



Demande de la CNER faisant l'objet d'un examen préalable #125486

Quarry in Pangnirtung

Type de demande : New

Type de projet: Pits and Quarries

Date de la demande : 9/19/2019 10:05:56 AM

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

Autorisations proposées: from 0001-01-01 to 0001-01-01

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DÉTAILS

Description non technique de la proposition de projet

Anglais: The quarry site located on Lot 2 Block 3 Plan 3943 in Pangnirtung being proposed have been investigated by the Government of Nunavut in consultation with the Hamlet of Pangnirtung. It is established that this site can be used to extract aggregate to complement the existing quarry to meet the increasing construction demands of the community. The proposed site contains an abundance of aggregate (gravel, sand, silt, and riprap) that will fulfill the construction needs of the community now and in the future. This quarry will remain active until all its aggregate is depleted. The Municipality will use the proceeds from Quarry permit fees to remediate the area. Appropriate aggregate extraction equipment, such as dump trucks to haul aggregate, loaders to extract aggregate and a screener, will be used on site for all future projects requiring aggregate. The site is located about 1 kilometer to the north of the Pangnirtung community. This site is in reasonable proximity to Pangnirtung, which results in easier access for the residents of the community to retrieve gravel. Close proximity to the community also minimizes costs to the contractors and the Hamlet due to the fact that equipment has quicker access to the proposed sites. The Government did explore other quarry sites, but felt this site will adequately complement the existing quarry and thus the best option due to the reasonable proximity to Pangnirtung, its aggregate reserves, and the quality of the aggregates.

Français: En consultation avec le hameau de Pangnirtung, le gouvernement du Nunavut a examiné le site de carrière proposé, soit le lot 2 du pâté de maisons 3, plan 3943. Il a été décidé qu'il servira à l'extraction de granulat, au même titre que la carrière existante, pour mieux répondre aux besoins en construction grandissants de la localité. Puisque le site est riche en granulat (gravier, sable, silt et enrochement), il saura combler la demande actuelle et future. La carrière sera exploitée jusqu'à l'épuisement du granulat, et la municipalité utilisera les revenus des permis d'exploitation pour restaurer le site. La machinerie appropriée, notamment des camions à benne, des chargeurs et un tamiseur, demeurera sur place pour tous les projets d'extraction à venir. Le site se situe à une distance raisonnable de Pangnirtung, soit environ un kilomètre au nord; il sera donc facile pour les résidents de se procurer du gravier. Cette proximité réduira aussi les coûts pour les entrepreneurs et le hameau, puisque la machinerie pourra y être transportée rapidement. Bien entendu, le gouvernement a étudié d'autres possibilités, mais il croit que ce site complètera bien la carrière préexistante et constitue ainsi le meilleur choix, d'autant plus qu'il est près de Pangnirtung et qu'il abrite de grandes quantités de granulat de qualité.

[illegible]

Personnel

Personnel on site: 2

Days on site: 120

Total Person days: 240

Operations Phase: from 2019-10-25 to 2029-10-25

Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
Quarry_1	Quarry/Borrow pit	Commissioners	Not known - site currently zoned as Industrial	No known historical site on the lot	Site about 1 km from the community and apart from being located within the 100 ft water strip, it is not near any protected area

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Pangnirtung	Eric Lawlor	Hamlet of Pangnirtung	2019-08-06

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

South Baffin

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Office des eaux du Nunavut	This site is located near the ocean however, it is not anticipated that the quarry activities will require water uses or deposit of waste into the waters	Not Yet Applied		
Government of Nunavut, Community Government & Services	Once NIRB approves the quarry, CGS will enter into a Quarry Administration agreement with the Hamlet. This agreement will give the Hamlet control of the quarry and will allowed them to issue permits	Active		
Hamlets and Municipalities	Hamlet of Pangnirtung currently approves land application and CGS issue quarry permit. When the quarry is screened and a Quarry Administration Agreement is signed, the Hamlet will approve and issue quarry permit .	Not Yet Applied		

Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Land		

Project accomodation types

Collectivité

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
Wheel Loaders	1	20.3 ft	To load overburden and aggregates
Off-Highway Trucks	1	49.5ft x 32 ft	Hauling
Excavator	1	10.8ft x 14.7ft	Extraction of aggregates
Crusher	1	26 x 45	process large rocks into smaller stones
Screening Machine	1	5ft x 7ft	Screening of aggregate

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Information is not available						

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0		

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Quarry/Borrow pit	Déchets non combustibles	5 tons	Bins will be placed on site to collect waste. The quarry site is located about a block away from the community dump	None

Répercussions environnementales :

These site will be used to extract aggregate (Sand, Gravel, riprap and silt) to be used for construction projects in the community of Pangnirtung. Stockpiling of aggregate may occur in the event that a project requires aggregate but will not be permanent. A road already exists to the site so construction of a road is not required. Minor slumping may occur to the landscape due to the extraction of aggregate but will be levelled off once the quarry is depleted. Once the sites are depleted of essential aggregate, the quarry will be levelled off to avoid any steep ditches using sand, silt and any other undesirable aggregate. No water will be used in this project and no waste will be dumped into any water source. The runoff from this site will be all natural material (dust, sand etc.) in which runoff of this material already occurs in nature. No plans for snow accumulation exist due to the fact that any changes in snow drifting in this area from extraction of aggregate will be minimal (if any). No fuel will be stored at this location so no official plan exists. In the unlikely event that a transportation vehicle's (dump truck/loader) fuel tank is punctured, the Municipality will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The contaminated soil will be relocated to the community land farm. The Municipality's contact information is as follows: ATTN: Eric Lawlor Municipality of Pangnirtung P.O. Box 253 Pangnirtung, NUX0C 0R0PH: (867) 473-8953

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

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 de l'environnement existant : Environnement physique

The quarry site is not designated as protected neither is it close to parks or protected area. The ground is pretty level and stable. Generally, the dominant surface unit consists of colluvium made of sand and gravel layers up to 4 m thick on top of pre-existing washed till deposits below the marine limit. A thin peat layer (5 to 25 cm) overlies the colluvial deposit. Affected by periglacial processes such as gelifluction lobes and frost boils. Ice wedges occasionally present in the near surface permafrost.

Description de l'environnement existant : Environnement biologique

The tundra around Pangnirtung is home to vibrant dwarf rosy coloured fireweed and fluffy Arctic cotton. You may also see: purple bladder campion, pink clusters of wintergreen, Arctic purple saxifrage, yellow marsh saxifrage, Arctic daisies, mauve harebells, yellow Arctic poppies, star chickweed.

Description de l'environnement existant : Environnement socio-économique

Site not located near archaeological and cultural historic sites. The quarry will contribute to the socio-economic development of Pangnirtung by providing the community with aggregates for constructional works.

Miscellaneous Project Information

It is estimated that the about 80,000 cubic metres of aggregate extracts will be extracted from the site over the course of the next few years. Through technical study this area of town has been zoned as industrial because there is no known indication of this either by local knowledge. If there is spillage, the Hamlet will reach out to the GN spill line. No spill equipment will be on site.

Identification des répercussions et mesures d'atténuation proposées

These site will be used to extract aggregate (Sand, Gravel, riprap and silt) to be used for construction projects in the community of Pangnirtung. Stockpiling of aggregate may occur in the event that a project requires aggregate but will not be permanent. A road already exists to the site so construction of a road is not required. Minor slumping may occur to the landscape due to the extraction of aggregate but will be levelled off once the quarry is depleted. Once the sites are depleted of essential aggregate, the quarry will be levelled off to avoid any steep ditches using sand, silt and any other undesirable aggregate. No water will be used in this project and no waste will be dumped into any water source. The runoff from this site will be all natural material (dust, sand etc.) in which runoff of this material already occurs in nature. No plans for snow accumulation exist due to the fact that any changes in snow drifting in this area from extraction of aggregate will be minimal (if any). No fuel will be stored at this location so no official plan exists. In the unlikely event that a transportation vehicle's (dump truck/loader) fuel tank is punctured, the Municipality will call the NU 24-hour spill report line at (867) 920-8130 and immediately extract and remove the aggregate at the point of the spill. The

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Dust Control Measures

Dust control Measures - Regular washing of extraction, processing and transport equipment. Reducing haul trips and limiting speeds on unpaved roads. Wetting material prior to processing or loading. Covering stock piles, conveyor belts, and loads in trucks. Locating stock piles in locations that limit their exposure to wind. proper loading of trucks. Avoid scheduling loading, unloading and blasting activities on a windy days

• Re-vegetating disturbed areas as soon as possible to reduce erosion and minimize dust.

Erosion Control Measures

An un-disturbed, vegetation buffer zone and sediment fence barrier will be maintained between the quarry and the ocean where possible; Progressive site stabilization will be implemented as soon as practically possible, and maintained at all times during the quarry

Before commencing earthworks on any part of Lot 2 Block 3, materials sufficient to protect against storms will be available on site and the work scheduled to ensure that, wherever practicable, any permanent or temporary erosion protection is in place before exposing earthworks

Traditional and Recreational Activities

This lot is located at areas zoned for industrial use and close to the dump site so there is no recreational activities close to this site

Répercussions cumulatives

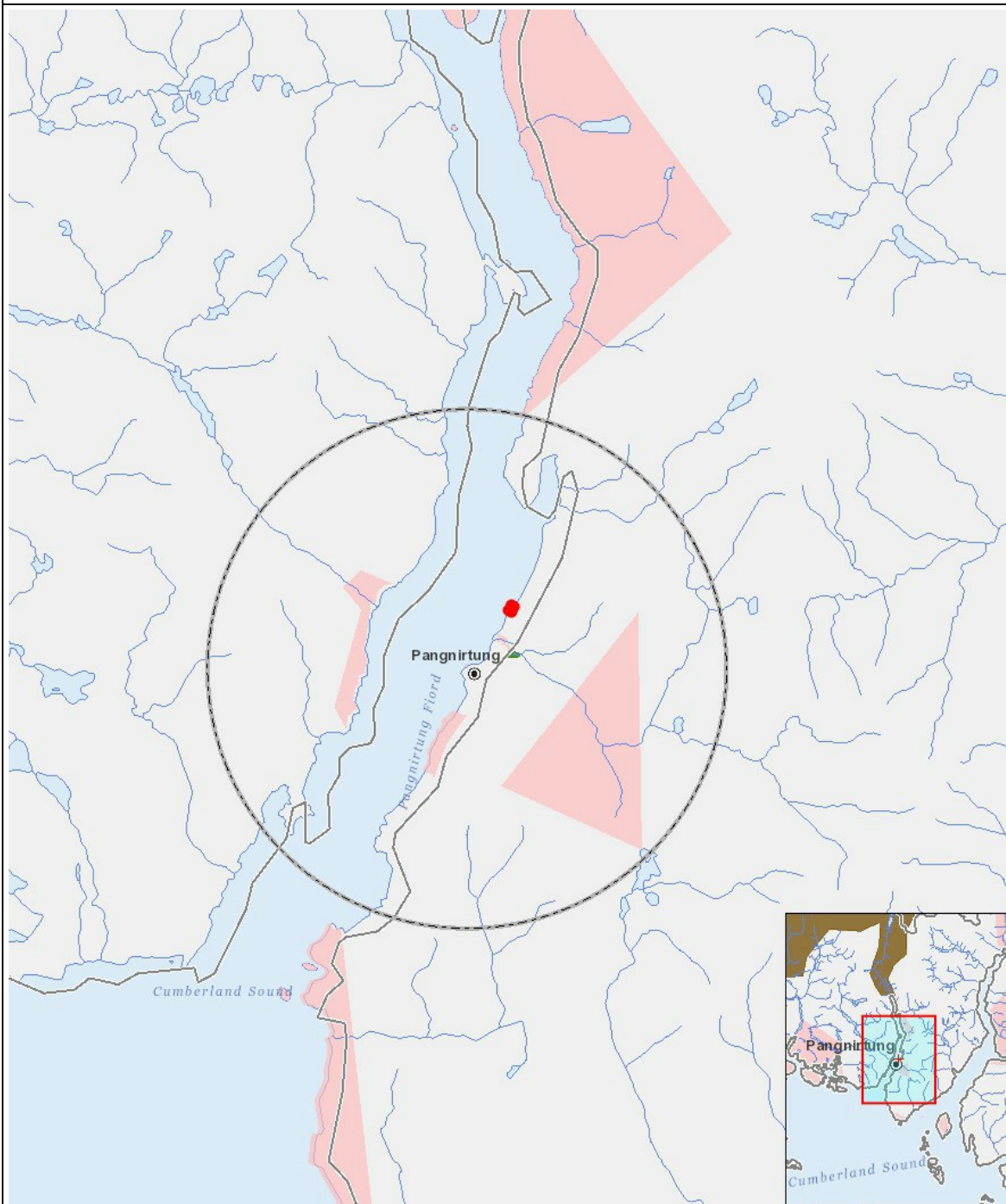
Impacts

Identification des répercussions environnementales

		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																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Exploitation																										
Quarry/Borrow pit		-	P	U	-	U	M	U	M	M	U	M	M		M	P	P	P	P		P	P	P	P	P	M
Désaffectation																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

1	polygon	Quarry_1
2	polygon	Quarry_1
3	point	Quarry_1
4	point	Quarry_1
5	point	Quarry_1
6	point	Quarry_1
7	point	Quarry_1
8	point	Q1_1
9	point	Q1_2
10	point	Q1_3
11	point	Q1_4
12	point	Q1_5

