

Project Description: Lockerby Mine – Disposition of Crown-owned chattels

PROJECT OVERVIEW

The Lockerby Mine (AMIS #05606) is a former underground copper-nickel mine located in Denison Township, approximately 17 km southwest of the community of Chelmsford and 30 km west of the City of Greater Sudbury, Ontario. The mine is accessed from the north off Highway 144 via Gordon Lake Road (also known as Lockerby Mine Access Road). The mine is bordered by the Crean Hill mine to the west. The location of the mine is illustrated below on Figure 1.

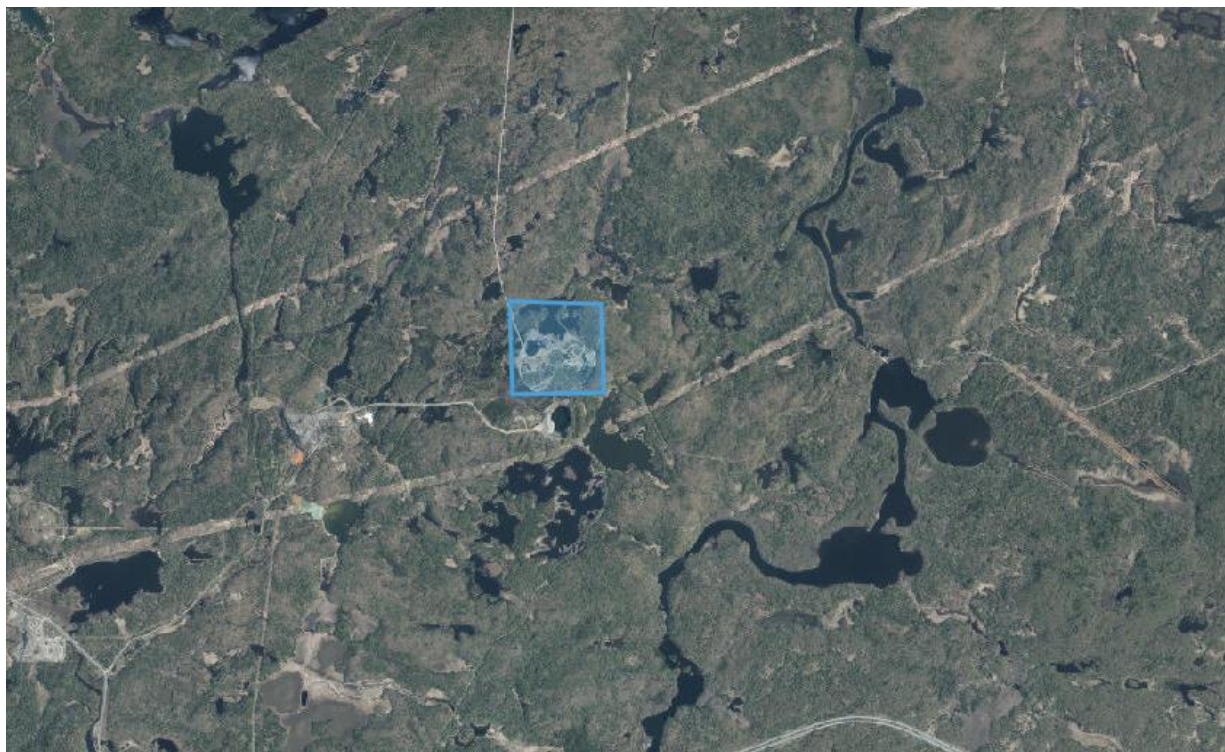


Figure 1 – Site Location Map (Image Source: NHIC Map 2024).

The underground mine operated discontinuously since the 1960's and suddenly ceased operations in 2015. The mining rights were forfeited to the Crown in early 2020. An ore pile remains at the mine with an estimated volume of 27,000 m³. There is evidence of metal leaching/acid rock drainage (ML/ARD) associated with the ore pile which has contaminated an adjacent property and poses a risk to aquatic life in surrounding surface water features. The location of the ore pile is illustrated below in Figure 2.

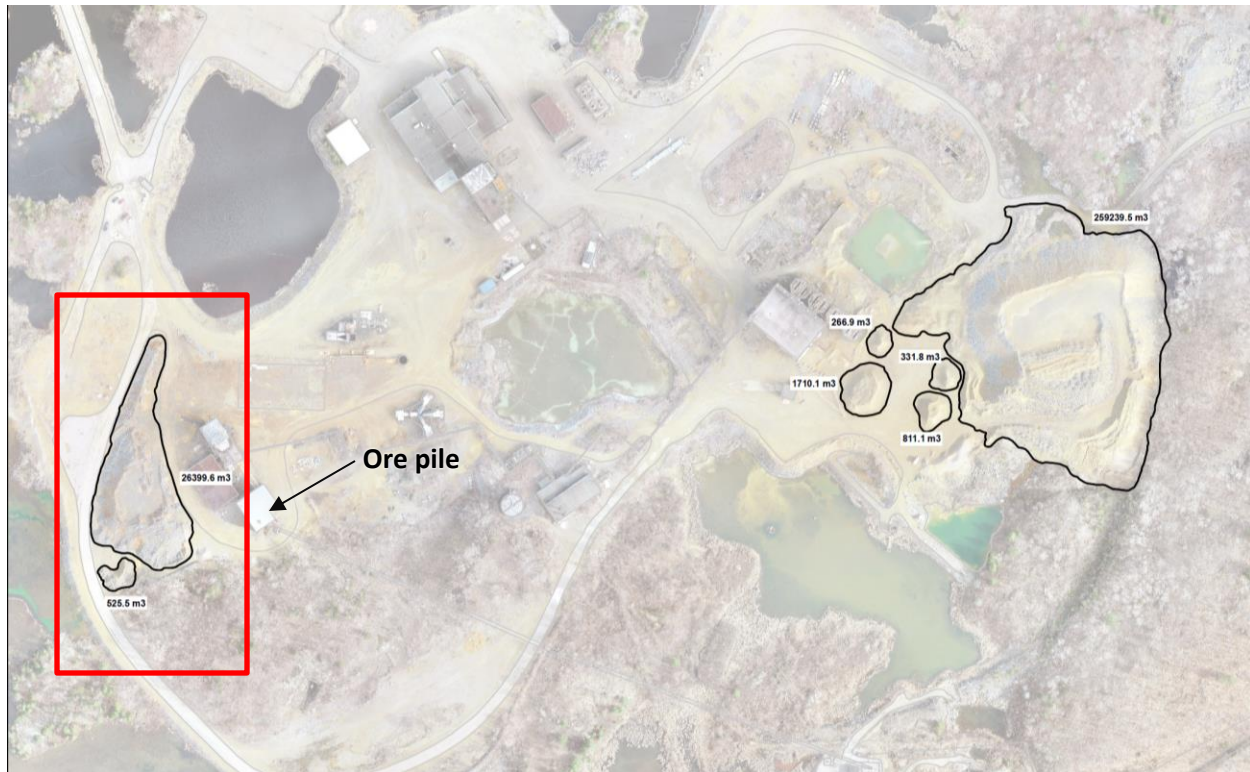


Figure 2 – Location of ore pile.

In accordance with Section 53 (1) of the Mining Act, all chattels remaining on the property within six months after the forfeiture, including ore, belong to the Crown and may be sold or otherwise disposed of by the Minister. The removal of the ore pile is a priority by the Ministry due to the ongoing contamination risk to adjacent properties and surface water features. The proposed work is the disposition of the ore pile through a competitive procurement process. The removal of the ore from the property is estimated to occur over one to two weeks.

CLASS EA SCREENING

The proposed rehabilitation activities are subject to The Ministry of Mines Class Environmental Assessment (EA) Process, as prescribed in the *Class Environmental Assessment for Activities of the Ministry of Northern Development and Mines under the Mining Act* (amended 2018). The undertaking has been screened as a Category B undertaking with low potential for environmental effects.

ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES

The Ministry of Mines is seeking input on the undertaking and proposed mitigation measures. Several environmental effects associated with the undertaking have been identified during the Class EA screening process. A summary of negative environmental effects and proposed mitigation measures are provided below in Table 1.

Table 1 - Environmental Effects and Mitigation measures

Criteria	Description of Environmental Effect	Proposed Mitigation Measure
<p>Surface water/ fish and other aquatic species or habitat</p>	<p>According to the NHIC Map, there are no provincially significant wetlands on or adjacent to the site.</p> <p>The mine is situated between the Ella Lake and Zilch Lake watershed, both of which empty into the Vermillion River. The property is surrounded by several waterbodies and the area is known to provide habitat to various fish and aquatic species. The proposed activities will improve water quality in surrounding surface water features by removing a source of contamination to the land.</p> <p>There is the potential to negatively affect surrounding surface water features through spills or sedimentation.</p>	<p>An emergency spill kit will be always readily available during construction activities and all workers trained on proper use. Should a spill occur, regardless of its severity, it will be the responsibility of the Site Supervisor to ensure that the Ministry of Environment, Conservation and Parks is immediately notified through the Ontario Spill Action Centre (1-800-268-6060). The MINES Project Manager will be immediately notified, and all applicable provincial and federal regulations adhered to.</p> <p>Sediment and erosion controls (e.g., erosion control fencing, fabrics, straw, sediment trap) will be used to mitigate erosion of exposed soils and sedimentation to adjacent waterbodies.</p> <p>Access to banks or areas adjacent to waterbodies will be limited to the extent practical to protect the structural integrity of the banks and shorelines.</p>
<p>Terrestrial wildlife/ Species at risk and species at risk habitat</p>	<p>According to the Natural Heritage Information Centre (NHIC) map, there are recorded observations of Blanding’s Turtle, Snapping Turtle, and Midland Painted Turtle adjacent to the mine. The ore pile is not expected to support turtle nesting habitat.</p> <p>There is the potential to encounter turtles or other terrestrial wildlife during the completion of the work.</p> <p>Wildlife-vehicle collisions may cause injury/mortality to individual animals.</p>	<p>If any SAR are encountered, work will immediately stop and the MECP consulted as to how to proceed. Applicable regulatory requirements will be adhered to, and mitigation measures implemented to avoid impacting SAR.</p> <p>The risk of mortality and injury to wildlife will be reduced by enforcing speed limits on access roads. The work area will remain free of litter and all waste disposed of in accordance O.Reg 347.</p>

NEXT STEPS

The Ministry of Mines will be preparing a competitive procurement for the disposition of the Crown-held chattels. The procurement process will be completed in accordance with Ontario’s procurement directive. It is estimated that the ore pile can be removed from the site over one to two weeks.