May 27, 2025

Joseph Monteith
Water Resources Officer
Qikiqtani and High Arctic Region
Crown-Indigenous Relations and Northern Affairs Canada
P.O. Box 2200
Iqaluit, NU, X0A 0H0
Ph: 867-975-1787
Email: joseph.monteith@rcaanc-cirnac.gc.ca

RE: Grise Fiord Sewage Lagoon Decant, Water Licence No. 3BM-GRI2025

Dear Joseph,

As per Part D, Item 2 of the Municipality of Grise Fiord Water Licence No. 3BM-GRI2025, this is notification of plans to discharge waste from the sewage lagoon beginning June 6, 2025. An early decant of the sewage lagoon is needed to comply with the minimum 1.0 m freeboard requirement of Part D, Item 4 of the Licence, and prevent potential damage to the sewage lagoon berms due to high effluent levels during thaw. This will also ensure that the lagoon will maintain a 1.0 m freeboard until the seasonal decant period, which will occur later in the summer. This notification meets the requirements for a ten (10) day notice period of the Licence.

The sewage treatment facility in Grise Fiord consists of a single cell, constructed retention treatment system that discharges into a wetland. The lagoon is located approximately 800 m southwest from the center of the community and was commissioned in 1998.

Figure 1. Grise Fiord Sewage Lagoon.

The sewage lagoon cell filled to near the top of the berms over winter, shown in Figures 2 and 3. The sewage lagoon has an effluent discharge path designed for a pump decant during the ice-free season, located in the southwest corner of the lagoon. The discharge path leads to a filter strip wetland area. To lower effluent levels to 1.0 m freeboard, 10 days of pumping is projected, dependant on weather conditions that affect pumping operations.

Figure 2. Grise Fiord Sewage Lagoon, May 2025.

Figure 3. Grise Fiord Sewage Lagoon, facing South.

Effluent will be directed to the filter strip wetlands. As temperatures are still below freezing, it is anticipated that the effluent will freeze as it is dispersed, for gradual release later in the spring when the wetland thaws. Regular decanting operations will take place this summer (following notice to Inspector) to fully decant the lagoon.

Samples will be taken during the decant at GRI-4 for comparison to effluent criteria set out in Part D, Item 3 of Water Licence No. 3BM-GRI2025, along with daily decant volume. This will be reported to Crown-Indigenous Relations and Northern Affairs (CIRNAC) upon Certificate of Analysis receipt, and included in the 2025 Annual Report.

Should you have any questions, please contact me at rwalton@gov.nu.ca.

Sincerely,

Rory Walton
Municipal Engineering Student
Municipal Works Division
Transportation and Infrastructure Nunavut
Government of Nunavut

Cc: David General, Senior Administrative Officer, Municipality of Grise Fiord
Marty Kuluguktuq, Assistant Senior Administrative Officer, Municipality of Grise Fiord
NWB Licensing Department
Megan Lusty, Acting Director, Municipal Works Division, GN-TIN
Ryan Kum, Municipal Engineering Officer, Municipal Works Division, GN-TIN