NIRB Uuktuutinga Ihivriuqhikhamut #125538
Rankin Inlet sand pit

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Pits and Quarries

Uuktuutinga Ublua: 6/2/2020 7:33:20 PM

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

Piumayaat Angirutinga: from 0001-01-01 to 0001-01-01

Havauhikhaq Ikayuqtinga: Randy Mercer
Government of Nunavut
P.O. Box 490
Rankin Inlet Nunavut X0C 0G0
Canada
Hivayautit Nampanga:: 867-645-8115, Kayumiktukkut Nampanga:: 867-645-8143

QANURITTUT

Tukihiannaqtunik havaariyauyumayumik uqauhiuyun

Qablunaatitut: Rankin Inlet sand pit is a site currently being used by the Hamlet of Rankin Inlet and members of the public to extract sand and other fine materials to meet the construction demands of the community. The use of the aggregate will vary widely. The Hamlet will use it for municipal purposes such as road construction and maintenance. The public will use it for private purposes. The site will be used in the summer months (June-September) of each year until all the aggregate is extracted. The frequency of use will depend on the construction projects in Rankin Inlet and the need for sand and other fine materials for that year. The quarry is located 7.3 kilometers north of the community of Rankin Inlet and 222 metres south of the Iqalugaarjuup Nunanga Territorial Park.This site is already being used for quarrying purposes. The exact date of its first use is not known but it is estimated to have occurred in the early 1990's. The total volume of quarry material that was taken from the site is not known.All the aggregate within the quarry is loose sand; extraction will be done by CAT track excavators and wheel loaders. Dump trucks of varying make and models will be used to haul aggregate to and from the quarry site. No blasting of rock outcrops is planned. There is an estimated volume of 300,000 cubic metres of material left in the quarry.There is an existing road that connects the community to the territorial park that passes by the Rankin Inlet sand pit. This road will be used to access the site. It is used frequently by both the Hamlet, community residents, and contractors.The quarry is located on untitled municipal land which is administered by the department of Community and Government Services (CGS). Once approval for this the site is obtained, CGS will go into a quarry administration agreement (QAA) with the Hamlet which allow the Hamlet to issue quarry permits instead of CGS. The Hamlet will stockpile the aggregate and then members of the public will obtain quarry permits from the Hamlet. The fees from these quarry permits will be stored in a Hamlet financial account which will be used to maintain the road to the quarry site, cover administrative costs, and to remediate the quarry.After the quarry is depleted, the Hamlet will smooth out the edges of the site to ensure no steep inclines are present. Vegetation that was present prior to the use of the site will grow back over time.Due to its proximity to the community of Rankin Inlet, its estimated volume, and the existing road that reaches the site, makes the sand pit a desirable site for the extraction of quarry material.

Uiviititut: not applicable

Inuktitut: ᑲᖏᖅᓂᓂᕆᑎᑦ ᑐᐊᕐᓇᖅᓯᐅᑦ ᐃᓐᓇ ᐊᑐᖅᑕᐅᔪᑐᖅ ᐄᐋᒡᓕᑯᓐᓄᑦ ᑲᖏᖅᓂᓂᕆᑎᑦ ᐃᓕᒥᐅᐅᔨᓇᓪᓗ ᑭᐅᔨᑐᐊᓐᓂᓗᓄᑦ ᐊᐊᓇᓐᓂᔭᓗ ᐅᐅᖅᑲᓂ ᐊᓇᐅᐅᓇᔪᖅᑲᑐᓄᑦ ᐊᖏᔪᒪᑎᕆᑦᓕᓂᒥᑦ. ᑐᐊᕐᖓᑦ ᐊᑐᖅᑕᖅᑐᑦ ᐊᔨᑦᑎᖅᑕᙱᑉᑦᑐᑦ ᐄᐋᒡᒪᓕᔭᐅᓐᓄᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᖅ ᐊᖅᓄᓕᐅᖅᑎᓪᓗᒥᑦ ᐊᓯᖏᓐᓂᔭᔪᓐᓇᖅᑐ

Personnel

Personnel on site: 2
Days on site: 1800
Total Person days: 3600
Operations Phase: from 2020-03-28 to 2030-09-21

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtailiyainnit nuna
Rankin Inlet Sand Pit 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 1990's. Prior to that date, this site has no land use.	This site has no archaeological or paleontological value.	The quarry is located 7.3 kilometres from the community of Rankin Inlet. The Iqalugaarjuup Nunanga Territorial Park is 222 metres north of the quarry boundary. No other known protected areas in or around the quarry boundary.

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Kangirliniq	Morag Macpherson, Senior Administrative Officer	The Municipal Corporation of the Hamlet of Rankin Inlet	2020-05-27

Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Kivalliq

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
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 Rankin Inlet gave consent to move forward with this application.	Active		

Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	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

Nunauyuq

Ihuaqutivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutinik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
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
Screener	1	14.2m(L) x 4m(H) x 4.9m (W)	Screen undesirable aggregate and large boulders out of Sand

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	1	535	535	Liters	fuel tank that attached to the CAT Wheel loader. Diesel will be taken from the community fuel station.
Diesel	fuel	1	567	567	Liters	fuel tank that attached to the Dump Truck. Diesel will be taken from the community fuel station.
Diesel	fuel	1	600	600	Liters	fuel tank that attached to the Track Excavator. Diesel will be taken from the community fuel station.
Diesel	fuel	1	276	276	Liters	fuel tank that attached to the Screener. Diesel will be taken from the community fuel station.

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
4571	Water is retrieved from the Rankin Inlet fill station located on lot 546 plan 2542. The water is pumped from the community drinking source known as Nippisar Lake to the fill station.	Nippisar Lake- Rankin Inlet's drinking water source.

Iqqakuq

Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Information is not available				

Avatiliriniqmut Ayurhautingit:

The natural vegetation such as moss and other arctic plants on the surface will be disturbed or destroyed within the excavation area of the Sand Pit. This is unavoidable due to the nature of quarry operations. Additional environmental impacts and the mitigation measures are outlined the Quarry Management, Spill Contingency and the dust mitigation measures Plans attached to this application.

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

(see Quarry Management Plan attached to this application under Project application documents)

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

The site is already being used for quarrying purposes. It was estimated this quarrying started in the early 1990's. Prior to quarrying there was no land use. The quarry boundary is 30 metres east from of a large lake known locally as First Landing lake, though the actual extraction area is approximately 200 metres east. The depth and marine biology of First Landing Lake is not known but it has an approximate diameter of 744 metres. south-east of First Land Lake is an existing bridge named Char River Bridge that crosses over a drainage channel that drains water from First Landing Lake to Hudson Bay. It is located approximately one kilometre south of the Sand Pit. This bridge is used to access the quarry site. The Sand Pit contains natural sand eskers. These eskers have an elevation of 15 metres from the highest peak of the esker to the bottom of the quarry. The rest of the Sand Pit contains untouched natural vegetation. An image of the sand pit can be found attached to this NIRB application in Jpeg named "Rankin Inlet sand pit". There is an existing road that connects the community to the Iqalugaarjuup Nunanga Territorial Park that passes by the Rankin Inlet sand pit. This road will be used to access the site. It is used frequently by both the Hamlet, community residents, and contractors. There is no evidence of ice lensing, Therokarsts, 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.

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

A portion within the sand pit boundary is already being used for quarrying purposes. This portion has been stripped of natural vegetation such as moss. The other portion has been untouched and contains typical vegetation found in Nunavut such as moss and other arctic plants. There are no wildlife or bird migration routes nor is there any species of concern in this area.

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

The Sand Pit is located 7.3 kilometres north of the community of Rankin Inlet and 222 metres south of the Iqalugaarjuup Nunanga Territorial Park. 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 the community to the Iqalugaarjuup Nunanga Territorial Park that passes by the Rankin Inlet sand pit. This road will be used to access the site. It is used frequently by both the Hamlet, community residents, and contractors. Since the quarry site is located 7.3 kilometres from the community of Rankin Inlet and 222 metres south of the Iqalugaarjuup Nunanga Territorial Park, the effect of the extraction process on the well-being of the residence will be minimal.

Miscellaneous Project Information

Additional information can be see in the Dust Management, Spill contingency and Quarry Management plans.

Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit

Impacts and mitigation measures are outlined in the Dust Management, Spill contingency and Quarry Management plans.

Tamatkiumayunik Ihuikgutivaktunik

The road from the Community to the Iqalugaarjuup Nunanga Territorial Park which passes by the sand pit is well known by the residents of Rankin Inlet. It is used regularly by the Hamlet to access the sand pit, members of the public for recreational and leisure purposes and by the mining company Agnico Eagle Mines Limited to reach their Meliadine gold mine. Any possible cumulative effects from this sand pit will be minimal.

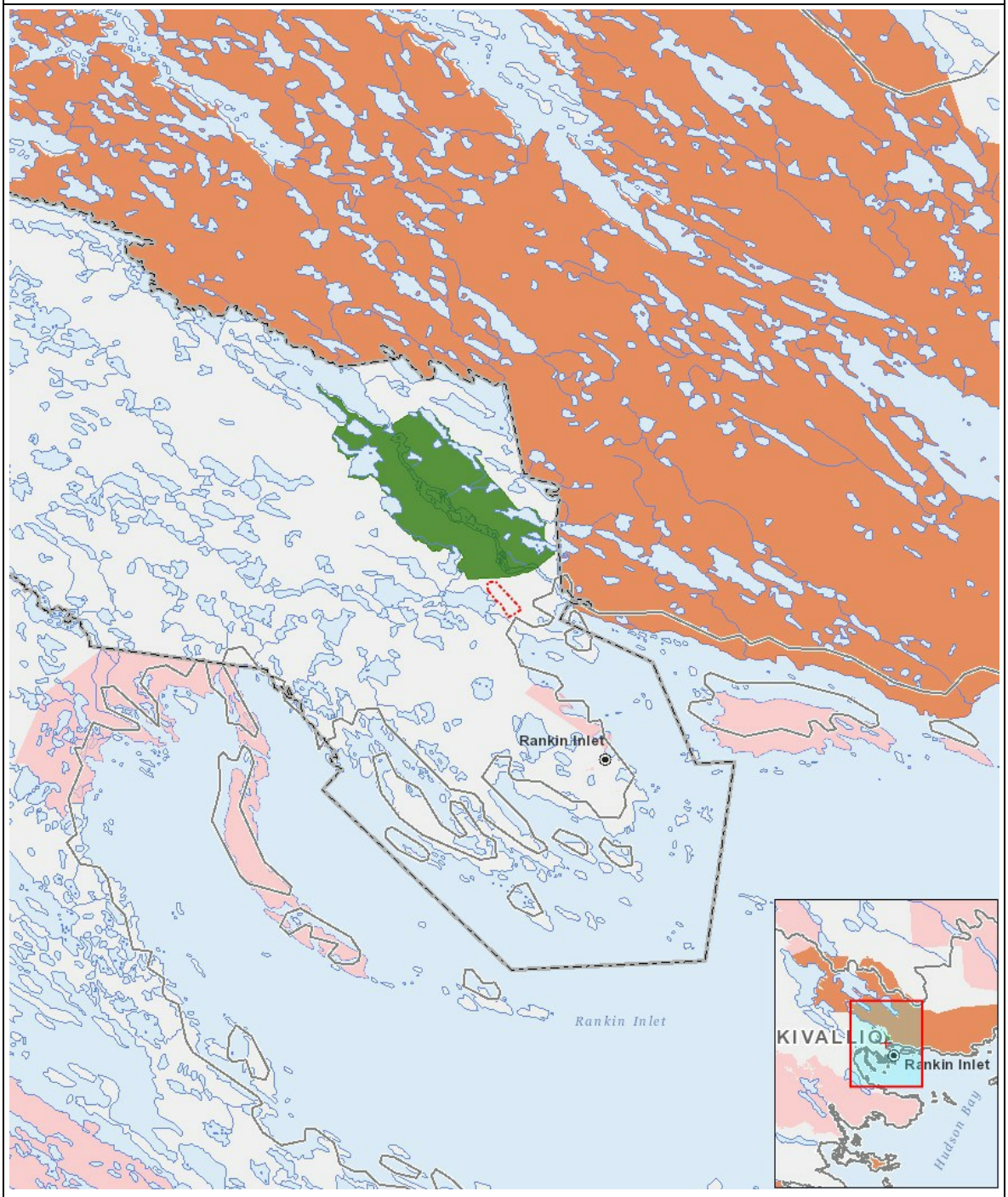
Impacts

Ilitariyauniq Avatiliriniqmut Ayurhautingit

	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
Havakvinga																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Aulapkaininnga																									
Quarry/Borrow pit		-	U	U	-	-	-	-	U	U	-	-	N		N	-	-	-	-		-	P	P	P	-
Piiqtauniq																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyauyuq)

Havaariyauyukhamut Nayugaa



List of Project Geometries

1	polyline	Rankin Inlet Sand Pit boundary