

**Demande de la CNER faisant l'objet d'un examen préalable #125544**  
**Application for the Water Licence Amendment of the Municipality of**  
**Kimmirut #3BM-KIM1929**

## DÉTAILS

## Description non technique de la proposition de projet

Anglais:

Executive Summary of the Municipality of Kimmirut Water Licence #3BM-KIM1929 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.

Français: Not applicable

[illegible]

### Post-Closure Phase: from to

## 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
New project geometry	Other	Municipal	N/A	N/A	Kimmirut

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

Collectivité	Nom	Organisme	Date de la prise de contact
Information is not available			

# 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	Type B License	Active		

## Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Land	Heavy Equipment	

## 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
Heavy Equipment	1	Heavy duty	Land leveling

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
Diesel	fuel	10	200	2000	Liters	To run the heavy equipment

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
50	Pumping	Lake

# Déchets

## Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Information is not available				

## Répercussions environnementales :

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**

**Description de l'environnement existant : Environnement physique**

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

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

**Miscellaneous Project Information**

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

**Répercussions cumulatives**

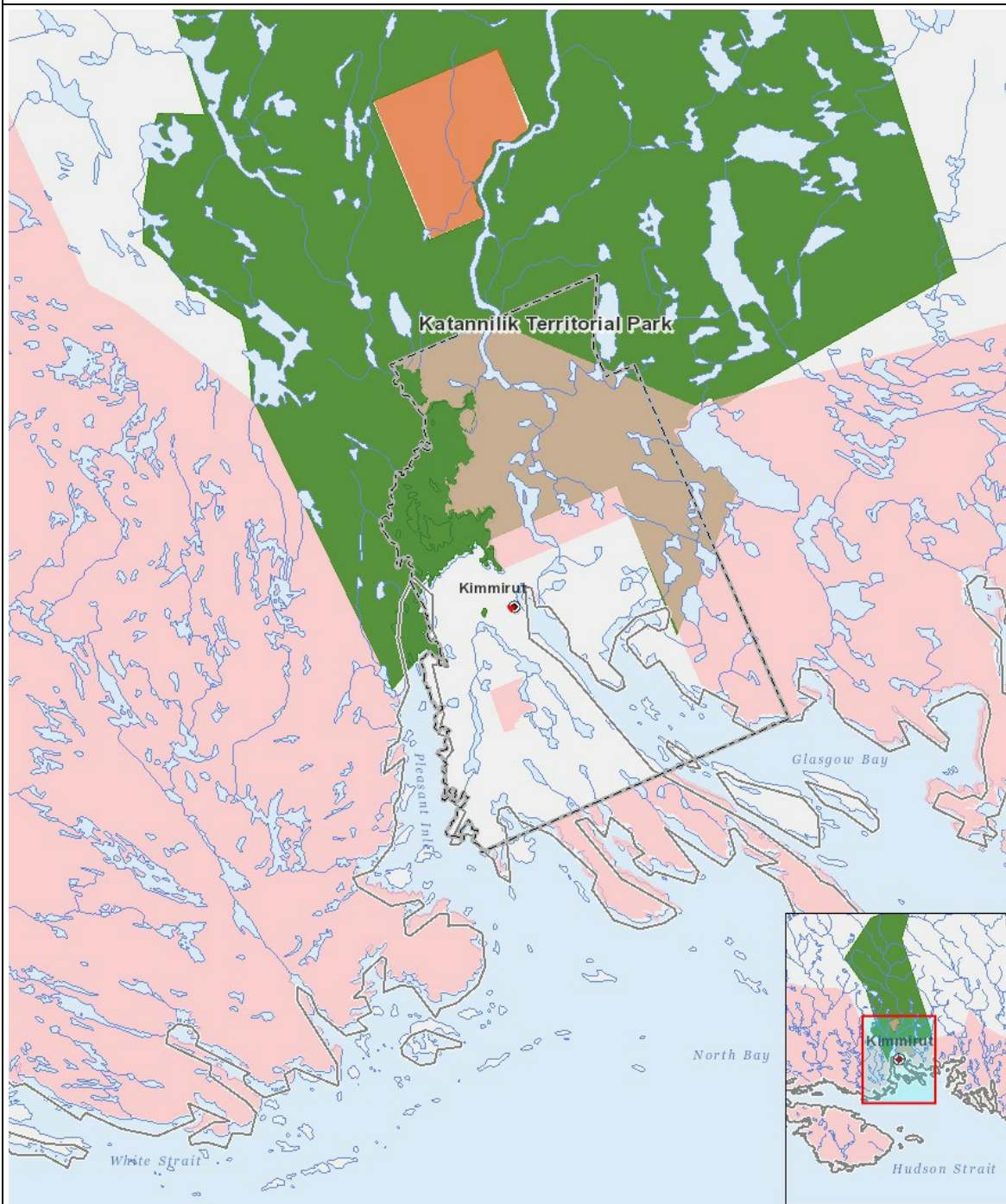
Impacts

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Désaffectation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

# Site du projet



## Liste des géométries de projet

1	polygon	New project geometry
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