



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

REPLY TO THE ATTENTION OF:

OCT 09 2014

Ms. Mary Ann Heidemann
Manager of Grant and Government Programs
Minnesota Historical Society
345 Kellogg Boulevard West
St. Paul, Minnesota 55102-1903

RE: Cliffs Natural Resources, Inc., Silver Bay Power
Cultural Resource Assessment

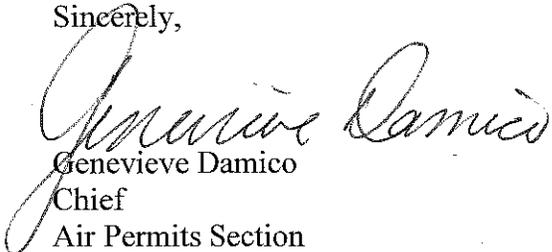
Dear Ms. Heidemann:

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470, et seq., I am writing to notify you that the U.S. Environmental Protection Agency has reviewed a cultural resource assessment related to a modification at Silver Bay Power in Silver Bay, Minnesota to determine what impact there may be on listed or eligible historic properties. Specifically, the U.S. Environmental Protection Agency notified Cliffs Natural Resources, Silver Bay Power (Cliffs) that it is required to implement steps to assure compliance with the NHPA and its implementing regulations. As part of the process, EPA directed Cliffs to conduct certain activities to assist in determining if historic properties will be affected by the proposed modification. The purpose of this letter is to seek concurrence from you on our determination that the proposed project will have no adverse effect in relation to the proposed air quality permit for this facility.

Cliffs is proposing to replace its Power Boilers 1 and 2 with low nitrogen oxides (NO_x) burner systems as a voluntary NO_x emission reduction project. The proposed modifications require an air permit under the Prevention of Significant Deterioration (PSD) program pursuant to the federal Clean Air Act (CAA). The Minnesota Pollution Control Agency (MPCA) has been delegated authority by the EPA to issue PSD permits under the federal PSD regulation set forth at 40 C.F.R. Part 52. The replacement for Power Boiler 1 is scheduled to occur early in 2015, during a planned outage and the installation for Power Boiler 2 is scheduled to occur approximately 18 months later, in late 2016, also during a planned outage. No new infrastructure will be required at the Silver Bay site for this project and all construction related activities will take place within existing buildings. Cliffs provided an analysis of impacts from the proposed project to EPA on May 5, 2014 and it is enclosed for your review. Based upon the information submitted and EPA's understanding of the proposed modifications, EPA finds that the proposed project will have no adverse effect on any listed or eligible historic properties. By this letter, EPA is fulfilling its obligations pursuant to Section 106 of the NHPA for the Cliffs permitting

action before MPCA. If you have any questions with respect to this letter or disagree with this determination, please contact me at (312) 353-4761, or Jennifer Darrow, of my staff, at (312) 886-6315.

Sincerely,


Genevieve Damico
Chief
Air Permits Section

Enclosures

cc: Hassan Bouchareb, MPCA

MAY - 9 2014



CLIFFS NATURAL RESOURCES INC.
Northshore Mining Company
10 Outer Drive, Silver Bay, MN 56614
P 218.226.4125 F 218.226.6037 cliffsnaturalresources.com

May 5, 2014

Genevieve Damico
USEPA Region V
77 West Jackson Blvd
Mail Code Ar-18J
Chicago, IL 60604-3507

Re: **National Historic Preservation Act Consultation for a PSD Permit Application
Silver Bay Power, Silver Bay, Lake County, Minnesota**

Dear Ms. Damico:

Silver Bay Power in Silver Bay, Lake County, Minnesota is proposing a project to install a low NO_x burner with overfire air (LNB-OFA) system on Power Boilers 1 and 2 (Project). The proposed Project voluntarily reduces nitrogen oxide (NO_x), however, a collateral increase in carbon monoxide (CO) emissions exceeds the Prevention of Significant Deterioration (PSD) permitting threshold. Therefore, the Project requires an air permit under the U.S. Environmental Protection Agency (USEPA) PSD program pursuant to the federal Clean Air Act (CAA). The Minnesota Pollution Control Agency (MPCA) has been delegated authority by the USEPA to issue PSD permits under the federal PSD regulations set forth at 40 C.F.R. Part 52. The action by MPCA of issuing a federal PSD permit under its delegated authority qualifies as an "agency action" that triggers the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). As such, the MPCA requires all PSD project proposers to contact the USEPA regarding the NHPA.

This letter provides information regarding the Project and the results of a search of the Minnesota State Historic Preservation Office (SHPO) databases for the Project area to provide the information necessary to support MPCA's obligations under Section 106 and is provided to you at the request of the MPCA.

Facility Overview and Project Description

The fossil fuel-fired power plant, Silver Bay Power, is located onsite at Northshore Mining Company's Silver Bay taconite processing facility. The power plant consists of two industrial boilers (Power Boilers 1 and 2) capable of burning solid, liquid and gaseous fossil fuels to provide process steam and electricity to the taconite processing operations. Each industrial boiler has an electric generator set, and the combined total rated capacity of the two is 115 megawatts. The electricity generated is used primarily by the Silver Bay taconite processing facility. However, a portion may be sold to the electric grid. Process steam is produced at the power plant using evaporators that extract heat from the power boilers. The process steam is used in taconite processing operations.

Silver Bay Power plans to replace the existing six front-wall-fired burners in Power Boiler 1 and the nine front-wall-fired burners in Power Boiler 2 with LNB-OFA systems as a voluntary NO_x emission reduction project. The LNB-OFA installation for Power Boiler 1 is scheduled to occur in early 2015, during a planned

outage, and the installation for Power Boiler 2 is scheduled to occur approximately 18 months later, in late 2016, also during a planned outage. No new infrastructure will be required at the Silver Bay site for this project and all construction related activities will take place within existing buildings. The anticipated emission changes as a result of the project are as follows.

Pollutant	Existing Power Boilers 1&2 (tons/year)	Post-Project (Power Boilers 1&2; LNB-OFA) (tons/year)	Emissions change (tons/year)
NO _x ¹	3,292	1,454	(1,838)
CO ¹	85	290	205

¹ NO_x and CO emissions are projected actual emissions based on 8,400 hours of operation at maximum design capacity and baseline actual emissions for a 24 month period ending Jan 2009 (NO_x) and Feb 2009 (CO).

Location of Proposed Project and Database Search Results

The facility is located in Sections 5 and 6, Township 55 North, Range 7 West and Sections 31 and 32, Township 56 North, Range 7 West, in Lake County, Minnesota). The facility address is:

10 Outer Drive
Silver Bay, Minnesota 55614

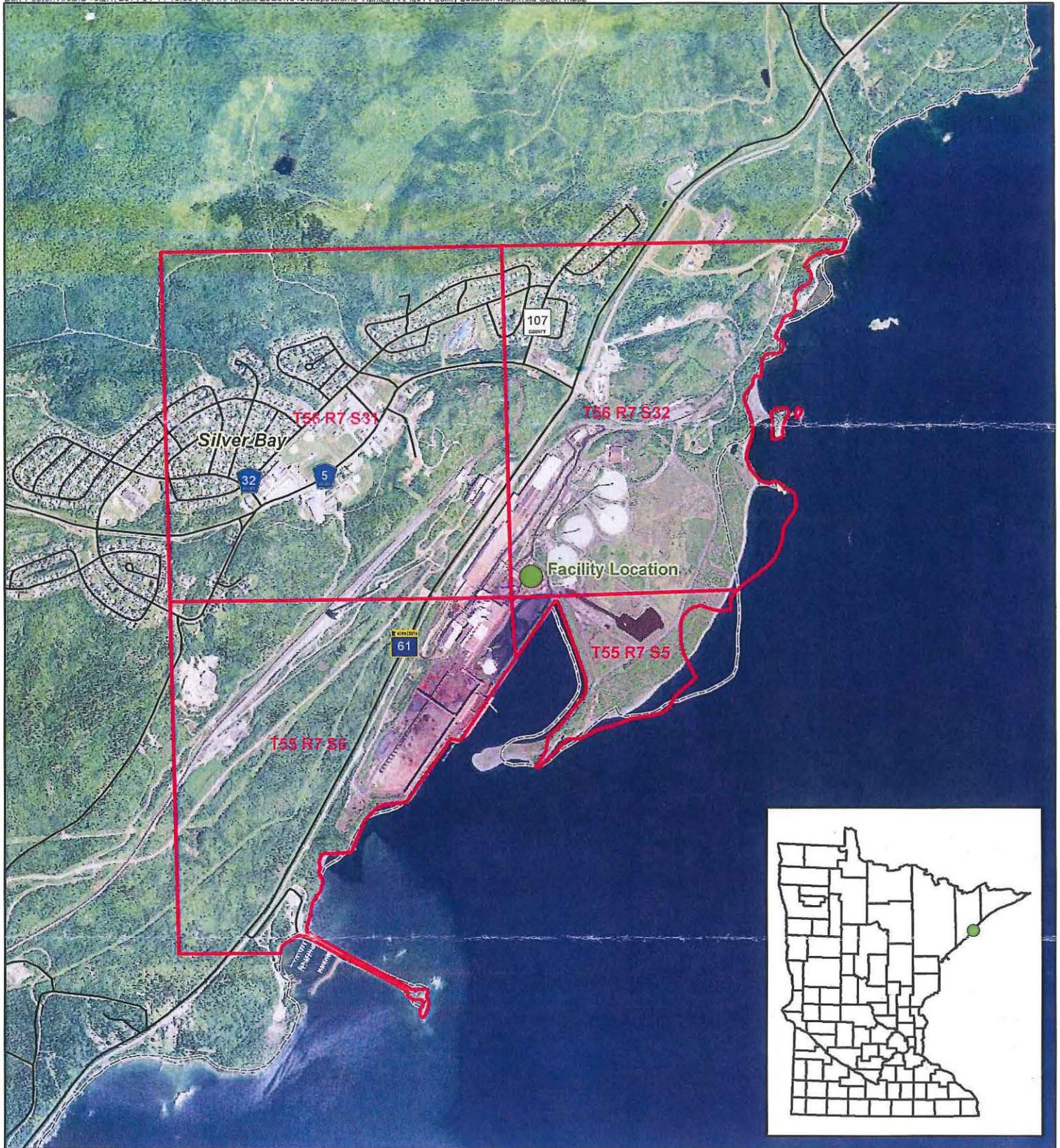
No archaeological sites or historic structures were identified in a search of the Minnesota Archaeological Inventory and Historic Structures Inventory for the Sections listed above. Attached is a figure showing the areas included in the file search along with an April 1, 2014 e-mail from the Minnesota SHPO providing the search results.

It is our initial conclusion that no cultural resources will be impacted by the Project. If you have any questions, comments, or concerns please do not hesitate to contact me at (218) 226-6032 or andrea.hayden@cliffsnr.com.

Sincerely,



Andrea J. Hayden
Northshore Mining Company



-  Silver Bay Power Facility
-  Public Land Survey Sections



FACILITY LOCATION
Silver Bay Power
Cliffs Natural Resources
Silver Bay, Minnesota

Paul Taylor

From: Thomas Cinadr [mailto:thomas.cinadr@mnhs.org]
Sent: Tuesday, April 01, 2014 2:54 PM
To: Courtney M. Bot
Subject: Re: Request a File Search

THIS EMAIL IS NOT A PROJECT CLEARANCE.

This message simply reports the results of the cultural resources database search you requested. The database search produced results for only previously known archaeological sites and historic properties. Please read the note below carefully.

No archaeological sites or historic structures were identified in a search of the Minnesota Archaeological Inventory and Historic Structures Inventory for the search area requested.

The result of this database search provides a listing of recorded archaeological sites and historic architectural properties that are included in the current SHPO databases. Because the majority of archaeological sites in the state and many historic architectural properties have not been recorded, important sites or structures may exist within the search area and may be affected by development projects within that area. Additional research, including field survey, may be necessary to adequately assess the area's potential to contain historic properties.

If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson in Review and Compliance @ 651-259-3455 or by email at kelly.graggjohnson@mnhs.org.

The Minnesota SHPO Survey Manuals and Database Metadata and Contractor Lists can be found at <http://www.mnhs.org/shpo/survey/inventories.htm>

Tom Cinadr
Survey and Information Management Coordinator
Minnesota State Historic Preservation Office
Minnesota Historical Society
345 Kellogg Blvd. West
St. Paul, MN 55102

651-259-3453

On Tue, Mar 25, 2014 at 3:39 PM, Courtney M. Bot <CBot@barr.com> wrote:

Good afternoon Tom,

I would like to request a State Historic Preservation Office database search for the Silver Bay Power facility, which is located at the Northshore Mining Company site.
The facility is located at 10 Outer Drive, Silver Bay, MN 55614.

The project for which this search is conducted is the installation of a low NOx burner with overfired air (LNB-OFA) in Units 1 and 2 of the power plant at the facility.

The project is located within the property boundaries of the Northshore Mining facility.

Facility location information:

Lake County,

City of Silver Bay

T55N R7W Sections 5 and 6 and T56N R7W Sections 31 and 32.

If you have any questions or need further information please feel free to contact me at 952-842-3586.

Thank you,
Courtney Bot

Courtney M. Bot

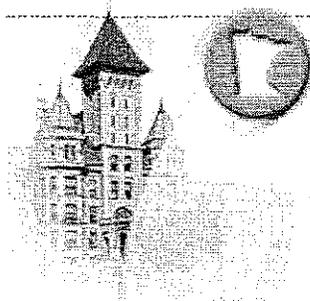
Senior Environmental Scientist
Minneapolis office: 952.842.3586

CBot@barr.com

www.barr.com

resourceful. naturally.





- HOME
- SEARCH FOR A PROPERTY
- FAQ

RESULTS OF NATIONAL REGISTER PROPERTY SEARCH

16 records matched your search.

Lake County

Barn

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Bath House

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Boat Shelter

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Cabin A

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Cabin B

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Cabin C

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Cabin D

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Dog House

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Filers' Shack

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Garage

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Hesper Shipwreck

, vicinity of Silver Bay
Wood-hulled, bulk-freight steamer that towed schooner barges for iron ore industry and grain trade; launched in 1890 and lost in 1905.

Kitchen/Dining Hall

off Co. Hwy. 4, vicinity of Silver Bay
Located in [Tettegouche Camp Historic District](#)

Main Lodge

off Co. Hwy. 4, vicinity of Silver Bay
Located in Tettegouche Camp Historic District

Outhouse

off Co. Hwy. 4, vicinity of Silver Bay
Located in Tettegouche Camp Historic District

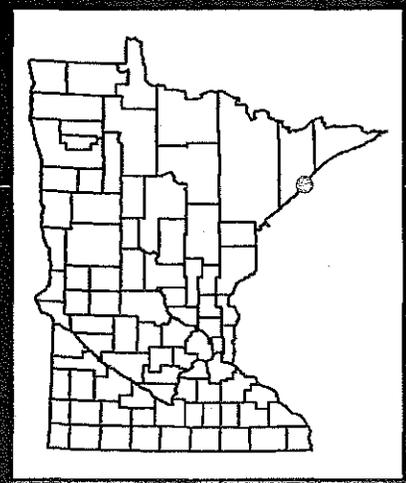
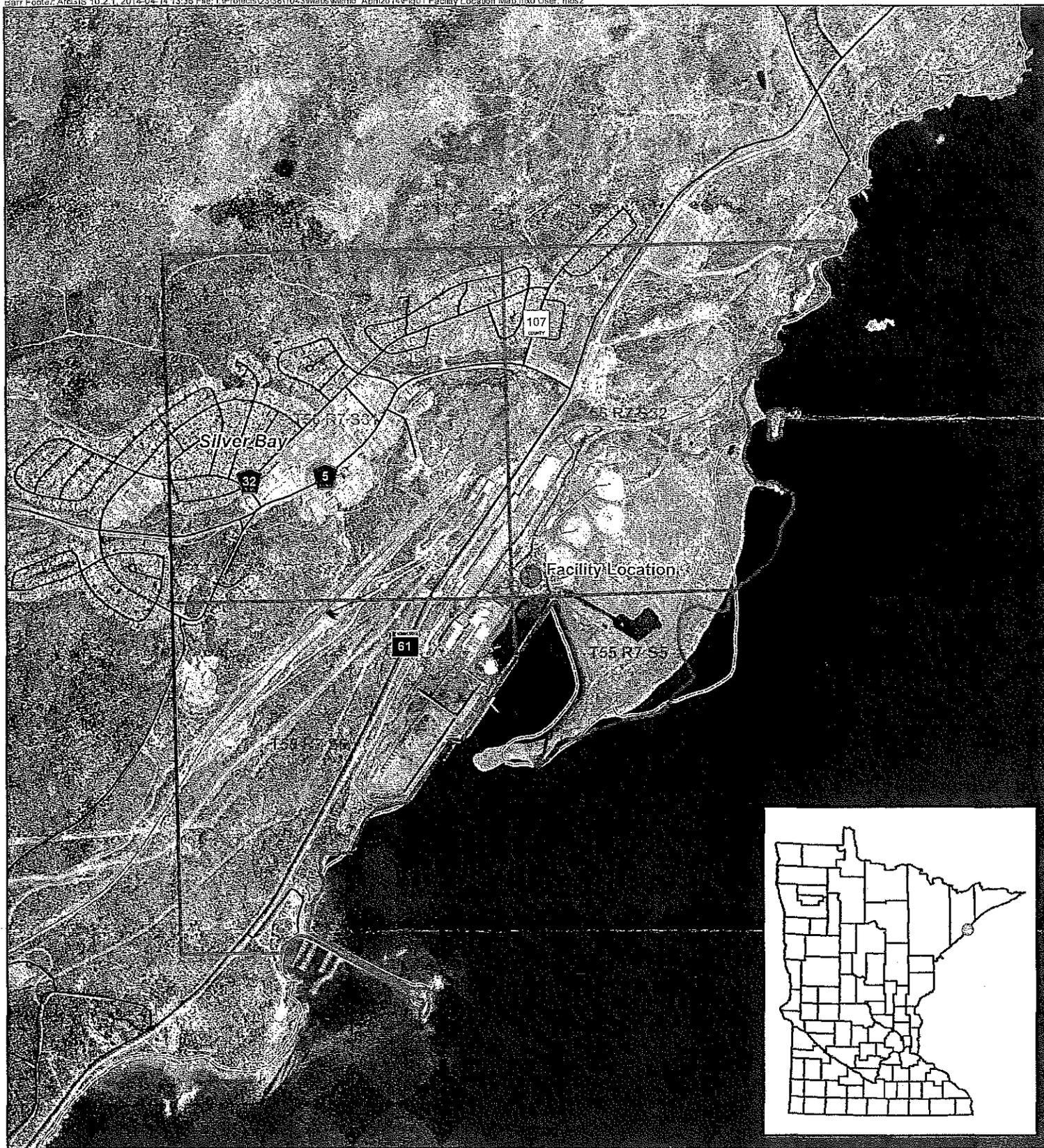
Root Cellar

off Co. Hwy. 4, vicinity of Silver Bay
Located in Tettegouche Camp Historic District

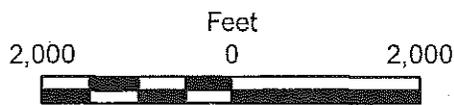
Sauna

off Co. Hwy. 4, vicinity of Silver Bay
Located in Tettegouche Camp Historic District

Minnesota Historical Society: 345 W. Kellogg Blvd., St. Paul, MN 55102-1906-651-259-3000 [Copyright](#) © 2009.
Send questions/comments to Webmaster@mnhs.org.



- Silver Bay Power Facility
- Public Land Survey Sections



FACILITY LOCATION
Silver Bay Power
Cliffs Natural Resources
Silver Bay, Minnesota