

Ministry of MinesMineral Development Branch
Mine Rehabilitation Section933 Ramsey Lake Road, B6
Sudbury ON P3E 6B5
Tel.: 705-670-3023
Fax: 705-670-5803
Toll Free: 1-888-415-9845, Ext 3023**Ministère des Mines**Direction de l'exploitation des minéraux
Section réhabilitation de la mine933, chemin du lac Ramsey, étage B6
Sudbury ON P3E 6B5
Tél. : 705-670-3023
Télééc. : 705-670-5803
Sans frais : 1-888-415-9845, poste 3023

Notice of Completion for a Category C Project
Class Environmental Assessment for Activities of the Ministry of Northern
Development and Mines under the Mining Act

Long Lake Gold Mine Rehabilitation Project

The Ministry of Mines (MINES) has completed our assessment for the Long Lake Gold Mine Rehabilitation Project and access road improvements. The abandoned Long Lake Gold Mine (AMIS #05292) is located at the south end of Long Lake, in Eden Township, Sudbury District, approximately 6km south of the City of Greater Sudbury limits. The mine site borders the community of Atikameksheng Anishnawbek First Nation (AAFN) to the west and was historically accessed by a mine road that transected reserve land. Access to the mine is currently provided via a series of public roads and trails along the southeast side of Long Lake.

The Long Lake Gold Mine operated intermittently from 1908 to 1939. The ore body consisted of gold-bearing arsenopyrite and pyrite that was mined through underground mining methods. A mill was historically present that discharged tailings to low-lying areas where they would be naturally contained by the surrounding topography. The mine features three uncontained tailings' areas (referred to as TA-01, TA-02 and TA-03) estimated to contain approximately 163,000 m³ of tailings. The tailings areas are interconnected by a surface water drainage channel. Over time, the tailings have eroded into the receiving environment resulting in the deposition of tailings into Luke Creek and the south bay of Long Lake. A tailings "delta" has formed in Long Lake at the outlet of Luke Creek.

Long Lake is a densely populated lake with approximately 1,000 permanent and seasonal residents. The waterbody is the source of drinking water for most residents on the lake. Surface water samples collected from the south bay of Long Lake have arsenic concentration greater than the applicable Ontario Drinking Water Standard (ODWS) of 10 µg/L. In response to the elevated arsenic, the Sudbury and District Health Unit issued a drinking water advisory to property owners located in the affected area of the lake. The Ministry of Mines has been providing bottled water to affected residence since the advisory was issued in November 2012. The objective of the Long

Lake Gold Mine rehabilitation project is to reduce arsenic concentrations in the south basin of Long Lake to below the drinking water standard of 10 µg/L.

Project Background

The preferred rehabilitation approach is the construction of an impoundment area within TA-01 and consolidating all tailings, waste rock and contaminated soils that contribute to the arsenic loading to Long Lake within the impoundment. The consolidated tailings and contaminated materials will be covered by an impermeable liner and a vegetative cover to prevent surface water infiltration, oxidation, and transport. The proposed rehabilitation strategy will effectively remove all major sources of arsenic loading to Long Lake. The cover system will also eliminate the pathway for transport of leaching tailings to human and ecological receptors by limiting the infiltration of water into the waste. The rehabilitation approach for the project was originally presented to the public in 2017 as part of the Ministry of Mines' Class Environmental Assessment.

The construction of the impoundment and cover will require a significant quantity of aggregates, topsoil, and other material. In 2017, it was proposed that all aggregate be hauled from an off-site source using an existing network of public roads along the southside of Long Lake. Several concerns were raised by the public regarding the volume of haul traffic on Long Lake Road, Tilton Lake Road, Wavy Trail, and Lakes End Road. In response to these concerns, the Ministry voluntarily withdrew the 2017 Notice of Completion (NOC) to review alternative access routes and aggregate sources.

The Long Lake Gold Mine Rehabilitation project has since evolved to include alternative aggregate sources closer to the project area that will reduce the quantity of aggregate to be hauled on public roads. Although alternatives to the access road have been explored, the network of roads on the southside of Long Lake remains the preferred option for site access. The results of the alternatives analysis and revised Class EA were presented to the public in October 2019 and the NOC posted in December 2019. Multiple Part II Order requests were received, all related to safety concerns associated with the access road and impacts to residences along the haul route. The Ministry of Mines has since completed additional investigations to ensure that concerns related to the road are adequately addressed and considered.

Updates to the Project

The preferred rehabilitation strategy for the Long Lake Gold Mine Project remains the same as what was originally proposed in 2017: the construction of an impoundment area and consolidating all material that contribute to the arsenic loading to Long Lake within the impoundment.

Access to the mine will be provided by an existing network of public roads located along the southeast side of Long Lake. The network of roads includes Long Lake Road, Tilton Lake Road, Wavy Trail, Lakes End Road, and the Site Access Road. Road improvements will be needed to facilitate access by heavy equipment and increased vehicular traffic on public roads. The Ministry retained a consultant to complete technical studies and to prepare the detailed design of the road improvements. The improvements will include some tree/vegetation clearing; trimming back of rock cuts; relocation of six existing utility poles; replacement and/or installation of guide rails; and the replacement and/or installation of new signs. The upgrades aim to improve sight line distances and make the road safer for both local and construction traffic. The proposed road improvements were presented to stakeholders along the access road route on November 21, 2023.

To reduce the haulage of trucks on public roads, the Ministry has obtained permits under the Aggregate Resources Act (ARA) to operate two aggregate pits located closer to the site, referred to as the Wavy Trail Pit and Crown Pit. The Crown Pit is situated along the mine access road, approximately 1 km northeast of the mine. The entirety of the material extracted from the Crown Pit will be utilized to support the remediation. The Wavy Trail Pit (Permit ID 6473) is situated approximately 3km northeast from the project site. The pit was acquired by the Ministry in 2022. Aggregate material extracted from the Wavy Trail pit will be utilized for the road improvement construction. The Ministry is proposed to amend the existing permit of the Wavy Trail pit to operate as a quarry. Utilizing the abovementioned aggregate sources closer to the mine site will not only minimize the haulage of material on public roads but will also reduce the projects greenhouse gas emissions from vehicular traffic and minimize the indices of wildlife-vehicle interactions.

It is noted that environmental impacts associated with the two aggregate pits have been assessed by the Ministry of Natural Resources and Forestry in accordance with the Aggregate Resources Act (ARA) and the *Class EA for Resource Stewardship and Facility Development Projects* and is excluded from this Class EA.

The road improvement work is anticipated to start in 2024 and take two construction seasons to complete, while the rehabilitation activities is anticipated to be initiated in 2025 and take three construction seasons.

Provide Comments

The undertaking has been assessed as a Category C project, in accordance with the *Class Environmental Assessment for Ministry of Northern Development and Mines Activities under the Mining Act* (Class EA).

You are invited to provide any new information or concerns related to this project by **March 4, 2024**. To obtain a copy of the project documentation, receive additional information, or to submit new concerns regarding the project, please contact:

Michaela Haring
Environmental Planner
933 Ramsey Lake Road
Sudbury, ON P3E 6B5
Ph: 249- 885- 3631
Michaela.Haring2@Ontario.ca

After March 4, 2024, if MINES is satisfied that there are no outstanding concerns, the project will be implemented as planned without notice. This notice was issued on January 30, 2024

Section 16(6) Order Request

In addition, a request may be made to the Ministry of Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should be sent to the contacts below and include the requester's contact information and full name for the ministry.

Requests should specify what kind of order is being requested (request for conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate, or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request. This will ensure that the ministry is able to efficiently begin reviewing the request.

The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks

135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
EABDirector@ontario.ca

A copy of the request must also be sent to the Ministry of Mines contact identified above my mail or email.

Your Privacy

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 MINES 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, Conservations and Parks. 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.