

Badger Minerals LLC

414 10th Avenue
Menominee, MI 49858
906-352-4024

May 7, 2020

Karl Jennrich
Zoning Director
Oneida County Planning & Zoning Dept.
Courthouse, P.O. Box 400
Rhinelander, WI 54501

RE: Metallic Mineral Exploration – Notice of Exploratory Drilling Program

Dear Mr. Jennrich,

Badger Minerals (Oneida County Metallic Mineral Exploration Permit #2000142) would like to submit the following notice to the County of the company's planned exploration drilling program within Schoepke Township. Drilling is currently planned to begin on the 1st of June, 2020. However, preparation of some sites, including the removal of some trees, will take place prior to initiating the drill program. In the event that any delays occur, Badger Minerals will notify the county as this information becomes available to us.

Please see the section below, "Oneida County Metallic Mineral Exploration - Notification Requirements", for specific details pertaining to our proposed exploratory drill program as required under 9.61 (H). I have also attached a number of attachments containing correspondences with the State regarding our project, as well as figures and tables which are included or referenced in the below section.

Please do not hesitate to contact me directly with any questions or requests for additional information.

Sincerely,

Eric Quigley
Senior Geologist
Great Lakes Exploration
C: 218-428-8961
E: equigley@glexploration.com

Oneida County Metallic Mineral Exploration - Notification Requirements

Badger Minerals, LLC

May 7, 2020

Included below are the Notification Requirements pursuant to Section 9.61 Metallic Mineral Exploration, Bulk Sampling and Mining (blue text). Information that has previously been submitted to the Wisconsin DNR is cross referenced and copies of the documentation are attached.

9.61 (H)

- 3. Notification Requirements. The holder of any exploration Permit issued by Oneida County shall notify the County in writing, as required in the section at least ten days prior to commencement of the earlier of preparing any location to serve as a drilling site or commencement of drilling in Oneida County. The notification required by this section shall include the following:
 - A. Copies of any notices of intent to drill provided to DNR under Wis. Stat. Ch. 293 or any rule promulgated thereunder;

Badger Minerals LLC submitted to the DNR a Notice of Intent to Drill document outlining their proposed drill program in Shoepke Township on January 28, 2020. The original submittal is attached to this document as '**Attachment 1A**'. Badger Minerals subsequently received comments back from the various departments of the DNR on February 7, 2020 (**Attachment 1B**). This document outlined additional information that the department required of Badger Minerals as well as additional permitting requirements that may need to be taken into consideration for the proposed drilling program. '**Attachment 1C**' summarizes the DNR's comments as well as actions taken by Badger Minerals to address the department's comments and potential permitting requirements.

Note that some modifications to the program were made during conversations with the DNR including:

- The original schedule of the program has been changed and the program is planned to be completed during the month of June 2020
- The total number of drill sites have been reduced from 10 to 8 drill sites.
- The drill site footprint has been increased to 50'x62.5'
- Lime will be added to the drill sumps prior to backfilling

- B. A list of all local and state permits and approvals in effect to allow the intended exploration to proceed;

Badger Minerals has obtained an exploration permit from Oneida County (**Attachment 2A**) as well as an exploration license from the State of Wisconsin DNR (**Attachment 2B**). A general permit was also obtained through the DNR for dewatering operation related to the dewatering of the drilling sump. A list of permits and approvals along with the date of issuance or completion can be found below.

Additional project information was provided to the various DNR departments to verify that additional permits were not required (see '**Attachment 1C**').

9.61 (H) 3 (b) - List of Local and State Permits/Approvals obtained by Badger Minerals for Shoepke Drilling Program

Permit/Approval	Regulatory Body	License/Permit Number	Date of Approval/Completion
Metallic Mineral Exploration License	DNR	41003	2/7/2020
Oneida County Metallic Mineral Exploration Permit	Oneida County	2000142	4/28/2020
Exemption Determination Request for Water Intake Structures	DNR	NA	4/10/2020
Waiver for fish timing restrictions	DNR	NA	4/10/2020
General Permit - Dewatering Operations (No. WI-0049344-05-0)	DNR	General Permit	2/28/2020
Endangered Resource Review	DNR	NA	2/21/2020

- C. An exploration Plan as set forth below, provided that where the information required is duplicative of documents filed with DNR, those materials may be provided by cross references;
 - (1) Identity of the owner of land on which any drilling site is located;

Badger Minerals is planning to conduct an exploratory drill program consisting of a total of up to 10 drillholes (totaling 4,000 linear feet) on up to 8 drill sites on private property in Schoepke Township.

See attached **'Figure 1'** which contains a site map showing the locations of the proposed drill sites. The drill sites are labeled on the map for reference. All holes with prefix "LB" are located on private property owned by Badger Minerals. The remaining holes (prefixes "RB" and "DB") are located on Private Property owned By Heartwood (The Forestland Group).

- (2) Certification of legal ingress and egress to and including the lands to be explored;

Heartwood Property: Access to the Northern drill sites (on Heartwood property) will be off of Browns Road from the north of the project area. Badger Minerals and Heartwood (The Forestland Group) have entered into an agreement and Badger Minerals currently has permission to enter the properties for exploration purposes. **'Attachment 3A'** contains an email from The Forestland Group confirming Badger Minerals' right of ingress/egress, the right to drill on the property and permission to use Stockley Creek as a water source on their properties.

Contact information for Heartwood (The Forestland Group):

Sam Rorabaugh
 Director, Timberland Transactions
 818 W 44th Street
 Richmond, VA 23225
sam@forestlandgroup.com
 M: 724.840.5136
www.forestlandgroup.com

Badger Minerals Property: Access to the southern drill sites (on Badger Minerals owned property) will be off of Meister-Stockley Road via an existing, unmarked, driveway.

- (3) type and distance of nearest water body, including lakes, streams, floodplains and wetlands, to drilling location;

See attached '**Figure 2**' showing the location of drill sites with an overlay of the floodplain data. Approximate measurements are also tabulated showing the distance of each drill site to the nearest water body and wetland.

- (4) type of equipment or machinery to be used;

See section 3, Project Description and Methods within Badger Minerals' Notice of Intent document ('**Attachment 1A**') for a description of drill site construction and the drilling operation. A schematic drawing of a typical drill site and a discussion/estimation of total disturbances for the project are attached as "**Attachment 4A**"

Taconite Drilling, based out of Warba, MN will be the drill contractor for the Shoepke program. They will use a skid/wheel mounted Sandvick DE-130 drill. A backhoe/loader will be used for site/sump preparation, moving the drill rig, and for backfilling and reclamation. A water truck will be used for transporting water from the water sources (see '**Figure 1**') to the drill site.

Contact Information for Taconite Drilling:

Mark Porter
CEO/Driller
17126 Co Rd 456
Warba, MN 55793
M: 218.259.5272
mportertaconitedrilling@frontier.com

- (5) Time frame for exploration, drill hole abandonment and reclamation in accordance with applicable permits, approvals and applicable provisions of the Wisconsin Administrative Code.

The drilling program is currently planned to begin on June 1, 2020. It is estimated that the program will take between 18-25 days. Drilling will take place 24 hours per day with 2 12-hour shifts running throughout the duration of the program.

Reclamation will take place as described in '**Attachment 1A**' section 4.

It is currently planned that all drill holes will be abandoned immediately after each hole is completed and the abandonment procedure will be completed in compliance with NR 130.06(1)(3)(a). In the event that a hole will need to remain open (temporarily abandoned) for the completion of future work, a water-tight threaded cap will be placed on the top of the casing.

All sumps will be backfilled prior to equipment being demobilized from the site. Manual reclamation work (raking, spreading brush, stacking wood, seeding and mulching) will be completed within 3 weeks of the end of the drilling program.

- D. A Schedule of financial assurances and certification that all such assurances will remain in effect for the duration of exploration from commencement of drilling through completion of drill site reclamation. Applications for an exploration permit shall be accompanied by a certificate of insurance certifying that the applicant has in force a liability insurance policy issued by an insurance company authorized to do business in Wisconsin covering all exploration activities of the applicant and affording personal injury and property damage protection in a total amount deemed adequate by the Planning and Development Committee but no less than \$5,000,000;
- Badger Minerals currently has a liability insurance policy (coverage of \$5,000,000) issued by an insurance company authorized to do business in Wisconsin. A certificate of this policy was included in Badger Minerals' Metallic Mineral Exploration Permit Application submitted to the County and is included in the county's approval of the application in '**Attachment 2A**'.
- The DNR has reviewed Badger Minerals' drilling plans and has required the company to provide the state with a surety bond in the amount of \$25,000 to cover all reclamation costs. The bond will not be released back to the company until the DNR completes an inspection of the properties and determines that all reclamation activities are completed. A copy of the bond is attached to this document as '**Attachment 5A**'.
- E. A description of intended methods for proper segregation, handling, storage, and disposal of all waste materials produced in the process of exploration.

Waste material produced during the drilling operation includes: 1. Trash consisting of containers, wrappers, boxes, banding, rags, food waste etc. 2. Sediment control devices such as silt socks and silt fencing, and 3. drill cuttings and drilling fluids produced during the drilling process.

1. All trash produced at site will be disposed of in trash cans and will be disposed of off-site.
2. Sediment control devices such as silt socks and silt fencing will be removed once the surrounding area has been sufficiently stabilized. In most cases, where no significant slopes are present, the sediment control devices can be removed shortly after the area has been seeded and mulched.
3. See '**Attachment 1A**', section '3. Waste/Water Management' for a description of the management of drilling fluids and drill cuttings. In summary, drill fluids will be stored in the sump at each site and will be left to disperse into the unconsolidated glacial material after drilling is complete. Drill cuttings will be stored in the bottom of the sump and buried with backfill material after drilling is complete. As per DNR instructions (see '**Attachment 1B**') drill cutting shall be amended with lime prior to backfilling if >3% total sulfide minerals are present over 50' of drilling. Through discussion with local officials, Badger minerals has agreed to amend each sump with a minimum of 25 lbs. of lime for every 100' of bedrock drilled in each sump regardless of sulfide content.
- 4. Further Notifications. The exploration permit holder shall provide the County with copies of any reports and forms pertaining to drill hole abandonment and to drilling site reclamation that are provided to DNR under Wis. Stat. Ch. 293 or any rule promulgated thereunder, within 5 business days of providing any such information to DNR.

Badger Minerals will supply the County with all abandonment report required to be submitted to the DNR within 5 days of submitting such documents to the DNR. The reports will be sent electronically to zoning@co.oneida.wi.us and Karl Jennrich will be copied on the transmission at kjennrich@co.oneida.wi.us