



NIRB Application for Screening #125535

Baker Lake quarry #1

Application Type: New

Project Type: Pits and Quarries

Application Date: 6/2/2020 2:57:58 PM

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

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

Project Proponent: Randy Mercer
Government of Nunavut
P.O. Box 490
Rankin Inlet Nunavut X0C 0G0
Canada
Phone Number:: 867-645-8115, Fax Number:: 867-645-8143

Inuinnaqtun: Not applicable

Personnel

Personnel on site: 2

Days on site: 1800

Total Person days: 3600

Operations Phase: from 2020-03-29 to 2040-09-22

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
quarry boundary	Quarry/Borrow pit	Commissioners	The current use of this site is for quarrying purposes. It is estimated that this site was used as a quarry since at least the 1980's. Prior to that date, this site has no use.	This site has no archaeological or paleontological value.	This quarry is 3.6 kilometres west from the community of Baker Lake. The Inuujaarvik Territorial Park within lot 444 plan 4664 is located 2.2 kilometres east of the quarry site. No known protected areas within or around the quarry.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Baker Lake	Sheena Iksiraq, Planning and Lands Administrator	The Municipal corporation of the Hamlet of Baker Lake	2020-06-02
Rankin Inlet	Randy Mercer, Manager, Lands Administration	Government of Nunavut-Dept. of CGS	2020-06-02

Authorizations

Indicate the areas in which the project is located:

Kivalliq

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Government of Nunavut, Community Government & Services	The quarry boundary is located on Untitled Municipal Land, which is administered by CGS. CGS is the applicant and we approve of this NIRB application.	Active		
Hamlets and Municipalities	Senior administrative officer with the Hamlet of Whale Cove gave consent to move forward with this application.	Active		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Land	There is an existing road that was and is still being used to access the site. CAT loaders, excavators and dump trucks will use this road.	

Project accomodation types

Community

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Loader	1	5.7m x 2.7m x1.5m	excavate quarry material
dump truck	1	8m x 2.5m x 3.4m	haul quarry material
Track Excavator	1	10m(L) x 3.2m (H) x 3.2m (W)	excavate quarry material

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Information is not available						

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0		

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Information is not available				

Environmental Impacts:

The natural vegetation such as moss and other arctic plants on the surface will be disturbed due to the extraction process of the aggregate. After the quarry is depleted of usable aggregate, the edges of the quarry will be smoothed out to prevent steep inclines. The Vegetation will grow back over time.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

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

•This quarry site will be used to extract quarry material such as gravel, sand, and rock. A CAT track excavator will be used to dig and loosen the soil for extraction. A CAT loader will be used to stockpile, and a CAT dump truck will be used to haul the aggregate to and from the quarry. •Extraction of aggregate is estimated to go down 3-4 metres. •The closest waterbody is located 2.1 kilometres east of the quarry. •There will be no blasting or washing in this activity but there will be stockpiling of aggregate.

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

•The site is already being used for quarrying purposes. It was estimated this quarrying started in the early 1980's. Prior to quarrying there was no land use. •There is an existing road that branches off the main road between the community of Baker Lake and the terminal building that is and will be used to access this quarry site. •There is no evidence of ice lensing, Thero karsts, ground or rock instability and seismicity. •There are no heritage sites, sport and commercial fishing areas, migration routes, protected wildlife areas or sites of cultural or historical significance, or areas of natural beauty within or around the quarry boundary. •Surface and bedrock geology, permafrost, and, sediment and soil quality are not known. •There are no waterbodies in the immediate vicinity of the quarry boundary.

Description of Existing Environment: Biological Environment

•Since the current use of the site is used for quarrying purposes, the area has no vegetation due to the excavation process and has several stockpiles of aggregate. •300 metres west of the quarry site located on Lot 1001, Quad 66A/08 plan 2068 is a federal reserve under the name of Transport Canada for communication equipment for the airport. •There are no wildlife or bird migration routes nor is there any species of concern in this area.

Description of Existing Environment: Socio-economic Environment

•The site is located 2.6 kilometres west of the community of Baker Lake and 2.2 kilometres west of the Inuujaarvik Territorial Park located within lot 444 plan 4664. •There are no archaeological or culturally significant sites within or around the quarry. •There is no subsistence harvesting, tourism, trapping or guiding operations in the quarry. •As mentioned previously, there is an existing road that connects this quarry to the community. This road will be used to haul aggregate from the quarry. •Since the quarry site is located 2.6 kilometres from the community of Baker Lake, the effect of the extraction process on the well-being of the residence will be minimal.

Miscellaneous Project Information

•There is no abandonment and decommissioning plan, emergency response plan, comprehensive spill/prevention plan, or monitoring and management plans. •The site is not located within the Caribou protection areas or schedule 1 Species at Risk known locations.

Identification of Impacts and Proposed Mitigation Measures

NIL

Cumulative Effects

- The quarry site will limit future expansion of community subdivisions into this area, but this is a minimal effect in the short term because the community of Baker Lake is expanding North and this site is located west of the community.

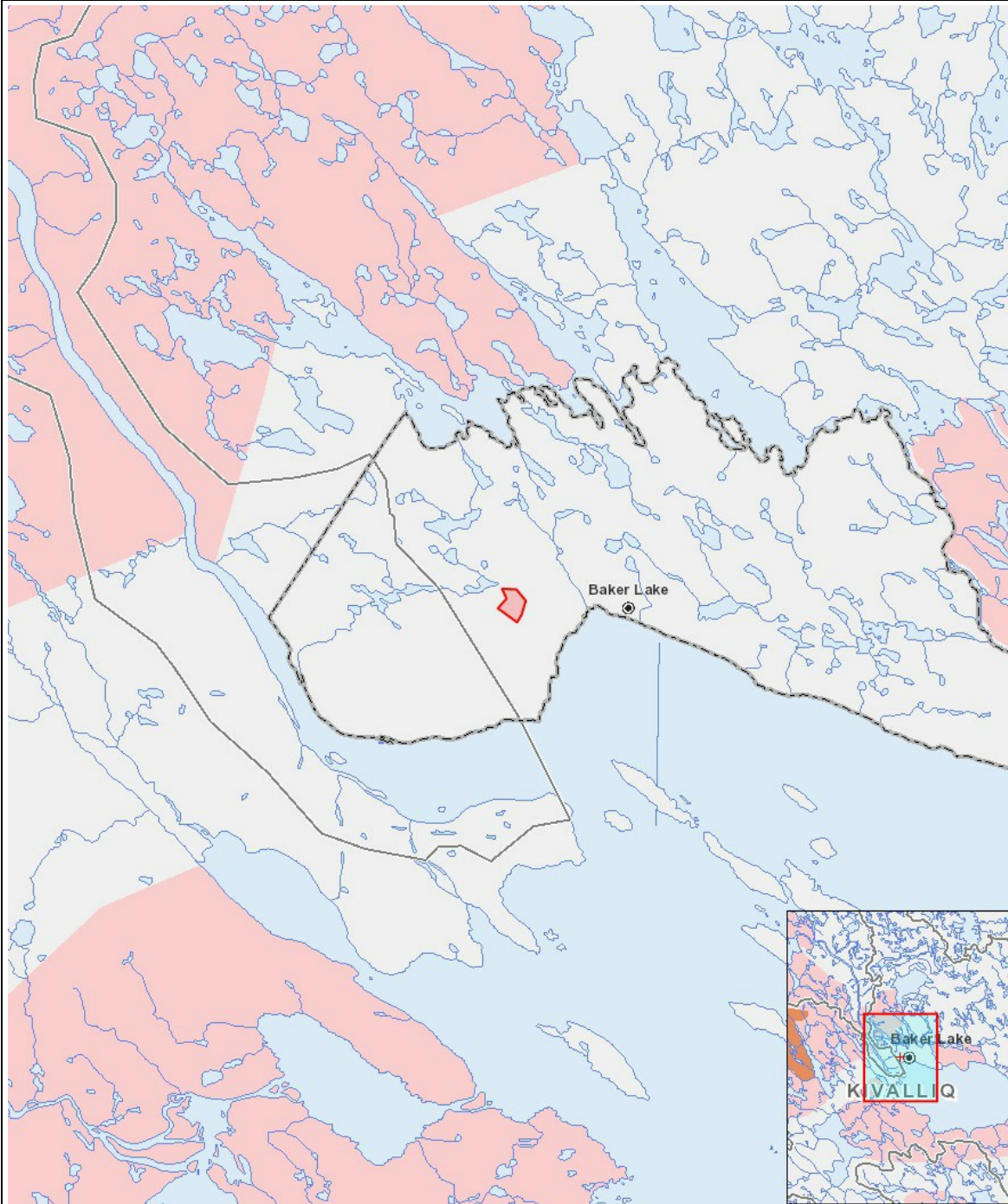
Impacts

Identification of Environmental Impacts

		PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	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	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Operation																										
Quarry/Borrow pit		-	U	U	-	-	-	-	-	U	U	-	-	N		N	-	-	-	-		-	P	P	P	-
Decommissioning																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

1	polygon	quarry boundary
---	---------	-----------------