



NIRB Application for Screening #125969

Amendment to Municipality of Grise Fiord Water Licence 3BM-GR12025

Application Type:	New
Project Type:	Municipal and Industrial Development
Application Date:	5/25/2024 2:11:28 PM
Period of operation:	from 2028-10-01 to 2048-10-01
Project Proponent:	Community Support Division Government of Nunavut p.o. box 700 station 1000 Iqaluit Nunavut x0a0h0 Canada Phone Number:: 867-975-5478, Fax Number::

DETAILS

Non-technical project proposal description

English: The Government of Nunavut Department of Community and Government Services, on behalf of the Municipality of Grise Fiord, is applying for an amendment to water licence 3BM GRI2025 to replace the existing water supply infrastructure, increase the maximum annual water withdrawal volume, and to upgrade the existing landfill. A design for the new water supply infrastructure is complete and business case for the landfill upgrades has been developed. There is no change to wastewater management being requested at this time. The new water supply facility will consist of a treatment building, three water storage tanks and water will be transported from the river using a gas driven centrifugal pump, through 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. Grise Fiord must fill storage tanks each summer to maintain water supply to the community throughout the year. The water source 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 total tank capacity will hold a maximum of 13,200 m³ of water. The overland flexible piping for water withdrawal will be stored once the resupply is complete each year. The footprint of the landfill will remain the same, but the upgrades are intended to improve regulatory compliance by addressing the following: •stormwater management and ditching to divert water from the landfill; •waste containment and segregation by berming the existing landfill areas and establishing a drop-off area; and •installation of fencing to improve containment.

French: Le ministère des Services communautaires et gouvernementaux du gouvernement du Nunavut présente, au nom de la municipalité de Grise Fiord, une demande de modification à son permis d'utilisation des eaux 3BM GRI2025 afin de remplacer l'actuelle infrastructure d'approvisionnement en eau, d'augmenter le volume annuel d'eau prélevée et de moderniser le site d'enfouissement actuel. La conception de la nouvelle infrastructure d'approvisionnement en eau est terminée et l'analyse du projet d'amélioration du site d'enfouissement a été élaborée. À l'heure actuelle, aucune modification n'est demandée concernant la gestion des eaux usées. La nouvelle infrastructure d'approvisionnement en eau comportera un bâtiment pour son traitement et trois réservoirs d'eau, et l'eau de la rivière sera acheminée sur 300 m par un tuyau flexible de surface, à l'aide d'une pompe centrifuge au gaz, jusqu'à une chambre à partir de laquelle elle parcourra 300 m dans une canalisation enterrée jusqu'au bâtiment de traitement. Chaque été, Grise Fiord doit remplir ses réservoirs pour maintenir l'approvisionnement en eau de la localité tout au long de l'année. La nouvelle installation utilisera la source d'eau actuelle. La modification demandée quant au volume d'eau prélevé découle de l'ajout d'un réservoir au nouveau système, ceci afin de disposer d'une marge de manœuvre pour assurer l'approvisionnement de la localité advenant la défaillance d'un des réservoirs. La nouvelle infrastructure d'approvisionnement en eau aura une capacité totale de 13 200 m³ d'eau. Une fois tous les réservoirs remplis, le tuyau flexible de surface sera rangé jusqu'à l'année suivante. L'empreinte du site d'enfouissement demeurera la même, mais les améliorations visent à en améliorer la conformité réglementaire par : • la gestion des eaux pluviales et l'aménagement d'un fossé pour en éloigner l'écoulement du site d'enfouissement; • le confinement et la séparation des déchets par l'aménagement de bermes autour des sites d'enfouissement existants et l'établissement d'une aire de dépôt; • l'installation de clôtures pour maximiser le confinement.

[illegible]

Inuinnaqtun: Nunavut Kavamanga Nunalingni Kavamatkunnili Pivikhaqautikkut, pitqutigiquplugu Haamlanganit Ausuittuq, uuktuliqtut aadlanguriami imaqlut laisinganik 3BM GRI2025 himmiriami ittut imaqarvinga aulapkaitjutikhanik, angikliyuumiqplugu kiklinga ukiuq tamaat imaqlut taimaaqtittiyuq qanuraaluktut, nutaanguqtiriamilu ittut iqqakuuqvik. Qanurinnikkaa nutaamun imaqarvikhanun igluqpaghatigut iniqtauyuuq uvalu nanminiaqtut pidjutauyut haffumunga iqakuuqviknun nutaanguqtigutikhat havaktauyut. Aalagugituq iqqakunik iqqakunik munagidjutinik apiqhiyut tadjat. Nutaat imaqarvikhaq piqaqniaqtuq halumaqhiivikhamik igluqpakmik, pingahut imaqarviit quyagiyauyut imarlut agyaqtauniaqtut kuukkap atuqluni gaasalikimik pamirvikhangit 300 mik ihuaqtumik tuqhuaqarluni nunat qangagun, taima anmugianganiq iliugarvikhaanun ilaulunilu hauhimajumik tuqhuangit hivutunirmik aulaniaqtun 300 mik miitanik halumaqhiyumun igluqpaangnun. Ausuittuq tatatiyukhaq qattaryuit auyaq tamaat pihimayaangani imaqarvikhaq nunallaamun ukiuq tamaat. Imaq aulalimaituq aadjiiktumik nutaamun igluqpangmun. Akituquyuumiyut imakkut auladjutikharnik tukhiqtauliqtut taimaali nutaat auladjut piqangniaqtuq ilaliutihimayunik qatarjunik tunihiyaangani nunallaanun aupayaqtumik imaqarvikhamik ihuangitpat hivungani. Nutaat atautimut qattaryuit aktikkutilanga 13,200 m³-mik imarmik. Tamna nunami ayurnaittumik imarmik auladjutikharnik tutqurlugit qataryuangit inirumik ukiuq tamaat. Tamna hanadjutikhanga iqakuuqvik aulangulimaituq, kihimi tamna nuutaanguqtiquhimayut havakhimayut ihuaqhaidjutikharnik malikhautikharnik ilituqhaiyaangat ukuninga:•hilarluk imaq munaridjutait kukulaqiblutiklu ahinungaqlugit imaqlut iqakuuqvikmin;•iqakut iluaniituqagtut uvalu ikualatiivit ikualatilugit iqakuuqviit uvalu havaklugit agitiqviit nayugainut; unalu•iliurainiq avatiliqimik pimmarigharnikkut hiamitiqtaagtunik.

Post-Closure Phase: from to

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Water Treatment Plant	Municipal and Industrial Development	Municipal	Lot adjacent to the power plant. New plant will provide treated water to the community.	N/A	Within the municipality
Existing landfill where the upgrades will take place	Landfill	Municipal	Existing landfill will be upgraded to improve solid waste management and containment.	N/A	Within the municipality

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Grise Fiord	David General	Municipality of Grise Fiord	2024-03-24

Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Water Board	3BM GRI2025	Active	2020-12-09	2025-12-08

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Some water treatment equipment may be flown in	
Water	Sealift of most construction materials	

Project accomodation types

Community

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Heavy	1	Unknown	Front end Loader or Excavator

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Diesel	fuel	1	10000	10000	Liters	Used to fuel heavy equipment during construction

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
299	Water will continue to be pumped from the licenced source Airport River	Airport River

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Landfill	Hazardous	0.6 cubic meters per capita per year	Temporary containment at landfill	Backhauling to an approved facility for final disposal
Landfill	Other, Domestic	6 cubic meters per capita per year	Landfilling	N/A

Environmental Impacts:

The water treatment plant provide sustained access to safe drinking water and upgraded landfill will improve the containment of waste, supporting environmental protection.

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

This is critical municipal infrastructure within the municipal bounds

Description of Existing Environment: Physical Environment

This is critical municipal infrastructure within the municipal bounds

Description of Existing Environment: Biological Environment

This is critical municipal infrastructure within the municipal bounds

Description of Existing Environment: Socio-economic Environment

This is critical municipal infrastructure that is essential for municipal operations.

Miscellaneous Project Information

Not applicable

Identification of Impacts and Proposed Mitigation Measures

Not applicable

Cumulative Effects

Not applicable

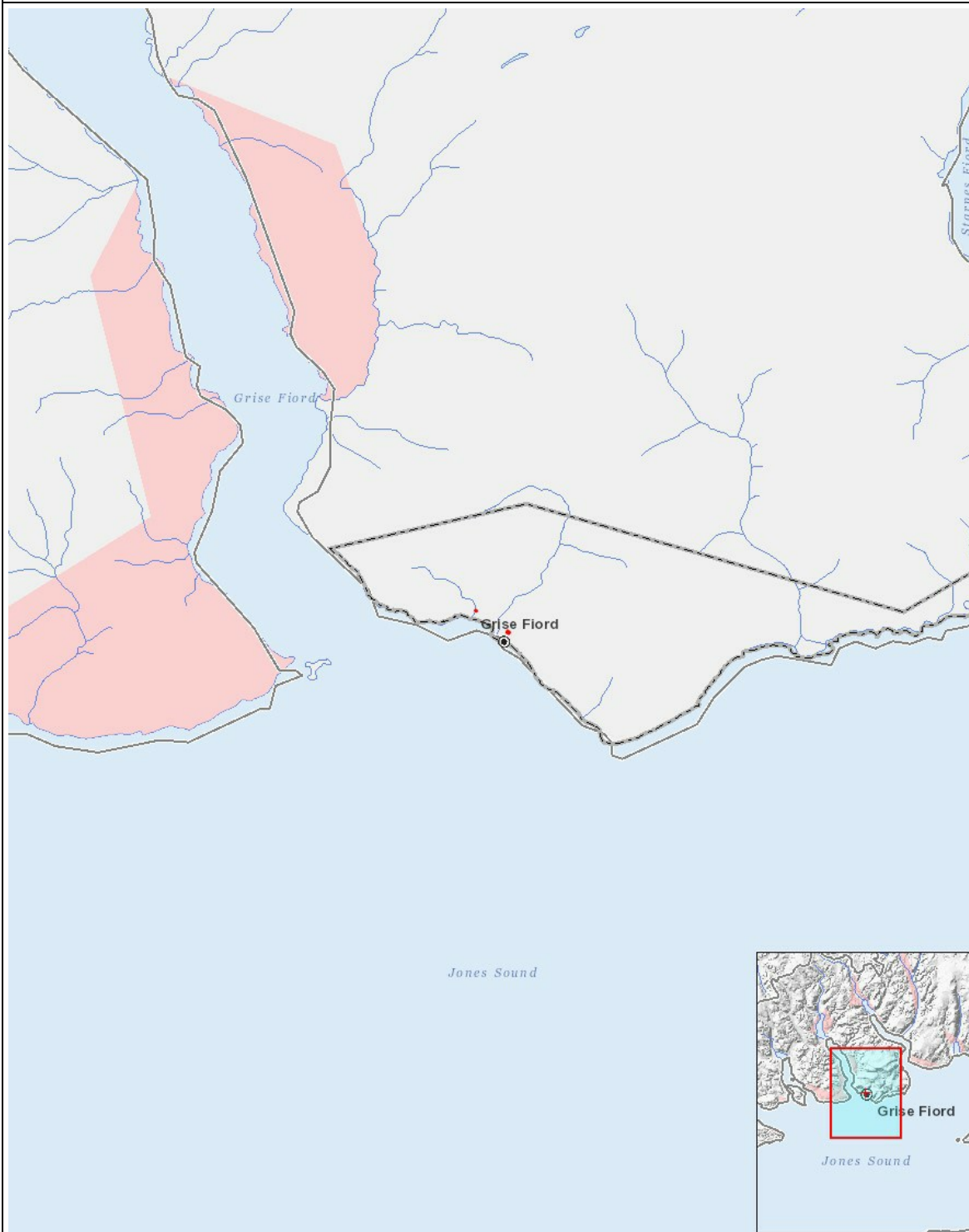
Impacts

Identification of Environmental Impacts

	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																									
Landfill		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	P	P	P	P
Municipal and Industrial Development		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	P	P	P	-
Operation																									
Landfill		-	-	-	-	P	P	-	-	-	-	-	-		-	-	-	-	-		-	P	P	P	P
Municipal and Industrial Development		-	-	-	-	P	-	-	-	-	-	-	-		-	-	-	-	-		-	P	P	P	P
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

- | | | |
|---|---------|--|
| 1 | polygon | Existing landfill where the upgrades will take place |
| 2 | polygon | Water Treatment Plant |