

Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

ECCC File: 6200 000 017/003
NWB File: 3BM-GRI1520



September 14, 2020

via email at: licensing@nwb-oen.ca

Richard Dwyer
Manager Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

**RE: 3BM-GRI1520 – GN-CGS – Municipality of Grise Fiord – Type B Water License
Application for Renewal**

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned Type “B” Water License. Our comments are enclosed.

ECCC’s specialist advice based on our mandate pursuant to the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*.

The following comments are provided:

1. Topic: Solid Waste Management

Reference(s)

- Grise Fiord Executive Summary 2020
- Solid Waste Operation and Maintenance Manual 2014

Comment

The municipality acknowledges that solid waste management is an issue for the community, and a consultant has been hired to work on a new solid waste site. The existing solid waste site is unmanaged, and there is no segregation of hazardous materials, waste fuel barrels, bulky/metal and domestic wastes. The 2014 Solid Waste Operation and Maintenance Manual describes the landfill as follows:

"The MSW disposal area at Grise Fiord is used as a natural attenuation landfill. This means that the landfill is not lined and small amounts of contaminants can enter the surrounding



environment to be naturally broken down. In this type of landfill, the rate that contaminants enter the environment is expected to occur at a rate such that contaminants can easily be broken down and the surrounding environment is not overwhelmed. Natural attenuation landfills also rely on permafrost aggrading into the covered waste cells of the landfill and eventually freezing them. However, as contaminants are able to freely enter the environment in this type of landfill, proper waste segregation is important to ensure harmful contaminants are kept out of the landfill."

The O&M plan goes on to make recommendations for waste segregation and operational procedures, including for open burning.

The Executive Summary submitted with the renewal application states:

"The Solid Waste Facility consists of a main Solid Waste area and a bulky metal area. 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 also not properly stored.

A consulting firm is currently working on the waste audit and feasibility study of the waste management site. The design work will start on the new site once it is selected and supported by the Hamlet. The decommissioning of the existing site will be implemented soon after the new site is designed, built and commissioned. The new site will have an independent cell to manage each different type of wastes. The new site is anticipated to be built and operational in next 3 to 4 years. The new site will be fenced with a control gate."

Given the length of time for a new landfill site to be constructed and commissioned, improving management of the existing site in the interim should be a priority, particularly for hazardous wastes.

ECCC Recommendation(s)

ECCC recommends that the municipality take measures to manage the existing solid waste site in accordance with the current O&M plan, ensuring that hazardous waste is segregated.

ECCC recommends that design and construction of the new solid waste site be prioritized.

2. Topic: 2019 Monitoring Results

Reference(s)

- Application for Water License Renewal

Comment

The 2019 Annual Report references sampling, which was completed for various water and wastewater streams, including leachate, and indicates that the results were appended to the Annual Report. The results do not appear to be posted to the public registry, and would provide useful information for review of the water licence application.

ECCC Recommendation

ECCC requests that the 2019 monitoring results be made available for the Board's review.

3. Topic: Licence Term

Comment

The Licensee is applying for a 5-year term. ECCC concurs with this duration, as it will cover the period of upgrades to the community water treatment and waste disposal sites.

If you need more information, please contact Abigayle Blackmore at Abigayle.Blackmore@Canada.ca.

Sincerely,

[original signed by]

Abigayle Blackmore
Environmental Assessment Officer

cc: Jody Small, Acting Head, Environmental Assessment North (NT and NU)