



File No: **3BM-GRI2636**

May 22, 2026

David General  
Senior Administrative Officer (SAO)  
Municipality of Grise Fiord  
P.O. Box 77  
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Email: [gfsao@qiniq.com](mailto:gfsao@qiniq.com)

**RE: NWB Replacement Water Licence No: 3BM-GRI2636**

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Dear Mr. General:

Please find attached Licence No: **3BM-GRI2636** (Licence) issued to Municipality of Grise Fiord (Municipality or Licensee or Applicant) by the Nunavut Water Board (NWB or Board) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement)*. The terms and conditions of the attached Licence related to water use and waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee may be in contravention of the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least **three (3) months** prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this Licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

It should be noted that in accordance with Section 75(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, the Board is not allowed to issue a permit or authorization for any project proposal that has not been submitted to the Nunavut Planning Commission (NPC) in accordance with Section 76 of *NuPPAA*.

The NWB strongly recommends that the Licensee consult the comments received by interested persons on issues identified. This information is attached for your consideration.<sup>1</sup>

Sincerely,

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Lootie Toomasie  
Nunavut Water Board  
Chair

LT/as/rh

Enclosure: Licence No: **3BM-GRI2636**  
Comments – CIRNA and ECCC

Cc: Qikiqtani Distribution List

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<sup>1</sup> Crown-Indigenous Relations and Northern Affairs (CIRNA) January 16, 2026, and Environment and Climate Change Canada (ECCC), January 13, 2026

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## DECISION

### LICENCE NUMBER: 3BM-GRI2636

This is the decision of the Nunavut Water Board (NWB) with respect to a complete application received on December 16, 2025 for the renewal of a Water Licence made by:

### MUNICIPALITY OF GRISE FIORD

to allow for the use of water and deposit of waste during municipal activities by the Municipality of Grise Fiord located within the Qikiqtani Region, Nunavut, generally located at the geographical coordinates as follows:

Latitude: 76°25'03" N

Longitude: 82°53'38" W

## DECISION

After having been satisfied that the application conforms to the North Baffin Regional Land-Use Plan (NBRLUP) and is a significant modification, the project requires screening by the Nunavut Impact Review Board (NIRB), as per the Nunavut Planning Commission (NPC)<sup>2</sup>; the NIRB pursuant to paragraph 92(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, recommended that a review of the project is not required<sup>3</sup>; the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (Act)* and Article 13 of the *Nunavut Agreement*, public notice of the application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *Nunavut Agreement* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

**Licence No: 3BM-GRI2025 be replaced by Licence No: 3BM-GRI2636 subject to the terms and conditions contained therein. (Motion #: 2026-B1-004)**

Signed this 22<sup>nd</sup> day of May, 2026 at Gjoa Haven, NU.

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Lootie Toomasie  
Nunavut Water Board, Chair

LT/as/rh

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<sup>2</sup> Nunavut Planning Commission (NPC) Conformity Determination, February 27, 2024;

<sup>3</sup> Nunavut Impact Review Board (NIRB) Screening Decision, June 2, 2025



## I. BACKGROUND

The Municipality of Grise Fiord (Municipality) is located on the southern tip of Ellesmere Island, 320 km northeast of Resolute, in the Qikiqtani Region of Nunavut. The Municipality is situated in a zone of continuous permafrost and experiences temperatures ranging from approximately  $-35^{\circ}$  to  $8^{\circ}$  Celsius.

The Municipality is responsible for providing municipal services to its estimated 144 (2021 Census) residents, including potable water supply, sewage treatment, and solid waste management, partly in the context of a water licence issued by the Nunavut Water Board (NWB or Board) to the Municipality. The potable water source for the community is a stream of glacial runoff (Airport River) which lasts for about 45 to 50 days a year during the summer from July to August. The water is then pumped through an overland hose into the water treatment plant for treatment and year-round storage in water storage tanks.

The Municipality proposes to build a new water treatment plant and intake system to supply water from Airport River through an overland pipeline. The facility will provide 13,200 cubic metres ( $m^3$ ) of storage capacity across three tanks to meet community needs through 2043, with one tank serving as backup during maintenance. Once operational, the existing water treatment plant and related infrastructure will be decommissioned.

The solid waste disposal facility consists of a fenced disposal area for municipal solid waste (MSW), a separate bulk metal disposal area, and a separate hazardous materials area. Sewage is disposed in a single cell storage lagoon with a one-year capacity. During the open water season, the sewage is discharged into a wetland area, with an effluent path of 250 metres for additional treatment, prior to release into the environment at Jones Sound. The Municipality's Water Licence expired on December 8, 2025.

## II. PROCEDURAL HISTORY

On **December 16, 2025**, the Municipality of Grise Fiord submitted a renewal Water Licence Application (Application). The following documents were submitted by the Applicant:

- Application Cover Letter
- Water Licence Amendment Renewal Application v2
- Executive Summaries in English and Inuktitut
- NPC Conformity Determination
- NIRB Screening Decision Reports
- Representative Authorization
- Amendment Justification Letter (December 2025)

- Grise Fiord OM Plan Solid Waste Disposal Facility (December 2025)
- Grise Fiord OM Plan Water Supply Facilities (December 2025)
- Grise Fiord OM Plan Sewage Disposal Facilities (December 2025)
- Grise Fiord Water Supply Facility IFC Detailed Design Drawings
- Grise Fiord Water Treatment Plant Schematic Design Report (Nov 2023)
- Annual Reports for years 2020 to 2024
- 2025 Plan for Compliance

On **December 19, 2025**, the NWB concluded that the Application generally met the requirements of section 48(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA or Act)* and forwarded notice of the Application to interested parties. All parties were invited to make representations to the NWB within thirty (30) days by **January 19, 2026**.

On or before **January 19, 2026**, Crown-Indigenous Relations and Northern Affairs (CIRNA) and Environment and Climate Change Canada (ECCC) submitted comments. The Applicant responded to the interveners' comments on January 29, 2026.

On **February 4, 2026** Environment and Climate Change Canada (ECCC) confirmed that they were satisfied by the response received from the Applicant; CIRNA submitted follow-up requests on February 5, 2026 and February 24, 2026 indicating that the Applicant's responses were not adequate and required further clarifications. The Applicant responded to CIRNA's follow-ups on February 13, 2026 and March 4, 2026.

The NWB has placed in its Public Registry copies of the Application and all comments received from interveners. This information can be accessed on the NWB's online registry site using the following link:

[Grise Fiord Application](#)

### **III. FILE HISTORY**

According to information included on the NWB's FTP site, four licences have been issued by the NWB to the Municipality of Grise Fiord in the past for its Municipal undertaking.

#### Licences Issued by the Nunavut Water Board

- Licence, NWB3GRI0308 – Type B, was issued to the Municipality of Grise Fiord on November 15, 2003 with an expiry date of November 15, 2008. The licence allowed for the use of 6,200 m<sup>3</sup> of Water per year and the deposit of Waste in support of a Municipal undertaking;
- Licence 3BM-GRI0911 was issued to the Municipality of Grise Fiord on July 25, 2009 for the use of 7,720 m<sup>3</sup> of Water per year and the deposit of Waste. This Licence expired on July 31, 2011.
- Licence 3BM-GRI1520 was issued to the Municipality of Grise Fiord on December 09,

2015 and allowed for the use of 7,700 m<sup>3</sup> of Water per year and the deposit of Waste. This Licence had an expiry date of December 08, 2020.

- Licence 3BM-GRI2025 was issued to the Municipality of Grise Fiord on November 16, 2020 and allowed for the use of 8,000 m<sup>3</sup> of Water per year and the deposit of Waste. This Licence expired of December 08, 2025.

#### IV. GENERAL CONSIDERATIONS

The following sections provide background information relevant to the terms and conditions included in this Licence, in the context of submissions received and/or the Board's rationale.

##### Term of the Licence

In accordance with s. 45 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSTRA or Act)*, the NWB may issue a Licence for a term not exceeding twenty-five (25) years. In determining an appropriate term for a renewal Licence, the Board generally takes into consideration several factors including interveners' comments, the Licensee's compliance history, as well as CIRNAC's site inspection reports and the compliance record of the Applicant.

The Licensee requested in its Application, a twenty-two (22) year term for the Licence. The Board, in examining the compliance history of the licensee, felt that a ten-year term was appropriate. The Board has therefore granted a reduced term to the Licensee. In so doing, the Board believes and expects that the **ten-year term** will provide the Licensee with significant opportunities to consistently abide by the terms and conditions in the Licence over time and resolve the ongoing non-compliances prior to the need for a renewal.

##### Annual Reports

During the review of the Application, CIRNA raised concerns regarding failures to report the daily sewage discharge quantities. The Municipality responded that the sewage trucks and the sewage lagoon do not have a flowmeter as they could not be feasibly maintained. The NWB recommends that the Municipality provide, at a minimum, estimates of the daily quantities of sewage discharged into the lagoon using monthly quantities and provide this calculation in the Annual Reports.

Under Part B, Item 1 of the Licence, the Licensee is required to submit Annual Reports for the purpose of ensuring that the NWB has an accurate annual update of municipal activities related to Water use and Waste disposal during each calendar year. This information is maintained on the Public Registry and is available to interested parties upon request. A "Standardized Form for Annual Reporting" is to be used by the Licensee and is available from the NWB registry site under the Public Registry link at the NWB Website:

[Standardized Form for Annual Reporting](#)

## Water Use

The Municipality obtains its freshwater from a stream of glacial runoff (Airport River), which is available for 45 to 50 days every year in the summer. The water use requested in this application increases from 8,000 to 13,200 cubic meters (m<sup>3</sup>) *per* year and shall not exceed 299 m<sup>3</sup> *per day*.

## Water Supply Facility

The Water Supply Facility consists of two water storage tanks, a heating system, boilers to supply heat, a chlorination system, and trucks to deliver the water to the Community.

The Municipality intends to construct a new water treatment plant and intake infrastructure to pump and convey water from Airport River through an overland pipe to the new water treatment plant. The new water treatment plant will increase the year-round water storage capacity to 13,200 m<sup>3</sup> to meet the needs of the community through to 2043. Water will be stored in 3 equally sized 4,400 m<sup>3</sup> storage tanks.

The facility is designed to meet the community's consumption demands for the projected growing population of 200 people was calculated as 8,760 m<sup>3</sup> annually. The required water storage is met over two tanks with a third tank providing redundancy should one of the tanks need to be offline at any given year for maintenance and repairs.

Once the new plant is commissioned, the existing water treatment plant, catch basin, and conveyance hose will be decommissioned.

## Sewage Disposal Facility

The Sewage Disposal Facility (SDF) consists of a non-engineered, unfenced sewage lagoon with a capacity of 19,360 m<sup>3</sup>. The lagoon is located 800 m away from the community next to the landfill. During the open water season, the sewage is discharged by pump into a natural tundra vegetated filter strip wetland area with an effluent path of 250 metres for additional treatment prior to release into the environment at Jones Sound. There are no changes to the infrastructure or operations of the Sewage Disposal Facility.

## Solid Waste Disposal Facility

The Solid Waste Disposal Facility (SWDF) is 0,8 km north-west of the community. The airport runway is located northeast of the main waste area and the sewage waste treatment lagoon is located immediately to the east. The SWDF consists of the following:

- An area that contains general household, commercial and institutional wastes, hazardous waste, construction and demolition waste, and other bulky materials;
- An adjacent area for bulky and metal waste material located at the east and west side of

- the main waste area; and
- Three seasonal streams that convey surface water from the solid waste disposal site, and surface drainage from northeast of the solid waste disposal facility to the ocean.

There is no protocol in place for the management and handling of waste. The solid waste facility does not segregate hazardous waste and drums of waste oil and other unknown liquids are not stored separately.

The Municipality states that they intend to perform upgrades to the existing solid waste facility, and will submit the details to the NWB in the future.

### Operation & Maintenance Plans

The Licensee has submitted updated Operation & Maintenance Plans for the Solid Waste Disposal Facilities, Sewage Disposal Facilities and the Water Supply Facilities. These plans were reviewed during the Application process and updated documents were submitted to incorporate recommendations from interveners. The following updated documents are being approved with the issuance of this Licence.

- Operation & Maintenance Plan for Municipal Water Licence: Water Supply Facilities, December 2025;
- Operation & Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities, February 2026;
- Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities, February 2026; and
- Environmental Emergency Contingency Plan for Municipal Water Licence, February 2026.

### Closure and Reclamation Plan

The Applicant has stated that they plan on building a new Water Treatment Plant and a new Solid Waste Disposal Facility in the future. The Licensee is required to submit a Closure and Reclamation Plan at least six (6) months prior to decommissioning any facility under the scope of this Licence.

### Monitoring Plan

During the review of the Application, CIRNA raised concerns regarding exceedances of the Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Long-term Protection of Aquatic Life for copper, iron, and mercury in the 2021 and 2024 monitoring results. CIRNA recommended that the Applicant provide a plan to bring lagoon effluent into compliance with the CCME Water Quality Guidelines prior to decanting into the wetland. In addition, CIRNA recommended establishing maximum thresholds for copper, iron,

and mercury within the monitoring criteria for GRI-4, and adding Dissolved Organic Carbon (DOC) to the sample analysis requirements set out in Part H, Item 5 of the Licence.

The Licensee stated that *“the vegetated filter strip is a terrestrial component of the treatment system and does not constitute a freshwater aquatic habitat. The ultimate receiving environment is the marine waters of Jones Sound. Available monitoring data from GRI-4 (pre-dilution and pre-wetland treatment) does not demonstrate effluent concentrations that would reasonably be expected to cause adverse effects in the marine receiving environment when compared against CCME Water Quality Guidelines for the Protection of Aquatic Life (Marine).”*

The NWB acknowledges CIRNA’s concerns regarding these exceedances, but also agrees with the Licensee that the wetland receiving environment does not constitute freshwater aquatic habitat and that the ultimate receiving environment is marine environment. Accordingly, the NWB has determined that changes to the monitoring requirements for GRI-4 are not warranted at this time.

Part H of the Licence details the environmental monitoring requirements. Requirements are similar to the previous Licence.

The Licensee is required to seek approval from the Board prior to making any changes to the monitoring program. It should also be noted that additional sampling may be required upon request by the Board or the Inspector.

#### Summary of comments received

##### Crown-Indigenous Relations and Northern Affairs (CIRNA)

1. CIRNA recommended measures to improve accuracy and completeness of water, sewage, and waste reporting (daily, monthly, annual), ensure proper sampling and consistent data labeling, and include analysis of monitoring results in Annual Reports. Conduct and document annual inspections, report unauthorized discharges with follow-up actions, and provide summaries of inspections, maintenance, and facility modifications to strengthen transparency and compliance

Response: The Applicant responded that most reporting requirements are already being met or will be addressed in future annual reports (e.g., water volumes, sampling parameters, and data interpretation). Some limitations remain due to feasibility, resource, and technical constraints (e.g., lack of flowmeters and precise discharge measurement). The Applicant acknowledges past omissions, such as unreported spills, missing inspection summaries, and certain non-compliances, and commits to correcting these in future reporting.

CIRNA follow-up (February 5, 2026) – CIRNA found the Plan for Compliance still incomplete. Some items were resolved, but key issues remain, particularly around estimating sewage and water usage without flowmeters. Other requirements were marked

resolved with conditions, including expectations for improved future spill reporting, continued annual inspections, and more robust waste quantification as infrastructure improves and funding becomes available.

Response (February 13, 2026) – The Applicant stated that estimating sewage volume using full tank assumptions would be inaccurate due to partial, schedule-driven discharges and operational constraints. It also states that dust suppression water use is minimal, irregular, and sometimes avoided due to freezing risks, making it a negligible contributor to overall wastewater volumes.

CIRNA follow-up (February 24, 2026) – CIRNA recommended the Applicant to update the compliance plan to reflect non-compliances identified by CIRNA and plans for achieving compliance. CIRNA maintains this item as unresolved, emphasizing that daily sewage volume tracking is a legal requirement. While flowmeters are not feasible and annual estimates are accepted, the Applicant must propose a method to measure or estimate daily sewage discharge and report it in annual reports.

Response (March 4, 2026) – The Applicant updated the compliance plan to show some non-compliances and stated that “...it is not feasible to measure the wastewater disposal daily, but the daily volumes can be estimated, and the full water quality sampling program is not always completed.”

2. CIRNA requested the Applicant to provide a plan to bring the lagoon water effluent in compliance with the CCME Water Quality Guidelines before decanting into the wetland. Further CIRNA recommended adding maximum thresholds (for Cu, Fe, Hg) to Part D of the Licence regulating discharge at GRI-4 and adding Dissolved Organic Carbon (DOC) to the sample analysis requirements listed in part H-5 of the License to allow regulators to assess whether Zinc concentrations exceed CCME guidelines.

Response: The Applicant responded that the wetland is a vegetated filter strip that does not support aquatic life.

CIRNA follow-up (February 5, 2026) – CIRNA stated that “Lagoon effluent discharged into a freshwater body or wetland must be monitored for potential contaminants, since an influx of contaminants can negatively impact water quality downstream. The CCME guidelines are widely accepted as the standard for assessing freshwater contamination.” CIRNA maintained their previous recommendations.

Response (February 13, 2026) – The Applicant maintained their positions stating that the CCME Water Quality Guidelines for the Long-Term Protection of Aquatic Life are not applicable to the vegetated wetland filter strip as it is not a freshwater habitat.

CIRNA follow-up (February 24, 2026) – CIRNA highlighted that lagoon effluent contains metals exceeding water quality guidelines, classifying it as waste under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. The municipality did not provide a plan to meet required standards, leaving key items unresolved. CIRNA recommended developing a

treatment plan to meet CCME guidelines or conducting site-specific studies to establish acceptable thresholds, as well as adding stricter discharge limits and additional monitoring parameters (DOC to assess whether Zinc concentrations exceed CCME guidelines) to the licence.

Response (March 4, 2026) – The Applicant stated that the wetland is not a true aquatic habitat and that the final receiving environment is marine waters (Jones Sound), where monitoring data show no exceedances when compared to CCME Water Quality Guidelines for the Protection of Aquatic Life (Marine). Considering natural attenuation and dilution, the Applicant concludes that additional treatment measures or stricter limits are not technically justified.

3. CIRNA recommended updated plans to clearly define spill prevention measures for sewage handling, clarify fuel storage volumes and containment at the new water treatment facility, and provide an updated spill contingency plan detailing storage capacities and contaminants across all relevant municipal facilities.

Response: The Applicant responded that sewage discharge is controlled manually to prevent spills, fuel storage at the new facility will meet regulatory standards with secondary containment and safety features, and submitted an updated environmental emergency contingency plan to address spill response and storage details.

CIRNA follow-up (February 5, 2026) – CIRNA considers the response as unresolved and recommended specific operating procedures that include some form of secondary containment, such as drip trays or splash pads. CIRNA also recommended that the applicant further clarify the quantity of jet fuel and diesel / gasoline stored in bulk within the municipality.

Response (February 13, 2026) – The Applicant submitted an updated Environmental Emergency Contingency Plan and Operation and Maintenance Plan for the Sewage Disposal Facilities. The Applicant stated that bulk jet fuel, diesel, and gasoline associated with the airport and tank farm are fully managed by the owners of those facilities and is not apart of the scope of the municipal water licence.

4. CIRNA recommended that the Applicant define the boundaries of the Wetland Treatment Area, conduct studies on its retention time and effluent flowrate, and update maintenance and monitoring procedures to align with CSA guidelines.

Response: The Applicant submitted an updated O&M Plan for the Sewage Disposal Facilities to define the wetland treatment area, include CSA-based maintenance and monitoring requirements, and report average seasonal discharge flowrates. Further the Applicant stated that retention time has not been determined due to the system's age and lack of historical studies, and discharge remains seasonal with variable flow.

CIRNA follow-up (February 5, 2026) – CIRNA requested a commitment from the Applicant to undertake studies to determine the retention time of the Wetland Treatment

Area.

Response (February 13, 2026) – The Applicant stated that “A *study on the wetland treatment area for retention time has not been a regulatory requirement in the procedural history for the wastewater treatment facility, which was commissioned in 1996. The Licensee is committed to achieving the effluent quality limits as per the water licence to minimize environmental impact.*”

5. CIRNA requested clarification whether runoff is known to flow out of the Sewage Disposal Facility, and if so, provide a plan to prevent, contain or treat this runoff moving forward.

Response: The Applicant referred CIRNA to the updated O&M Plan for the Sewage Disposal Facilities.

6. CIRNA requested the Applicant to provide a detailed contingency plan describing how the Sewage Disposal Facility will be managed in the event that surface water accumulates and the effluent does not meet water licence quality requirements for discharge.

Response: The Applicant referred CIRNA to the updated O&M Plan for the Sewage Disposal Facilities and stated that “*annual decanting and preventing impacted surface water by maintaining the surface water diversion berms are primary methods to avoid lagoon overflowing scenario. The lagoon has a large relative capacity of 19,600 cubic metres compared to the annual sewage generation and precipitation.*”

7. CIRNA requested clarification whether the original seepage concern was ever addressed, and if not, provide a plan to monitor and prevent future seepage from the lagoon.

Response: The Applicant stated that the lagoon is unlined and may experience seasonal seepage, as originally designed. The Applicant will monitor conditions through inspections and water quality testing, and will implement corrective measures if significant seepage or environmental impacts are identified.

8. CIRNA recommended that the Applicant develop plans to prevent leachate and contaminants from entering seasonal streams and runoff, including runoff diversion measures, and update the solid waste operations plan to include spring snow clearing practices.

Response: The Applicant stated that the planned solid waste facility upgrades include stormwater diversion through ditching, site regrading for improved drainage, and improved waste segregation and storage systems. Design work is expected to begin in 2026–2027 pending funding.

9. CIRNA requested the Applicant to provide a timeline for installing engineered berms and liner or other equivalent secondary containment systems at the bulk metal / hazardous waste storage area.

Response: The Applicant stated that the engineered berm and liner have been removed from the plan, and instead the hazardous waste area will rely on grading, ditching, and contained storage (including seacans) to reduce runoff and contamination. Design of the broader solid waste facility upgrade is planned for 2026–2027, subject to funding.

10. CIRNA recommended the applicant update The Operation & Maintenance Plan for Solid Waste Disposal Facilities to describe how it will manage ongoing solid waste production while the existing landfill is at capacity.

Response: The Applicant provided an updated Operation & Maintenance Plan for the Solid Waste Disposal Facilities and acknowledged prior inaccuracies and confirms that key issues, related to water management, grading, waste segregation, and signage, will be addressed through the future capital upgrade project for the solid waste facility.

11. CIRNA recommended the applicant provide an updated Operation & Maintenance Plan for the Solid Waste Disposal Facilities that includes a detailed plan to achieve hazardous waste segregation (including milestone and timelines), prior to any renewed license being issued.

Response: The Applicant stated that they support improved waste segregation but it is currently a challenge given the capacity and site limitations. The facility will continue centralized operations until planned capital upgrades introduce better segregation, drainage controls, and hazardous waste containment, with design expected in 2026–2027. The Licensee also notes that timely water licence renewal is needed to proceed with the water treatment plant project.

CIRNA follow-up (February 5, 2026) – CIRNA considered hazardous waste segregation unresolved and required a detailed, time-bound plan in the Operations & Maintenance Plan to prevent leachate runoff at the unlined site, including milestones and realistic timelines aligned with funding and capacity constraints.

Response (February 13, 2026) – The Applicant submitted an updated Operation & Maintenance Plan for Solid Waste Disposal Facilities which included the timelines for the solid waste upgrade project, and measures to improve segregation for hazardous and bulky wastes.

12. CIRNA recommended the Applicant describe how and when it will monitor the quality of the bottom ash to ensure it is not hazardous. Testing of the ash is recommended whenever there is reason to believe the burn pile contained materials other than paper products, paperboard packaging, untreated wood, or natural fiber textiles.

Response: The Applicant referred CIRNA to the updated Operation & Maintenance Plan for the Solid Waste Disposal Facilities.

13. CIRNA recommended the Applicant update the Operation & Maintenance Plan for the Solid Waste Disposal Facilities to include provisions for managing wind-blown litter, such as fencing or a landfill cover system.

Response: The Applicant referred CIRNA to the updated Operation & Maintenance Plan for the Solid Waste Disposal Facilities stating that the solid waste upgrade capital project will include new full fencing around the municipal solid waste cell area.

14. CIRNA requested data on instantaneous and annual flow rates based on the flow monitors installed by Dillon consulting in July 2023.

Response: The Applicant submitted a memo titled “*Grise Fiord Hydrological Assessment*”.

15. CIRNA requested confirmation that the aggregate is non-potentially acid generating and non-metal leaching before beginning construction.

Response: The Applicant stated that the aggregate is non-potentially acid-generating and non-metal leaching.

#### Environment and Climate Change Canada (ECCC)

1. ECCC recommended that the Applicant assess sludge accumulation and past desludging activities to determine potential impacts on lagoon treatment performance, and evaluate options to improve treatment efficiency, particularly to reduce ammonia levels in the effluent.

Response: The Applicant stated that “*sludge monitoring or removal has not occurred recently. It is not known whether sludge accumulation may be impacting overall treatment efficiency; however, the Licensee will commit to reviewing the effluent quality and implementable techniques for treatment optimization along with an environmental engineer. The review will be commenced in Spring 2026, and the findings and actions will be provided in the 2026 Annual Report.*”

2. ECCC recommended that the Applicant consider FEQG for comparison when assessing water quality samples from the solid waste facility and sewage facility.

Response: The Applicant referred ECCC to the updated Operation & Maintenance Plan for the Solid Waste Disposal Facilities and the updated Operation & Maintenance Plan for Sewage Disposal Facilities.

3. ECCC recommended that the Applicant implement interim measures to prevent contact between surface water runoff and the solid waste facility, and prioritize long-term solutions to prevent off-site contaminant migration.

Response: The Applicant agreed to implement ECCC’s recommendations in the design of the upgraded solid waste facility.



**NUNAVUT WATER BOARD**  
**WATER LICENCE**

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**Licence No: 3BM-GRI2636**

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

**MUNICIPALITY OF GRISE FIORD**

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(Licensee)

**P.O. BOX 77 GRISE FIORD, NUNAVUT X0A 0J0**

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(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: **3BM-GRI2636 TYPE B**

Water Management Area: **SOUTHERN ELLESMERE ISLAND WATERSHED (64)**

Location: **QIKIQTANI REGION, NUNAVUT**

Classification: **MUNICIPAL UNDERTAKING**

Purpose: **DIRECT USE OF WATER AND DEPOSIT OF WASTE**

Quantity of Water use not to Exceed: **13,200 CUBIC METRES PER ANNUM AT MAXIMUM RATE OF 299 CUBIC METRES PER DAY**

Effective Date: **MAY 22, 2026**

Expiry of Licence: **MAY 21, 2036**

This Licence renewal, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

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**Lootie Toomasie,**  
**Nunavut Water Board, Chair**

## **PART A: SCOPE, DEFINITIONS AND ENFORCEMENT**

### **1. Scope**

This Licence allows for the use of Water and the deposit of Waste for a Municipal undertaking classified as per Schedule 1 of the *Regulations* at the Municipality of Grise Fiord, located within the Qikiqtani Region of Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new *Regulations* are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such *Regulations*, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

### **2. Definitions**

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Addendum**” means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report;

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of waste is permitted by a licence issued by the Board;

“**Board**” means the Nunavut Water Board established under the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Effluent**” means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, lagoon (including wetland), landfill or a treatment plant;

“**Engineer**” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2d* the

*Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;*

“**Final Discharge Point**” in respect of an effluent means an identifiable discharge point of a facility beyond which the operator of the facility no longer exercises control over the quality of the Effluent;

“**Freeboard**” means the vertical distance between water line and the designed maximum operating height on the crest of a dam or dyke’s upstream slope;

“**Geotechnical Engineer**” means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

“**Grab Sample**” means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

“**Greywater**” means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet Wastes;

“**Hazardous Waste**” means Waste classified as “hazardous” by Nunavut Territorial or Federal legislation, or as “dangerous goods” under the Transportation of Dangerous Goods Act;

“**High Water Mark**” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

“**Inspector**” means an Inspector designated by the Minister under Section 85 (1) of the Act;

“**Licensee**” means the holder of this Licence;

“**Modification**” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“**Monitoring Program**” means a monitoring program established to collect data on surface water and groundwater quality to assess impacts to the freshwater aquatic environment of an appurtenant undertaking;

**“Nunavut Agreement”** means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*”, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

**“Regulations”** means the *Nunavut Waters Regulations SOR/2013-69 18th April, 2013*;

**“Sewage”** means all toilet wastes and greywater;

**“Sewage Disposal Facility”** refers to the earthen and unlined lagoon where sewage undergoes natural treatment before being discharged into the ocean, as described in the Application for Water Licence renewal filed by the Applicant on December 16, 2025;

**“Solid Waste Disposal Facility”** means the area comprised of, and the associated structures designed to contain solid Waste, as described in the Application for Water Licence renewal filed by the Applicant on December 16, 2025;

**“Spill Contingency Plan”** means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

**“Use”** means use as defined in S.4 of the *Act*;

**“Waste”** means, as defined in S.4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means;

**“Waste Disposal Facilities”** means all facilities designated for the disposal of waste, and includes the Sewage Disposal Facility and Solid Waste Disposal Facility, as described in the Application for Water Licence renewal filed by the Applicant on December 16, 2025;

**“Water” or “Waters”** means waters as defined in section 4 of the *Act*; and

**“Water Supply Facility”** refers to the glacier run-off stream source of freshwater, and its associated equipment: Water storage tanks, boilers for heating and recirculation system and hypochlorite dosing pumps to treat the water, as described in the Application for Water Licence renewal filed by the Applicant on December 16, 2025.

### 3. Enforcement

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;

- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

**PART B: GENERAL CONDITIONS**

1. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31<sup>st</sup> of the year following the calendar year being reported, containing the following information:
  - a. Tabular summaries of all data generated under the “Monitoring Program”;
  - b. The daily, monthly and annual quantities in cubic metres of fresh Water obtained at the Water Supply Facility and/or for all purposes under the licence;
  - c. The daily, monthly and annual quantities in cubic metres of sewage Waste discharged; and the monthly and yearly quantities of every type of Waste accepted at the Solid Waste Facilities;
  - d. Summary of modifications and/or major maintenance work carried out on the Water Supply Facility and Waste Disposal Facilities, including all associated structures;
  - e. A list of unauthorized discharges and summary of follow-up action taken;
  - f. A summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;
  - g. Any Addendum with updates or revisions for manuals and plans (including *Operations and Maintenance Manuals/Plans*) as required by changes in operation and/or technology;
  - h. A summary of any studies or reports requested by the Board that relate to the use of Water and Waste disposal or restoration, and a brief description of any future studies planned;
  - i. A summary of any inspections completed by federal or territorial authorities, geotechnical or municipal engineers, on undertakings related to Waste disposal, Water use or reclamation activities; and
  - j. Any other details on Water or Waste deposit requested by the Board by November 1 of the year being reported.
2. The Licensee shall comply with the “Monitoring Program” described in this Licence, and any amendments to the “Monitoring Program” as may be made from time to time, pursuant to the conditions of this Licence.
3. The “Monitoring Program” and compliance dates specified in the Licence may be modified at the discretion of the Board in writing.
4. The Licensee shall, maintain the necessary signs, where possible, to identify the stations of

the “Monitoring Program”. All signage postings shall be in the Official Languages of Nunavut, and shall be located and maintained to the satisfaction of an Inspector.

5. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
6. The Licensee shall install flow meters or other such devices, or implement other such methods as approved by the Board in writing, for the measuring of Water volumes as required under Part H of this Licence.
7. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
8. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
9. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
10. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and condition imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
11. The Licensee shall ensure a copy of this Licence is maintained at the Municipal Office at all times. Any communication with respect to this Licence and any notice provided to an Inspector, shall be made in writing to the attention of:

**(a) Manager of Licensing:**

Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0  
Telephone: (867) 360-6338  
Fax: (867) 360-6369  
Email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**(b) Inspector Contact:**

Manager of Field Operations, CIRNA  
Nunavut District, Nunavut Region  
918 Nunavut Drive  
Iqaluit, NU X0A 3H0

Telephone: (867) 975-4284

12. The Licensee shall submit one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut and Inuinnaqtun.
13. The Licensee shall ensure that all document(s) and correspondence submitted by the Licensee to the Board are received and acknowledged by the Manager of Licensing.
14. This Licence is not assignable except as provided in Section 44 of the Act.
15. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

**PART C: CONDITIONS APPLYING TO WATER USE**

1. The Licensee shall obtain all fresh water for municipal purposes under this Licence from glacial melt water source using the Water Supply Facilities and Airport River or as otherwise approved by the Board.
2. The annual quantity of Water used for all purposes shall not exceed thirteen thousand and two hundred (13,200) cubic metres annually, at a maximum daily withdrawal rate that shall not exceed two hundred and ninety-nine (299) cubic metres.
3. The use of Water from streams or any water bodies not identified in Part C, Item 1, is prohibited unless authorized and approved by the Board in writing.
4. The Licensee shall not remove any material from below the ordinary High-Water Mark of any water body unless otherwise approved by the Board in writing.
5. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
6. The Licensee shall implement sediment and erosion control measures, prior to and during operations, to prevent entry of sediment into Water.
7. The Licensee shall maintain the Water Supply Facilities to the satisfaction of the Inspector.
8. The Licensee shall equip all water intake hoses with a screen of appropriate mesh size to ensure that fish are not entrained and shall withdraw Water at a rate such that fish do not become impinged on the screen.
9. Sediment and erosion control measures shall be implemented prior to and maintained as required during municipal operations, to prevent entry of sediment into water.

**PART D: CONDITIONS APPLYING TO WASTE DISPOSAL**

1. The Licensee shall direct all Sewage to the Sewage Disposal Facility or as otherwise approved by the Board.
2. The Licensee shall provide a minimum of ten (10) days’ notice to an Inspector prior to initiating any decant of the Sewage Disposal Facility.
3. All Effluent discharged from the Sewage Disposal Facility at Monitoring Program Station GRI-4 shall be measured for the parameters listed under this Licence and shall not exceed the following Effluent quality limits:

<b>Parameter</b>	<b>Maximum Concentration of Any Grab Sample</b>
pH	between 6 and 9
cBOD <sub>5</sub>	100 mg/L
Total Suspended Solids	120 mg/L
Fecal Coliforms	1 x 10 <sup>6</sup> CFU/100 mL
Oil and grease	No visible sheen

4. The Licensee shall maintain at all times, a Freeboard of at least 1.0 metre, or as recommended by a qualified Geotechnical Engineer and as approved by the Board in writing, for all dams, dykes or other structures intended to contain, withhold, divert or retain Water or Waste.
5. The Sewage Disposal Facility shall be maintained and operated in such a manner as to prevent structural failure.
6. The Licensee shall dispose of and permanently contain all solid Wastes at the Solid Waste Disposal Facilities or as otherwise approved by the Board in writing.
7. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
8. The Licensee shall segregate and store all hazardous materials and/or hazardous Waste within the Solid Waste Disposal Facility in such a manner as to prevent the deposit of deleterious substances into any Water, until such a time that the materials have been removed for proper disposal at an approved facility.
9. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.

**PART E: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION**

1. The Licensee shall submit to the Board for review, for construction design drawings stamped by a qualified Engineer, sixty (60) days prior to the construction of any dams, dykes or structures intended to contain, withhold, divert or retain Water or Waste.
2. The Licensee may, without written approval from the Board, carry out modifications to the Water Supply Facility and Solid Waste Disposal Facilities provided that such modifications are consistent with the terms of this Licence and the following requirements are met:
  - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
  - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
  - c. such Modifications do not constitute “significant modifications” that require conformity assessment by the Nunavut Planning Commission and/or impact assessment by the Nunavut Impact Review Board before consideration by the NWB;
  - d. within sixty (60) days following notification of the proposed Modifications, the Licensee, Nunavut Planning Commission, Nunavut Impact Review Board, designated Inuit organization or responsible regulatory authority has not indicated that any conformity determination, impact assessment, compensation negotiations or other consideration of the Modification that must be completed before the NWB can consider the Modification will take longer than 45 days; and
  - e. the Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that the NWB’s consideration of the proposed Modification will require more than sixty (60) days.
3. Modifications for which all of the conditions referred to in Part E, Item 2, have not been met may be carried out only with written approval from the Board. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.
4. The Licensee shall, within ninety (90) days of completion of Modification or construction of facilities and/or infrastructure associated with the project, submit to the Board for review a Construction Summary Report along with stamped as-built plans and drawings, providing explanation to reflect any deviations from for construction drawings taking into account construction and field decisions and how they may affect the performance of engineered facilities.
5. All activities shall be conducted in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake any corrective measures in the event of any impacts on surface drainage.

6. The Licensee shall implement and maintain sediment and erosion control measures prior to and during activities carried out under this Part, to prevent the release of sediment and minimize erosion.
7. With respect to earthworks, the deposition of debris or sediment into or onto any Water body is prohibited. These materials shall be disposed of at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the Water.
8. The Licensee shall only use material that is free of contaminants, for construction, operation, and maintenance activities and that is obtained from approved sources, demonstrated not to be potentially acid generating and metal leaching.

**PART F: CONDITIONS APPLYING TO OPERATION AND MAINTENANCE**

1. The Board has approved the Plan entitled “*Environmental Emergency Contingency Plan for Municipal Water Licence*” dated February 2026, which is being approved with the issuance of this Licence.
2. The Licensee shall implement the plan entitled “*Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities*”, dated February 2026, which is being approved with the issuance of this Licence.
3. The Licensee shall implement the plan entitled “*Operation & Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities*”, dated February 2026, which is being approved with the issuance of this Licence.
4. The Licensee shall implement the plan entitled “*Operation & Maintenance Plan for Municipal Water Licence: Water Supply Facilities*”, dated December 2025, which is being approved with the issuance of this Licence.
5. An inspection of all engineered facilities related to the management of Water and Waste shall be carried by an Engineer (Civil, Municipal or Geotechnical) annually or before commissioning any facility. The Engineer’s report shall be submitted to the Board within sixty (60) days of the inspection, including a Cover Letter from the Licensee outlining an implementation plan addressing each of the Engineer’s recommendations.
6. The Licensee may request changes to the type, frequency, and personnel of the inspection and monitoring required under Part F, Item 5. Any submission requesting changes to the required inspection and monitoring shall include supporting evidence to justify the changes. The requirements of Part F, Item 5 may be modified upon approval of the Board in writing.
7. The Licensee shall perform more frequent inspections of the engineered facilities at the request of an Inspector.

8. The Licensee shall, during the term of this Licence, undertake the following activities in addition to any other required action, should an unauthorized discharge of waste or harmful substance occur or if such a discharge is foreseeable:
  - a. Employ the appropriate contingency measures as approved under the Environmental Emergency Contingency Plan for Municipal Water Licence for the Municipality of Grise Fiord;
  - b. Report the incident immediately via the [online Spill Report Webform](#) or by calling NWT/NU 24-Hour Spill Reporting Line at (867) 920-8130, and the Inspector at (867) 975-4284; and
  - c. Submit to the Inspector, a detailed report on each occurrence, not later than thirty (30) days after initially reporting the event, that provides the necessary information on the location (including the GPS coordinates), initial response action, remediation/clean-up, status of response (ongoing, complete), proposed disposal options for dealing with contaminated materials and preventative measures to be implemented.
  
8. The Licensee shall, in addition to Part F, Item 7, regardless of the quantity of releases of harmful substances, report to the NWT/NU 24-Hour Spill Reporting Line if the release is near or into a Water body.

**PART G:        CONDITIONS APPLYING TO ABANDONMENT, RESTORATION AND CLOSURE**

1. The Licensee shall submit to the Board for approval an *Abandonment, Restoration and Closure Plan* at least six (6) months prior to abandoning any facilities or upon submission of the final design drawings for the construction of new facilities to replace existing ones. Where applicable, the Plan shall include information on the following:
  - a. water intake facility;
  - b. the water treatment and waste disposal sites and facilities;
  - c. petroleum and chemical storage areas;
  - d. any site affected by waste spills;
  - e. leachate prevention;
  - f. an implementation schedule;
  - g. maps delineating all disturbed areas, and site facilities;
  - h. consideration of altered drainage patterns;
  - i. type and source of cover materials;
  - j. future area use;
  - k. hazardous wastes; and
  - l. a proposal identifying measures by which restoration costs will be financed by the Licensee upon abandonment.

2. The Licensee shall complete all restoration work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board.
3. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
4. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
5. Areas that have been contaminated by hydrocarbons shall be reclaimed to meet objectives as outlined in the Government of Nunavut’s Environmental Guideline for Site Remediation, January 2002. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.

**PART H: CONDITIONS APPLYING TO MONITORING PROGRAM**

1. The Licensee shall maintain Monitoring Program Stations at the following locations:

<b>Monitoring Program Station Identification</b>	<b>Description</b>	<b>Frequency</b>	<b>Status</b>
GRI-1	Raw Water Supply Intake at the Water Supply Facility prior to treatment	Daily, Monthly and Annually	Active (Volume)
GRI-2	Effluent discharge from the Final Discharge Point at the Solid Waste Facility	Once in the beginning, once in the middle and once near the end of the season (when flow is observed)	Active (Quality)
GRI-3	Raw sewage at the truck offload point	NA	Inactive
GRI-4	Effluent discharge from the Sewage Disposal Facility (end of wetland)	<u>Volume</u> : Monthly and Annually; <u>Water Quality</u> : Twice Annually – in the beginning and near completion of decanting	Active (Volume) (Quality)

2. The Licensee shall measure and record, in cubic metres, the daily, monthly and annual quantities of water pumped at Monitoring Program Station GRI-1, for all purposes.
3. The Licensee shall measure and record in cubic metres, the monthly and annual quantities of effluent discharged from Monitoring Program Station GRI-4.
4. All samples obtained at Monitoring Program Station GRI-4 shall be in compliance with effluent criteria as established under Part D, Item 3.
5. The Licensee shall sample at Monitoring Program Stations GRI-2 and GRI-4, according to the frequency established under Part H, Item 1, during periods of observed flow. Samples shall be analyzed for the following parameters:

Biochemical Oxygen Demand (BOD <sub>5</sub> )	Fecal Coliforms
Total Suspended Solids	pH
Conductivity	Nitrate-Nitrite
Oil and Grease	Magnesium
Calcium	
Sodium	Potassium
Chloride	Sulphate
Total Hardness	Total Alkalinity
Ammonia Nitrogen	Total Zinc
Total Cadmium	Total Iron
Total Cobalt	Total Manganese
Total Chromium	Total Nickel
Total Copper	Total Lead
Total Aluminum	Total Arsenic
Total Mercury	Total Organic Carbon (TOC)*

6. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board.
7. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
8. The Licensee shall annually review the QA/QC Plan and modify it as necessary. Revised QA/QC Plans shall be submitted to the Board with a current approval letter from an accredited lab and shall meet the standards set out in Part H, Item 6 and Part H, Item 7 of the Licence.
9. The Licensee shall include all of the data and information required by the “Monitoring

Program” complete with an interpretation and discussion of the results, in the Licensee's Annual Report, as required *per* Part B, Item 1, or as requested by an Inspector.

10. Modifications to the Monitoring Program may be made only upon written approval from the NWB.
11. Additional monitoring stations, sampling and analyses may be requested by an Inspector.