



Government of Nunavut

December 16, 2025

The Municipality of Grise Fiord is applying to renew and amend Water Licence 3BM-GRI2025. The amendments the Municipality would like to apply as well as justification are as presented in Table 1. The proposed amendments are to ensure the municipal water use demands are sufficiently met through to 2047, to align the licence with newly issued municipal licences requirements that are based on evidence and best practices, and to remove previous requirements that are no longer relevant or practical.

Table 1. Proposed Amendments to the Municipality of Grise Fiord Renewed Water Licence

ITEM	REQUEST	JUSTIFICATION
C-2	Amend maximum annual withdrawal rate from 8,000 cubic metres to 13,200 cubic metres.	Increase the annual water withdrawal to meet the storage volume of the new water treatment facility, which is 13,200 cubic metres over three equally sized 4,400 cubic metre capacity tanks. The facility is designed to meet the community's consumption demands through to the year 2043, which for the projected growing population of 200 people was calculated as 8,760 cubic metres 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.
D-3	<p>Amend the parameter BOD₅ to cBOD with a 100 mg/L maximum concentration of any grab sample</p> <p>Amend the maximum concentration of any grab sample of 120 mg/L for total suspended solids</p>	<p>The <i>Canada-Wide Strategy for the Management of Municipal Wastewater Effluent (2009)</i> recommended Nunavut to complete research to develop performance standards for wastewater treatment facilities, as it was recognized that standardized effluent criteria would not be practical for systems in the Far North and a customized approach may be needed.</p> <p>The requested effluent quality limits are based on the findings from long-term research of lagoon-wetland systems across Nunavut. Please see Sections 1-7 and 1-8 in the uploaded report <i>Recommendations for the Development of Nunavut Municipal Wastewater Management Standards</i> dated October 2017 prepared by exp Services Inc., which provided the following conclusions and recommendations:</p> <ul style="list-style-type: none"> • Natural wetlands are capable of achieving wastewater treatment • Site specific effluent discharge limitations should be considered • Technology-based limitations establish a minimum level of effluent quality that is attainable using demonstrated technologies that are economically available • Achievable limits for lagoon wetland systems: <ul style="list-style-type: none"> ○ Limits: 100 mg/L cBOD₅; 120 mg/L TSS; <ul style="list-style-type: none"> ▪ Systems application: Flows <2,500 m³/day to well flushed marine receiving environments • The effluent discharge point considers only the location where the effluent enters the receiving waters (marine or fresh)

		<ul style="list-style-type: none"> • Wetland system final discharge points should be monitored and amended as required if flow patterns throughout the wetland are dynamic • Negligible environmental impacts from wastewater effluent have been observed
F-2	Remove / amend requirement upon acceptance of submitted Plan.	<p>The plan was updated according to the requested updates by CIRNAC and the water licence clause. The plan was submitted along with the Renewal and Amendment Application.</p> <p>Please note that the O&M plan for the solid waste disposal facility will be updated again shortly following this amendment and renewal application as modifications to upgrade the solid waste facility will take place over the next 2 years.</p>
F-3	Remove / amend requirement upon acceptance of submitted Plan.	<p>The plan was updated according to the requested updates. The plan was submitted along with the Renewal and Amendment Application.</p> <p>Please note that the O&M plan for the water supply facilities will be updated and submitted to the Board following this amendment and renewal application upon the commissioning of the new water treatment plant in 2027.</p>
F-4	<p>Amend requirement or add clause:</p> <p>The Licensee may request changes to the type, frequency, and personnel of the inspection and monitoring required. Any submission requesting changes to the required inspection and monitoring shall include supporting evidence to justify the changes, and the Board shall circulate the request for comment to relevant parties before considering the Applicant's request. Following</p>	<p>The Municipality does not have engineers available who are trained to conduct water or waste facility inspections. Furthermore, engineers cannot misrepresent their area of expertise according to NAPEG's Code of Ethics Rules of Conduct: "Professional Engineers and Professional Geoscientists: shall undertake only such work as they are competent to perform by virtue of training and expertise and shall express opinions on engineering and geoscience matters only on the basis of adequate knowledge and honest conviction."</p> <p>A CIRNAC Inspection occurs annually. The inspection report is received by the municipality as well as the Government of Nunavut – Municipal Works Division. The Municipal Works Division reviews the inspection report and based on the Inspector's observations and requests determines whether an engineer is required to provide an engineered solution to resolve the compliance item. An engineer is not always required and therefore it is requested that the annual CIRNAC inspections continue, and an engineer's review of the report take place on a case-by-case basis.</p>

	the Board's consideration of supporting evidence and comments, the Board shall issue their decision about the request in writing, including, if applicable, approval of any changes to the required inspection.	It is proposed that inspections, independent of CIRNAC inspections, of engineered facilities by qualified / certified personnel can take place at a frequency based on supporting evidence and best practices. A geotechnical engineering memo outlining the recommended inspection frequency and scope will be submitted in 2026.
F-6 (second clause)	Remove requirement	All spills regardless of quantity, location , and type must be reported under the Northwest Territories–Nunavut Spills Working Agreement. The first clause Part D, Item 6 could be amended to refer to both discharge of waste and harmful substances.