

Public Registry - Project Proposals

NPC 150968: Amendment of Water Licence 3BM-GRI2636 to Type A

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Proposal Status: Conformity Determination Issued

[Overview Documents](#)

[Project Overview](#)

Type of application: Amendment

Proponent name:

Municipal Works Division

Proponent company:

Transportation and Infrastructure Nunavut

Project Description:

The Government of Nunavut Department of Transportation and Infrastructure Nunavut, on behalf of the Municipality of Grise Fiord, is applying to amend water licence 3BM-GRI2025 to replace the existing water supply infrastructure and increase the daily and maximum annual water withdrawal volume to meet the needs of the growing population. The requested volumes of up to 2,160 cubic metres daily and 13,200 cubic metres annually from Airport River will require that a Type A water licence be obtained. Based on a hydrological study, Airport River does not support fish bearing, passage, or habitat. Furthermore, the maximum requested water takings represents just 0.9% of the instantaneous average observed flow of Airport River. A design for the new water supply infrastructure is complete and the municipal council of Grise Fiord has passed a motion approving the construction and responsibility for operations and maintenance as owners of the facility at construction completion. The new water supply facility will be located entirely on municipal lands. The facility will consist of a treatment building, three water storage tanks and water will be transported from Airport River using an intake centrifugal pump and 300 m of flexible overland hose, where it then drops into a chamber and enters a buried pipeline that extends another 300 m to the treatment building. The storage tanks must be resupplied each summer to maintain water supply to the community throughout the year. The water source, Airport River, will remain the same for the new facility. An increase in water withdrawal is being requested because the new system will have an additional tank to provide the community with redundancy should a tank fail in the future. The new water

storage capacity will be 13,200 cubic metres of water between three tanks. The seasonal overland flexible piping for water withdrawal will be stored once the water resupply is complete each year. The intake pump will include a recirculation line to return excess volumes of withdrawn water that the water treatment plant does not have the capacity to process. The water in the recirculation line is raw water that does not enter the water treatment system and will be returned immediately downstream back to Airport River from the intake line. Erosion protection measures (large stones) have been included in the recirculation/discharge line to prevent environmental impact. Civil works for the site is anticipated to start summer 2026 and the tanks and water treatment building will be connected on site during summer 2027. Full commissioning of the water treatment plant is expected either by fall 2027. Construction materials and any hazardous wastes will be transported in and out of the community by sealift. The number of personnel for seasonal construction is 31 and there will be 2 year round staff operating the water treatment plant during the operations phase. This application is only for the new Grise Fiord water treatment plant as the solid waste facility was submitted under NPC150230 and completed NIRB screening 25XN006.

[Project Schedule](#)

Start Date:

2027-09-01

End Date:

2047-09-01

[Project Map](#)

List of project geometries:

Id

Geometry

Location Name

[19154](#)

polygon

Water Treatment Plant and Water Storage Tanks

[19155](#)

point

Pumping Location at Airport River

NPC Planning regions:

North Baffin

Project Land Use and Authorizations

Project Land Use:

Permanent Structures

Permanent Structures

Licensing Agencies:

Nunavut Water Board

Nunavut Water Board

Material Use

Equipment:

Type

Quantity

Type

Use

LAND RESCAPING HEAVY CONSTRUCTION MACHINERY

10

XYZ

all heavy earth moving construction machinery used in constructing permanent structures.

Centrifugal Pump

1

xyz

Seasonal pump to withdraw water from Airport River

Fuel Use:

Type

Container

Capacity

Use

Diesel

1

10000

DPD diesel fuel supply will be used for refueling purposes of dozers', excavators, compactors, trucks, concrete mixers and portable power supply generators

Diesel

1

260000

Heating and emergency backup genset for the operations phase only per year

Hazardous Material and Chemical Use:

Type

Container

Capacity

Use

Sodium hypochlorite 12%

1

240

For the disinfection of water during treatment for the operations phase only per year

Water Consumption:

Daily Amount (m²)

Retrieval Method

Retrieval Location

2160

Airport River

pumping

Waste and Impacts

Environmental Impacts:

None

Waste Management:

Waste Type

Quantity Generated

Treatment Method

Disposal Method

No data found