



NIRB Uuktuutinga Ihivriughikhamut #125544

Application for the Water Licence Amendment of the Municipality of Kimmirut #3BM-KIM1929

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Imaktiggut

Uuktuutinga Ublua: 7/3/2020 3:28:01 PM

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

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

Havauhikhaq Ikayuqtinga: NIRB info
Nunavut Impact Review Board
Box 1360 (20 Mitik)
Cambridge Bay Nunavut X0B 0C0
Canada
Hivayautit Nampanga:: (867) 983-4600, Kayumiktukkut Nampanga:: (867) 983-2594

Tukihiannaqtunik havaariyaumayumik uqauhiuyun

Qablunaatitut: Executive Summary of the Municipality of Kimmirut Water Licence #3BM-KIM 1929 for amendment in order to accommodate the construction of the New Wastewater Treatment Facility (WWTF). Kimmirut is located on the southern end of Baffin Island at 62°50'48"N and 069°52'07"W. Kimmirut is a small community with a current population of 511 in 2020. Like most communities in the north, Kimmirut is only accessible year-round by plane. Boat access to the community is available for a limited number of months during the year. This small community is currently 100% serviced by a trucked system for both water delivery and sewage collection. For the past 30 years, they have discharged the untreated wastewater into a trench near the community's solid waste facility. This trench drains over a steep (average slope 4:1) embankment into the ocean through Lake Harbour. The current sewage disposal system provides only preliminary treatment, with some further primary treatment occurring during the summer months when vegetation is present and active. This facility is non-compliant. It is estimated that Kimmirut produces roughly 18,500 cubic meters of wastewater annually. The Government of Nunavut (GN) is proceeding with the design and construction of a new Waste Water Treatment Facility at "Site 9" (62°50'15.4N and 69°52'35.2W) in Kimmirut, Nunavut. The new WWTF will be designed to meet the community's waste water requirements for 20 years. The proposed site for the new sewage lagoon has been supported by the Hamlet Council of Kimmirut and approved by Transport Canada. The GN is currently in the design phase of this new WWTF project. A feasibility study conducted in 2015 determined that the optimal design of the new WWTF in Kimmirut is to build a sewage lagoon using an existing pond at Site 9 in Kimmirut. Two design options have been considered for this site. The first design option provides a secondary treatment process through the use of an impermeable berm to allow for a one year retention period. The second design option includes an enhanced preliminary treatment process using a permeable berm that allows for continuous discharge from the lagoon. In both cases, the lagoon will discharge along a path that flows overland into the marine environment of Lake Harbour. The effluent quality will be further enhanced by the overland flow and the design of permeable berms along the overland flow path. The new lagoon will be designed to meet all regulatory standards and requirements, including the 2019 water licence effluent criteria. These design considerations will result in improved effluent criteria that will ensure the health and safety of those living in Kimmirut along with the environment. The future consultant will design the facility considering the best option. This Design Brief will be approved by the NWB prior to starting construction. The project is expected to be completed in 2021. The design phase will commence in March 2020 with construction expected to start in July 2021. Commissioning of the new sewage lagoon is expected to occur in November 2021 after successful training and handoff of operations to the Hamlet. The existing Water Licence #3BM-KIM1929 was issued on May 27, 2019 and will expire on May 26, 2029. The proposed amended water licence will accommodate the construction of the new WWTF which is anticipated to be commissioned in 2021. The as-built drawings and O&M manual will be made available to operate the new facility.

Uiviititut: Not applicable

[illegible]

Inuinnaqtun: Not applicable

Personnel on site: 1

Days on site: 3650

Total Person days: 3650

Operations Phase: from 2021-06-28 to 2021-11-29

Operations Phase: from 2020-02-27 to 2029-05-23

Post-Closure Phase: from to

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaliyainnit nuna
New project geometry	Other	Municipal	N/A	N/A	Kimmirut

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Information is not available			

Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

South Baffin

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Nunavut Imaligiyyit Katimayit	Type B License	Active		

Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Land	Heavy Equipment	

Project accomodation types

Nunauyuq

Ihuaqutivaluin Atuqtauyukhan

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

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Heavy Equipment	1	Heavy duty	Land leveling

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	10	200	2000	Liters	To run the heavy equipment

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
50	Pumping	Lake

Iqqakuq

Ikkakunik Munakgiyauyunik

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

Avatiliriniqmut Ayurhautingit:

Not applicable

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

Miscellaneous Project Information

Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit

Tamatkiumayunik Ihuikgutivaktunik

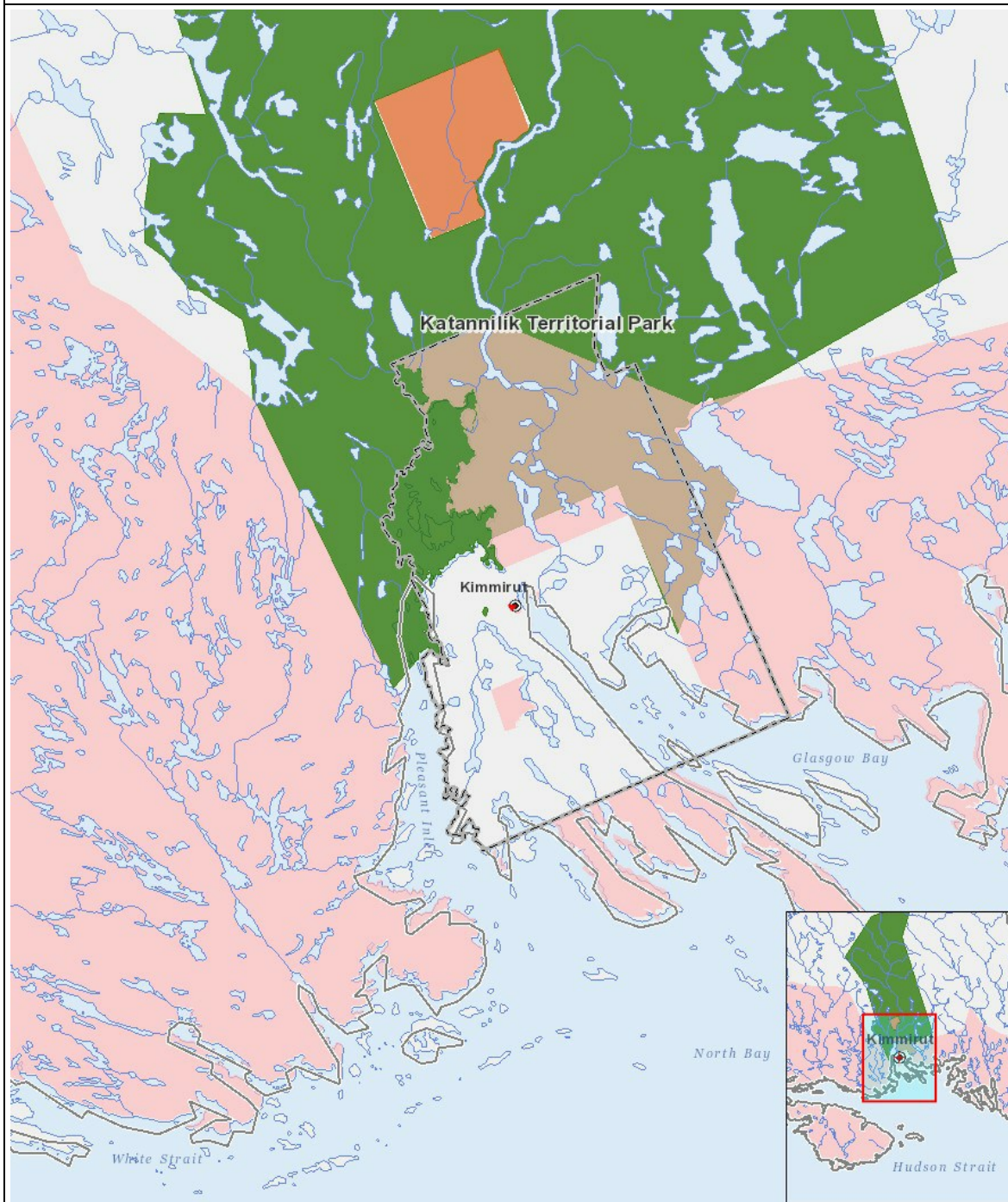
Impacts

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Piiqtauniq	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Havaariyauyukhamut Nayugaa



List of Project Geometries

1	polygon	New project geometry
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