

Ministry of Northern Development and Mines  
Category B Environmental Assessment  
Rond Lake Mine Rehabilitation Project  
Fort Hope (Eabametoong First Nation), Ontario

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*October 26, 2017*

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# 1 Project Description

The Rond Lake Mine site (also historically known as the Fort Hope Mine or Golden Hope Mine) is located 1.6 kilometres south of Rond Lake, and approximately eight kilometres northwest of the community of Fort Hope (Eabametoong First Nation) (Figure 1). The mine site is located in the Central Ecotone of the Far North of Ontario (Far North Land Use Strategy – draft).

The mine was in operation from 1927 to 1959. Two trenches, a shaft and lateral works were constructed during this time. Mining activities were eventually discontinued with no recorded gold production, and the property has been idle since 1959. Abandoned equipment and waste materials are still present at the site.

A discretionary rehabilitation activity under the Class Environmental Assessment for Activities of the Ministry of Northern Development and Mines (MNDM) under the *Mining Act* is proposed. The proposed work will involve the capping of the mine shaft, and the possible removal of abandoned mining equipment and minerals, including two potentially pressurized cylinders, if feasible. The shaft is filled with water, and reported to be approximately 40 metres deep, and accesses over 90 metres of underground mine workings.

The work is planned as two separate phases that will occur over two successive years. Site clearing and ground preparation around the shaft collar and landing pad will begin October 2017. Approximately 0.1225 ha (35-m x 35-m) of vegetation will be cleared for the landing pad, which will be located approximately 80-m from the shaft, in a relatively flat area. Vegetation will be cleared within 10-m of the shaft collar, and the area within 2-m of the shaft collar will be grubbed and stripped to bedrock using hand tools and power-washing equipment. Overburden removal will need to be completed in frost-free and snow-free conditions. If this task cannot be completed in the fall of 2017, the fieldwork will attempt to be completed by May 1, 2018.

A detailed ground survey around the shaft collar will be conducted once the site clearing and ground preparation work is done in order to inform the engineering design and fabrication of a 21-m<sup>2</sup> (3-m x 7-m) steel cap. An inventory of the abandoned items left on the site will be done, and the condition of the cylinders will be determined.

The steel cap will be prefabricated off-site and installed over the shaft in late September 2018. The removal of the abandoned equipment and material from the site at this time will depend upon helicopter capacity and safety considerations.

Due to its remoteness, the mine site can only be accessed by air or by a winter road. The proposed means of access is by helicopter. A landing pad will need to be cleared near the site in order to ferry workers, equipment and materials into the site. If an excavator is used, it would likely be brought in during the 2017/18 winter across Eabamet Lake and on an existing trail from the lake to the Rond Lake Mine site.

Figure 1: Site Location



## **2 Project Rationale**

MNDM has a mandate to ensure a safe and environmentally responsible mineral sector. Rehabilitating abandoned mine sites on Crown Land is one activity undertaken by MNDM that contributes to the protection of the environment, reduction in the impacts of exploration and mining, and addressing the climate change challenge (Ontario's Mineral Development Strategy).

The purpose of the proposed rehabilitation activity is to address safety concerns with the open shaft. The Eabametoong First Nation community and other resource users in the area (i.e. trappers, hunters) have expressed an interest in the site being rehabilitated to address safety issues.

Failure to address a safety concern identified by Eabametoong First Nation and within their traditional territory could possibly impact relations with the community.

## **3 Consultation**

A Record of Consultation has been prepared for the project (Appendix). This document identifies the agencies, communities, and stakeholders who were notified of project intent; the consultation that occurred; and a summary of comments and concerns received.

### **3.1 Summary of Consultation Undertaken**

A 30-day Notice of Opportunity to Provide Input was provided to the Ministry of Environment and Climate Change, the Ministry of Natural Resources and Forestry, and other potentially interested stakeholders and members of the public. The notice was posted on-line as an Information Notice on the Environmental Registry (ER # 1256), and on MNDM's Class EA web page on August 17, 2017. The comment period closed on September 15, 2017. A link to the project description was also included in the on-line notices. No public comments were received during this time.

Since 2016, MNDM has discussing the project with representatives from Eabametoong First Nation and Four Rivers Environmental Services Group (Matawa First Nations Management) regarding safety concerns environmental constraints, project design, and employment opportunities.

MNDM will be continuing consultation and engagement efforts with the Eabametoong First Nation community in order to share information, identify and address concerns, and discuss potential economic opportunities.

## **3.2 Input Received**

### **3.2.1 Ministry of Natural Resources and Forestry**

The Geraldton area office of the Ministry of Natural Resources and Forestry (MNRF) was contacted for advice regarding the presence of wildlife habitat and species at risk. Based on telemetry data, a nursery area for Woodland caribou has been identified near the project site. Woodland caribou are threatened species under the *Endangered Species Act (ESA)*. The General Habitat Description for the Forest-dwelling Woodland Caribou specifies that activities that result in sensory disturbance within 10 km of high use areas can potentially displace caribou during sensitive periods that occur from May 1<sup>st</sup> to September 15<sup>th</sup> of any year. Given the nature of the project (i.e. capping a mine shaft), MNDM would not require an authorization under the *ESA*, as long as the work can be restricted outside the timing window.

MNRF also identified the potential for the presence of four endangered bat species protected under the *ESA*. Due to the unknown distribution of all four listed bat species at the proposed project, *ESA* authorization may be required for the project. It was also recommended the removal of trees be avoided and that the helicopter landing be located away from the treed area immediately surrounding the mine shaft, to minimize disturbance to bats.

The Nipigon District MNRF office also identified that two trap-lines operate in the project area. The trappers are community members of Eabametoong First Nations.

Nipigon District MNRF supplied additional information regarding fire history in the area of the mine site, and provided direction on additional regulatory considerations under the *Crown Forest Sustainability Act* for the removal of trees. MNRF will also issue a Letter of Authorization that will provide documentation acknowledging MNDM's activities at the mine site.

### **3.2.2 Ministry of the Environment and Climate Change**

The Ministry of the Environment and Climate Change (MOECC) reviewed MNDM's project description posted during the Notice of Opportunity to Provide Input comment period, and provided the following recommendations on information requirements for the project documentation:

- The project site appears to be in the Far North Planning Area. It would be helpful to indicate this in the project description and also to describe land use planning impacts (if any) in the project documentation.
- An estimate of the amount of clearing needed to access the site and the location in relation to the mine shaft. The method that will be used to determine the location of the landing pad should be included.

- Merchantable timber (if any) and the Sustainable Forest License holder (if any), or the absence of either should be indicated. Method of removal and disposal of non-merchantable timber and/or slash and other vegetation should also be included.
- Preparation of a landing site may impact surface water runoff. This should be addressed in the Project Documentation. Additionally, it is known that historically, mine sites often have fuel impacts from used drums left on site. Should this be the case here, this would need to be addressed. Potential impacts to surface water and groundwater should be described along with mitigation measures in the project documentation.
- Two pressurised gas cylinders on the site may be removed, if feasible. Please include in the project documentation how it will be determined if it is feasible to remove the tanks and the mitigation measures to both removal and leaving tanks including any long term monitoring, if required.
- Mitigation measures that are being considered for all aspects of the project should be included in the project description. Evaluation of the mitigation measures should be included in the project documentation.

### **3.2.3 Ministry of Tourism, Culture and Sport**

The Ministry of Tourism, Culture and Sport (MTCS) was contacted for information to assist in MNM's screening for built heritage and/or cultural heritage values. MTCS was not aware of a conservation plan for cultural heritage resources for this area; or of any evaluation, or any information that could indicate potential for built heritage and/or cultural heritage landscapes. The property is not on the list of provincial heritage properties.

### **3.2.4 Eabametoong First Nation**

Eabametoong First Nation has expressed safety concerns for the open mine shaft, and believe it is possible that the mine hazard may have been responsible for the loss of community members. The community should be engaged on how these members can be respectfully remembered.

Eabametoong First Nation supports the rehabilitation project, but has also expressed concerns with project delays, and would like to see MNM keep its initial commitment for project completion by the end of the summer 2018.

It was also suggested that the helicopter use be limited to the project site in order to minimize noise during the fall hunting season.



### **3.2.5 Four Rivers Environmental Services Group (Matawa First Nations Management)**

Four Rivers Environmental Services Group is the Matawa Service Group established to assist the Matawa member First Nations with building capacity to actively manage land and water resources within their traditional territories. Representatives from Four Rivers have provided MNM advice on project delivery and information sharing.

## **4 Potential Environmental Effects**

### **4.1 Far North Planning**

Section 12 of the *Far North Act* does allow for environmental clean-ups without a community based land use plan. Although exempt from requiring a land use plan, the Rond Lake Rehabilitation project is still demonstrates consistency with a number of objectives and overarching principles of the draft Far North Land Use Strategy, including consultation with Eabametoong First Nation and respectful consideration of safety concerns with the mine site, the maintenance of biological diversity by minimizing impacts to a species at risk; and by providing an economic opportunity for First Nation community members.

### **4.2 Impacts to Surface Water Run-off**

Changes to surface run-off and/or drainage patterns are not anticipated. No grubbing of soil will occur in the area to be cleared for the landing pad. Use of the landing pad is short-term in duration and is expected to re-vegetate naturally without rehabilitation.

A 2-m area around the shaft collar will be cleared, grubbed and stripped to bedrock in order to facilitate a survey required for detailed engineering design of the steel cap. Once the steel cap is installed, a 50-m<sup>2</sup> area surrounding the shaft will be graded to direct rainwater away from the cap. The change to the pattern and amount of run-off from this site will be minor given the small surface area that will be affected by the project.

### **4.3 Water / Soil Contamination**

There is a potential for fuel spills due to the use of small equipment (i.e. chainsaws) and other machinery that may be used (i.e. excavator). Spill containment facilities for storage and fueling will be maintained at the site during active construction. Spill management plans including spill clean-up kits will also be available at the site during construction activities.

The contamination of water bodies is unlikely, because the closest water feature is a small creek located approximately 240-m north of the mine shaft.

Water required for the power-washing will be accessible from the standing water in the existing shaft and/or the tributary 240 m north of the shaft. A permit to take water (PTTW) is not required since pumping will remain under 50,000 L/day.

#### **4.4 Archaeological and Cultural Resources**

A Stage 1 Archaeological Assessment was completed for the Rond Lake mine site in 2015, which concluded that the mine site had a low potential for containing archaeological resources due to disturbance from previous mining activities, the lack of features associated with archaeological potential, and the absence of previously registered archaeological sites located within or adjacent to the project area.

Based on information provided by MTCS and MNM's screening checklist, the site was determined to have low potential for the presence built heritage and cultural heritage values. The preparation of cultural heritage evaluation report was not required for this project.

#### **4.5 Indigenous Peoples**

Eabametoong First Nation has expressed safety concerns with the open mine shaft at the Rond Lake mine site, and believe that the mine hazard may have been responsible for the loss of community members. Although at this time there is no documentation confirming this, there is a risk to public safety and it is possible that human remains are located in the mine shaft. The community may want to have these individuals commemorated before the cap is placed over the mine shaft.

Many community members from Eabametoong First Nation engage in fall hunting activities. Use of a helicopter and on-site work with chainsaws has the potential to affect game behaviour.

The two trappers that operate trap-lines in the project area are community members from Eabametoong First Nation. Project activities have the potential to coincide with and temporarily disrupt trapping efforts in the area.

The Rond Lake Rehabilitation Project provides an economic opportunity for Eabametoong First Nation, through employment and the purchasing of community services (i.e. lodging and meals).

#### **4.6 Human Health and Safety**

The project will have a positive effect on the human health and safety by removing access to a known mine hazard.

## 4.7 Natural Environment

The Rond Lake mine site is located within Central Plateau Forest Section of Eco-region 2W (Big Trout Lake) of the Ontario Shield Eco-zone; and within the Eco-district 2W-3 (Wunnummin Lake). Sparse forest covers approximately 21.4% of the ecoregion. Coniferous and mixed forests grow on 19.4% and 8.4% of the area, respectively, and small pockets of deciduous forest grow along river valleys. Black spruce is the predominant forest tree on both upland and lowland sites. Jack pine and White birch are frequent associates of Black spruce on upland sites. More than 30% of the ecoregion is covered by various types of wetlands, including 12.1% water and 9.1% treed bog. Burns occupy 8.1% of the ecoregion, the highest percentage in Ontario (OMNR 2009).

The area was subjected to a 4000 ha forest fire in 1996 however, stands of merchantable timber do remain near the mine site. A Sale and Purchase Agreement for Fuelwood will not be required because Eabametoong First Nation will be utilizing the wood for non-commercial, communal use. Any trees felled during the project will be cut and left on-site, in such a way as to maintain access for pedestrian and animal movement, until winter when they will be retrieved and transported back to the community for fuelwood use. The numbers of each species, size (dbh), and dates of clearing will be reported to the Nipigon District MNR. Small vegetation cleared for the project will be left on-site for natural decomposition.

The fauna of the ecoregion is typically boreal, including such vertebrate species as Gray wolf, American black bear, North American river otter, Wolverine, American marten, Beaver, Woodland caribou, Moose, Snowshoe hare, Eastern red-backed vole, Spruce grouse, Bald eagle, Gray jay, Palm warbler, White-throated sparrow, American toad, Spring peeper, Northern leopard frog, Mink frog, and Eastern gartersnake. Spottail shiner, Finescale dace, Fathead minnow, White sucker, Brook stickleback, and Mottled sculpin are among the fish species found in aquatic ecosystems in the ecoregion (OMNR 2009).

The mine site is within the Ozhiki Range of Forest-dwelling Woodland caribou; a threatened species protected under the *Endangered Species Act*. The General Habitat Description for the Forest-dwelling Woodland Caribou specifies that no activities, which result in sensory disturbance within 10 km of a high use area, should occur between May 1 and September 15 in any year. Telemetry data for the species shows that the mine shaft is within 10 kilometres of a high use area. The project does have the potential to negatively impact calf survival and the reproductive success of Woodland caribou, if activities are conducted during this sensitive period.

The mine site does not have the potential as hibernaculum habitat for bats. The shaft itself is flooded with water, with snow accumulating above the surface in the winter. Because the area was also subject to a recent burn, it likely does not provide suitable habitat for roosting.

No other wildlife habitat was identified for this area, although there is a potential for nesting birds to be present at the site during the bird breeding season (May 1 – August 31).

## **5 Advantages and Disadvantages**

### **5.1 Advantages**

The advantages of the Rond Lake mine rehabilitation project include:

- Resolving a long-standing safety concern with an open mine shaft
- Providing employment opportunities community members in Eabametoong First Nation
- Strengthening MNDM's relationship with Eabametoong First Nation

### **5.2 Disadvantages**

The disadvantages of the Rond Lake mine rehabilitation project include:

- The potential for short-term sensory disturbance of caribou in a high use area, within 10 km of the mine site.
- The potential to affect the behaviour of wildlife, which would affect hunting and trapping success.

## **6 Analyses**

### **6.1 Mitigation Measures**

#### **6.1.1 Fuel Spills**

To minimize the potential for fuel spills, aircraft will only be fueled at the air base in Fort Hope.

For other fuels (i.e. chainsaw), a spill action plan will be developed and followed by workers on-site. Gas and oil containers will be stored on-site in designated areas. If an excavator is used in 2018, a temporary fuel containment area may also be constructed.

All fuel containers brought into the mine site will be removed upon project completion .

#### **6.1.2 Community Concerns**

Key contact persons from Eabametoong First Nation will be provided regular updates on project progress.

Prior to the installation of the steel cap in 2018, consultation with the community will occur to discuss how lost community members can be remembered and respected.

Through community contacts, potentially affected hunters and trappers will be notified of the timing of activities, schedules and progress. Helicopter use will be kept to a minimum in order to avoid disturbing game animals, and used to ferry workers and equipment to and from the project each day. Helicopter use will not occur at dusk or dawn when hunting effort is the greatest.

### 6.1.3 Species At Risk and Other Wildlife

The General Habitat Description for the Forest-dwelling Woodland Caribou specifies that no activities, which result in sensory disturbance within 10 km of a high use area, should occur between May 1 and September 15 in any year. As a result, project activities are proposed to only occur in late September, over a two year period. Some work may still need to occur in early spring before May 1<sup>st</sup>, if weather conditions in the previous fall prevent the completion of critical tasks. If an excavator will be used in 2018, then it would have to be brought over during the winter, before May 1<sup>st</sup> of that year.

In the event any part of the work has to occur during the sensitive period for caribou, the appropriate authorization under the *Endangered Species Act* will still need to be sought, either as a registered activity under Section 23.18 of Ontario Regulation 242/08 or through Section 17.2(a) Health and Safety Permit.

Because the project will be carried out between September 15<sup>th</sup> and May 1<sup>st</sup> of the following year, there will also be no work during the breeding season for birds.

## 6.2 Alternative Methods

### 6.2.1 Rehabilitation Method

**Table 1: Rehabilitation Alternatives and Selected Option**

| Rehabilitation Method              | Rationale for Selection and/ or Exclusion   |
|------------------------------------|---|
| <b>Steel Cap (selected option)</b> | Installation of a steel cap on the mine shaft will involve fewer flights and less noise, and be shorter in duration, than the alternative of installing a concrete cap.                           |
| <b>Concrete Cap</b>                | No near-by aggregate sources are available, so concrete would need to be brought in, resulting in more helicopter flights and noise.<br><br>Area around the shaft collar may need to be heated in |

|                                |   |
|--------------------------------|---|
|                                | order cure the concrete properly.   |
| <b>Backfill with Aggregate</b> | <p>No near-by aggregate source is available, so material would need to be flown in, resulting in more flights, noise and expenses.</p> <p>Greater risk of long term subsidence since there are several obstructions just below the shaft collar. These obstructions would likely result in aggregate “bridging” and creating voids within the fill which, over time will shift and consolidate.</p> |
| <b>Fencing</b>                 | <p>Less effective safety barrier than a cap or plug.</p> <p>Long-term maintenance commitment. Remote site makes regular monitoring and repairs challenging.</p> <p>No. #6 gauge chain-link fencing would be heavy and difficult to handle.</p>  |
| <b>Bat Cupola</b>              | Mine shaft does not provide suitable hibernaculum habitat for bats. The installation of a bat cupola will not be required.  |

## 6.2.2 Access

**Table 2: Access Alternatives and Selected Option**

| <b>Access Type</b>                  | <b>Rationale for Selection / Exclusion</b>  |
|-------------------------------------|---|
| <b>Helicopter (selected option)</b> | Access by air will avoid potential negative impacts to Woodland caribou habitat and the need for authorization under the <i>Endangered Species Act</i> that would authorize habitat damage.   |
| <b>Winter Road</b>                  | <p>Depending on the actual winter temperatures and conditions, a new road several kilometres in length from Fort Hope to the mine site would need to be established, and would be more expensive than using a helicopter to transport workers and equipment,</p> <p>The route would involve travel on Eabamet Lake at least in one location. Safety risks with inadequate ice conditions, and a greater chance of fuel contaminating the water body</p> |

|              |   |
|--------------|---|
|              | <p>if equipment and machinery do breakthrough the ice.</p> <p>Overland road would create potential corridor for predators and negatively impact survival rates for Woodland caribou. Project scope would need to be expanded to address additional decommissioning efforts and cost. The road may also be considered as habitat damage and require authorizations under the Endangered Species Act.</p> |
| <b>Barge</b> | <p>Equipment and workers could be barged to the trail that runs from Eabamet Lake to the mine shaft, however the water levels in the narrows of the lake may be not be deep enough to accommodate a barge. Based on the water levels observed in 2017, this alternative may be unfeasible.</p>  |

### 6.2.3 Equipment

**Table 3: Equipment Alternatives and Selected Option**

| <b>Equipment</b>   | <b>Rationale for Selection / Exclusion</b>  |
|--|---|
| <b>Manually Operated Equipment (e.g. tripods, come-alongs, etc.) (selected option)</b> | <p>Fewer impacts to the environment than excavator, but increases workload, project duration and safety risks to project staff.</p> <p>The engineering design for the steel cap will address the logistics associated with its installation and a design suitable to facilitate assembly and installation will be commissioned and fabricated.</p>  |
| <b>Excavator</b>   | <p>Quicker and safer than manual installation, but greater impacts to the environment due to risk of fuel leaks as well as the temporary disturbance of vegetation caused by trail maintenance.</p> <p>In the absence of a road, the excavator would have to be brought over during the winter months to facilitate work in 2018, on the fitting of the steel cap over the mine shaft. As result, the machinery would be inactive for long periods of</p> |

|  |   |
|--|---|
|  | <p>time and not available for community use.</p> <p>If water levels are high enough in September it may be possible to barge an excavator across to the shaft site. This would serve to shorten the installation schedule for the cap. Excavator usage will continue to be assessed as a contingency method until such time as water levels can be established at the site.</p> |
|--|---|

## 6.2.4 Project Timing

**Table 4: Project Timing Alternatives and Selected Option**

| <b>Project Timing</b>   | <b>Rationale for Selection / Exclusion</b>   |
|---|--|
| <b>No Work between May 1<sup>st</sup> and September 15<sup>th</sup> (selected option)</b> | Will avoid potential negative impacts to Woodland caribou and the need for authorization under the <i>Endangered Species Act</i> .   |
| <b>No Timing Constraints</b>  | <p>Would provide more time for completing project work, with more flexibility to account for adverse weather conditions.</p> <p>Activities between May 1<sup>st</sup> and September 15<sup>th</sup> would result in a sensory disturbance to woodland caribou; potentially impacting reproductive success. An authorization under the <i>Endangered Species Act</i> would be required.</p> |

## 6.3 Studies

A Stage 1 Archaeological Assessment was completed by AECOM in 2015, and carried out in accordance with the *Standards and Guidelines for Consultant Archaeologists* (2011). As a remote location with no direct access road from any major populated area, the Rond Lake Mine study area was assessed under *Section 1.3.4, Alternatives for potential evaluation in special conditions: Remote areas, Standard 2* in the *Standards and Guidelines for Consultant Archaeologists*.

The assessment documented the geographic, archaeological and land use history of lands identified within the 0.301 hectare study area in order to assess their potential to contain archaeological resources. Due to the remote location of the Rond Lake Mine site, an optional property inspection was not undertaken. Instead, detailed mapping, satellite imagery, current and archival aerial photographs, field photos provided by MNDM and a past site assessment report were used in order to evaluate the property's archaeological potential.



In combination with the disturbance from previous mining activities and the lack of features of archaeological potential or previously registered archaeological sites located within or adjacent to the study area, it has been determined that the study area assessed in this report has low potential for containing archaeological resources, and it was recommended that no additional archaeological assessment will be required for Rond Lake Mine property.

## **7 Future Effects Monitoring**

As per Schedule 1, Part 1, Bit 15 of Ontario Regulation 240/00 under the *Mining Act*, an inspection of the steel cap is required at least once every five years to ensure it continues to meet the specifications and requirements of the Mine Rehabilitation Code of Ontario.

The monitoring of gas containers and other waste is not being proposed, as this is not an objective of the rehabilitation project. It is believed the environmental risk of leaving materials on-site is low. However, some of the waste may be removed, if it is considered feasible and safe to do so.

## 8 Project Schedule

| Task  | Dates        |               |               |                      |                      |
|---|--------------|---------------|---------------|----------------------|----------------------|
|   | October 2017 | November 2017 | December 2017 | January – Sept. 2018 | After Sept. 15, 2018 |
| Contractor Mobilization   | X            |               |               |                      |                      |
| Training (Health and Safety, Fall Arrest)                             | X            |               |               |                      |                      |
| Clear Vegetation for New Helipad                                      | X            |               |               |                      |                      |
| Anchor Installation   | X            |               |               |                      |                      |
| Clear Vegetation from around the Shaft                                | X            |               |               |                      |                      |
| Clear Overburden from around the Shaft                                | X            | X             |               |                      |                      |
| Surveying and Geotechnical Mapping                                    |              | X             |               |                      |                      |
| Contractor Demobilization   |              | X             |               |                      |                      |
| Drafting and CAD Services, Drawing Submission                         |              | X             | X             |                      |                      |
| Steel Cap Fabrication   |              |               |               | X                    |                      |
| Installation of Steel Cap (including mobilization and demobilization) |              |               |               |                      | X                    |

## 9 Class EA Requirements

The Rond Lake Rehabilitation Project has been screened to a Category “B” under MNDM’s Class EA.

Category “B” projects are activities that are anticipated to have low potential environmental effects that are minor and short-term in nature, well-understood and predictable. These effects are easily managed or mitigated. The level of interest in regards to the project was expected to be minor and localized, with no anticipated opposition to the undertaking.

The environmental assessment for the Rond Lake Rehabilitation Project was carried out in accordance with MNDM’s Class EA review and planning process for Category “B” projects. A project description and project document have been prepared, that address the technical and information requirements outlined in the Class EA.

A Notice of Opportunity to Provide Input has been provided to the appropriate government agencies, communities and potentially interested/affected stakeholders; as well as posted on MNDM’s website and as an information notice on the Environmental Registry (Appendix – Record of Consultation). Under MNDM’s Class EA, there is no requirement to post a Notice of Completion for a Category “B” project. An approved Statement of Completion will be prepared for the project.

English and French versions of the Notice of Opportunity to Provide Input, project description, and project document will be made available. These documents will also be compliant with the *Accessibility for Ontarians with Disabilities Act*.

## 10 References

Ontario Ministry of Natural Resources and Forestry. 2009. The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions.

Ontario Ministry of Natural Resources and Forestry. 2013. General Habitat Description for the Forest-dwelling Woodland Caribou (*Rangifer tarandus caribou*)

Ontario Ministry of Natural Resources and Forestry. September 2015. Far North Land Use Strategy: A Draft.

Ontario Ministry of Northern Development and Mines. Ontario Regulation 240/00 (Last Amendment 307/12). Mine Development and Closure under Part VII of the (Mining) Act.

Ontario Ministry of Northern Development and Mines. July 3, 2014. A Class Environmental Assessment for Activities of the Ministry of Northern Development and Mines under the *Mining Act*.

Ontario Ministry of Northern Development and Mines. 2015. Ontario's Mineral Development Strategy.

Ontario Ministry of Tourism, Culture and Sport. 2011. Standards and Guidelines for Consultant Archaeologists.

## **11 Appendix**

Record of Consultation

# Rond Lake Mine Rehabilitation Project: Record of Consultation

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## Project Description

The Rond Lake Mine site (also historically known as the Fort Hope Mine or Golden Hope Mine) is located 1.6 kilometres south of Rond Lake, and approximately eight kilometres northwest of the community of Fort Hope (Eabametoong First Nation).

The mine was in operation from 1927 to 1959. Two trenches, a shaft and lateral works were constructed during this time. Mining activities were eventually discontinued with no recorded gold production, and the property has been idle since 1959. Abandoned equipment and waste materials are still present at the site.

A discretionary rehabilitation activity under the Class Environmental Assessment for Activities of the Ministry of Northern Development and Mines (MNDM) under the *Mining Act* is proposed. The proposed work will involve the capping of the mine shaft, and the possible removal of abandoned mining equipment and minerals, including two potentially pressurized cylinders, if feasible.

The work is planned as two separate phases that will occur over two successive years. Site clearing and ground preparation around the shaft collar and landing pad will begin as early as October 2017. Vegetation will be cleared for the landing pad, which will be located approximately 80-m from the shaft. Vegetation will be cleared within 10-m of the shaft collar, and the area within 2-m of the shaft collar will be grubbed and stripped to bedrock. If this task cannot be completed in the fall of 2017, the fieldwork will be attempted in late spring prior to May 1, 2018.

A detailed ground survey around the shaft collar will be conducted once the site clearing and ground preparation work is done in order to inform the engineering design and fabrication of a steel cap. An inventory of the abandoned items left on the site will be done, and the condition of the cylinders will be determined.

The steel cap will be prefabricated off-site and installed over the shaft in late September 2018. The removal of the abandoned equipment and material from the site at this time will depend upon helicopter capacity and safety considerations.

Due to its remoteness, the mine site can only be accessed by air or by a winter road. The proposed means of access is by helicopter.

## 1. Interested Persons or Aboriginal Communities

MNDM identified the following interested persons at the beginning of the planning process (Table 1).

**Table 1: Interested Persons or Aboriginal Communities**

| Type   | List   | Rationale for inclusion   |
|--|--|---|
| <b>Federal, Provincial, and Municipal Agencies</b> | Ministry of the Environment and Climate Change: <ul style="list-style-type: none"> <li>• Environmental Approval Branch</li> <li>• Northern Region</li> <li>• Thunder Bay District</li> </ul> | Regulatory Authority for <i>Environmental Assessment Act</i> requirements   |
|  | Ministry of Natural Resources and Forestry, Nipigon District Office  | Regulatory Authority for <i>Endangered Species Act</i> and <i>Crown Forest Sustainability Act</i>   |
|  | Ministry of Tourism, Culture and Sport   | Regulatory Authority for the <i>Ontario Heritage Act</i>  |
| <b>Indigenous community or organization</b>        | Eabametoong First Nation (Fort Hope)   | Within traditional territory. Expressed health and safety concerns with mine site.  |
|  | Four Rivers Environmental Services Group (Matawa First Nations Management)   | Matawa First Nations Management (MFNM) is a tribal council for the nine-member Ojibway and Cree First Nations, which provides a variety of advisory services and program delivery. Four |

| Type   | List                               | Rationale for inclusion  |
|--|------------------------------------|--|
|  |                                    | Rivers Environmental Services Group is the Matawa Service Group established to assist the Matawa member First Nations with building capacity to actively manage land and water resources within their traditional territories. |
| <b>Interested Persons and Organizations</b>  | Two trappers                       | Identified by MNRF. May operate trap-lines in the area.  |
|  | Slam Exploration Ltd.              | Adjacent mining claim holder   |
| <b>Member of Provincial Parliament (MPP)</b> | Sarah Campbell, Kenora-Rainy River | MPP for constituents in project area   |

## 2. Consultation and Engagement Activities

### 2.1 Notices

From August 17, 2017 to September 15, 2017, MNDM posted a Notice of Opportunity to Provide Comment on its website and on the Environmental Registry (#013-1256) (see Appendix).

### 2.2 Meetings

Table 2 lists the meetings that were held during the consultation period.

**Table 2: Meetings**

| <b>Name</b>   | <b>Method of Communication / Location</b> | <b>Date</b>        | <b>Comments</b>  |
|---|---|--------------------|--|
| <b>Eabametoong First Nation, Four Rivers Environmental Services Group and MNDM</b>  | Teleconference                            | October 3, 2016    | Discussion of rehabilitation options for Rond Lake Mine shaft, and tentative timelines for project activities. Potential for community interest in the project.  |
| <b>Eabametoong First Nation, Four Rivers Environmental Services Group, and MNDM</b> | Teleconference                            | May 29, 2017       | Project update for the Rond Lake Mine site was discussed, including reasons for project delays.  |
| <b>Eabametoong First Nation and MNDM</b>  | Teleconference                            | August 15, 2017    | <p>Discussed information provided by MNRF regarding Woodland caribou habitat near the Rond Lake Mine location.</p> <p>Discussed project activities, and community interest in work for parts of the project.</p> <p>Important to keep Chief and Council updated.</p> |
| <b>Eabametoong First Nation, Four Rivers Environmental Services Group, and MNDM</b> | Meeting / Thunder Bay (MNDM Office)       | September 25, 2017 | Discussed site clearing and survey work for fall 2017, as well as provided an update on the tendering process. The anticipated timeline for the design and fabrication of the steel cap, and its installation in fall 2018, was also discussed.                      |



### 3. Comment Summary Table

**Table 3: Comment Summary Table**

| <b>Commenter</b>   | <b>Summary of Comments</b>  | <b>MNDM's Response</b>   |
|--|---|--|
| <p><b>Ministry of the Environment and Climate Change (MOECC) (Northern Region – Sudbury)</b></p> | <p>Recommendations on information requirements for the project documentation:</p> <ul style="list-style-type: none"> <li>• The project site appears to be in the Far North Planning Area. Describe land use planning impacts (if any) in the project documentation.</li> <li>• Estimate the amount of clearing needed to access the site and the location in relation to the mine shaft, and the method that will be used to determine the location of the landing pad.</li> <li>• Indicate if any merchantable timber on-site and if a Sustainable Forest License holder is required. The method of removal and disposal of non-merchantable timber and/or slash and other vegetation should be identified.</li> <li>• Address potential surface water runoff and ground water impacts.</li> <li>• Describe how it will be determined if it is feasible to remove the gas tanks, identify appropriate mitigation measures, and including any long term monitoring, if</li> </ul> | <p>MNDM will incorporate the recommended information into the project documentation, where relevant.</p> |

| Commenter  | Summary of Comments  | MNDM's Response  |
|--|--|--|
|  | <p>required.</p> <ul style="list-style-type: none"> <li>Mitigation measures that are being considered for all aspects of the project should be included in the project description. Evaluation of the mitigation measures should be included in the project documentation.</li> </ul>  |  |
| <p><b>Ministry of Natural Resources and Forestry (MNR) - Nipigon District Office / Geraldton Area Office</b></p> | <p>Based on telemetry data, there is a nursery area for Woodland caribou near the project site. Activities that result in sensory disturbance within 10 km of high use areas can potentially displace caribou during sensitive periods, from May 1<sup>st</sup> to September 15<sup>th</sup> of any year. Given the nature of the project (i.e. capping a mine shaft), if work can be restricted outside the timing window, then MNDM would not require an authorization under the <i>Endangered Species Act (ESA)</i>.</p> <p>Potential for the presence of any of four endangered bat species protected under the <i>ESA</i>. The removal of trees that could provide suitable roosting habitat, for the purpose of creating a landing pad, should also be avoided to minimize disturbance.</p> <p>Two trap-lines operate in the project area. The trappers are community members of</p> | <p>Project work will be scheduled between September 15<sup>th</sup> and May 1<sup>st</sup> of the following year, to avoid impacts to Woodland caribou.</p> <p>The mine shaft is filled with water and snow, and does not provide suitable hibernaculum habitat for bats. The area was subject to a recent burn and does not provide suitable habitat for roosting.</p> <p>MNDM will work with community to ensure members are notified.</p> <p>Information included</p> |

| Commenter   | Summary of Comments   | MNDM's Response   |
|---|---|---|
|   | <p>Eabametoong First Nations.</p> <p>Historical fire map showed a 4000 ha fire that burn through the area in 1996.</p> <p>No land use permit is required. A Letter of Authorization will be issued by MNRF under the Public Lands Act (PLA).</p> <p>If wood is being provided to the community, no licence or sale &amp; purchase agreement is required. However, letter is required from Eabametoong First Nation which includes confirming arrangement. Information on trees cleared (will still be reported to MNRF after tree clearing takes place. If the wood is not being provided to the community, then MNDM will require a Sale and Purchase Agreement for Fuelwood. From MNRF.</p> | <p>in project document.</p> <p>MNDM will provide information to MNRF for Letter of Authorization.</p> <p>MNDM will confirm that wood will be given to Eabametoong First Nation and will seek confirmation from the community.</p> |
| <p><b>Ministry of Tourism, Culture and Sport (MTCS)</b></p> | <p>MTCS was not aware of a conservation plan for this area.</p> <p>MTCS was not aware that the area has been evaluated before.</p> <p>The property was not on MTCS' list of provincial heritage properties.</p> <p>MTCS was not aware of any information that could indicate potential for built heritage and/or cultural heritage landscapes.</p>  | <p>Information was used to complete MNDMs' built heritage / cultural heritage screening.</p>  |
| <p><b>Eabametoong First</b></p>                             | <p>Safety concerns for the open</p>   | <p>MNDM reaffirmed</p>  |

| <b>Commenter</b> | <b>Summary of Comments</b>  | <b>MNDM's Response</b>   |
|------------------|---|--|
| <b>Nation</b>    | <p>mine shaft. Possible that the site may be responsible for the death of community members. The community should also be engaged on how these members can be remembered.</p> <p>Support for the rehabilitation project, but concerns with project delays, and would like to see MNDM keep its initial commitment for project completion by the end of the summer 2018.</p> <p>A technical meeting should be arranged in Thunder Bay prior to presenting the final plan to the community, to determine how work will be contracted out to whom, and what the employment opportunities will be for community members.</p> <p>Important to keep Chief and Council informed and updated to ensure project support.</p> <p>Minimize use of helicopter during the fall hunt to minimize disturbance of game animals.</p> | <p>commitment to the rehabilitation of the Rond Lake Mine as a priority project.</p> <p>The proposed project schedule would result in the cap being installed by early fall of 2018.</p> <p>A technical meeting occurred September 25, 2017.</p> <p>MNDM will be maintaining communications and providing regular updates to community representatives.</p> <p>Helicopter use for this project will be kept to minimum and will not operate at dusk or dawn. Some of the work may be re-scheduled to early spring (before May 1<sup>st</sup>).</p> |

| <b>Commenter</b>                                | <b>Summary of Comments</b>  | <b>MNDM's Response</b>   |
|---|---|--|
| <b>Four Rivers Environmental Services Group</b> | Expressed concerns that Woodland caribou information had not been shared with First Nation groups or communities. | Provided contact information for MNRF biologist that can address questions regarding caribou data. |

**Appendices**

Notice of Opportunity to Provide Input

Project Description

## Notice of Opportunity to Provide Input on a Category B Project

### ***Class Environmental Assessment for Activities of the Ministry of Northern Development and Mines under the Mining Act***

Rond Lake Mine Rehabilitation Project (Proposal to Cap an Open Mine Shaft)

The Ministry of Northern Development and Mines (MNDM) invites you to comment on the MNDM's proposal to place a cap on an open mine shaft at the abandoned Rond Lake Mine (Figure 1). The work is planned as two separate phases occurring in early fall (September / October) over two successive years, in order to avoid the disturbance of Woodland caribou. Site clearing and ground preparation around the shaft collar and landing pad is proposed to begin in late September 2017. A detailed ground survey around the shaft collar will be conducted once the site clearing and ground prep work is done in order to inform the engineering design and fabrication of the steel cap. The steel cap will be installed over the shaft in late September 2018, along with any other rehabilitation work that may be determined to be appropriate.

This proposed Category B project is being carried out in accordance with the Class Environmental Assessment for MNDM's Activities under the Mining Act (Class EA).

The project description for this proposed project is available at <http://www.mndm.gov.on.ca/en/mines-and-minerals/mining-act/class-environmental-assessment-activities/rond-lake-rehabilitation.pdf>

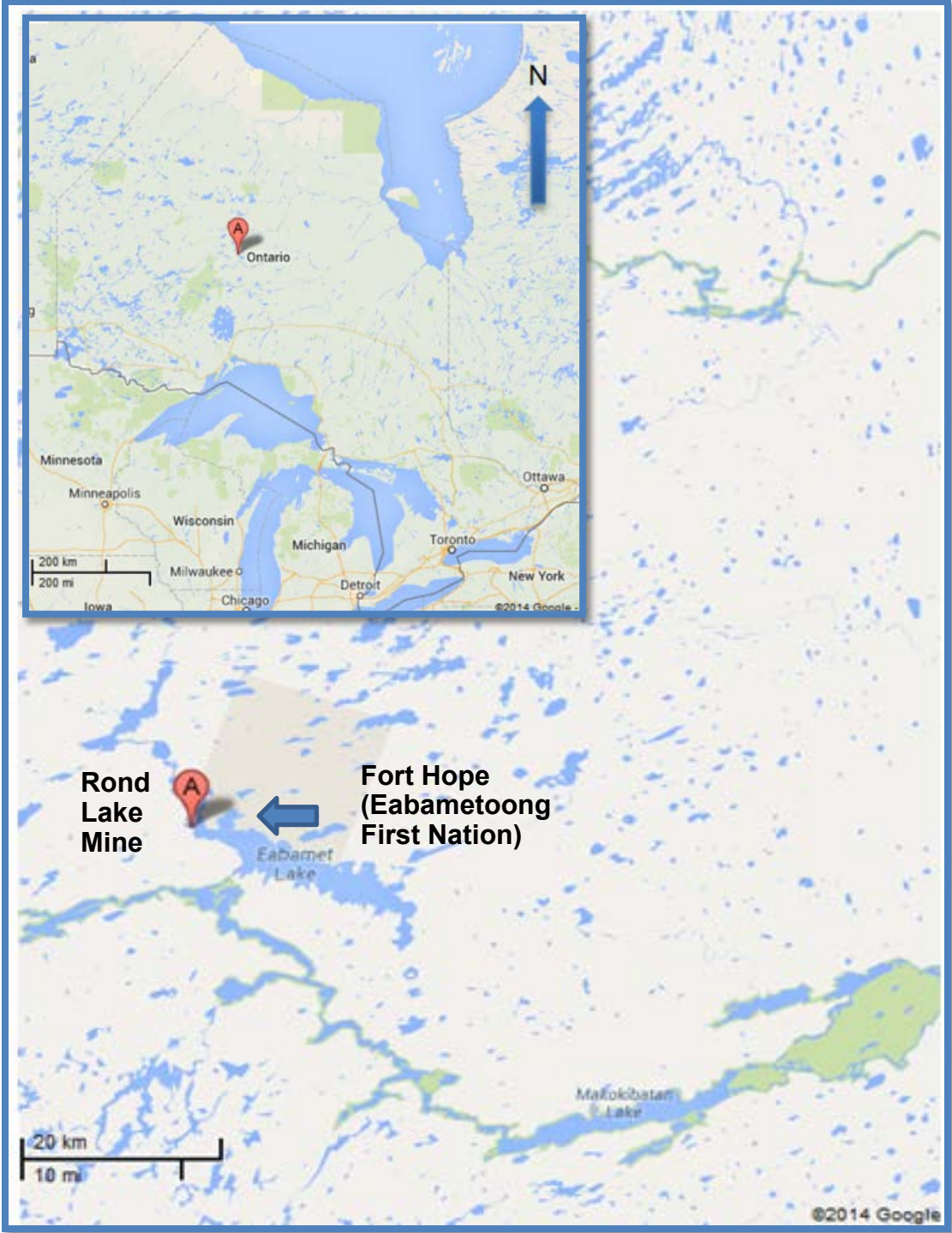
You are invited to provide input and express any concerns about this proposed project. Comments must be received by September 15, 2017. For more information, or to submit comments on the project, please contact:

Eric Cobb  
Environmental Planner  
933 Ramsey Lake Road  
Sudbury, ON P3E 6B5  
Ph. 705-670-5624 Fx: 705-670-5803  
eric.cobb@ontario.ca

Please note that personal information provided in a submission (such as name, address, and telephone number) and your views and opinions are being collected by MNDM under the authority of the *Environmental Assessment Act* for the purpose of engaging in public consultation and making decisions regarding the project. The personal information may also be shared with the Environmental Approvals Branch of

the Ministry of the Environment and Climate Change. The collection, use, and disclosure of this information are all governed by the *Freedom of Information and Protection of Privacy Act*. Questions about the collection of this information should be directed to the contact listed above.

**Figure 1: Project Location**





# Project Description

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## Project Title

Rond Lake Mine Rehabilitation Project (Proposal to Cap an Open Mine Shaft)

## Project Summary

The Rond Lake Mine site (also historically known as the Fort Hope Mine or Golden Hope Mine) is located 1.6 kilometres south of Rond Lake, and approximately eight kilometres northwest of the community of Fort Hope (Eabametoong First Nation) (Figure 1). The mine was in operation from 1927 to 1959, with two trenches, a shaft and lateral works constructed during this time. Mining activities were eventually discontinued with no recorded gold production, and the property has been idle since 1959.

A discretionary rehabilitation activity under the Class Environmental Assessment for Activities of the Ministry of Northern Development and Mines (MNDM) under the *Mining Act* is being proposed to address safety concerns with the open shaft. The proposed work involves the capping of the mine shaft, and the possible removal of two potentially pressurized gas containers if feasible. The shaft is filled with water, and reported to be approximately 40 metres deep, and accesses over 90 metres of underground mine workings.

Due to its remoteness, the mine site can only be accessed by air or by a winter road. The current preferred means of access is by helicopter. A landing pad will need to be cleared near the site in order to ferry equipment and materials into the site. The work is planned as two separate phases occurring in early fall (September / October) over two successive years.

## Screening Results

The Rond Lake Rehabilitation project has been screened to a Category “B” under MNDM’s Class EA.

Category “B” projects are anticipated to have low potential environmental effects that are minor and short-term in nature, well-understood and predictable. These effects are easily managed or mitigated.

The level of interest in regards to the project is expected to be minor and localized, with no anticipated opposition to the undertaking. The Eabametoong First Nation community and other resource users (i.e. trappers, hunters) in the area have expressed an interest in the site being rehabilitated to address safety issues. It was determined that the mine

site has a low potential for containing archaeological resources due to disturbance from previous mining activities, the lack of features associated with archaeological potential, and the absence of previously registered archaeological sites located within or adjacent to the project area.

Although the project will have a positive effect on the human health and safety by removing access to a mine hazard, the project does have the potential to negatively impact Woodland caribou if conducted during a sensitive period. However, sensory disturbance can be avoided with the appropriate timing restrictions.

## **Mitigation Measures**

Woodland caribou is a threatened species under the *Endangered Species Act*.

Telemetry data for the species shows that the mine shaft is within 2 kilometres of a high use area. The General Habitat Description for the Forest-dwelling Woodland Caribou specifies that no activities, which result in sensory disturbance within 10 km of a high use area, should occur between May 1 and September 15 in any year. As a result, project activities are proposed to only occur in late September, over a two year period. In the event any part of the work has to occur during the sensitive period for caribou, the appropriate authorization under the *Endangered Species Act* will be sought.

## **Next Steps**

A 30-day Notice of Opportunity to Provide Input will be provided to the Ministry of Environment and Climate Change as well as other appropriate agencies, and other potentially interested stakeholders and members of the public. The notice will also be posted as an Information Notice on the Environmental Registry and on MNDM's Class EA web page. MNDM will be undertaking consultation and engagement efforts with the Eabametoong First Nation community in order to share information, identify concerns, and discuss opportunities.

Site clearing and ground preparation around the shaft collar and landing pad is proposed to begin in late September 2017. A detailed ground survey around the shaft collar will be conducted once the site clearing and ground prep work is done in order to inform the engineering design and fabrication of the steel cap. The steel cap will be installed over the shaft in late September 2018, along with any other rehabilitation work that may be determined to be appropriate.

Figure 1: Site Location

