



Project Description: Lupin Mine Winter Access Road

Purpose:

In 2019, Lupin Mines Incorporated (Lupin Mines), a wholly owned subsidiary of Mandalay Resources Corporation, contracted Nahanni Construction Ltd. to permit and construct a winter access road to a portion of the Tibbitt to Contwoyto Winter Road (TCWR) route from the Ekati Mine turnoff on Lac de Gras in the Northwest Territories (NT; Lac de Gras) to the Lupin Mine in Nunavut (NU; Lupin) in order to construct and operate this portion of the TCWR to mobilize and demobilize equipment and supplies that may be used for ongoing reclamation and closure of Lupin in the Kitikmeot Region of Nunavut (the Program).

Authorizations for this work were a Type A Land Use Permit MV2019F0026 in Northwest Territories and a Class A Land Use Permit N2019F0001 in Nunavut.

Lupin Mines plans to continue its reclamation work during the 2024, 2025 and 2026 field seasons. To complete this work, Lupin Mines must transport equipment from Yellowknife to the Lupin Mine during the 2024 and 2025 winter seasons.

To ensure on-time execution of the reclamation and closure planning approved by the Nunavut Water Board (NWB) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Lupin Mines is requesting new authorization under a Type A Land Use Permit to include additional supporting activities in Northwest Territories, and is applying for a Type B water licence in Nunavut.

It is understood that the Tibbitt to Contwoyto Joint Venture (TCJV) currently holds a licence of occupation for the entire winter road route; conversations with TCJV personnel are underway to discuss current plans to construct the segment of the TCWR extending from Lac de Gras to Lupin.

Location:

The Program will extend from Lac de Gras to Lupin along the existing TCWR route, traversing 95 km in NT and 118 km in NU (213 km in total).

Mobilization to construct and operate this portion of the winter road will occur from the existing seasonally constructed portion of the TCWR from Yellowknife to Lac De Gras, and/or from Lupin.

As the route crosses the NT/NU border, this is a transboundary project.

Timing:

Use is expected to be seasonal for two (2) years, commencing in January 2025 and recurring in 2026, however, as a contingency, use over a five (5) year period is being sought in the event of unforeseen delays or schedule changes.

Construction is expected to occur in December and January each year.

Operations are expected to occur from January to April, depending on ice conditions.

Closure will occur seasonally once ice conditions are such that ice travel is deemed unsafe. Typically, this will occur in April.

Scope:

To execute the Program, authorization of the following activities is being sought:

- Construction, operation and closure of a winter road occurring within the existing corridor for the TCWR from Lac de Gras to Lupin;
- Use of up to two temporary mobile construction camps in Northwest Territories;
- Establishment of temporary fuel caches in Northwest Territories for up to 43,850 L diesel 2,550 L gas, 25 gallons of various lubricants and 1000 lbs of propane;
- Staging equipment and fuel year-round in Northwest Territories;
- Withdrawal of up to 299 m³/day of water in Nunavut.

Construction of the winter road will follow current best practices and standards for winter road construction. Depending on conditions and staging area availability, construction will either start at the Lupin mine with crews working southward, or crews may also start simultaneously at Lac de Gras and the Lupin mine, working both northwards and southwards. Crews will either be accommodated at the Lupin mine site or accommodated in a mobile construction camp.

Operation of the winter road will occur generally in accordance with the procedures already in place for the TCWR, along with those associated with this application. Operational activities include:

- Transport of equipment and supplies required for mine reclamation activities; and,
- Maintenance of the winter road including removal of blowing snow and repairing potholes and rough areas.

Should the need arise during operation of the winter road, the staged temporary construction camps may be used as emergency shelters.

Seasonal closure of the winter road will occur once conditions are deemed unsafe for operations.

Equipment and fuel may be staged along the route during construction, operation and seasonal closure to support late season use of the Project area, and early season construction, without being reliant on the TCWR and weather conditions south of the Project area.

Water for industrial use (road and portage construction and maintenance; NU and NWT) and domestic use (temporary camps; NWT only) will be withdrawn from nearby lakes. Withdrawal volumes will be within applicable permitted limits.

Waste generated over the life of the project will involve a combination of on-site treatment and disposal (incinerate camp waste, discharge black and greywater to upland sumps) and off-site treatment and disposal, with waste backhauled to approved facilities at the Lupin mine site or Yellowknife. Waste generation is limited to Northwest Territories.

Alternatives:

Alternatives to the project have been considered and involve:



- TCJV construct and operate the TCWR. Personnel at the TCJV indicate that this option is not favourable as they currently have no plans to construct this portion of the TCWR in the upcoming years.
- Airlift supplies and equipment into Lupin. Equipment and supplies required to support ongoing reclamation activities are of a size and weight that is either not possible, logistically difficult and/or cost prohibitive to transport to site by air.

Accordingly, it is the Applicant's preference to seasonally construct, operate and close the TCWR from Lac de Gras to Lupin themselves, to ensure an economic and efficient means of transporting supplies and equipment to the Lupin mine in support of ongoing reclamation and closure activities.