

Project Dashboard

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

(149319)

Proposal Status: Conformity Determination Issued

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Project Overview

Type of application: **New**

Proponent name:	Bhabesh Roy
Company:	GN-CGS

Schedule:

Start Date:	2019-05-27
End Date:	2029-05-26
Operation Type:	Annual

Project Description:

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.

[illegible]

habitants de Kimmirut et de l'environnement. Le consultant choisira la meilleure option pour la conception de l'installation. L'énoncé de conception sera approuvé par l'OEN avant le début de la construction. La fin du projet est prévue pour 2021. La phase de conception commencera en mars 2020, et le début de la construction est prévu pour juillet 2021. La mise en service du nouvel étang d'épuration est prévue pour novembre 2021, lorsque le personnel du hameau aura été formé et aura pris en charge l'exploitation. Le permis d'utilisation des eaux actuel (no 3BM-KIM1929) a été délivré le 27 mai 2019 et expirera le 26 mai 2029. L'amendement proposé permettra la construction de la nouvelle installation de traitement des eaux usées, dont la mise en service est prévue en 2021. Les plans de récolement et le manuel de fonctionnement et d'entretien seront fournis pour l'exploitation de la nouvelle installation.

Personnel:

Persons:	1
Days:	3650

Project Map

List of all project geometries:

ID	Geometry	Location Name
6165	point	New project geometry

Planning Regions:

Qikiqtani

Affected Areas and Land Types

Municipal

Settlement Area

Project Land Use and Authorizations

Project Land Use

All-Weather Road Access

Licensing Agencies

NWB: [Type B Licence](#)

Other Licensing Requirements

No data found.

Material Use

Equipment

Type	Quantity	Size	Use
Heavy Equipment	1	Heavy duty	Land leveling

Fuel Use

Type	Container(s)	Capacity	UOM	Use
Diesel	10	200	Liters	To run the heavy equipment

Hazardous Material and Chemical Use

Type	Container(s)	Capacity	UOM	Use
unknown	0	0	Liters	Not applicable

Water Consumption

Daily Amount (m³)	Retrieval Method	Retrieval Location
50	Pumping	Lake

Waste and Impacts

Environmental Impacts

No Impact

Waste Management

Waste Type	Quantity Generated	Treatement Method	Disposal Method
No data found.			