



## **NIRB Application for Screening #125435**

### **Lupin Mine Winter Access**

**Application Type:** New

**Project Type:** Winter Road / Winter Trail

**Application Date:** 1/14/2019 10:40:55 AM

**Period of operation:** from 0001-01-01 to 0001-01-01

**Proposed Authorization:** from 0001-01-01 to 0001-01-01

**Project Proponent:** Kenny Ruptash  
Nahanni Construction Ltd.  
Box 2070 100 Nahanni Drive  
Yellowknife NT X1A 2P6  
Canada  
Phone Number:: 867-873-2975, Fax Number::

## DETAILS

### Non-technical project proposal description

English: Nahanni Construction Ltd. (NCL) wants to build the winter road from the diamond mines in NWT to the Lupin Mine in Nunavut in order to transport equipment and supplies to Lupin for ongoing reclamation. Currently, the winter road is only built to the diamond mines, not all the way to Lupin; NCL wants to use the existing winter road to the diamond mines, and then build the rest of the road to Lupin themselves. NCL plans to need the road for 2-5 years. They will build it in December and January each year, and then move the required equipment and supplies between Lupin and Yellowknife from January to April. The winter road will close in April once the ice becomes unsafe. Please see attached detailed Project Description.

French: N/A

[illegible]

Inuinnaqtun: Nahanni Construction Ltd.-kut (NCL) ukiumi apqutiliurumayut piniquitikanik uyaraktaqvikmit Nunatiami Lupin-mut Uyaraktaqvikmut Nunavumi akyariagani piqutinik ihuaqutiniklu Lupin-mut atuqtauyukhanik kiklimaktiqnigani. Taja, ukiumi apquut hanahimayuk piniquitikanik uyaraktaqvikmut, Lupin-mut tikimagituq; NCL-kut aturumayut atuqtumik ukiumi apqunmik piniquitikanik uyaraktaqvikmut, hanalugilu ilaga apqutauyuup Lupin-mut inmik.NCL-kut upalugaiqtut aturiagani apqutauyuq malruuknit talimanut ukiuni. Hanaliquiaqtut December-mi January-milu aipagutuaaraagat, nuulugilu aturiaqaqtut piqutit ihuaqutilu akungani Lupin-mit Yalunaimilu January-mit April-mut. Ukiumi apquut umikniaqtuq April-mi hiku nagiaqnaqhikpat.

## Personnel

Personnel on site: 15

Days on site: 315

Total Person days: 4725

Operations Phase: from 2019-01-24 to 2019-02-07

Operations Phase: from 2019-02-07 to 2019-04-07

Closure Phase: from 2019-04-07 to 2019-05-07

### Post-Closure Phase: from to

## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Winter road route	Access Road	Crown	See attached Regulatory History	Route in Nunavut is almost entirely on lakes therefore limited potential to interact with archaeological sites	300 km southwest of Kugluktuk
Winter road route	Camp	Crown	See attached Regulatory History	Route in Nunavut is almost entirely on lakes therefore limited potential to interact with archaeological sites	300 km southwest of Kugluktuk

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Kugluktuk	See attached Engagement Summary	HTO, KIA, Landusers	2018-11-13

## Authorizations

Indicate the areas in which the project is located:

Transboundary  
Kitikmeot

### Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Other	Land Use permit from the MVLWB	Applied, Decision Pending		
Aboriginal and Northern Affairs Canada	Land Use permit	Applied, Decision Pending		
Nunavut Water Board	Approval without a licence	Not Yet Applied		
Fisheries and Oceans Canada	Letter of Advice 18-HCAA-01591	Active	2019-01-09	

### Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Construction crews may be mobilized to the Lupin Mine by air.	
Land	Crews will access the road via the existing Tibbitt to Contwoyto Winter Road, from Yellowknife to the Ekati turnoff.	

### Project accomodation types

Temporary Camp  
Other,

## Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Loader	2	various	Snow clearing
Ice profiler	2	tbd	Determine ice thickness
Pumps	8	various	winter road construction
Dozer	2	D6	Portage construction
Haglund	1	various	Snow compaction
Water truck	2	various	Road construction
snow cat	2	various	snow clearing
temporary, mobile camp on sled	1	tbd	Emergency shelter for construction crew
grader	3	various	snow clearing
pickup	8	various	snow removal, crew, supplies and fuel (in a tidy tank) transport
side by side	1	tbd	crew transport
Super B	40	tbd	Fuel and lubricant transport
end dump truck	10	tbd	transport parts and tires
drill rig	1	tbd	transport for use at Lupin
B train	2	tbd	transport supplies
flat deck	4	tbd	transport supplies
snowmobile	6	tbd	Transport people and supplies, routing.

### Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	10	50	500	Liters	Pump fuel
Diesel	fuel	6	4560	27360	Liters	Fuel for trucks and equipment-tidy tanks
Propane	fuel	5	100	500	Lbs	Fuel for emerg shelter
Diesel	fuel	5	210	1050	Liters	Fuel for emergency shelter
Diesel	fuel	38	40000	1520000	Liters	Transport for use at Lupin
Lubricants	hazardous	5	5	25	Liters	vehicle operation and maintenance
ANFO	hazardous	1	10400	10400	Kg	Transport for use at Lupin. Bags or sticks, to be confirmed
Lime	hazardous	1300	70	91000	Lbs	Transport for use at Lupin
Lubricants	hazardous	2	40000	80000	Liters	Transport for use at Lupin

**Water Consumption**

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
49	Pump fitted with a screened intake	Adjacent lakes

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Combustible wastes	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities
Camp	Greywater	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities
Access Road	Hazardous waste	Unknown	Backhaul to suitable facility offsite	Recycle or disposal
Camp	Hazardous waste	unknown	Backhaul to suitable facility off site	Recycle or disposal
Camp	Non-Combustible wastes	Minimal	Backhaul to offsite waste receiver	Recycle
Camp	Sewage (human waste)	Minimal	Backhaul	Disposal at Lupin Mine's existing approved facilities

### Environmental Impacts:

See the attached effects assessment, Environment and Heritage Resources Protection Plan, the Wildlife Protection Plan, the Abandonment and Restoration Plan and the Spill Contingency Plan.

# **Additional Information**

## **SECTION A1: Project Info**

The proposed road route is existing and has been used to supply the Lupin Mine in the past. There is 1 portage identified in Nunavut, occurring in the same location as for past road construction, at the south end of Contwoyto Lake near the NWT border. The road route largely occurs on Contwoyto Lake. Exact routing along the lake will occur based on existing conditions experienced at the time of construction. The road will generally be single lane up to 50 wide, with low sloped snow banks to manage snow drifting and to support wildlife crossing. At the portage, a combination of snow fill and ice may be used to construct the road surface, depending on conditions observed at the time of construction. Road maintenance will occur as needed and may include grading, flooding, and snow removal. The road is private, and only project related traffic is planned. Project related traffic during operations is identified in the Equipment Use tab of this application, and cargo is listed under the Materials Use tab. It is expected that approximately 40 super b trains of fuel will go north full and south empty as well as 5 pick up trucks, 10 rock trucks/end dumps and approximately 5 flat beds of supplies. Similar traffic use is expected in the second year. Trucks typically travel along the road in convoys of 3 vehicles. The road route is located entirely within the Nunavut Settlement Area. Other regulatory requirements are as listed within this Application.

## **SECTION A2: Allweather Road**

## **SECTION A3: Winter Road**

Surface preparation includes snow clearing, and if needed, flooding to increase ice thickness. Snow berms may be constructed and compaction may be employed at the portage and other areas where needed, depending on the conditions encountered on site at the time of construction. As the majority of the road route in Nunavut traverses Contwoyto Lake, Contwoyto Lake will be the water source for any flooding that may need to occur. Traffic speeds will occur in accordance with those in place for the Tibbitt to Conwayto Winter Road, as follows for haul trucks: -Driving on Lakes: 25 km/hr loaded, 35 km/hr empty; -Driving on Portages: 30 km/hr loaded and empty; -Traveling through flood zones: 10 km/hr; -Traveling on and off lakes: 10 km/hr loaded, 25km/hr empty; Pickup trucks may travel up to 80 km/hr. There will be a 24 hr security patrol on the road in a pick up truck at all times to monitor road safety, conditions and wildlife. Contwoyto Lake is a fish bearing water course.

## **SECTION B1: Project Info**

## **SECTION B2: Exploration Activity**

## **SECTION B3: Geosciences**

## **SECTION B4: Drilling**

## **SECTION B5: Stripping**

## **SECTION B6: Underground Activity**

## **SECTION B7: Waste Rock**

## **SECTION B8: Stockpiles**

## **SECTION B9: Mine Development**

## **SECTION B10: Geology**

## **SECTION B11: Mine**



**SECTION B12: Mill**

**SECTION C1: Pits**

**SECTION D1: Facility**

**SECTION D2: Facility Construction**

**SECTION D3: Facility Operation**

**SECTION D4: Vessel Use**

**SECTION E1: Offshore Survey**

**SECTION E2: Nearshore Survey**

**SECTION E3: Vessel Use**

**SECTION F1: Site Cleanup**

**SECTION G1: Well Authorization**

**SECTION G2: Onland Exploration**

**SECTION G3: Offshore Exploration**

**SECTION G4: Rig**

**SECTION H1: Vessel Use**

**SECTION H2: Disposal At Sea**

**SECTION I1: Municipal Development**

**Description of Existing Environment: Physical Environment**

Refer to the Environment and Heritage Resources Protection Plan, attached.

**Description of Existing Environment: Biological Environment**

Refer to the Environment and Heritage Resources Protection Plan and the Wildlife Protection Plan, attached.

**Description of Existing Environment: Socio-economic Environment**

Refer to the Environment and Heritage Resources Protection Plan and the Community Engagement Plan, attached.

**Miscellaneous Project Information**

The following additional documents are attached: Abandonment and Restoration Plan; Spill Contingency Plan; Waste Management Plan.

## **Identification of Impacts and Proposed Mitigation Measures**

See the attached effects assessment, Environment and Heritage Resources Protection Plan and the Wildlife Protection Plan.

## **Cumulative Effects**

It is expected that there will be a positive cumulative effect arising from the project as works are in support of ongoing reclamation efforts at the Lupin Mine and progressive reclamation is considered to be beneficial to the physical and biological environment as well as to land users.

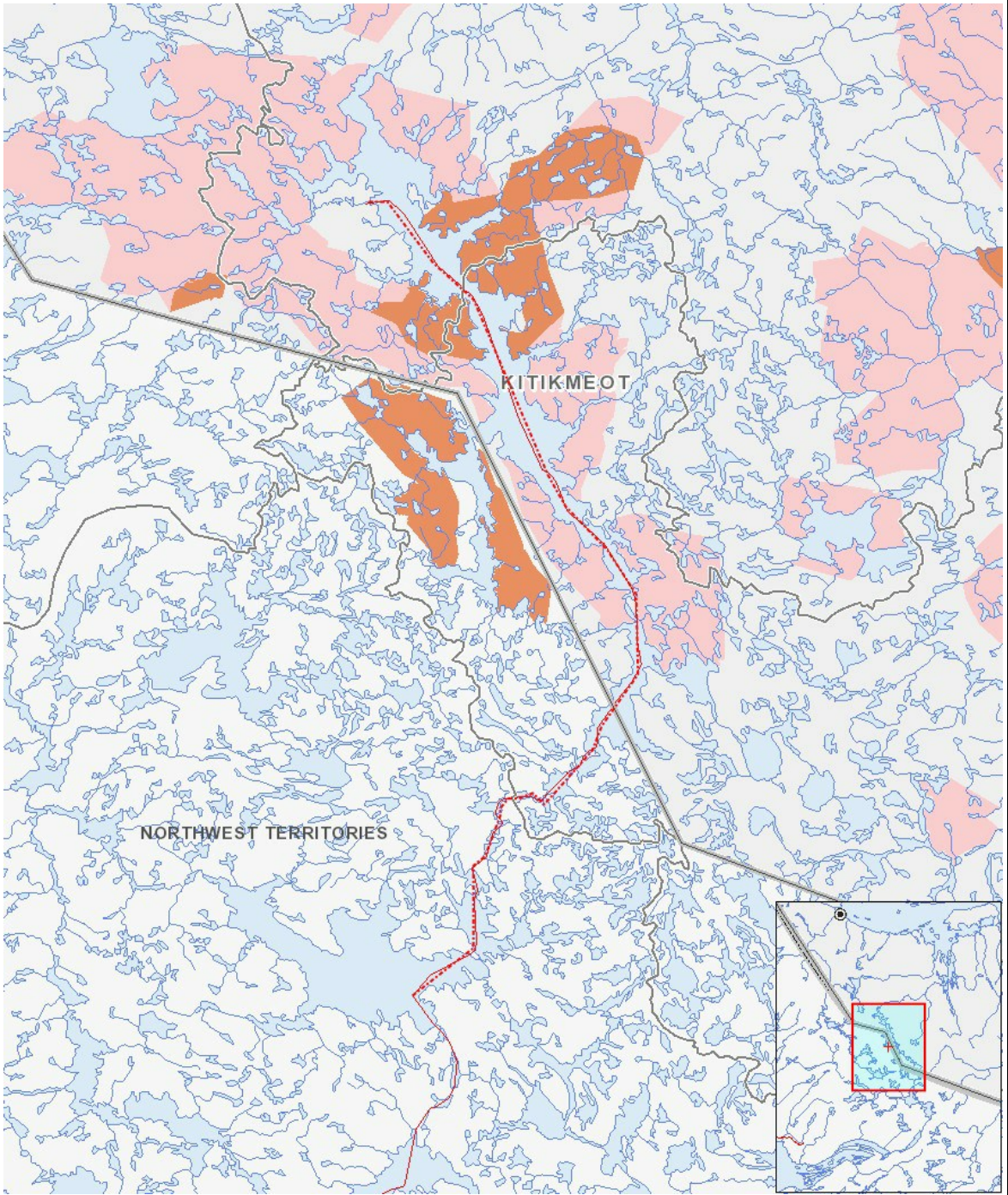
# Impacts

## Identification of Environmental Impacts

	P H Y S I C A L																B I O L O G I C A L																S O C I O - E C O N O M I C															
	Designated environmental areas																Vegetation																Archaeological and cultural historic sites															
	Ground stability																Wildlife, including habitat and migration patterns																Employment															
	Permafrost																Birds, including habitat and migration patterns																Community wellness															
	Hydrology / Limnology																Aquatic species, incl. habitat and migration/spawning																Community infrastructure															
	Water quality																Wildlife protected areas																Human health															
	Climate conditions																																															
	Eskers and other unique or fragile landscapes																																															
	Surface and bedrock geology																																															
	Sediment and soil quality																																															
	Tidal processes and bathymetry																																															
	Air quality																																															
	Noise levels																																															

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	polyline	Winter road route
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