

Proposed activities in permit areas that are near (within 100 feet) of Management Areas which are No Surface Occupancy (RNA and UBA), which prohibit exploration (BWCAW, MPA and Wild River Segments), and developed recreation facilities.

## Frequency/duration

When operating plans propose activities adjacent to RNA, UBA, BWCAW, MPA, Wild River Segments or developed recreation facilities.

Data Storage District and Supervisor's Office files

### Analysis Report

Operating plan files, summary in Forest Monitoring Report Minerals Section

*Personnel* Geologist, Monitoring Technicians, Surveyors

Responsible Individual

Geologist

### Adaptive Management

If any surface occupancy is discovered in prohibited areas, inform the permittee, require remediation of surface impacts, and identify and correct any problems in boundary identification to prevent a recurrence.

# Reclamation

# Objectives

Ensure that interim and final reclamation is effectively completed per RECL Stipulations in Attachment 2. Monitoring for other resources (Road/Trail Closure, Soil/Water, and Invasive Species) is also relevant for reclamation efforts.

### Protocols and Methods

### Parameters

Parameters include road closure or decommissioning, backfill of sumps, recontouring, removal of equipment, removal of invasive species, planting of only native vegetation to reclaim sites, and other tasks. See Stipulations RECL-2 and RECL-3 in Attachment 2.

### Methodology

Site visits in which visual review and photographs document compliance with necessary reclamation procedures.

*Location* Drill sites and access routes.

*Frequency/duration* During and after interim and final reclamation work is completed.

Data Storage District and Supervisor's Office files

Analysis Report Operating plan files, summary in Forest Monitoring Report Minerals Section

Personnel Geologist, Monitoring Technicians

Responsible Individual Geologist

# Adaptive Management

If reclamation is not completed per RECL Stipulations in Attachment 2, work with companies to achieve compliance. The Bureau of Land Management may utilize a bond to complete reclamation work if necessary (see Attachment 2, BLM Stipulation #1).

# Attachment 10: MN DNR FIM Wetland Identification Procedure

Matt Tyler, September 2012

Aerial photo interpretation and local experience in the Lax Lake area suggested that the National Wetlands Inventory (NWI) layer available from the MN DNR Data Deli (http://deli.dnr.state.mn.us/) did not adequately reflect the wetlands occurring in the proposed Lax Lake mineral lease area. Additional wetlands were identified on MN DNR lands using Cooperative Stand Assessment (CSA) data contained in the MN DNR Forest Inventory & Management (FIM) layers also available from the MN DNR Data Deli.

FIM Polygons that met the following criteria were identified and mapped as wetlands:

- 1. Physiographic Score (PHYS field) of 4 ("hydromesic") or 5 ("Hydric").
- 2. MN Cover Type code in the table below.

MN Cover Type Code	MN Cover Type Abbreviation	MN Cover Type Description
1	Ash	Ash
6	Wil	Willow
9	LH	Lowland Hardwoods
71	BSL	Black Spruce-Lowland
72	Т	Tamarack
73	С	White Cedar
75	SX	Stagnant Spruce
76	TX	Stagnant Tamarack
77	CX	Stagnant Cedar
83	LG	Lowland Grass
85	LB	Lowland Brush
96	L	Permanent Water
97	LF	Nonpermanent Water
98	Mh	Marsh
99	Ms	Muskeg

Offere
DS YES
DS YES
DS YES
DS NO
DS YES
YES
DS YES
DS YES
DS YES
YES
YES
YES
YES
OS YES
OS YES

Lake County

 E1/2-SW1/4
 80.00
 TAX LANDS
 YES

 NW1/4-SW1/4
 35.22
 TAX LANDS
 YES

 SW1/4-SW1/4
 36.74
 TAX LANDS
 NO

 SE1/4
 160.00
 TAX LANDS
 YES

 602.04

 Special features or uses: designated trout streams;

35.70

40.00

TAX LANDS YES TAX LANDS YES

fisheries management sites (NE1/4); the North Shore Trail

SW1/4-NW1/4

SE1/4-NW1/4

I
I

MINING UNIT No.		Land	Surface
CO-SEC-TWP-RNG Legal Description	Acres	Class	Offered
L-07-056-08			
NE1/4	160.00	TAX LANDS	YES
E1/2-NW1/4	80.00	TAX LANDS	
NW1/4-NW1/4	37.03	TAX LANDS	YES
SW1/4-NW1/4	37.09	TAX LANDS	YES
E1/2-SW1/4	80.00	TAX LANDS	YES
NW1/4-SW1/4	37.15	TAX LANDS	YES
SW1/4-SW1/4	37.20	TAX LANDS	YES
NE1/4-SE1/4	40.00	TAX LANDS	YES
NW1/4-SE1/4	40.00	SCHOOL	YES
S1/2-SE1/4	80.00	TAX LANDS	YES
	628.47		
Special features or uses: designated trout stream; the North Shore Trail			
L-08-056-08			
SW1/4-NE1/4	40.00	TAX LANDS	
W1/2-NW1/4	80.00	TAX LANDS	
SE1/4-NW1/4	40.00	TAX LANDS	
N1/2-SW1/4	80.00	TAX LANDS	
SW1/4-SW1/4	40.00	TAX LANDS	YES
SE1/4	160.00	TAX LANDS	YES
	440.00		
Special features or uses: designated trout streams; the North Shore Trail			
L-09-056-08			
NE1/4-NW1/4	40.00	SCHOOL	YES
SW1/4-NW1/4	40.00	GENERAL	YES
SW1/4	160.00	GENERAL	YES
E1/2-SE1/4	80.00	TAX LANDS	
	320.00		
Special features or uses: designated trout stream; fisheries management sites (SW1/4-NW1/4, SW1/4)			
L-16-056-08			
FULL SECTION	640.00	SCHOOL	YES
	640.00		
Special features or uses: designated trout stream; the North Shore Trail			

the North Shore Trail

MINING UNIT No.		Land	Surface
CO-SEC-TWP-RNG Legal Description	Acres	Class	Offered
L-17-056-08			
NE1/4	160.00	TAX LANDS	YES
NW1/4-NW1/4	40.00	TAX LANDS	YES
SW1/4-NW1/4	40.00	TAX LANDS	NO
SW1/4	160.00	TAX LANDS	NO
NE1/4-SE1/4	40.00	TAX LANDS	YES
NW1/4-SE1/4	40.00	TAX LANDS	NO
SE1/4-SE1/4	40.00	TAX LANDS	NO
Special features or uses: designated trout stream;	520.00		
the North Shore Trail			
NE1/4-NE1/4	40.00	TAX LANDS	YES
SW1/4-NE1/4	40.00	TAX LANDS	
SW1/4-NE1/4 SE1/4-NE1/4	40.00	TAX LANDS	
E1/2-NW1/4	40.00	TAX LANDS	
NW1/4-NW1/4	37.44	TAX LANDS	
SW1/4-NW1/4	37.87	SCHOOL	YES
NE1/4-SW1/4	40.00	TAX LANDS	
NE1/4-SE1/4	40.00	SCHOOL	NO
NW1/4-SE1/4	40.00	TAX LANDS	
SE1/4-SE1/4	40.00	TAX LANDS	
			2.0
	435.31		
Special features or uses: designated trout stream			

# Lake County

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
SL-01-056-14			
LOT02 (NW1/4-NE1/4)	41.75	TAX LANDS	YES
SW1/4-NE1/4	40.00	TAX LANDS	YES
LOT03 (NE1/4-NW1/4)	41.13	TAX LANDS	YES
SE1/4-NW1/4	40.00	TAX LANDS	YES
	162.88		
SL-03-056-14			
LOT04 (NW1/4-NW1/4)	39.97	TAX LANDS	
SW1/4-NW1/4	40.00	TAX LANDS	
NW1/4-SW1/4	40.00	TAX LANDS	
SW1/4-SE1/4	40.00	TAX LANDS	YES
	159.97		
Special features or uses: historic/archaeologic sites			
SL-04-056-14	10.00	TAVIANDO	VEG
SE1/4-NE1/4	40.00	TAX LANDS	YES
	40.00		
Special features or uses: natural heritage features			
SL-05-056-14			
LOT01 (NE1/4-NE1/4)	38.93	TAX LANDS	
SE1/4-NE1/4	40.00	TAX LANDS	
SE1/4-SW1/4	40.00	TAX LANDS	YES
	118.93		
Special features or uses: historic/archaeologic sites			
SL-06-056-14			
LOT01 (NE1/4-NE1/4)	37.00	TAX LANDS	
LOT02 (NW1/4-NE1/4)	37.00	TAX LANDS	
LOT06 (NW1/4-SW1/4)	42.62	SCHOOL	NO
	116.62		
Special features or uses: historic/archaeologic sites	110.02		
SL-07-056-14			
NE1/4-SE1/4	40.00	SCHOOL	YES
NE1/4-SE1/4			
S1/2-SE1/4	80.00	SCHOOL	YES

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-08-056-14 S1/2-NE1/4 80.00 TAX LANDS YES NE1/4-SW1/4 40.00 SCHOOL YES S1/2-SW1/480.00 SCHOOL YES \_\_\_\_\_ 200.00 Except the bed of Whiteface Reservoir (69-375P) Special features or uses: historic/archaeologic sites SL-09-056-14 TAX LANDS YES NW1/4-NW1/4, except 1 acre for school 39.00 \_\_\_\_ 39.00 Except the bed of Whiteface Reservoir (69-375P) SL-10-056-14 W1/2-NE1/4 80.00 TAX LANDS YES E1/2-SW1/4 TAX LANDS YES 80.00W1/2-SE1/4 80.00TAX LANDS YES \_\_\_\_\_ 240.00 Except the bed of Whiteface Reservoir (69-375P) SL-11-056-14 SE1/4-NE1/4 40.00 TAX LANDS YES NE1/4-SE1/4 TAX LANDS YES 40.00 \_\_\_\_\_ 80.00 Special features or uses: historic/archaeologic sites SL-12-056-14 SW1/4-NE1/4 40.00 TAX LANDS YES S1/2-NW1/4 TAX LANDS YES 80.00 N1/2-SW1/4 TAX LANDS YES 80.00 -----200.00 SL-01-057-14 N1/2-SW1/4 80.00 SCHOOL YES S1/2-SW1/4 80.00 TAX LANDS YES SW1/4-SE1/4 40.00 TAX LANDS YES -----200.00

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-02-057-14 SW1/4-NE1/4 40.00 NREG MINS NO N1/2-SW1/4 80.00 TAX LANDS YES SE1/4-SW1/4 40.00 TAX LANDS YES NW1/4-SE1/4 NREG MINS NO 40.00 -----200.00 SL-06-057-14 SE1/4-NW1/4 40.00 TAX LANDS YES \_\_\_\_ 40.00 Special features or uses: historic/archaeologic sites; natural heritage features SL-08-057-14 NW1/4-SW1/4 TAX LANDS YES 40.00 \_\_\_\_\_ 40.00 Except the bed of the St. Louis River; Special features or uses: canoe/boating route; historic/archaeologic sites; federal public access site (NW1/4-NE1/4); natural heritage features SL-11-057-14 NW1/4-SW1/4 TAX LANDS YES 40.00 \_\_\_\_\_ 40.00 Special features or uses: canoe/boating route SL-12-057-14 W1/2-NE1/4 80.00 TAX LANDS NO NW1/4 TAX LANDS YES 160.00 NE1/4-SW1/4 40.00 TAX LANDS YES SE1/4-SW1/4 YES SCHOOL 40.00 -----320.00 SL-13-057-14 NE1/4-NE1/4 40.00 TAX LANDS YES SE1/4-NW1/4 40.00 TAX LANDS YES E1/2-SW1/4 TAX LANDS YES 80.00 -----160.00

#### Surface MINING UNIT No. Land CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-17-057-14 SE1/4-SW1/440.00 TAX LANDS YES \_\_\_\_\_ 40.00 Special features or uses: natural heritage features SL-18-057-14 TAX LANDS YES SW1/4-NE1/4 40.00 \_\_\_\_. 40.00 Special features or uses: natural heritage features SL-20-057-14 SW1/4-NW1/4 40.00 TAX LANDS YES SE1/4-NW1/4 40.00 TAX LANDS NO N1/2-SW1/4 TAX LANDS YES 80.00 W1/2-SE1/4 TAX LANDS YES 80.00 \_\_\_\_\_ 240.00 SL-21-057-14 Und. 1/2 of SW1/4-NE1/4 40.00 TAX MINS NO Und. 1/2 of SW1/4-NE1/4 NREG MINS NO E1/2-NW1/4 80.00 NREG MINS NO Und. 2/3 of NW1/4-NW1/4 TAX MINS 40.00 NO Und. 2/3 of SW1/4-NW1/4 TAX MINS 40.00 NO Und. 263/2160 of NE1/4-SW1/4 40.00 TAX MINS NO Und. 7/16 of NE1/4-SW1/4 NREG MINS NO Und. 2/3 of NW1/4-SW1/4 40.00 TAX MINS NO S1/2-SW1/4 80.00 TAX MINS NO Und. 1/2 of NE1/4-SE1/4 TAX MINS 40.00 NO Und. 1/2 of NE1/4-SE1/4 NREG MINS NO W1/2-SE1/4 80.00 TAX MINS NO Und. 43/1080 of SE1/4-SE1/4 40.00 TAX MINS NO Und. 7/16 of SE1/4-SE1/4 NREG MINS NO \_\_\_\_\_ 520.00

#### Saint Louis County

4

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
SL-22-057-14			
Und. 1/2 of SW1/4-NE1/4	40.00	TAX MINS	NO
Und. 1/2 of SW1/4-NE1/4	40.00	NREG MINS	NO
SE1/4-NW1/4	40.00	TAX LANDS	
Und. 1/2 of NE1/4-SW1/4	40.00	TAX LANDS	NO
Und. 1/2 of NE1/4-SW1/4	40.00	NREG MINS	NO
Und. 1/2 of NW1/4-SW1/4	40.00	TAX MINS	NO
	40.00		
Und. 1/2 of NW1/4-SW1/4	40.00	NREG MINS	NO
Und. 31/2160 of SW1/4-SW1/4	40.00	TAX MINS	NO
Und. 7/16 of SW1/4-SW1/4	10.00	NREG MINS	NO
Und. 1/2 of SE1/4-SW1/4	40.00	TAX MINS	NO
Und. 1/2 of SE1/4-SW1/4	00.00	NREG MINS	NO
E1/2-SE1/4	80.00	TAX LANDS	
Und. 1/2 of NW1/4-SE1/4	40.00	TAX MINS	NO
Und. 1/2 of NW1/4-SE1/4		NREG MINS	NO
	360.00		
SL-23-057-14			
NE1/4	160.00	TAX LANDS	NO
SE1/4-SW1/4	40.00	TAX LANDS	YES
SE1/4-SE1/4	40.00	TAX LANDS	YES
	240.00		
<b>SL-24-057-14</b> NE1/4-NW1/4	40.00	TAX LANDS	VFS
SW1/4-SW1/4	40.00	TAX LANDS	
5 W 1/ T - 5 W 1/ T		IAA LANDS	1125
	80.00		
SL-25-057-14			
E1/2-SW1/4	80.00	TAX LANDS	YES
N1/2-SE1/4	80.00	TAX LANDS	YES
	160.00		
SL-26-057-14			
	80.00	TAX LANDS	YES
E1/2-NE1/4		TAX LANDS	
E1/2-NE1/4 NW1/4-NW1/4	40.00		1
NW1/4-NW1/4	40.00 40.00		YES
	40.00 40.00 40.00	TAX LANDS TAX LANDS	

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-27-057-14 W1/2-NE1/4 80.00 TAX LANDS YES SE1/4-NW1/4 40.00 TAX LANDS YES Und. 49/864 of NE1/4-SW1/4 40.00 TAX MINS NO Und. 7/16 of NE1/4-SW1/4 NREG MINS NO 40.00 Und. 133/1080 of SW1/4-SW1/4 TAX MINS NO Und. 7/16 of SW1/4-SW1/4 NREG MINS NO SE1/4-SW1/4 40.00 TAX LANDS YES SW1/4-SE1/4 TAX LANDS YES 40.00 SE1/4-SE1/4TAX MINS 40.00 NO \_\_\_\_\_ 320.00 SL-29-057-14 TAX LANDS YES W1/2-NE1/4 80.00 \_\_\_\_\_ 80.00 Special features or uses: historic/archaeologic sites; natural heritage features SL-31-057-14 NW1/4-SE1/4 TAX LANDS YES 40.00 \_\_\_\_ 40.00 Special features or uses: historic/archaeologic sites SL-32-057-14 SE1/4-SE1/4 TAX LANDS NO 40.00 \_\_\_\_\_ 40.00 Special features or uses: historic/archaeologic sites SL-35-057-14 E1/2-SW1/4 TAX LANDS YES 80.00 -----80.00 Special features or uses: natural heritage features SL-36-057-14 FULL SECTION 640.00 SCHOOL YES \_\_\_\_\_ 640.00

Surface

Land

#### CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-14-058-14 N1/2-NW1/4 80.00 TAX LANDS NO S1/2-SW1/4 80.00 TAX LANDS NO \_\_\_\_\_ 160.00 Except the bed of Partridge River; Special features or uses: natural heritage features SL-15-058-14 SE1/4-SW1/4 40.00 TAX LANDS NO NE1/4-SE1/4 TAX LANDS NO 40.00 \_\_\_\_\_ 80.00 Except the bed of Partridge River; Special features or uses: natural heritage features; historic/archaeologic sites SL-16-058-14 E1/2-NE1/4 80.00 SCHOOL YES W1/2-NE1/4 80.00 SCHOOL NO W1/2 320.00 SCHOOL NO SE1/4 160.00 SCHOOL NO \_\_\_\_\_ 640.00 Special features or uses: historic/archaeologic sites SL-17-058-14 N1/2-SW1/4 TAX LANDS NO 80.00 N1/2-SE1/4 TAX LANDS NO 80.00 -----160.00 SL-21-058-14 Und. 17/30 of SW1/4-SW1/4 40.00 TAX LANDS NO TAX LANDS NO Und. 17/30 of SE1/4-SW1/4 40.00 \_\_\_\_\_ 80.00

#### Saint Louis County

MINING UNIT No.

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-28-058-14 E1/2-NE1/4 80.00 TAX LANDS NO Und. 17/30 of NE1/4-NW1/4 40.00 TAX LANDS NO Und. 17/30 of NW1/4-NW1/4 40.00 TAX LANDS NO Und. 17/30 of SW1/4-NW1/4 TAX LANDS NO 40.00 Und. 17/30 of SE1/4-NW1/4 TAX LANDS NO 40.00 E1/2-SW1/4 80.00 TAX LANDS YES \_\_\_\_\_ 320.00 Except the bed of the St. Louis River Special features or uses: canoe/boating route SL-30-058-14 Und. 1/20 of LOT01 (NW1/4-NW1/4) 40.46 TAX LANDS YES Und. 1/20 of LOT02 (SW1/4-NW1/4) 40.59 TAX LANDS YES \_\_\_\_\_ 81.05 Except the bed of the St. Louis River Special features or uses: canoe/boating route; natural heritage features SL-31-058-14 LOT02 (SW1/4-NW1/4) 40.79 TAX LANDS NO \_\_\_\_\_ 40.79 Except the bed of the St. Louis River Special features or uses: canoe/boating route; historic/archaeologic sites; natural heritage features SL-35-058-14 NW1/4-NE1/4 TAX LANDS NO 40.00 \_\_\_\_\_ 40.00 Except the bed of the St. Louis River Special features or uses: canoe/boating route; historic/archaeologic sites SL-36-058-14 FULL SECTION 640.00 SCHOOL YES \_\_\_\_ 640.00 Except the bed of the St. Louis River Special features or uses: canoe/boating route; natural heritage features

#### MINING UNIT No. Land Surface CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-13-058-15 NW1/4 160.00 TAX LANDS NO \_\_\_\_\_ 160.00 Except the bed of the Partridge River Special features or uses: natural heritage features SL-14-058-15 320.00 TAX LANDS NO E1/2 SE1/4-NW1/4 40.00 TAX LANDS NO E1/2-SW1/4 TAX LANDS NO 80.00 \_\_\_\_\_ 440.00 Except the bed of the Partridge River Special features or uses: natural heritage features SL-16-058-15 W1/2-NE1/4 80.00 SCHOOL NO SE1/4-NE1/4 NO 40.00 SCHOOL W1/2 320.00 SCHOOL NO SE1/4 SCHOOL NO 160.00 \_\_\_\_ 600.00 SL-17-058-15 W1/2-NE1/4 80.00 TAX LANDS NO SE1/4-NW1/4 TAX LANDS NO 40.00 NE1/4-SW1/4 TAX LANDS NO 40.00 N1/2-SE1/4 TAX LANDS NO 80.00 \_\_\_\_\_ 240.00 SL-18-058-15 40.00 TAX LANDS YES SE1/4-NE1/4 SE1/4-SW1/4 TAX LANDS YES 40.00 -----80.00

### Saint Louis County

Except the bed of unnamed wetland (69-430W)

#### MINING UNIT No. Land Surface CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-19-058-15 NE1/4-NE1/4 40.00 TAX LANDS NO SW1/4-NE1/4 40.00 TAX LANDS NO LOT01 (NW1/4-NW1/4) 44.86 TAX LANDS NO E1/2-SW1/4 80.00 TAX LANDS NO TAX LANDS NO LOT03 (NW1/4-SW1/4) 44.48 NW1/4-SE1/4 40.00 TAX LANDS NO S1/2-SE1/4 80.00 TAX LANDS YES \_\_\_\_\_ 369.34 Except the bed of unnamed wetland (69-430W) Special features or uses: natural heritage features, canoe/boating route SL-20-058-15 N1/2-NE1/4 80.00 TAX LANDS NO TAX LANDS NO N1/2-NW1/4 80.00 TAX LANDS YES SW1/4-NW1/4, except that part described as follows: 37.75 Commencing at the SW corner of SW1/4-NW1/4, thence at an assumed azimuth of 90d 13m 49s along the E-W 1/4 line a distance of 530 ft., thence at an azimuth of 339d 51m 14s a distance of 213.35 ft. to a point being 200 ft. N. of the E-W 1/4 line measured at a perpendicular, thence at an azimuth of 270d 13m 49s a distance of 450 ft. to a point on the W. line of the NW1/4, thence at an azimuth of 181d 52m 02s a distance of 200.08 ft to the point of beginning. SW1/4-NW1/4, that part described as follows: 2.25 TAX LANDS NO Commencing at the SW corner of SW1/4-NW1/4, thence at an assumed azimuth of 90d 13m 49s along the E-W 1/4 line a distance of 530 ft., thence at an azimuth of 339d 51m 14s a distance of 213.35 ft. to a point being 200 ft. N. of the E-W 1/4 line measured at a perpendicular, thence at an azimuth of 270d 13m 49s a distance of 450 ft. to a point on the W. line of the NW1/4, thence at an azimuth of 181d 52m 02s a distance of 200.08 ft to the point of beginning. SE1/4-NW1/4 40.00 TAX LANDS YES TAX LANDS YES S1/2-SW1/4 80.00 SW1/4-SE1/4 TAX LANDS YES 40.00 -----360.00 Except the beds of Cedar Lake and unnamed wetland (69-431P, 69-432W) Special features or uses: natural heritage features,

#### Saint Louis County

Special features or uses: natural heritage for canoe/boating route

Saint	Louis	County

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
ST 21 050 15			
SL-21-058-15	40.00	TAVIANDS	NO
NW1/4-NW1/4 SW1/4-SW1/4	40.00	TAX LANDS TAX LANDS	
NW1/4-SW1/4 NW1/4-SE1/4, the E. 200 ft. lying S. of river	40.00	TAX LANDS	
SW1/4-SE1/4, the E. 330 ft. of W. 530 ft., except the	8.49	TAX LANDS	
W. 50 ft.			
	93.27		
Except the bed of unnamed wetland (69-432W) Special features or uses: natural heritage features, canoe/boating route	93.21		
SL-22-058-15			
SW1/4-NE1/4	40.00	TAX LANDS	YES
	40.00		
Special features or uses: natural heritage features, canoe/boating route	40.00		
SL-24-058-15			
SW1/4-NW1/4	40.00	TAX LANDS	NO
SW1/4	160.00	TAX LANDS	
W1/2-SE1/4	80.00	TAX LANDS	
SE1/4-SE1/4	40.00	TAX LANDS	NO
	320.00		
Except the bed of unnamed wetland (69-990W) Special features or uses: natural heritage features			
SL-25-058-15	00.00		VEG
E1/2-NE1/4	80.00	TAX LANDS	
W1/2-NE1/4	80.00	TAX LANDS	
NW1/4-NW1/4	40.00	TAX LANDS	
NE1/4-SW1/4 SW1/4 SW1/4	40.00	TAX LANDS	
SW1/4-SW1/4 NE1/4 SE1/4	40.00	TAX LANDS TAX LANDS	
NE1/4-SE1/4 NW1/4-SE1/4	$\begin{array}{c} 40.00\\ 40.00\end{array}$	TAX LANDS	
S1/2-SE1/4	40.00 80.00	TAX LANDS	
Except the bed of the St. Louis River	440.00		
Special features or uses: natural heritage features,			
cance/boating route			

canoe/boating route

40.00 40.00  80.00 40.00 5.00 10.00 6.20  141.20	TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS	YES NO NO
40.00  80.00 40.00 5.00 10.00 6.20 	TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS	YES NO NO
80.00 80.00 40.00 5.00 10.00 6.20	TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS	NO NO
80.00 80.00 40.00 5.00 10.00 6.20	TAX LANDS TAX LANDS TAX LANDS	NO
40.00 5.00 10.00 6.20	TAX LANDS TAX LANDS TAX LANDS	NO
40.00 5.00 10.00 6.20	TAX LANDS TAX LANDS TAX LANDS	NO
40.00 5.00 10.00 6.20	TAX LANDS TAX LANDS TAX LANDS	NO
5.00 10.00 6.20	TAX LANDS TAX LANDS	
10.00 6.20	TAX LANDS	NO
6.20		
	IAA LANDS	
141.20		NO
40.00	TAYLANDS	NO
40.00		
40.00	TAX LANDS	NO
280.00		
40.00		
	IAA LANDS	123
520.00		
320.00		
38.09		
40.00		
524.03		
527.05		
	40.00 280.00 40.00 320.00 160.00 520.00 320.00 38.09 1.91 44.03 40.00 40.00	160.00       TAX LANDS         40.00       TAX LANDS         40.00       TAX LANDS         280.00       TAX LANDS         280.00       TAX LANDS         320.00       TAX LANDS         160.00       TAX LANDS         520.00       TAX LANDS         38.09       TAX LANDS         1.91       TAX LANDS         44.03       TAX LANDS         40.00       TAX LANDS

#### MINING UNIT No. Land Surface CO-SEC-TWP-RNG Legal Description Acres Class Offered SL-31-058-15 NE1/4 160.00 TAX LANDS YES E1/2-NW1/4 80.00 TAX LANDS YES TAX LANDS YES LOT01 (NW1/4-NW1/4) 42.77 LOT02 (SW1/4-NW1/4) TAX LANDS YES 42.55 LOT03 (NW1/4-SW1/4) TAX LANDS YES 42.33 N1/2-SE1/4 80.00 TAX LANDS YES SW1/4-SE1/4, the N. 330 ft. of the S. 990 ft. 10.00 TAX LANDS NO SE1/4-SE1/4 TAX LANDS YES 40.00 \_\_\_\_\_ 497.65 Special features or uses: natural heritage features, canoe/boating route SL-32-058-15 TAX LANDS YES FULL SECTION 640.00 \_\_\_\_\_ 640.00 SL-33-058-15 TAX LANDS YES NW1/4 160.00 W1/2-SW1/4 TAX LANDS YES 80.00 \_\_\_\_\_ 240.00 SL-34-058-15 NW1/4-SE1/4 40.00 TAX LANDS NO \_\_\_\_\_ 40.00 SL-35-058-15 W1/2-NE1/4 80.00 TAX LANDS YES TAX LANDS YES SE1/4-NE1/4 40.00 NE1/4-SE1/4 TAX LANDS YES 40.00 \_\_\_\_\_ 160.00 SL-36-058-15 FULL SECTION 640.00 SCHOOL YES -----640.00

#### MINING UNIT No. Land Surface CO-SEC-TWP-RNG Legal Description Acres Class Offered A-01-046-22 LOT01 (NE1/4-NE1/4) 40.07 TAX LANDS YES TAX LANDS YES LOT02 (NW1/4-NE1/4) 40.22 TAX LANDS YES S1/2-NE1/4 80.00 TAX LANDS YES LOT03 (NE1/4-NW1/4) 40.37 LOT04 (NW1/4-NW1/4) TAX LANDS YES 40.52 S1/2-NW1/4 TAX LANDS YES 80.00 S1/2 320.00 TAX LANDS YES \_\_\_\_\_ 641.18 A-02-046-22 LOT01 (NE1/4-NE1/4) 40.52 TAX LANDS YES TAX LANDS YES LOT02 (NW1/4-NE1/4) 40.35 TAX LANDS YES S1/2-NE1/4 80.00 TAX LANDS YES LOT03 (NE1/4-NW1/4) 40.16 LOT04 (NW1/4-NW1/4) TAX LANDS YES 40.02 S1/2-NW1/4 TAX LANDS YES 80.00 S1/2 320.00 TAX LANDS YES \_\_\_\_\_ 641.05 A-03-046-22 LOT01 (NE1/4-NE1/4) 40.13 TAX LANDS YES TAX LANDS YES 40.50 LOT02 (NW1/4-NE1/4) 80.00 TAX LANDS YES S1/2-NE1/4 TAX LANDS YES LOT03 (NE1/4-NW1/4) 40.88 LOT04 (NW1/4-NW1/4) 41.25 TAX LANDS YES S1/2-NW1/4 80.00 TAX LANDS YES S1/2 320.00 TAX LANDS YES \_\_\_\_\_ 642.76 A-04-046-22 LOT01 (NE1/4-NE1/4) 41.40 TAX LANDS YES LOT02 (NW1/4-NE1/4) 41.31 TAX LANDS YES S1/2-NE1/4 80.00 TAX LANDS YES LOT03 (NE1/4-NW1/4) 41.22 TAX LANDS YES LOT04 (NW1/4-NW1/4) 41.14 TAX LANDS YES S1/2-NW1/4 80.00 TAX LANDS YES SW1/4 160.00 TAX LANDS YES E1/2-SE1/4 80.00 SCHOOL YES W1/2-SE1/4 80.00 TAX LANDS YES

Aitkin County

-----645.07

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered A-05-046-22 LOT01 (NE1/4-NE1/4) 40.70 TAX LANDS YES TAX LANDS YES LOT02 (NW1/4-NE1/4) 39.89 TAX LANDS YES S1/2-NE1/4 80.00 SE1/4-NW1/4 TAX LANDS NO 40.00 N1/2-SW1/4 TAX LANDS NO 80.00 S1/2-SW1/4 80.00 TAX LANDS YES SE1/4 160.00 TAX LANDS YES \_\_\_\_\_ 520.59 A-06-046-22 LOT01 (NE1/4-NE1/4) 36.14 TAX LANDS NO NE1/4-SW1/4 40.00 TAX LANDS NO 27.66 LOT06 (NW1/4-SW1/4) SCHOOL YES LOT07 (SW1/4-SW1/4) 27.89 SCHOOL YES SE1/4-SW1/4 40.00 SCHOOL YES N1/2-SE1/4 80.00 TAX LANDS NO SW1/4-SE1/4 40.00 SCHOOL YES SE1/4-SE1/4 40.00 SCHOOL NO \_\_\_\_\_ 331.69 A-07-046-22 S1/2-NE1/4 80.00 TAX LANDS NO E1/2-NW1/4 80.00 TAX LANDS NO LOT01 (NW1/4-NW1/4) 27.95 TAX LANDS NO LOT02 (SW1/4-NW1/4) 27.86 TAX LANDS NO E1/2-SW1/4 80.00 TAX LANDS NO LOT03 (NW1/4-SW1/4) 27.76 TAX LANDS NO LOT04 (SW1/4-SW1/4) 27.67 TAX LANDS NO N1/2-SE1/4 80.00 TAX LANDS NO SE1/4-SE1/4 TAX LANDS NO 40.00

#### Aitkin County

471.24

MINING UNIT No.			Land	Surface
CO-SEC-TWP-RNG	Legal Description	Acres	Class	Offered
A-08-046-22				
NE1/4		160.00	TAX LANDS	YES
NE1/4-NW1/4		40.00	SCHOOL	YES
NW1/4-NW1/4		40.00	SCHOOL	NO
SW1/4-NW1/4		40.00	TAX LANDS	NO
SE1/4-NW1/4		40.00	TAX LANDS	
NE1/4-SW1/4		40.00	TAX LANDS	
at the NW corner distance of 208 ft	t 1 acre described as follows: Beginning , thence running E. on the quarter line a ., thence S. 208 ft., thence W. 208 ft., he section line 208 ft. to the place of	39.00	TAX LANDS	YES
SW1/4-SW1/4		40.00	SCHOOL	NO
SW1/4-SW1/4 SE1/4-SW1/4		40.00	SCHOOL	YES
NE1/4-SE1/4		40.00	TAX LANDS	
NW1/4-SE1/4		40.00	SCHOOL	NO
S1/2-SE1/4		80.00	TAX LANDS	
51/2 501/1			IIII LIII(DS	125
		639.00		
<b>A-09-046-22</b> Full Section		640.00  640.00	TAX LANDS	YES
A-10-046-22				
N1/2-NE1/4		80.00	SCHOOL	YES
SW1/4-NE1/4		40.00	SCHOOL	YES
SE1/4-NE1/4		40.00	TAX LANDS	
NW1/4		160.00	SCHOOL	YES
NE1/4-SW1/4		40.00	TAX LANDS	
NW1/4-SW1/4		40.00	SCHOOL	YES
S1/2-SW1/4		80.00	TAX LANDS	
N1/2-SE1/4		80.00	SCHOOL	YES
S1/2-SE1/4		80.00	TAX LANDS	YES
		640.00		
A 11 046 22				
A-11-046-22 FULL SECTION		640.00	TAX LANDS	YES
		640.00		

MINING UNIT No.			Land	Surface
CO-SEC-TWP-RNG	Legal Description	Acres	Class	Offered
4-12-046-22				
N1/2-NE1/4		80.00	TAX LANDS	YES
SW1/4-NE1/4		40.00	TAX LANDS	YES
SE1/4-NE1/4		40.00	SCHOOL	NO
NW1/4		160.00	TAX LANDS	
E1/2-SW1/4		80.00	SCHOOL	YES
NW1/4-SW1/4		40.00	TAX LANDS	YES
SW1/4-SW1/4		40.00	SCHOOL	NO
N1/2-SE1/4		80.00	SCHOOL	YES
S1/2-SE1/4		80.00	TAX LANDS	
		640.00		
A-13-046-22				
N1/2		320.00	TAX LANDS	YES
S1/2-SW1/4		80.00	TAX LANDS	NO
NE1/4-SE1/4, the N1/2		20.00	TAX LANDS	NO
NW1/4-SE1/4, the N1/2		20.00	TAX LANDS	NO
S1/2-SE1/4		80.00	TAX LANDS	NO
		520.00		
A-14-046-22				
W1/2-NE1/4		80.00	SCHOOL	YES
SE1/4-NE1/4		40.00	TAX LANDS	
N1/2-NW1/4		80.00	TAX LANDS	
SW1/4-NW1/4		40.00	TAX LANDS	
SE1/4-NW1/4		40.00	SCHOOL	YES
SW1/4		160.00	SCHOOL	YES
NE1/4-SE1/4		40.00	TAX LANDS	
W1/2-SE1/4		80.00	SCHOOL	YES
SE1/4-SE1/4		40.00	SCHOOL	YES
		600.00		
A-15-046-22 FULL SECTION		640.00	TAX LANDS	YES
		640.00		

MINING UNIT No. CO-SEC-TWP-RNG	Legal Description	Acres	Land Class	Surface Offered
A 16 046 <b>22</b>				
A-16-046-22 N1/2-NE1/4		80.00	SCHOOL	YES
SW1/4-NE1/4		40.00	SCHOOL	YES
SE1/4-NE1/4		40.00	SCHOOL	NO
E1/2-NW1/4		80.00	SCHOOL	NO
W1/2-NW1/4		80.00	SCHOOL	YES
N1/2-SW1/4		80.00	SCHOOL	NO
S1/2-SW1/4		80.00	SCHOOL	YES
NE1/4-SE1/4		40.00	SCHOOL	NO
W1/2-SE1/4		80.00	SCHOOL	YES
SE1/4-SE1/4		40.00	SCHOOL	YES
		640.00		
A-17-046-22 E1/2		220.00	TAX LANDS	VEC
E1/2 N1/2-NW1/4		320.00 80.00	TAX LANDS	YES NO
SW1/4-NW1/4		40.00	TAX LANDS	
SE1/4-NW1/4		40.00	TAX LANDS	
SW1/4		160.00	TAX LANDS	
5 (1 1 1				110
		640.00		
A-18-046-22				
W1/2-NE1/4		80.00	TAX LANDS	NO
E1/2-NW1/4		80.00	TAX LANDS	
LOT01 (NW1/4-NW1/4)		27.69	TAX LANDS	NO
LOT02 (SW1/4-NW1/4)		27.83	TAX LANDS	NO
E1/2-SW1/4		80.00	TAX LANDS	NO
LOT03 (NW1/4-SW1/4)		27.97	TAX LANDS	NO
LOT04 (SW1/4-SW1/4)		28.11	TAX LANDS	NO
SE1/4		160.00	TAX LANDS	NO
		511.60		
A-19-046-22				
N1/2-NE1/4		80.00	TAX LANDS	NO
E1/2-NW1/4		80.00	TAX LANDS	NO
LOT01 (NW1/4-NW1/4)		28.18	TAX LANDS	NO
LOT02 (SW1/4-NW1/4)		28.18	TAX LANDS	NO
E1/2-SW1/4		80.00	TAX LANDS	NO
LOT03 (NW1/4-SW1/4)		28.18	TAX LANDS	NO
LOT04 (SW1/4-SW1/4)		28.19	TAX LANDS	NO
N1/2-SE1/4		80.00	TAX LANDS	NO
		432.73		

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
A-20-046-22			
N1/2-NE1/4	80.00	TAX LANDS	
SW1/4-NE1/4	40.00	TAX LANDS	
N1/2-NW1/4 NW1/4-SE1/4	$\begin{array}{c} 80.00\\ 40.00\end{array}$	TAX LANDS TAX LANDS	
IN W 1/4-SE 1/4	40.00	IAA LANDS	NO
	240.00		
A-21-046-22			
NE1/4	160.00	TAX LANDS	
N1/2-NW1/4	80.00	TAX LANDS	
SE1/4-NW1/4	40.00	TAX LANDS	
N1/2-SW1/4 E1/2-SE1/4	80.00	TAX LANDS TAX LANDS	
NW1/4-SE1/4	$\begin{array}{c} 80.00\\ 40.00\end{array}$	TAX LANDS	
IN W 1/4-SE 1/4	40.00	IAA LANDS	1123
	480.00		
A-22-046-22			
NE1/4	160.00	SCHOOL	YES
NW1/4	160.00	TAX LANDS	
NE1/4-SW1/4	40.00	SCHOOL	NO
NW1/4-SW1/4	40.00	SCHOOL	YES
SW1/4-SW1/4	40.00	SCHOOL SCHOOL	NO YES
SE1/4-SW1/4 NE1/4-SE1/4	40.00	TAX LANDS	
SW1/4-SE1/4	40.00 $40.00$	TAX LANDS	
5 (1) 1 (5) 1) 1		ITTAL ETTADO	110
	560.00		
A-23-046-22			
N1/2	320.00	TAX LANDS	
NW1/4-SW1/4	40.00	TAX LANDS	
SW1/4-SW1/4	40.00	TAX LANDS	
E1/2-SE1/4	80.00	TAX LANDS	NO
	480.00		
Special features or uses: historic/archaeologic sites			

MINING UNIT No.		Land	Surface
CO-SEC-TWP-RNG Legal Description	Acres	Class	Offered
A-24-046-22			
NW1/4-NE1/4	38.58	SCHOOL	YES
SW1/4-NE1/4	38.79	SCHOOL	YES
SE1/4-NE1/4	39.00	SCHOOL	YES
NE1/4-NW1/4	39.89	SCHOOL	YES
NW1/4-NW1/4	39.82	TAX LANDS	NO
SW1/4-NW1/4	39.82	SCHOOL	NO
SE1/4-NW1/4	39.89	SCHOOL	NO
NE1/4-SW1/4	39.90	SCHOOL	NO
NW1/4-SW1/4	39.83	SCHOOL	NO
SW1/4-SW1/4	39.83	SCHOOL	NO
NW1/4-SE1/4	38.36	SCHOOL	YES
	433.71		
Special features or uses: natural heritage features			
A-25-046-22			
W1/2-NE1/4	80.00	TAX LANDS	NO
N1/2-NW1/4	80.00	TAX LANDS	
SE1/4-NW1/4	40.00	TAX LANDS	
S1/2-SW1/4	80.00	TAX LANDS	
SE1/4	160.00	TAX LANDS	
	440.00		
Special features or uses: natural heritage features			
A-26-046-22			
NE1/4-NE1/4	40.00	TAX LANDS	NO
NW1/4-NE1/4, except 1.5 acre school site described as follows: Commencing at the NW corner, running thence S. a distance of 300 ft. along the W. quarter line of said forty, a distance of 15.5 rods, thence E. on a line parallel with the N. boundary of said section 26, a distance of 15.5 rods,	38.50	TAX LANDS	NO
thence N. on a line parallel with the W. quarter line of said forty, a distance of 15.5 rods, to the place of beginning.			
SW1/4-NE1/4	40.00	TAX LANDS	NO
NW1/4-NW1/4	39.83	SCHOOL	NO
S1/2-NW1/4	80.00	TAX LANDS	
E1/2-SW1/4	80.00	SCHOOL	NO
NW1/4-SW1/4	40.01	SCHOOL	NO
SW1/4-SW1/4, the E. 440 ft. of the W. 880 ft. of the N. 495 ft.	5.00	TAX LANDS	
	363.34		
	303.34		

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered A-27-046-22 E1/2 320.00 TAX LANDS NO NW1/4-NW1/4, except 10 acres in NW corner 30.00 TAX LANDS NO S1/2-NW1/4 80.00 TAX LANDS NO W1/2-SW1/4 TAX LANDS NO 80.00 SE1/4-SW1/4 TAX LANDS NO 40.00 \_\_\_\_\_ 550.00 Special features or uses: historic/archaeologic sites A-28-046-22 NO SE1/4-NE1/4 40.00 SCHOOL TAX LANDS NO W1/2 320.00 SE1/4 TAX LANDS NO 160.00 \_\_\_\_\_ 520.00 A-29-046-22 N1/2-NE1/4 80.00 TAX LANDS NO S1/2-NE1/4 80.00 TAX LANDS YES NW1/4 160.00 TAX LANDS NO N1/2-SW1/4 80.00 TAX LANDS NO S1/2-SW1/4 80.00 TAX LANDS YES SE1/4 TAX LANDS YES 160.00 \_\_\_\_\_ 640.00 A-30-046-22 TAX LANDS NO E1/2-NW1/4 80.00 TAX LANDS NO LOT01 (NW1/4-NW1/4) 28.15 LOT02 (SW1/4-NW1/4) 28.05 TAX LANDS NO NE1/4-SW1/4 40.00 TAX LANDS NO LOT03 (NW1/4-SW1/4) 27.95 TAX LANDS NO LOT04 (SW1/4-SW1/4) 27.85 SCHOOL YES SE1/4-SW1/4 40.00 SCHOOL YES NE1/4-SE1/4 40.00 SCHOOL NO NW1/4-SE1/4 TAX LANDS NO 40.00 SCHOOL S1/2-SE1/4 80.00 YES \_\_\_\_\_

#### Aitkin County

432.00

#### Surface MINING UNIT No. Land CO-SEC-TWP-RNG Legal Description Acres Class Offered A-31-046-22 N1/2-NE1/4 80.00 TAX LANDS NO SW1/4-NE1/4 40.00 TAX LANDS YES TAX LANDS NO SE1/4-NE1/4 40.00 TAX LANDS YES E1/2-NW1/4 80.00 TAX LANDS YES LOT01 (NW1/4-NW1/4) 27.72 LOT02 (SW1/4-NW1/4) 27.55 TAX LANDS YES NE1/4-SW1/4 40.00 TAX LANDS YES 27.39 TAX LANDS YES LOT03 (NW1/4-SW1/4) 27.22 LOT04 (SW1/4-SW1/4) TAX LANDS NO SE1/4-SW1/440.00 TAX LANDS NO NE1/4-SE1/4 40.00 TAX LANDS NO TAX LANDS YES NW1/4-SE1/4 40.00 SW1/4-SE1/4 40.00 TAX LANDS NO \_\_\_\_\_ 549.88 A-32-046-22 N1/2-NE1/4 80.00 TAX LANDS NO S1/2-NE1/4 80.00 TAX LANDS YES W1/2 TAX LANDS NO 320.00 N1/2-SE1/4 TAX LANDS YES 80.00 S1/2-SE1/4 TAX LANDS NO 80.00 \_\_\_\_\_ 640.00 A-33-046-22 320.00 TAX LANDS NO N1/2 W1/2-SW1/4 TAX LANDS NO 80.00 SE1/4 TAX LANDS NO 160.00 \_\_\_\_\_ 560.00 A-34-046-22 160.00 TAX LANDS NO NE1/4 NE1/4-NW1/4 TAX LANDS NO 40.00 NW1/4-NW1/4 SCHOOL 40.00 NO S1/2-NW1/4 80.00 TAX LANDS NO S1/2 TAX LANDS NO 320.00 \_\_\_\_\_ 640.00 A-35-046-22 FULL SECTION 640.00 TAX LANDS NO \_\_\_\_\_

#### Aitkin County

9

640.00

A-36-046-22 NE1/4 N1/2-NW1/4 SW1/4-NW1/4 SE1/4-NW1/4 NE1/4-SW1/4 NW1/4-SW1/4 S1/2-SW1/4 NE1/4-SE1/4 SW1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features A-01-046-23 LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4) LOT04 (NW1/4-NW1/4)	160.00 80.00 40.00 40.00 40.00 40.00 40.00 40.00 40.00 40.00 40.00 40.00 5640.00 39.62 38.87 80.00 36.12	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL	YES YES NO YES NO YES NO YES NO YES
NE1/4 N1/2-NW1/4 SW1/4-NW1/4 SE1/4-NW1/4 NE1/4-SW1/4 NW1/4-SW1/4 NE1/4-SE1/4 NW1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	80.00 40.00 40.00 40.00 80.00 40.00 40.00 40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL	YES NO YES NO YES NO YES
SW1/4-NW1/4 SE1/4-NW1/4 NE1/4-SW1/4 NW1/4-SW1/4 S1/2-SW1/4 NE1/4-SE1/4 SW1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 40.00 40.00 80.00 40.00 40.00 40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL	YES NO YES NO YES NO YES
SE1/4-NW1/4 NE1/4-SW1/4 NW1/4-SW1/4 S1/2-SW1/4 NE1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 Se1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 40.00 80.00 40.00 40.00 40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL	YES YES NO YES NO YES
NE1/4-SW1/4 NW1/4-SW1/4 S1/2-SW1/4 NE1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 40.00 80.00 40.00 40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL TAX LANDS TAX LANDS	YES NO YES NO YES
NW1/4-SW1/4 S1/2-SW1/4 NE1/4-SE1/4 NW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 80.00 40.00 40.00 40.00 640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL TAX LANDS TAX LANDS	NO YES NO YES YES
S1/2-SW1/4 NE1/4-SE1/4 NW1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	80.00 40.00 40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL SCHOOL SCHOOL	YES NO YES NO YES
NE1/4-SE1/4 NW1/4-SE1/4 SW1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL TAX LANDS TAX LANDS	NO YES NO YES
NW1/4-SE1/4 SW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL SCHOOL TAX LANDS TAX LANDS	YES NO YES
SW1/4-SE1/4 SE1/4-SE1/4 Special features or uses: natural heritage features A-01-046-23 LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00 40.00  640.00 39.62 38.87 80.00	SCHOOL SCHOOL TAX LANDS TAX LANDS	NO YES
SE1/4-SE1/4 Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	40.00  640.00 39.62 38.87 80.00	SCHOOL TAX LANDS TAX LANDS	YES
Special features or uses: natural heritage features <b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	640.00 39.62 38.87 80.00	TAX LANDS TAX LANDS	
<b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	640.00 39.62 38.87 80.00	TAX LANDS	NO
<b>A-01-046-23</b> LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	39.62 38.87 80.00	TAX LANDS	NO
LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	38.87 80.00	TAX LANDS	NO
LOT01 (NE1/4-NE1/4) LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	38.87 80.00	TAX LANDS	NO
LOT02 (NW1/4-NE1/4) S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	38.87 80.00	TAX LANDS	NO
S1/2-NE1/4 LOT03 (NE1/4-NW1/4)	80.00		NO
LOT03 (NE1/4-NW1/4)			
		TAX LANDS	
	37.37	TAX LANDS	
S1/2-NW1/4	80.00	TAX LANDS	
S1/2-1(W1/4 S1/2	320.00	TAX LANDS	
			110
	631.98		
A-02-046-23			
LOT01 (NE1/4-NE1/4)	37.22	TAX LANDS	NO
LOT02 (NW1/4-NE1/4)	37.67	SCHOOL	YES
SW1/4-NE1/4	40.00	SCHOOL	YES
LOT03 (NE1/4-NW1/4)	38.12	SCHOOL	YES
LOT04 (NW1/4-NW1/4)	38.57	SCHOOL	YES
S1/2-NW1/4	80.00	SCHOOL	YES
N1/2-SW1/4	80.00	SCHOOL	NO
SE1/4	160.00	SCHOOL	YES
	511.58		
A-03-046-23	20 50		NO
LOT01 (NE1/4-NE1/4)	38.79	TAX LANDS	
LOT02 (NW1/4-NE1/4)	38.77	TAX LANDS	
S1/2-NE1/4	80.00	TAX LANDS	
LOT03 (NE1/4-NW1/4)	38.75	TAX LANDS	
SE1/4-NW1/4 E1/2-SW1/4	$\begin{array}{c} 40.00\\ 80.00\end{array}$	TAX LANDS TAX LANDS	
E1/2-SW1/4 N1/2-SE1/4	80.00 80.00	TAX LANDS	
SW1/4-SE1/4	80.00 40.00	TAX LANDS	
ד/ו_ט-ד /ו יי ט	40.00	IAA LANDS	110
	436.31		

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
A-04-046-23			
SE1/4-NE1/4	40.00	SCHOOL	NO
SW1/4	160.00	TAX LANDS	NO
	200.00		
Special features or uses: historic/archaeologic sites			
A-05-046-23			
LOT01 (NE1/4-NE1/4)	39.79	TAX LANDS	NO
LOT02 (NW1/4-NE1/4)	39.77	TAX LANDS	
S1/2-NE1/4	80.00	TAX LANDS	
LOT03 (NE1/4-NW1/4)	39.75	TAX LANDS	
LOT04 (NW1/4-NW1/4)	39.73	TAX LANDS	
S1/2-NW1/4	80.00	TAX LANDS	
NE1/4-SW1/4	40.00	TAX LANDS	
W1/2-SW1/4 SE1/4-SW1/4	80.00 $40.00$	TAX LANDS	
SE1/4-SW1/4 N1/2-SE1/4	40.00 80.00	TAX LANDS TAX LANDS	
SE1/4-SE1/4	40.00	TAX LANDS	
	599.04		110
A-06-046-23 LOT01 (NE1/4-NE1/4) SW1/4-NE1/4 SE1/4-NE1/4 LOT03 (NE1/4-NW1/4) LOT05 (SW1/4-NW1/4) SE1/4-NW1/4 E1/2-SW1/4 LOT06 (NW1/4-SW1/4) LOT07 (SW1/4-SW1/4) NE1/4-SE1/4 W1/2-SE1/4 SE1/4-SE1/4	$\begin{array}{r} 39.75\\ 40.00\\ 40.00\\ 39.89\\ 57.11\\ 40.00\\ 80.00\\ 56.85\\ 56.59\\ 40.00\\ 80.00\\ 40.00\\\\ 610.19\end{array}$	TAX LANDS SCHOOL TAX LANDS SCHOOL SCHOOL SCHOOL SCHOOL TAX LANDS TAX LANDS SCHOOL SCHOOL	YES NO NO YES YES YES YES NO
A-07-046-23 W1/2-NE1/4 E1/2-NW1/4 LOT01 (NW1/4-NW1/4) LOT02 (SW1/4-NW1/4) NE1/4-SW1/4 LOT03 (NW1/4-SW1/4) LOT04 (SW1/4-SW1/4) SE1/4-SW1/4, except 2.07 acres	80.00 80.00 56.42 56.30 40.00 56.18 56.06 37.93  462.89	TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS TAX LANDS	YES YES NO YES NO NO

MINING UNIT No.			Land	Surface
CO-SEC-TWP-RNG	Legal Description	Acres	Class	Offered
A-08-046-23				
E1/2		320.00	SCHOOL	NO
N1/2-NW1/4		80.00	R CREDIT	NO
SW1/4-NW1/4		40.00	SCHOOL	NO
SE1/4-NW1/4		40.00	R CREDIT	NO
		480.00		
		480.00		
A-09-046-23				
E1/2		320.00	TAX LANDS	NO
NE1/4-NW1/4		40.00	TAX LANDS	NO
S1/2-NW1/4		80.00	TAX LANDS	NO
NE1/4-SW1/4		40.00	TAX LANDS	NO
S1/2-SW1/4		80.00	TAX LANDS	NO
		560.00		
A 10.047 22				
A-10-046-23 E1/2-NE1/4		80.00	SCHOOL	NO
W1/2-NW1/4		80.00	TAX LANDS	
SE1/4-NW1/4		40.00	TAX LANDS	
SW1/4		160.00	TAX LANDS	
5			11112111020	110
		360.00		
A-11-046-23		40.00	TAVIANDO	NO
NE1/4-NE1/4 S1/2-NE1/4		$\begin{array}{c} 40.00\\ 80.00\end{array}$	TAX LANDS TAX LANDS	
S1/2-NE1/4 S1/2-NW1/4		80.00 80.00	TAX LANDS	
S1/2-10 W 1/4 S1/2		320.00	TAX LANDS	
51/2		520.00	1111 11100	110
		520.00		

#### MINING UNIT No. Land Surface CO-SEC-TWP-RNG Legal Description Acres Class Offered A-12-046-23 SW1/4-NE1/4 39.77 SCHOOL NO SE1/4-NE1/4 39.61 SCHOOL NO NE1/4-NW1/4 39.33 SCHOOL NO NW1/4-NW1/4 39.21 SCHOOL NO SW1/4-NW1/4 39.24 YES SCHOOL SE1/4-NW1/4 39.36 YES SCHOOL NE1/4-SW1/4 38.90 SCHOOL NO NW1/4-SW1/4, 2 acres in NW corner TAX LANDS 2.00 NO 38.91 SCHOOL YES SE1/4-SW1/4 NE1/4-SE1/4 39.75 TAX LANDS NO NW1/4-SE1/4 39.50 SCHOOL NO SW1/4-SE1/4 39.48 SCHOOL YES SE1/4-SE1/439.74 TAX LANDS NO \_\_\_\_\_ 474.80 Special features or uses: historic/archaeologic sites A-13-046-23 320.00 TAX LANDS NO N1/2 W1/2-SW1/4 80.00 TAX LANDS NO SE1/4-SW1/4 40.00 TAX LANDS NO SE1/4 TAX LANDS NO 160.00 \_\_\_\_ 600.00 A-14-046-23 40.00 NW1/4-NE1/4 SCHOOL YES N1/2-NW1/4 80.00 SCHOOL YES E1/2-SW1/4 80.00 SCHOOL NO W1/2-SW1/4 YES 80.00 SCHOOL N1/2-SE1/4 80.00 SCHOOL YES SW1/4-SE1/4 TAX LANDS NO 40.00 SE1/4-SE1/4 SCHOOL YES 40.00 \_\_\_\_\_ 440.00 A-15-046-23 80.00 N1/2-NE1/4 TAX LANDS YES SW1/4-NE1/4 40.00 TAX LANDS NO SE1/4-NE1/4 TAX LANDS YES 40.00 W1/2 TAX LANDS NO 320.00 SE1/4 TAX LANDS NO 160.00 \_\_\_\_\_ 640.00

#### MINING UNIT No. Surface Land CO-SEC-TWP-RNG Legal Description Acres Class Offered A-16-046-23 NE1/4-NE1/4 40.00 SCHOOL NO W1/2-NE1/4 80.00 SCHOOL YES SE1/4-NE1/4 40.00 SCHOOL YES NE1/4-NW1/4 YES 40.00 SCHOOL W1/2-NW1/4 80.00 SCHOOL NO SE1/4-NW1/4 40.00 SCHOOL NO NE1/4-SW1/4 40.00 SCHOOL YES W1/2-SW1/4 NO 80.00 SCHOOL SE1/4-SW1/4 SCHOOL NO 40.00 YES SE1/4 SCHOOL 160.00 \_\_\_\_\_ 640.00 A-17-046-23 S1/2-NE1/4 80.00 TAX LANDS NO TAX LANDS NO S1/2-NW1/4 80.00 SW1/4 TAX LANDS NO 160.00 N1/2-SE1/4 TAX LANDS NO 80.00 \_\_\_\_\_ 400.00 Special features or uses: historic/archaeologic sites A-18-046-23 NE1/4 160.00 NO SCHOOL NE1/4-NW1/4 40.00 SCHOOL NO LOT01 (NW1/4-NW1/4) 55.88 SCHOOL NO S1/2-SE1/4 NO SCHOOL 80.00 \_\_\_\_\_ 335.88 A-19-046-23 NE1/4-SE1/4, the W1/2 20.00 TAX LANDS YES NE1/4-SE1/4, the E1/2 TAX LANDS NO 20.00W1/2-SE1/4 TAX LANDS NO 80.00 SE1/4-SE1/4 TAX LANDS NO 40.00 \_\_\_\_\_ 160.00 Special features or uses: wildlife management area A-20-046-23 S

-20-040-23			
E1/2-NE1/4	80.00	SCHOOL	YES
W1/2-NE1/4	80.00	SCHOOL	NO
N1/2-NW1/4	80.00	SCHOOL	NO
S1/2-SW1/4	80.00	SCHOOL	NO
	320.00		

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
A-21-046-23			
N1/2	320.00	TAX LANDS	NO
N1/2-SW1/4	80.00	TAX LANDS	NO
SE1/4-SW1/4	40.00	TAX LANDS	
N1/2-SE1/4	80.00	TAX LANDS	NO
	520.00		
A-22-046-23			
NE1/4	160.00	SCHOOL	YES
N1/2-NW1/4	80.00	TAX LANDS	NO
S1/2-NW1/4	80.00	SCHOOL	YES
E1/2-SW1/4	80.00	SCHOOL	NO
N1/2-SE1/4	80.00	SCHOOL	NO
SW1/4-SE1/4	40.00	SCHOOL	NO
SE1/4-SE1/4, except Hwy. R/W 4.12 acres	35.88	TAX LANDS	NO
	555.88		
Special features or uses: historic/archaeologic sites	222.00		
A-23-046-23			
N1/2	320.00	TAX LANDS	
N1/2-SW1/4	80.00	TAX LANDS	
S1/2-SW1/4	80.00	TAX LANDS	
N1/2-SE1/4	80.00	TAX LANDS	
S1/2-SE1/4	80.00	TAX LANDS	NO
	640.00		
A-24-046-23			
NE1/4-NE1/4	40.00	SCHOOL	NO
SW1/4-NE1/4	40.00	TAX LANDS	
NE1/4-NW1/4	40.00	TAX LANDS	
NW1/4-NW1/4	40.00	SCHOOL	YES
S1/2-NW1/4	80.00	TAX LANDS	
N1/2-SW1/4 S1/2-SW1/4	80.00	SCHOOL TAX LANDS	YES
	80.00	TAX LANDS TAX LANDS	
S1/2-SE1/4	80.00	IAA LANDS	INU
	480.00		
<b>A-25-046-23</b> FULL SECTION	640.00	TAX LANDS	NO
	640.00		

MINING UNIT No.		Land	Surface
CO-SEC-TWP-RNG Legal Description	Acres	Class	Offered
A-26-046-23			
NE1/4	160.00	TAX LANDS	NO
NW1/4-NW1/4	40.00	TAX LANDS	
S1/2-NW1/4	80.00	SCHOOL	YES
SW1/4	160.00	SCHOOL	YES
W1/2-SE1/4	80.00	SCHOOL	YES
SE1/4-SE1/4	40.00	TAX LANDS	NO
	560.00		
A-27-046-23			
NE1/4	160.00	TAX LANDS	
NE1/4-NW1/4	40.00	TAX LANDS	
NW1/4-NW1/4, except 1 acre described as follows: Commencing at the NW corner and running thence in an E'ly direction along the N. line of section 27, a distance of 16 rods, thence at right angles and in a S'ly direction 10 rods, thence at right angles and in a W'ly direction 16 rods, thence at right angles and in a N'ly direction 10 rods to place of beginning	39.00	TAX LANDS	NO
S1/2-NW1/4	80.00	TAX LANDS	NO
S1/2	320.00	TAX LANDS	NO
	639.00		
A-28-046-23			
NW1/4-NE1/4	40.00	TAX LANDS	NO
SW1/4-NE1/4	40.00	SCHOOL	YES
SW174-NE1/4 SE1/4-NE1/4	40.00	SCHOOL	NO
S1/2	320.00	SCHOOL	YES
	440.00		
Special features or uses: historic/archaeologic sites			

MINING UNIT No.		Land	Surface
CO-SEC-TWP-RNG Legal Description	Acres	Class	Offered
A-29-046-23			
NW1/4	160.00	TAX LANDS	NO
N1/2-SW1/4	80.00	TAX LANDS	NO
<ul> <li>S1/2-SW1/4, except 4.5 acres described as follows: From a point on the E. and W. quarter line of 30-46-23, distant 10 ft. W. of the E. quarter corner thereof, run S'ly and parallel with the E. line of section 30 for a distance of 1340 ft., thence deflect to the left at an angle of 82 deg. 49 min. for a distance of 265 ft., thence deflect to the left at an angle of 26 deg. 38 min. for a distance of 257 ft., thence deflect to the right at an angle of 14 deg. 23 min. for a distance of 260 ft., thence deflect to the right at an angle of 42 deg. 29 min. for a distance of 293 ft., thence deflect to the right at an angle of 18 deg. 33 min. for a distance of 235 ft. to the point of beginning of tract to be described, thence run W'ly and parallel with the S. line of said section 29 for a distance of 100 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 435.6 ft., thence deflect to the left at an angle of 90 deg. 00 min. for a distance of 350 ft. to the</li> </ul>	75.50	TAX LANDS	
point of beginning			
NE1/4-SE1/4, except Hwy. R/W 1.17 acres	38.83	TAX LANDS	
W1/2-SE1/4	80.00	TAX LANDS	
SE1/4-SE1/4	40.00	TAX LANDS	NO
	474.33		
A-30-046-23			
NE1/4	160.00	TAX LANDS	
E1/2-NW1/4	80.00	TAX LANDS	
LOT01 (NW1/4-NW1/4)	55.15	TAX LANDS	
LOT02 (SW1/4-NW1/4)	55.05	TAX LANDS	
E1/2-SW1/4	80.00	SCHOOL	YES
LOT03 (NW1/4-SW1/4)	54.95	TAX LANDS	
LOT04 (SW1/4-SW1/4)	54.85	SCHOOL	YES
NW1/4-SE1/4 SW1/4 SE1/4	40.00	TAX LANDS	
SW1/4-SE1/4	40.00	SCHOOL	YES
	620.00		

MINING UNIT No.		Land	Surface
CO-SEC-TWP-RNG Legal Description	Acres	Class	Offered
A-31-046-23			
E1/2	320.00	TAX LANDS	NO
E1/2-NW1/4	80.00	TAX LANDS	NO
LOT01 (NW1/4-NW1/4)	54.72	TAX LANDS	NO
LOT02 (SW1/4-NW1/4)	54.57	TAX LANDS	NO
E1/2-SW1/4	80.00	TAX LANDS	NO
LOT03 (NW1/4-SW1/4)	54.42	TAX LANDS	NO
LOT04 (SW1/4-SW1/4)	54.27	TAX LANDS	NO
	697.98		
Special features or uses: natural heritage sites			
<b>A-32-046-23</b>			
N1/2-NE1/4	80.00	SCHOOL	YES
N1/2-NW1/4	80.00	SCHOOL	YES
S1/2-NW1/4	80.00	TAX LANDS	
NE1/4-SW1/4	40.00	TAX LANDS	YES
NW1/4-SW1/4	40.00	TAX LANDS	NO
S1/2-SW1/4	80.00	SCHOOL	YES
W1/2-SE1/4	80.00	TAX LANDS	
SE1/4-SE1/4	40.00	TAX LANDS	
	520.00		
Special features or uses: historic/archaeologic sites			
4-33-046-23			
E1/2-NE1/4	80.00	TAX LANDS	YES
N1/2-NW1/4	80.00	TAX LANDS	
SW1/4-NW1/4, except 1.27 acre Hwy. R/W	38.73	TAX LANDS	
NW1/4-SW1/4, except 1 acre Hwy. R/W	39.00	TAX LANDS	
E1/2-SE1/4	80.00	TAX LANDS	
	317.73		
<b>A-34-046-23</b> NE1/4-NE1/4	40.00	SCHOOL	NO
NW1/4-NE1/4	40.00	TAX LANDS	
S1/2-NE1/4	80.00	SCHOOL	NO
NE1/4-NW1/4	40.00	SCHOOL	YES
W1/2-SW1/4	80.00	SCHOOL	YES
SE1/4-SW1/4	40.00	TAX LANDS	
NE1/4-SE1/4	40.00	TAX LANDS	
S1/2-SE1/4	80.00	TAX LANDS	
	440.00		
	440.00		

Special features or uses: historic/archaeologic sites

#### MINING UNIT No. Land Surface CO-SEC-TWP-RNG Legal Description Acres Class Offered A-35-046-23 N1/2-NE1/4 80.00 TAX LANDS NO SW1/4-NE1/4 40.00 TAX LANDS NO SE1/4-NE1/4 40.00 TAX LANDS YES NE1/4-NW1/4 TAX LANDS NO 40.00 S1/2-NW1/4 TAX LANDS NO 80.00 N1/2-SW1/4 TAX LANDS NO 80.00 SW1/4-SW1/4 40.00 TAX LANDS NO NE1/4-SE1/4 TAX LANDS 40.00 YES W1/2-SE1/4 TAX LANDS NO 80.00 SE1/4-SE1/4 TAX LANDS NO 40.00 \_\_\_\_\_ 560.00 A-36-046-23 FULL SECTION 640.00 SCHOOL YES \_\_\_\_\_ 640.00 Special features or uses: natural heritage features A-20-047-23 NE1/4-SE1/4, that part N. of old Soo Line Ry. R/W 31.51 TAX LANDS NO NW1/4-SE1/4, that part N. of old Soo Line Ry. R/W 31.24 TAX LANDS NO \_\_\_\_\_ 62.75 A-21-047-23 E1/2-NW1/4 80.00 TAX LANDS NO SE1/4 TAX LANDS NO 160.00 \_\_\_\_\_ 240.00 A-22-047-23 N1/2-NE1/4 80.00 SCHOOL YES S1/2-NE1/4 TAX LANDS YES 80.00 N1/2-NW1/4 80.00 TAX LANDS NO SE1/4-NW1/4 40.00 TAX LANDS NO TAX LANDS NO N1/2-SW1/4 80.00 NE1/4-SE1/4, that part N. of old Soo Line Ry. R/W TAX LANDS YES 39.54 NW1/4-SE1/4, that part N. of old Soo Line Ry. R/W TAX LANDS YES 38.45 \_\_\_\_\_ 437.99

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
A-23-047-23			
W1/2-NE1/4	80.00	TAX LANDS	NO
SE1/4-NE1/4	40.00	TAX LANDS	NO
W1/2	320.00	TAX LANDS	
W1/2-SE1/4	80.00	TAX LANDS	NO
	520.00		
<b>A-24-047-23</b> NE1/4-NE1/4	40.00	SCHOOL	NO
W1/2-NE1/4	80.00	TAX LANDS	
NE1/4-SW1/4, except old Soo Line Ry. R/W 1.38 acres	38.62	TAX LANDS	
W1/2-SE1/4, except old Soo Line Ry. R/W 14.66 acres	65.34	TAX LANDS	
	223.96		
A-25-047-23			
NE1/4-NE1/4, except coal and iron	40.00	TAX LANDS	NO
NW1/4-NE1/4, except coal and iron	40.00	TAX LANDS	NO
SW1/4-NE1/4, except coal and iron	40.00	TAX LANDS	
SE1/4-NE1/4, except coal and iron	40.00	TAX LANDS	
NE1/4-NW1/4, except coal and iron	40.00	TAX LANDS	
NW1/4-NW1/4, except coal and iron SW1/4-NW1/4, except coal and iron	$\begin{array}{c} 40.00\\ 40.00\end{array}$	TAX LANDS TAX LANDS	
SE1/4-NW1/4, except coal and iron	40.00	TAX LANDS	
NE1/4-SW1/4, except coal and iron	40.00	TAX LANDS	
W1/2-SW1/4	80.00	TAX LANDS	
SE1/4-SW1/4, except coal and iron	40.00	TAX LANDS	NO
NE1/4-SE1/4, except coal and iron	40.00	TAX LANDS	NO
W1/2-SE1/4	80.00	TAX LANDS	NO
SE1/4-SE1/4	40.00	TAX LANDS	NO
	640.00		
A-26-047-23			
Und. 7/12 of NE1/4-NE1/4	40.00	TAX LANDS	
Und. 5/12 of NE1/4-NE1/4	00.00	NREG MINS	NO
W1/2-NE1/4	80.00	TAX LANDS	
SE1/4-NE1/4 NE1/4 NW1/4	$40.00 \\ 40.00$	TAX LANDS TAX LANDS	
NE1/4-NW1/4 NW1/4-NW1/4	40.00	SCHOOL	NO NO
S1/2-NW1/4	40.00 80.00	TAX LANDS	
N1/2-SW1/4	80.00	NREG MINS	NO
SW1/4-SW1/4	40.00	SCHOOL	YES
Und. 7/12 of SE1/4-SW1/4	40.00	TAX LANDS	
Und. 5/12 of SE1/4-SW1/4		NREG MINS	NO
SE1/4	160.00	NREG MINS	NO

MINING UNIT No. CO-SEC-TWP-RNG Legal Description	Acres	Land Class	Surface Offered
A-27-047-23	80.00	TAVIANDO	NO
N1/2-SW1/4 SE1/4	160.00	TAX LANDS TAX LANDS	
	240.00		
A-28-047-23			
E1/2-NE1/4 SW1/4-NW1/4	80.00 $40.00$	TAX LANDS TAX LANDS	NO NO
S1/2-SW1/4		TAX LANDS	NO
SE1/4		TAX LANDS	NO
	360.00		
A-29-047-23			
NE1/4-NE1/4, the S1/2 NE1/4-NE1/4, the N1/2	20.00 20.00	TAX LANDS TAX LANDS	YES NO
NW1/4-NE1/4		TAX LANDS	
E1/2-NW1/4		TAX LANDS	YES
NE1/4-SW1/4	40.00	TAX LANDS	YES
W1/2-SE1/4 SE1/4-SE1/4		TAX LANDS TAX LANDS	YES NO
			NO
	320.00		
<b>A-30-047-23</b> NE1/4-SW1/4	40.00	SCHOOL	NO
LOT03 (NW1/4-SW1/4)		SCHOOL	NO
NW1/4-SE1/4		SCHOOL	NO
	136.31		
A-31-047-23			
LOT02 (SW1/4-NW1/4)		TAX LANDS	
SE1/4-NW1/4 E1/2-SW1/4	40.00 80.00	TAX LANDS	NO NO
LOT03 (NW1/4-SW1/4)	57.29		NO
LOT04 (SW1/4-SW1/4)		TAX LANDS	
SE1/4	160.00	TAX LANDS	NO
	451.87		

MINING UNIT No.			Land	Surface
CO-SEC-TWP-RNG	Legal Description	Acres	Class	Offered
A-32-047-23				
NE1/4-NE1/4, except NE1/4-NE1/4; th	1 acre commencing at the NE corner of nence running S. 208 ft.; thence W. 208 ft.; ; thence E. 208 ft. to place of beginning	39.00	TAX LANDS	NO
NW1/4-NE1/4		40.00	TAX LANDS	NO
SE1/4-NE1/4		40.00	TAX LANDS	NO
NE1/4-NW1/4		40.00	TAX LANDS	NO
W1/2-NW1/4		80.00	SCHOOL	NO
S1/2-SE1/4		80.00	TAX LANDS	NO
		319.00		
Special features or use	es: natural heritage feature			
4-33-047-23				
NE1/4		160.00	TAX LANDS	NO
S1/2		320.00	TAX LANDS	
			1111 2111 (2) 5	110
		480.00		
<b>A-34-047-23</b> N1/2		320.00	TAX LANDS	NO
111/2			ITA LINDS	NO
		320.00		
A-35-047-23		40.00		NO
NE1/4-NE1/4		40.00	TAX LANDS TAX LANDS	
NW1/4-NE1/4 S1/2-NE1/4		$\begin{array}{c} 40.00\\ 80.00\end{array}$	TAX LANDS TAX LANDS	
NW1/4		160.00	TAX LANDS	
SW1/4		160.00	TAX LANDS	
NE1/4-SE1/4		40.00	TAX LANDS	
NW1/4-SE1/4		40.00	TAX LANDS	
S1/2-SE1/4		80.00	TAX LANDS	
51/2 511/1				125
		640.00		
A-36-047-23				
FULL SECTION		640.00	SCHOOL	YES
		640.00		

## Attachment 14

# Citizen Petition Signatures Requesting Environmental Assessment Worksheet for Proposed Minnesota Department of Natural Resources October 2012 Mineral Lease Auction

More than 160 signatures are attached requesting an EAW.

Please note that some pages are single-sided and some are double-sided.

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME ADDRESS SIGNATURE CITY, STATE, ZIP (PRINT CLEARLY) (PRINT CLEARLY) 15+ 1621 ann

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
no h	12St	PO BOX 511	55/03	101
Melinda S	relflow	1299282	Finland MN	methodasuelflow e yahoo,
Anna G.	Coole	2629SKyl	ine Parkway Du	WHY MN annagcooke
Thomas Woh The	mg 13	70 Whitehake	Dr. Dulyth, MN	55803 @ frontier, com
	V	and -		

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME ADDRESS SIGNATURE (PRINT CLEARLY) CITY, STATE, ZIP (PRINT CLEARLY) auntor) MELODIE 921 regtennehotmail LAKE RD - SILVER BACK be

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME ADDRESS (PRINT CLEARLY) SIGNATURE CITY, STATE, ZIP (PRINT CLEARLY) Finland, MN 55603 POBOX 535 teren Geor SILD LAX LAKE Parle Hill Rd Figland MW 55603 850 Lav

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Liz Doane	Lyta	- Street	St. Cloud, MN 56301	liz. doane doane
Margie Con	way M.C.	1	350 IGH, MN Balardet. 55077	Mels Convery chot
Anette urbans	Ki Annette into	mel: 41 8 884	The NE Circle Pines	55014 bunskisgpro
FLOKENCE.	SANDOR STOREVER	2 Sandole 1/20	chesterne 5590	6 frandoko
by School	ret las	ot 2310 Ris	mn. Eln Ély Mn	55731
1) may B	ilher	117847	7 H- 161	47 15TER
Minna & C	L THOMPAS J. C;	HOSA Jr. 965 E. CAM	pst. Ely	SNOWFLAKE. Algo a Google .c
(Mal Stone	2 Gary Stone 15	18 BEARHEAD	ARX ROAD ELY	0
Junny Hore	Penny Stone 15		d St PKRd Ely	
Sulpr			)	

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME ADDRESS (PRINT CLEARLY) SIGNATURE CITY, STATE, ZIP (PRINT CLEARLY) 6185 Lax Lake Rd Finland, MN 55603 Martuell

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,

THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAM (PRINT CLEAR		ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
oretta	Poretta	Ill Garden	Duluth MN	dorierduluth
Reisenweber	Reisenweber	St	55812	hotmail.com
essica	00	3216 . AP	mpls MN	Jessica lateo
Tatro	Ju	HENNepinAve	55408	Sieudelub.De
Dawna	Dayne	5307€.	Dulith	mailBrichan
Brissette	Gunette	Superior St.	55804	T
Richard	Pin	5307 E.	Duluth MA	same
Tosseland	2-1	Superiorst	55804	
David	David	111 Barden St	Duluth Mn	Liquaterod
Reisenweber	Resenvelles	Bototh Inn	55812	bigwaterOch

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME (PRINT CLEARLY) (PRINT CLEARLY) SIGNATURE ADDRESS CITY, STATE, ZIP P.D. Box 660 Finlan MN Geopoeta @Gmailco, , cKSON Ters INLAND MN SW 600 1058 SK& H TWO HANCOS 5718 LAXLAKE ROBERT F. AN SILVER BAY, MN. 55614 5563 LAX LAKE Rd husen Solver Bag Mr.

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY,	STATE, ZIP	EMAIL (PRINT CLEARLY)	
Heather E. Lent	HAHRONS SA	47Edwards		22014		2-01
Erin Manning	Em E. Marm	GS87 Park	E Hill Rd.	Finland, M SSG0 3	hN emanni296 hotman	a il.con
ROBERT P CUNNIN		6185 LAX				3/1/1
Matt Tyler	Matthe Styl	6722 Par	K Hill Rd.	Finlan NW 5360		Q
Chers Kuski	B Chrisku	stritz 6589to	erk Hill Ra	Finland MN 5560		ć

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME SIGNATURE ADDRESS CITY, STATE, ZIP (PRINT CLEARLY) (PRINT CLEARLY) Box 433 Finland, MN. 55603 Cary o. Kent 13 DRAKE Silver Bay, MN Almer Mary L. Anselment POBOX 535 FINLAND, MN 55603 AMELIA GEORGE 9 9609 Arowhend Rd Isabella, MN 55607 5782 Little Marais Rd. Finland, MN 55603 Kaare Melby 7

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

BARB BURNS Barb-Buen 3995 Stocking Pt De ElyMin 55731 elyborns 200					
ARY CLEMENTS GARY CLEMENTS 1362 Lincolu, ST. PSJE, MN SCIENCUL and Clements Jon Clements 1335 Watch Rd, Ely MN 55731 jane 4chin BARB BURNS Barb-Byen 3995 Stocking Price Ely MN 55731 jane 4chin BARB BURNS Barb-Byen 3995 Stocking Price Ely MN 55731 elybornszer Mark Pratt Lath Half 1364 Brinsula Rd Ely MN 55731 Mark Pratt Lath Half 1364 Brinsula Rd Ely MN 55731 HAVELY ROE JUL 1685 BRADACUT RD ELYMH 55731 Taylow Pairs Cumme Carton 1685 Bradach RJ Ely, MN 55731 Mauri Still MAURICE E. Rich II 3877 SWAWSW SUPPOSEd ELYMH Jacob Jewer 3823 Dokem Dr Ely MN 55731 Dawledus 3823 Dokem Dr Ely MN 55731 Dawledus 1220 WARSH BD Ely MN 55731 Dawledus 1220 WARSH BD Ely MN 55034 geuflurba	FULL NAME (PUNT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	
and Clements pro Clements 1335 Walth Rd, Ely, MN 55731 jane 4ching BARB BUENS Barb-Byen 3995 Stocking Pt Se Ely MN 55731 elybornszer Mark Pratt Link Half 1364 Boninsula Rd ElyMN 55731 Warl Post Link Half 1364 Boninsula Rd ElyMN 55731 Warl DOG & JANCY ROE J K. 1685 BRADACH RD ELYMU 55758 FROMTER JANCY ROE MAURICE E. Rich 15 3872 SWAWSON SHOROS Rd. ELYMU Mauri Shilf MAURICE E. Rich 15 3872 SWAWSON SHOROS Rd. ELYMU Daved Swiedus 3823 Dokem DR Ely MN 55731 Daw Jumay 1220 WARSH RD Ely MN 55731 Daw Jumay 1220 WARSH RD Ely MN 55034 geoffurba	SARY CLEMENTS	5 GARY CLEME	NB 1362 L	ncola, ST. Pat	E, MN gclement
BARBBURNS Barb-Burn 3995 Stocking Pt De ElyMN 55731 elybornszer Mark Pratt Mith Half 1364 Poninsula Rd ElyMN 55731 JANCY ROE JUL 1685 BRADACIA RD ELYMY 55758 FRONTER Taylan Pairs Curry Javin 1685 Bradach RJ Ely, Ma 55731 Mauri Skilf Maurice E. Rich III 3872 Swawson Supros Rd. ELYMN Dave Given US 3823 Dorem DR Ely Mo 55731 Dan Jumer 1220 Warsh RD Ely Mo 55731 Can Jumer 1220 Warsh RD Ely Mo 55731 Dan Jumer 1220 Warsh RD Ely MN 55024 geoffurbu	Tana Clements	Jone Clemin	to 1335 Wa	th Rd, Ely, M	
Mark Prot Link Hand 1364 Pominsula Rd ElyMN 55731 ANELY ROE JUL 1685 BRADACH RD ELYMU 55758 FROMTER TAYLON DAVIS UNIN JAVIS, 1685 BRADACH RD ELYMU 55731 " Mauri-Skilf MAURICE E. Rich III 3877 SWAWSON SUBNOS Rd. SLY MA David Sciller MAURICE E. Rich III 3877 SWAWSON SUBNOS Rd. SLY MA David Sciller MAURICE E. Rich III 3877 SWAWSON SUBNOS Rd. SLY MA David Sciller MAURICE E. Rich III 3877 SWAWSON SUBNOS Rd. SLY MA David Sciller MAURICE E. Rich III 3877 SWAWSON SUBNOS Rd. SLY MA David Sciller MAURICE III 1887 SWAWSON SUBNOS Rd. SLY MA David Sciller J 220 WARSH BD Ely MA 55731 David Sciller J 220 WARSH BD Ely MA 55731 David Sciller J 220 WARSH BD Ely MA 55731 David Sciller J 220 WARSH BD Ely MA 55731	BARB BURNS	Barb-Byen	- 3995 Stock	ing Ptide ElyMa	
ANCY ROE The 1685 BRADACIT RD ELYMUSSISE FRANTE, TAYLON PRIS COMMENDER 1485 BRADACH RD ELYMUSSISE Mauri Skilf MAURICE E. Rich IT 3872 SWAWSON SLOPES Rd. SLY MA Dava Swiedus 3823 Dorem DR Ely MN 5573] Dav Summer 1220 WARSH RD Ely MN 5573] Can Summer 1220 WARSH RD Ely MN 55024 geoff. urba	Mark Pratt	Plant Frath		0 /	1 55731
Taylow Pairs Comme Carton 1685 Bradach Rd Ely, Mar 55731 " Mauri-Skilf Maurice E. Rich II 3877 Swawsond Supres Rd. SLy Min Down Scivedus 3823 Dorem Dr Ely Mo 55731 Dan Jumay 1220 Warsh BD Ely Mr 55731 Can Jumay 1220 Warsh BD Ely Mr 55731 Ceoff Ursan All 1018 Willow Trail Fairburger MN 55024 geoff. ursan	VANCY ROE -	2 Ru		0	WALL DOG-69
Dave Sivedus 3823 Dorem Dr Ely Mr 55737 Dan Jumay 1220 WARSH BD Ely Mr 55731 Geoff Ursan A/2 1018 William Tom Fairdington MN 55024 geofficiens.	Gaylow Pravis	Junn Javin			<i>k</i> .
Centre Ursan 1220 WARSH BD Ely MA 55731 Geoff Ursan Alt 1018 Willow Trail Fairburghen MN STORY GENFLURSA	Maurin Elich	A MAURICE E.	Rich 1 3872	SWAWSON SHORDS	Rd. SLY MA
Geoff UlrSant Alla 1018 Willwar Toul Favorangles MN STORY geofficersa	Doug Sai	repus 382	23 Dorem.	DR Ely Mo	0 55 731
Ceaff Ursan Alto 1018 Willow Ton Fairlanden MN STORY gentfursa	Dandsim	by 122	O WARSH &	D Ely M	7 55731
all from Engles Neel	Geoff Ursay	and the second se	1018 Willow	Trail Fasilington MI	V STORY gentlurban
	(	) all fr	on Egles No	set )	0

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

EMAIL FULL NAME ADDRESS (PRINT CLEARLY) SIGNATURE CITY, STATE, ZIP (PRINT CLEARLY) our Kaya 12 gmail. Con riversider bushsugar@live PO Box 526

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Jane Karcha	k CaneKore	hal PD.Bux 3	17 Ely, MNS	janekoschal Egmail.co
STEVEN L. KoscHA				-1 11
				Y M B Gmail. com
Thomas G. R.	1		5 BIRCH LK. R ELY, M	
latthew Haekenka	no Matthe	2 14 W. Chapi	nan Elv, MN 55	731 mhoeken Kamp By

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Mat Wallerus		126 Washing	tun st u	Uall 4444 @smail.
in wares	Mai non	Ely, MI	N 55731	

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Caroline De	vers Carolins	Quer Trygg	RI Ely MN 557	inequalisa
JOSEPHF. QU	as get	Junero 130	OTHEG RD BY	MN.5523/ 11
Betty J. Kol	overski Ber	ty Kohur	DELY, MU557	11
Teresa K. Sa	gen Jewat	Suger 13667	DeerRd Ely, MN 55	Front.crnet.n 131
		D	11	

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Nick Banove	tz hup	nt Ave		Nostan banovete gmail-co
nan Soyd		( 0.		whitshell Opol, C
Steven M HOFFm	110			- Grove, my 55076
DONALDE. W.				15573/ DEW436)F
Jergrd &	//	Po 30×270	Ely MN	
Phil Hog	lan	1902 Pine T.	reetsail Ely	MN55731 phones a
Micole Row	2514 14	rdale Are s.	Mpls, MN 55	MN55731 phogan &
_ navere di	manare 101	202 Ferner -	we st Delam	MA15522 Contieme
Doras Ann LAWS	on Gerdes 1	0566 Hury	1, ISAbella, M	INS5607 Erentes
Lynden B. Gendes	Long B Serts	10566 Hung	1, Isabella, MN	55607 1 bgeds @

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME	Section Section	Sacherer	The state of the	EMAIL
(PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	(PRINT CLEARLY)
Joe Bianzo	Agun	300 WCan	an ELY MIN :	55731 Joseph, biai
Mark Hennes	sy Multhema	my 2/27 Twh	Bluff Re. Red Wille	55066 @reacher
Matt Poppleton	alutt logo leten!	2015 James	5t. Paul 551	NOV 5639) annosgrove
Inn AlbrechtCis	grow andreg	756 Widste	a Circle Wayzahan	NO 5539) annosgrove
Inne Stewart	Uchiling 1914	Pine Tree	Tut Ely, MN 55	731 astewartuzeg
Chels Willins	lutitula	5 CRife	ed Ely MUS	3731
Ahn Santo	Antemat	= 35E. Goba	St. Ely MUZ	5731
Marca Syrta	1 Mult surt	- 35 E Consol	st. Ely, MN 9	5731
	Brown Set			
Emily MR	Brown Emely	mBrown	1603 Hanson Re	Ely 55731
1				

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Manreen K. Jo	nnon Maureer K	6763 25320 have	Stacy MNSS	
JAMES T. HART	anis Hul	1458 Bear Head Pre Rd, ELY, MA	(_5 <del>].</del> ]_==573]	steart & frontomet.
Bruce L Johnson	Bruce	6763 253rd	AVENE Stacy MNS50	79
ELLEN CASHMAN	andfastinan	206 E. Shered	ow St. Coly, MA 559	31 barebanes atrontiero
Reid Carron	Reid Carron	3100 HartleyP		
Ron BRODI	SAN Om C	allagni 13.	50 5 Mords HOE 7	100001000
Tephen J. Snyder	The "	Edina, MN 554	24 Stephen Sunda	OS Ny deraitter news, com 32
Cynthia Snyder	Cynthia Snyc		Mys. de snyder 11 53424	eindy @gmaili
Rolf Thompson R.	HARMAN GI	7 MAINSTIE, V	VABASHA MN 5598	
BJBWinke	man BOB	529 EShon	idan ElyMN	Franciswinkumm
			1557	31 horrat

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
- Que	0	11420 110th	st Cologne M	55322
Dodd B Cosgrave	allBerne	756 widster	~ Circle Wayza	A L CHOR BOOM
BETTY FURTH	July ton	1 1 12	with Ely, MN	55731 6 for Defin
Richard Wats	In Richard Hat	aur 14E. Bour	Joryst Ely M	N 5573/ rutatora
Sara MiEvan	5 Jara M. dian	3	in St# 133 Falcon	saraevans 185
Charly & K	2 th Charles &	Day toy	1 / 1	' 1 C 401 kok
Ateres	Cumpun	- 1321 N.	Any 21 Ely	MN 55731
Pand Danic	ic Albi	2721 10A	rito mes SLP	5542 Sjlanpmun al
B.exberra 2	Stunsmore.	10602 7	Fenner Que. 2	SE Delano Min
awerre J	STOMEAND	10602 Fenn		Delano, Mr 553
		Ded	dypopso front	iernet.net

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY,	STATE, ZIP	EMAIL (PRINT CLEARLY)
Nancy Schy	the Acolu	9926 Ld		R Isabella	
Im Kin	me for	- 921 W 6-55	St. vite	their our \$580	i lu On
Peterlewing	OFfec	165170	rackle	bergal	setelstander and the
Tom Mahlen	ton ha	2 5312 C.	hanney	l'a edina	tomahoumerkand
Susan Sc	hurke Jus	m Schure	1101	Ring Ru	xkRd Elyman
Par Sa	WORKE Ca	eshle	, 110	1 RING,	esa Ro Figm
Betsy Dank	> Edyla	at 1395 A	shipte	n Ane ii	. S. Parlin S
Grey Seitz	MA.	1115	Gordon A	v ) dant	sandsherte akail u
		Maplan	vod, M	N 5510	01
	)				

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Fi Bissouth	TARA	229 E Pattos	on \$ Ely 5573	elibison_13Cgm
PAUL Schoonanon	- Calith	P.O.Box 111	ELY MIN 557	-
Brittany Sattawhite	But muy Sittle	Attle P.O.Bot III	GIY, MN 55731	BRITISATTERWHITE
J	U		J	
-				

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY	-
Sharon Angell Ma	gliulo S.a. may	lula 821E	Pattison Ely MN	53731 smaali	2 63
Junda U. Jeh	ria Linda les	wis 311 SCe	stral #3 Elyma	155731	6
Cealin Rola	Indo CELILIAN	ROLANDO PO	Box 194, Ely	mN 55731	gin
Robert Bento VALERIE NESTERVI	Wath E wit	- 134101 ITE ST ELY 1	MN SSTAI VAL	MN 3593	L.C.
CHIP HANSON R	mand Human	- 304 è WHITE			-
Carol Orban (	and Orba	2E. Conard	St. Ely MN 55	731 Carolorbany	1600
Will House	1 821 E. Pac	thism ST.	ely MN 55	73/	J
WILL HAV	ISER A		0 7		
MARCIA Chamber		uleis 1118 Riv	g Rock Rd Ely	5iszwolf	aa
Civy Chamber	-5		,		

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
BRADLEY SAGEN	BRallysuger	1366T Deer RI	ELY, MN55731	trad Sagen@ to TMAIL. C
Condicen Urban	anhen Uch			urbshape frontiernet.n.
Elizabeth Urb.	an Alyabach Un	ba 1347 Walk	BRD ElyNW 557	31
Jim LEick	2 Juneski Je	k 6550 st	STENS Rel PUI	471+ Mr. 55803
Linda Sutta	Linde Sect	to 12773 4	YT ST NE ST MI	del MN 55376
Michael Gilgoso	11/ / //	A 12773 4		· Le
MaryJoLeona	rd Thingst	unard 409 Lo	cast LN Woodst	al [ IL 60098
Joyce Aubol	Ore auto	1952E. Chubliok	re Rd, Car Hon, C	MN 55718
Jill Drilling	JillDill	52355 tote Huy	Sandstone, MNS	5072
Richa & Au				:======================================

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY) SIGNATU	RE ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Mike Motzahn MM	12337 Endless (W	atos RJ EN,	nike.f.molzahne wellsfange. a
TrumAN PORTER Vind	A 1640 ELEAN	OR AN STALL M	IN toportere usfamily. ne
Nelyn Porter Mac	in NPorter "	11	nporter Ousfamily.
Dunght M. Comet	438 Buckno	o ELT	condor6@22.ner
Debbie Okerlund	5648 Pillsbur	S. Mpls m	W55419
Neil Olam	1	9	A /
Frankencox	5341Zout	LAVES MA	_S MN 5340
ME Fallet	5341 20mith	ALTS MP	SAN SELIA
Jone Fosse	1161 Lealand-	Rol Mound M	IN rfossepconca
Richard Fosso	1161 Lealand	Ra mplud	my rfosseRum
		1	

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Runn Anne Vesser	Pulser	FallLale Rd	Ely, MN 557	731 avesper@quail.com
HERB LEPLATT	JacePlat.	7017 Chegenne Tel.	A 4 1	55317 sherb220msn.com
Wende Nelson	Winle J. Ach	9 N. Yuhn Dr.	ElyMN 3	5731 wende Ofrantierne
Scott WILL HAY MILLS	hot hell	9N Lyton DA		5731 Scottwhills Sportie
Robin Haege	Mul. h.	22245.W35T	ANKenyl	4 50023
Smach Hanon	Saraffer	1445.5th Anc E	E Ely Min	
B:11 Struce	Wilh a st	y 204 W 4th	hat evoille	, Min 56096
STEVERLINDA LAN	-B Stine La	t 7870 G	HILD OF APPLE	Valley MN 55124
JONATHAN GREEN	freth the	- 2310 Rose	LANE, ELY, MN	55731 JONGREEN Q
	0		,	AMERITECA

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

FULL NAME (PRINT CLEARLY)	SIGNATURE	ADDRESS	CITY, STATE, ZIP	EMAIL (PRINT CLEARLY)
Jary Lourse Pe	1	enhow 13330f		N56731 -
Row Selippon	Rold Selly		Alman De Pre	oten Muss Ho
Terrence Mellenzie	Kovar 2 /1A	16512 Say1	nor Dr. MTKA M.	1 55745
Liv Vischia	ta Dela	1393 /ti	shway 169	Ely, MN SS73
WILL HAV!	BER WA. Hu	mu 821 \$	effision St. El	y MN 55-73/
				, 

- WHEREAS State Metallic Minerals Leases up for auction in October 2012 may have the potential for significant environmental effects on natural resources such as groundwater near existing drinking water wells, designated trout streams, popular fishing lakes, wetlands, and areas of high biological diversity, including areas immediately adjacent to Tettegouche State Park; and
- WHEREAS State minerals leasing has the potential for *immediate* economic harm to private property rights and property values due to the risk of condemnation for mineral prospecting and copper-sulfide mining; and
- WHEREAS the State of Minnesota is proceeding with plans for an extensive copper-sulfide mining district without evaluating potential cumulative harms to natural resources, private wells and private property values from prospecting and mining activities; and
- WHEREAS existing rules provide no opportunity for public process and assessment of environmental harm at the time when prospecting plans are approved by the State,
- THEREFORE, the undersigned persons request that the Minnesota Department of Natural Resources provide an Environmental Assessment Worksheet for its proposed October 2012 Minerals Lease Sale.

**FULL NAME** EMAIL SIGNATURE ADDRESS (PRINT CLEARLY) CITY, STATE, ZIP (PRINT CLEARLY) epic adven F Runki mhiver Dr. QUITE DR 60467 11600 32 oramklecomed 554 Plymo 11 5076 IN SSZ 2776 run Cedar L.R. PO Box 397 EN MN 55731 JANC Ach