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Your File: 3BM-GRI0308
Our file: 4782 046

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RE: NWB 3BM-GRI0308– Hamlet of Grise Fiord – “Type B” Water License Renewal

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities under the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Hamlet of Grise Fiord is applying to renew their water license to allow for the municipal use of water and the deposit of waste. Currently the Hamlet collects water for domestic and fire protection from the glacial run-off from the glacier location above the community. The sewage treatment system consists of a sewage lagoon with a capacity of approximately 19,360 m³. The Hamlet decants the lagoon into the marine environment. Solid waste is collected and deposited in the landfill and is burnt twice annually, once in the beginning of summer and once at the end. Bulky metals are stored next to the landfill site and are segregated; however, no specific guidelines are followed.

Our review of the renewal materials identified considerable gaps in the information that we feel would be necessary to provide recommendations towards a renewed licence that is both achievable and protective of the environment. Environment Canada requests that the Nunavut Water Board (Board) extend the Grise Fiord Water License for a term of 18 months so that the Hamlet has the opportunity to address deficiencies in the application. The Hamlet should then re-submit their water licence renewal application to the Board for renewal.

The following items should be addressed prior to the renewal of the Water License:

- Provide the Board with current and detailed maps indicating the location of the sewage treatment facilities, including the current lagoons, any future planned lagoons, the old honey bag pit, the solid waste area, and the hazardous waste storage area, including their location in relation to water.
- Submit information regarding the decommissioning of the old honey bag pit and the old sewage lagoon adjacent to the solid waste site, which has since been used for the disposal of bulky metals. Environment Canada requests that a decommissioning and

reclamation plan be submitted, which includes a discussion regarding where bulky metals will be disposed of once the old sewage lagoon is backfilled.

- An Operations and Maintenance (O&M) Manual should be submitted for the Sewage Disposal and the Solid Waste Disposal facilities, and an updated O&M manual for the Water Supply and Water Source. Generally the plans should include:
 - A description of how facilities are operated and maintained;
 - How often these tasks are performed; and,
 - Who is responsible for their completion.
- Provide a report identifying all Final Discharge Points, including a general description and geo-referenced locations.
- The proponent should submit a Draft Spill Response Plan for approval for the existing facilities. The plan should facilitate response to spills which might occur during construction and operation and decommissioning of the facilities. The plan should include a list of available spill response equipment and the names of trained personnel who will be on-site and available in the case of a spill.
- Environment Canada recommends that proper signage is in place indicating the locations of the water source and sewage lagoon.
- Fencing of the solid waste site should be done to facilitate control of access to the landfill and to prevent the spread of debris.
- According to the 2003 and 2006 INAC inspection reports, “numerous drums of unknown contents” were located within 30 meters of the high water mark. It is unclear if these drums have been removed or relocated. Environment Canada requests that information be provided on the current location of these drums, or provide the details of their disposal.
- The submission of an annual report as a condition of the license, including monitoring results and updates to plans.

EC does not feel we are in possession of sufficient information on these municipal operations to comment on the application at this time, and we look forward to being able to provide further feedback once the above items are available. Please contact me with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at carrie.spavor@ec.gc.ca

Yours truly,

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Environmental Assessment - North,
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cc: Carey Ogilvie (Head, EA-North, Environment Canada)
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