



## **NIRB Uuktuutinga Ihivriughikhamut #126018**

### **Kugaaruk Sealift Improvements Project**

<b>Uuktuutinga Qanurittuq:</b>	New
<b>Havaap Qanurittunia:</b>	Coastal Infrastructure
<b>Uuktuutinga Ublua:</b>	12/10/2024 2:37:07 PM
<b>Period of operation:</b>	from 2025-08-28 to 2050-10-26
<b>Havauhikhaq Ikayuqtinga:</b>	Richard Hoos Tetra Tech Canada Inc. 1000, 885 Dunsmuir Street Vancouver British Columbia V6C 1N5 Canada Hivayautit Nampanga:: 604 813 4952, Kayumiktukkut Nampanga::

## Tukhiannaqtunik havaariyauyumayumik uqauhiuyun

Qablunaatitut: The Hamlet of Kugaaruk has determined that the community's existing barge landing area, including the barge landing ramp and cargo laydown/storage area need to be expanded to accommodate future anticipated Hamlet sealift needs. In particular, the barge landing expansion project is proposed to include:

- Barge Landing Area Expansion of the existing barge landing area (0.76ha) to 45m wide to accommodate two (2) barges concurrently.
- Boulder and bedrock blasting in the lower intertidal zone, followed by rockfill and gravel placement during low tide conditions.
- Sealift Laydown Area-Expansion of the existing on-land sealift laydown area from its current size (0.5 ha) to 1.0 ha.
- Drainage improvements to the perimeter of the current sealift laydown area. Excavation and bedrock blasting as necessary, followed by gravel and rockfill placement to create the expanded level sealift laydown area.
- Sealift Laydown Area Widening of the existing access road from 8 m to 10 m.
- Improving existing steep vertical grades (approx.. 10-12% grades) along approximately 100 m. of the existing access road.
- Excavation and bedrock blasting as necessary, followed by gravel and rockfill placement.
- Additional proposed Infrastructure (Optional)
- Security Office insulated with Generator, powered heating and lighting.
- Security fence surrounding laydown area (320 m).
- Road and caution signage in both English and Inuktitut.

Uiviititut: Le hameau de Kugaaruk a déterminé que l'aire d'atterrissage actuelle des barges de la communauté, y compris la rampe d'atterrissage des barges et l'aire de dépôt et d'entreposage des marchandises, doit être agrandie pour répondre aux besoins futurs prévus du hameau en matière de transport maritime. En particulier, le projet d'agrandissement de l'aire d'atterrissage des barges est proposé pour inclure : Expansion de l'aire d'atterrissage des barges existante (0,76 ha) à 45 m de large pour accueillir deux (2) barges simultanément. Dynamitage des rochers et du substrat rocheux dans la zone intertidale inférieure, suivi de la mise en place de l'enrochement et du gravier dans des conditions de marée basse. Zone de dépôt du transport maritime - Extension de la zone de dépôt terrestre existante de sa taille actuelle (0,5 ha) à 1,0 ha. - Améliorations du drainage du périmètre de la zone de dépôt actuelle du transport maritime. Excavation et dynamitage du substrat rocheux au besoin, suivis de la mise en place de gravier et d'enrochement pour créer la zone de dépôt de transport maritime élargie. Zone de dépôt du transport maritime Élargissement de la route d'accès existante de 8 m à 10 m. Amélioration des pentes verticales abruptes existantes (environ 10 à 12 % des pentes) le long d'environ 100 m de la route d'accès existante, Excavation et dynamitage du substrat rocheux si nécessaire, suivis de la mise en place de gravier et d'enrochement. Infrastructure supplémentaire proposée (facultatif) Bureau de sécurité isolé avec une génératrice, chauffage et éclairage alimentés. Clôture de sécurité entourant la zone de dépôt (320 m). Signalisation routière et d'avertissement en anglais et en inuktitut.

[illegible]

**Personnel**

Personnel on site: 15

Days on site: 240

Total Person days: 3600

Operations Phase: from 2025-06-27 to 2026-10-27

Operations Phase: from 2025-08-28 to 2050-10-26

Post-Closure Phase: from to

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtailiyainnit nuna
expanded area footprints	Harbour infrastructure	Municipal	Existing sealift barge ramp with existing sealift laydown area	Previously disturbed site, no archaeological potential	1.6 kilometres south of Kugaaruk
expanded area footprints	Offshore Infrastructure (port, break water, dock)	Municipal	Existing Sealift barge ramp and Sealift cargo area will be expanded to address ongoing and future supply needs of the Hamlet of Kugaaruk. Aggregates from the community quarry/borrow site will be hauled to the project area and placed in areas designated for expansion,	this is a previously disturbed site and is not anticipated to have no archaeological potential	1.6 km south of Kugaaruk

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Kugaarjuk	Michelle Byers MBA	SAO	2024-10-30

# Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Iqalukhiurniqmut Tariuqmilu Kaanata	Letter of Advice	Not Yet Applied		
Nunaqaqqaaqhimayuliriyikkut Ukiuqtaqtumi Pivallianiq Kaanata	Land Use Permit	Not Yet Applied		
Tingmiliqiyiitkut Kaanatami	Approval	Not Yet Applied		

## Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Water	expansion of the sealift landing ramp will be conducted on land or in the dry during low tide conditions	
Land	all Project work will be conducted on land or in the dry during low tide conditions	

## Project accomodation types

Nunauyuq

## Ihuaqutivaluin Atuqtauyukhan

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

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Excavator	1	35 tons	excavate aggregate and rock for loading into trucks
Bull Dozer	1	25 tons	for moving and spreading of aggregate materials
Grader	1	20	leveling and grading of aggregate material for expansion of sealift ramp and laydown area
Front end Loader	1	20	Loading of aggregate into trucks
vibrator compactor	1	19 tons	for compacting of aggregate at expanded barge ramp and sealift laydown area
Water truck	1	15 cubic metres	for dust control and Project site and haul road
Dump Trucks	3	30 tons	Haul aggregate and rock from community quarry to project site for placement

### Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	9	300	2700	Liters	fuel for construction equipment

### Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqittagaani qanuq	Atulirumayain imavaluin utiqittagani humi
0	No water will be used for the construction of this expansion Project	Not Applicable

# Iqqakuq

## Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Harbour infrastructure	Ikulalaaqtun iqqakuuvaluin	10 cubic metres over 2 years	all combustible wastes will be transported to the hamlet landfill site for disposal	none required
Harbour infrastructure	Ikulalimanngittun iqqakuuvaluin	0.5 cubic metres	waste electrical wire will be returned to the Hamlet for re-use	None required
Harbour infrastructure	Anaagun (inuin anaaguin)	240 liters	Porta Potties or Hamlet facilities will be used. all sewage will be transported to the Hamlet sewage lagoon	None required

### Avatiliriniqmut Ayurhautingit:

Positive impacts will be achieved for the residents of the Hamlet of Kugaaruk as the sealift expansion project will permit an increase in the volume and variety of cargos that can be offloaded on an annual basis. A locally negative/non mitigable impact will occur to the small area of benthic intertidal marine habitat at the end of the current barge ramp, due to burial of this habitat by fill and aggregate material used to widen the end of the barge ramp. Negative/mitigable potential impacts on fish will be mitigated by conducting all potential in-water work by conducting all work "in the dry" during low tide conditions .

# **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**

The Hamlet of Kugaaruk has determined that the community's existing barge landing area, including the barge landing ramp and cargo laydown/storage area need to be expanded to accommodate future anticipated Hamlet sealift needs. In particular, the barge landing expansion project is proposed to include: Barge Landing Area Expansion of the existing barge landing area (0.76ha) to 45m wide to accommodate two (2) barges concurrently. Boulder and bedrock blasting in the lower intertidal zone, followed by rockfill and gravel placement during low tide conditions. Sealift Laydown Area-Expansion of the existing on-land sealift laydown area from its current size (0.5 ha) to 1.0 ha.-Drainage improvements to the perimeter of the current sealift laydown area. Excavation and bedrock blasting as necessary, followed by gravel and rockfill placement to create the expanded level sealift laydown area. Sealift Laydown Area Widening of the existing access road from 8 m to 10 m. Improving existing steep vertical grades (approx.. 10-12% grades) along approximately 100 m. of the existing access road, Excavation and bedrock blasting as necessary, followed by gravel and rockfill placement. Additional proposed Infrastructure (Optional) Security Office insulated with Generator, powered heating and lighting. Security fence surrounding laydown area (320 m). Road and caution signage in both English and Inuktitut.



## **SECTION D2: Facility Construction**

Construction of the sealift expansion facilities will involve the hauling of aggregate materials from the existing community quarry/borrow site and the placement, leveling and compaction of this material in the designated areas to complete the planned expansion of the sealift barge ramp and associated sealift cargo storage area.

## **SECTION D3: Facility Operation**

the expanded facilities will continue to be operated by assigned Hamlet personnel as per the current approach

## **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**

the barge ramp expansion will permit two barges to offload their cargos concurrently and to reduce the total time for offloading cargo

## **SECTION H2: Disposal At Sea**

No disposal at sea will occur in relation to this sealift expansion project

## **SECTION I1: Municipal Development**

### **Qanurittuq Ittunik Avatinga: Avatingalluanga**

Kugaaruk is characterized by coastal mountains and well-vegetated lowlands with several lakes, rivers, and ponds throughout the region, which provide important habitat for a variety of plants and animals<sup>2</sup>. Land-fast lead systems are areas of separated land-fast ice and pack ice and can be found throughout this region. Overall, Arctic temperatures are increasing and recently much of Nunavut experienced unseasonably warm summer temperatures<sup>3</sup>. Residents are also experiencing milder winters and fewer extreme cold temperatures. Due to glacial retreat in Kugaaruk, the land is rebounding to its former height, resulting in what appears to be declining sea levels.

### **Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga**

The wildlife economy plays an important role in Kugaaruk, with many residents supporting themselves by hunting, fishing, trapping, and gathering. Community members also participate in wage-based economic activities. Important coastal resources in the Kugaaruk region include bowhead whales, narwhals, seals, polar bears, and Arctic char, with residents sometimes travelling long distances to reach hunting and fishing grounds. The community's hunting and fishing area includes Pelly Bay, Boothia Peninsula, Committee Bay, Rae Strait, and The Gulf of Boothia. Currently there are no national or territorial parks located near Kugaaruk, however, several fishing and hunting camps exist nearby.

### **Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga**

According to the most recent census in 2021, the population of Kugaaruk was 1033. Kugaaruk is a traditional Central Inuit community. Until 1968, the people followed a nomadic lifestyle. The population is approximately 97% Inuit and most people self-identify as Netsilik. The residents blend a land based lifestyle with modern technology and interests. Most families supplement their diet with ringed seal, caribou, and Arctic char. Other wildlife includes narwhal, beluga, bowhead whale, polar bears, wolverine and peregrine falcons.[8][20][21] Despite the isolation of the community, the traditional language, Inuktitut, is declining. Most people 30 and over speak Inuktitut as their first language, but the language is not being passed on to their children. In most households, a mixture of English and Inuktitut is spoken. Children understand their parents and grandparents, but respond to them in English. One goal of the Nunavut educational system is to encourage and spread the use of Inuktitut.

### **Miscellaneous Project Information**

#### **Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit**

The Sealift expansion project involves the hauling of aggregate materials to the existing sealift barge ramp and associated cargo laydown area. Primary mitigation measures to be employed will include: dust control through the application of water as needed from a water truck; all in-water work will be conducted in the dry during low tide conditions to minimize impacts on fish. Blasting of bedrock at the end of the existing barge ramp will be conducted in the dry during low tide conditions in conformance with DFO guidelines; all fuel will be loaded into construction equipment at the Hamlet and not at the construction site to minimize the potential for a fuel spill to occur at the construction site.

#### **Tamatkiumayunik Ihuikgutivaktunik**

this project involves the expansion of the existing sealift facilities to accommodate the growing future community supply needs. no cumulative effects are anticipated to occur as a result of this projec

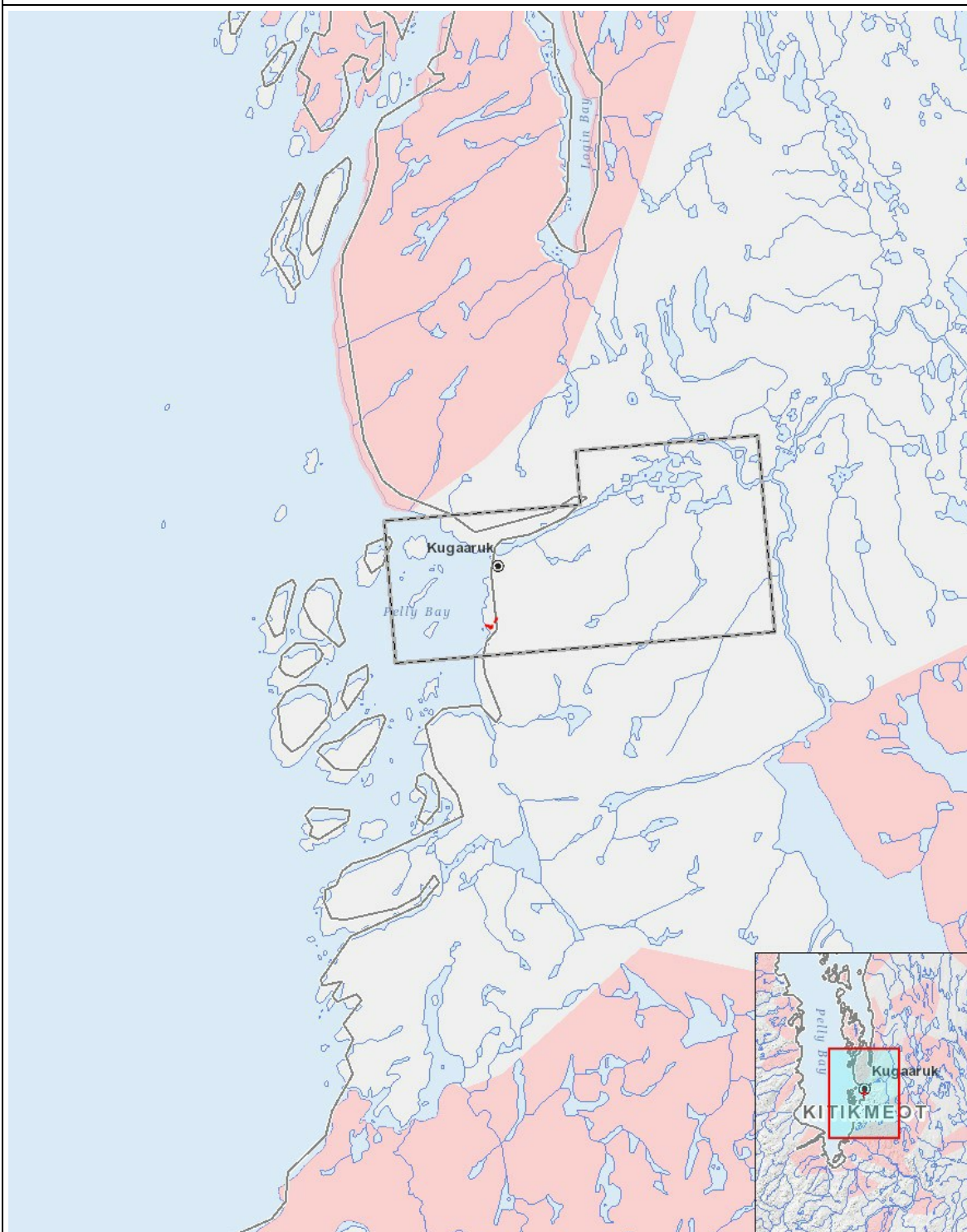
## Impacts

### 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																									
Harbour infrastructure		-	P	-	-	-	-	-	M	-	-	M	M		-	-	-	M	-		-	P	P	P	P
Aulapkaininnga																									
Harbour infrastructure		-	P	-	-	M	-	-	-	-	-	M	M		-	-	-	-	-		-	P	P	P	P
Piiqtauniq																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

# Havaariyauyukhamut Nayugaa



## List of Project Geometries

1	polyline	expanded area footprints
2	polyline	expanded area footprints
3	polyline	expanded area footprints
4	polyline	expanded area footprints