

**Demande de la CNER faisant l'objet d'un examen préalable #125641**  
**Kugaaruk Quarry Sites**

## DÉTAILS

## Description non technique de la proposition de projet

Anglais: To meet the construction demands of the community, Kugaaruk quarry sites will be used to extract aggregate (gravel, sand etc...). These sites are located south of Kugaaruk, the equipment working on site if approved, will be dump trucks to haul aggregate, crushers to break up material and loaders to extract aggregate. These quarries will remain active until all aggregates are depleted. The Hamlet will use the proceeds from Quarry permit fees to remediate the area to a point in which the area's vegetation can grow back. These sites contain gravel, sand, and silt suitable for construction purposes and road maintenance in reasonable quantities which makes these sites desirable locations. These sites are near Kugaaruk resulting in easier access for the residents of the community to retrieve gravel, also minimizing costs to the contractors and the Hamlet due to the fact that the dump trucks do not need to travel long distances. There are existing access roads to both quarry sites.

Français: Pour répondre aux besoins en construction de la collectivité, les carrières de Kugaaruk, au sud du hameau, serviront à l'extraction de granulats (gravier, sable, etc.). Si le projet est approuvé, l'équipement qui sera utilisé sur place consistera en des camions à benne, des concasseurs et des chargeuses qui serviront respectivement à transporter, à fragmenter et à extraire le granulat. Les carrières seront exploitées jusqu'à l'épuisement du granulat. Le hameau utilisera les revenus des permis d'exploitation pour restaurer les sites afin que la végétation puisse y repousser. Les sites en question contiennent de bonnes quantités de gravier, de sable et de silt pouvant servir à la construction et à l'entretien des routes, ce qui fait d'eux des terrains convoités. Les sites étant près de Kugaaruk, il sera facile pour la population de se procurer du gravier. De plus, cela réduira les coûts pour les entrepreneurs et pour le hameau, car les camions à benne n'auront à voyager que sur une courte distance. Il existe déjà des voies d'accès aux deux carrières.

[illegible]

Inuinnagtun: Hailihimajaanginni nappaqtirnikkut ihiariagijaujuni nunallaami, Kugaaruk ujaraliaqtarviit atuqtauniatun amuhijaami ujaralianik (ujaraliat, hiurat aallallu...). Ukuat najugait ittut hivuraanin Kugaaruk-min, akhaluutirjuat hapkuat havangniaqtun ujaraliaqtarvingmi angiqtaukpata agjaqtautit akhaluutit agjariami ujaralianik, pilurjaktirijiit ahiruqtirijaami ujaranik pualrihautillu amuhijukhat ujaralianik. Hapkuat uraliaqtarviit atuqtaraanginnarniaqtun talvunga ujaraliaqtarviit nunguttaukpata. Haamlatkut aturniaqtait maniliurutit talvunga Ujaraliaqtarvingmin laisikkut akingit pinnirharnirnun nunami talvunga nunaup nauttiangit nauffaalirianginnun. Hapkuat ujaraliaqtarviit pilgit ujaralianik, hiurarnik pujutun-ittunin hiurarnin nakuujun nappaqtirnikkut hulidjutiknun apqutinilu ihuarhaidjtikhanun nakuujuni amigainninginni pidjutijun hapkuninga ujaraliaqtarvingni pijumajaulluarviujunik. Hapkuat ujaraliaqtarviit qanittun Kugaaruk-mun pidlutiplotik ajurnaitqijamik pijaami nunallaamiutanun ujaraliaqtariami taimaalu akittuqtivallaangitait akinginnun kaantraaktinun Haamlatkunnullu talvannga akhaluutirjuat ungahiktuliangidjutainnun. Pilik tahamaniittuni apqutikhanik tamarmingnun ujaraliaqtarvingnun.

## Personnel

Personnel on site: 2

Days on site: 1500

Total Person days: 3000

Operations Phase: from 2021-07-24 to 2031-07-24

## 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
Lot 264 Plan 4689	Quarry/Borrow pit	Municipal	N/A	N/A	2.1 km
Lot 267 Plan 4689	Quarry/Borrow pit	Municipal	N/A	N/A	2 km
Lot 269 Plan 4689	Quarry/Borrow pit	Municipal	N/A	N/A	1.7 km
Lot 270 Plan 4689	Quarry/Borrow pit	Municipal	N/A	N/A	3 km

### Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Kugaarjuk	Blandina Kakkianium - PLA	Hamlet of Kugaaruk	2021-09-01
Kugaarjuk	Chantal Dowden - SAO	Hamlet of Kugaaruk	2021-09-01

## Autorisations

Indiquez les zones dans lesquelles le projet est situé:

Kitikmeot

### Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Gouvernement du Nunavut, Services communautaires et gouvernementaux	CGS Authorization letter	Active	2021-09-02	

### Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Land	access to the sites will be through the currently established dirt roads	

### 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
Loader	1	5.7m x 2.7m	excavate quarry material
Dump Truck	1	2.5mx3.4m	Haul quarry material
Water Truck	1	10 tons	Dust control

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
Gasoline	fuel	1	1	1	Liters	Fuel will be provided by the Hamlet's facilities and supplies. There will be no storage of fuel on site.
NA	hazardous	1	0	0	Liters	There will be no storage of hazardous material on site.

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	Mort-terrain (sol organique, déchets, résidus)	unknown	will be spread on land at the site	n/a

## Répercussions environnementales :

Accidental leaks and spillages of substances such as fuel or petroleum-based lubricants - if this occurs the Hamlet 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. Noise and vibration effects from rock crushing/breaking and machinery.

# **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**

No known carving stone deposits are located in this area. If a carving stone deposit is located then extraction of aggregate will cease until the Municipality decides what they wish to do. The extraction of the aggregate will go down 1-3 meters. Should flooding become an issue, drainage ditches will be constructed to promote drainage away from the pit. Hamlet will continually monitor erosion or potential for erosion and implement control measures to minimize erosion. Minor slumping may occur to the landscape due to the extraction of aggregate but will be levelled off once the quarry is depleted. No evidence of ice lenses in the area. Hamlet does not blast and do not foresee having to blast. We will inform the public about the sight, and post signs around the site about the safety. Staff will also follow WSCC safety regulations around the site and area. Once this site is depleted of essential aggregate, the quarry will be levelled off to avoid any steep ditches using sand, silt and any other undesirable 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 de l'environnement existant : Environnement physique**

Air quality – Appears excellent. There is no reason to believe that air quality should not be excellent. Climate conditions and predicted future climate trends – The arctic is undergoing apparent raise in average temperature in the long term. This will have no incidence of this quarry. Noise levels – Noise level is of low concern but will be typical of such heavy equipment.

### **Description de l'environnement existant : Environnement biologique**

Wildlife, including habitat and migration patterns – No wildlife observed, although any wildlife observed will be respected at all times during the work. Birds, including habitat and migration patterns – No birds observed, although any wildlife observed will be respected at all times during the work.

### **Description de l'environnement existant : Environnement socio-économique**

Archaeological and culturally significant sites (e.g. pingos, soap stone quarries) in the project and adjacent areas – None observed. Land and resource use in the area, including subsistence harvesting, tourism, trapping and guiding operations – The area surrounding the quarry areas is used as a gravel extraction activity. There are no subsistence harvesting or tourism activity within the surrounding quarry areas.

### **Miscellaneous Project Information**

### **Identification des répercussions et mesures d'atténuation proposées**

Excavation of material at the identified sites will expose underlying permafrost to warming and may cause permafrost thaw and slumping. Mitigation measures will be in place to limit or prevent excessive thaw such as: ensuring positive drainage away from the pit face and restricting excavation to the active layer in shallow sources.



## **Répercussions cumulatives**

The overall cumulative effects are good: a good source of granular material was found, its development will provide a good source of gravel for the Hamlet and its development will provide employment in Kugaaruk. No negative regional or cumulative economic effects associated with the quarries were identified.

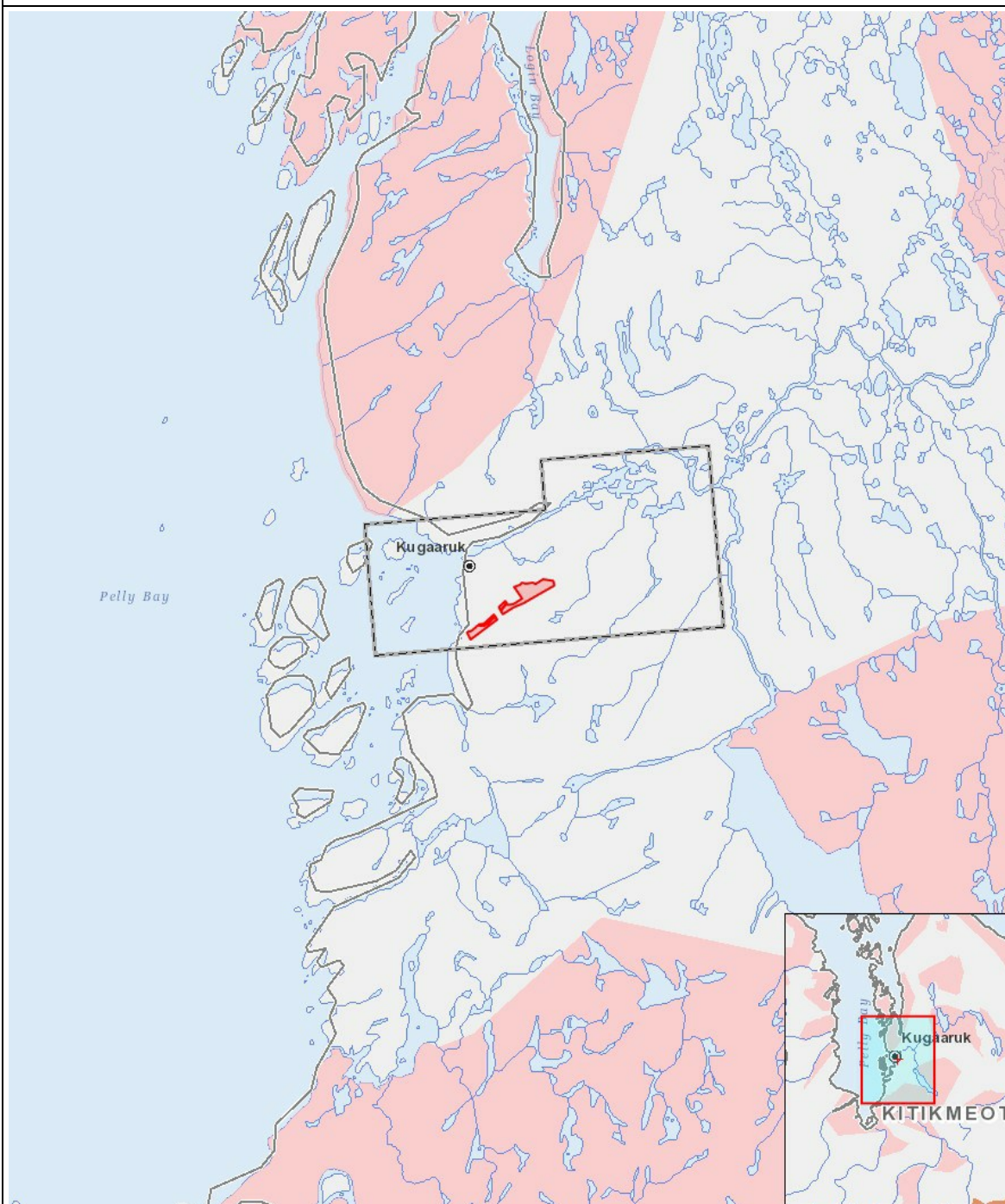
# Impacts

## 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
<b>Construction</b>																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
<b>Exploitation</b>																										
Quarry/Borrow pit		-	M	-	-	-	-	-	-	-	-	-	-	M		M	-	-	-	-		U	P	-	P	-
<b>Désaffectation</b>																										
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(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

## Site du projet



## Liste des géométries de projet

1	polygon	Lot 264 Plan 4689
2	polygon	Lot 267 Plan 4689
3	polygon	Lot 269 Plan 4689
4	polygon	Lot 270 Plan 4689