

Response to Comments and Recommendations
 Water Licence 3BM-GRI2025
 January 2026

Supporting documentation referenced in Licensee Response accessible at: <https://app.ca.e-builder.net/public/publicLanding.aspx?QS=83bdc86e00d143c89f24445f3cc7a5a2>

Agency	Date	Page(s) No.	Comment / Recommendation ID	Licensee Response
CIRNAC	Jan-16-2026	5	Comment 1a	The daily quantities of fresh water were provided in the 2024 Annual Report and will be continued to be provided in subsequent Annual Reports.
CIRNAC	Jan-16-2026	5	Comment 1b	The sewage trucks (gravity flow discharged) and sewage lagoon (outdoor exposed environment) do not have a flowmeter as they would be could not be feasibly maintained. The Board has accepted in the past that sewage disposal volumes be assumed as equal to delivered water volumes, which are available as monthly and yearly volumes.
CIRNAC	Jan-16-2026	5	Comment 1c	Subsequent Annual Reports will report the quantities of water in cubic metres.
CIRNAC	Jan-16-2026	5	Comment 1d	At this time, there are no technologies / methods that can be feasibly implemented to obtain a more accurate estimate of the effluent discharged volumes.
CIRNAC	Jan-16-2026	5	Comment 1e	Please reference the supporting document <i>Solid Waste Generation Estimates for Municipal Water Licences</i> . The provided volumes are the best that can be done to satisfy the water licence requirement until significant changes to the solid waste infrastructure and operations funding are in place. The reported volumes do not alter the environmental responsibilities and compliance obligations of operating and maintaining the solid waste disposal facility.
CIRNAC	Jan-16-2026	5	Comment 1f	The Licensee acknowledges it should have been included in the 2022 Annual Report.

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CIRNAC	Jan-16-2026	5	Comment 1g	The Licensee acknowledges that the spills should have been reported in the Annual Report.
CIRNAC	Jan-16-2026	5	Comment 1h	The Licensee acknowledges that an inspection summary should have been provided in the 2022 and 2023 Annual Reports.
CIRNAC	Jan-16-2026	5	Comment 1i	The Licensee acknowledges non-compliance with the water licence item. Amendment and justification for this item was submitted in the <i>Amendment Justification Letter</i> on the basis on resource (personnel and funding) and technical reasoning.
CIRNAC	Jan-16-2026	5	Comment 1j	Noted. The parameters will be performed in future laboratory analyses of GRI-2 and GRI-4.
CIRNAC	Jan-16-2026	5	Comment 1k	The 2025 Annual Report will include this interpretation and discussion.
CIRNAC	Jan-16-2026	5	Comment 1l	Noted.
CIRNAC	Jan-16-2026	6	R-01 (a-l)	See updated Plan for Compliance. As response to R-01d, please reference the supporting document <i>Solid Waste Generation Estimates for Municipal Water Licences</i> . The provided volumes are the best that can be done to satisfy the water licence requirement until significant changes to the solid waste infrastructure and operations funding are in place.
CIRNAC	Jan-16-2026	7	R-02 (a-c)	The wetland is a vegetated filter strip that does not support aquatic life.
CIRNAC	Jan-16-2026	7	R-03a	Sewage is only released from the trucks when the discharge valve is manually opened, and the trucks are aligned to discharge directly into the sewage lagoon.
CIRNAC	Jan-16-2026	8	R-03b	The storage tank for fuel will meet CSA CAN/ULC-S601-14. The day tank will be double walled with 110% capacity secondary containment installed on a concrete pad. The tank will be equipped with an overflow protection valve and a high-level audible alarm to alert the operator when the high-level mark is

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				reached. All piping drains containing fuel oil will be piped to appropriate secondary containments systems.
CIRNAC	Jan-16-2026	8	R-03c	Please see the updated Plan entitled <i>Municipality of Grise Fiord Environmental Emergency Contingency Plan for Municipal Water Licence January 2026</i> .
CIRNAC	Jan-16-2026	9	R-04a	The extent of the wetland treatment area has been added to the updated <i>Municipality of Grise Fiord Operation and Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities January 2026</i> .
CIRNAC	Jan-16-2026	9	R-04b	The retention time of the wetland treatment area has not been established as the sewage lagoon was designed in the early 1990s and commissioned in 1996 at which that time studies on the hydraulic retention time were not requested.
CIRNAC	Jan-16-2026	9	R-04c	The <i>Municipality of Grise Fiord Operation and Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities January 2026</i> was updated to include the lagoon and wetland maintenance requirements from CSA W203:19. The water quality monitoring activities for the sewage disposal facilities were updated and provided in the monitoring section, which meet the requirements of the water licence.
CIRNAC	Jan-16-2026	9	R-04d	Sewage is siphoned from the lagoon during the annual decant, resulting in a seasonal, non-continuous discharge with variable flow rates during the decant. The average discharge flowrate over the season was added to Section 7.0.
CIRNAC	Jan-16-2026	9	R-05	See updated <i>Municipality of Grise Fiord Operation and Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities January 2026</i> .
CIRNAC	Jan-16-2026	10	R-06	See updated <i>Municipality of Grise Fiord Operation and Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities January 2026</i> . Annual decanting and preventing impacted surface water by maintaining the surface water diversion berms are primary methods to avoid lagoon

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				<p>overflowing scenario. The lagoon has a large relative capacity of 19,600 cubic metres compared to the annual sewage generation and precipitation.</p>
CIRNAC	Jan-16-2026	10	R-07	<p>The original 1998 design and construction report identified that the sewage lagoon is unlined and that limited seasonal seepage through the lagoon base could occur during thaw conditions. No engineered liner or seepage control measures were implemented at the time of construction, and the lagoon continues to operate in its original configuration.</p> <p>To address this potential concern, periodic visual inspections of the lagoon base, berms, and surrounding areas will be conducted to identify signs of seepage, erosion, or saturated ground conditions. Effluent and surrounding surface water quality will continue to be monitored to identify any potential impacts.</p> <p>Should evidence of significant seepage and environmental impact be determined, corrective actions such as localized soil sealing, installation of low-permeability material or non-permeable liner in affected areas will be evaluated and implemented as feasible.</p>
CIRNAC	Jan-16-2026	11	R-08(a-b)	<p>In the next capital project for the solid waste disposal facility, the following improvements will be made:</p> <ul style="list-style-type: none"> • Construction of ditching to manage stormwater and divert the streams away from the facility to prevent contamination • Re-grading of the facility to allow proper collection and drainage of and drainage of storm water run-off • Cleaning up the facility and creating areas for segregated materials of similar waste type. This includes signage, sorted piles, purchasing sea cans and appropriate containers for the storage of various waste types

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				The Government of Nunavut anticipates securing the funding for and commencing the design of the solid waste facility upgrade in the 2026/2027 fiscal year.
CIRNAC	Jan-16-2026	11	R-08c	Please see the updated <i>Municipality of Grise Fiord Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities January 2026</i> .
CIRNAC	Jan-16-2026	11	R-09	<p>Reference to an engineered berm and liner has been removed from the updated Plan. In the next capital upgrade project, the approach for the metals and hazardous wastes area will be to minimize contact water and runoff water through ditching and grading. In addition, appropriate containment containers including seacans will be added to the hazardous waste area.</p> <p>The Government of Nunavut anticipates securing the funding for and commencing the design of the solid waste facility upgrade in the 2026/2027 fiscal year.</p>
CIRNAC	Jan-16-2026	12	R-10	Please see the corrected updated <i>Municipality of Grise Fiord Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities January 2026</i> . The statements provided on the previous version about the existing solid waste disposal facility were incorrect. The issues of water management, grading, waste segregation, and signage will be addressed by the capital upgrade project for the facility.
CIRNAC	Jan-16-2026	12	R-11	<p>The Licensee recognizes the benefits of increased waste segregation; however, current operational capacity and site limitations prevent the implementation of a detailed segregation program with defined milestones at this time.</p> <p>The Solid Waste Disposal Facility continues to operate as a centralized receiving area for multiple waste streams, consistent with historical practice in remote northern communities.</p>

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				<p>Planned capital upgrades will focus on waste segregation, minimizing contact water and leachate generation through improved grading, drainage controls, and the addition of enclosed containment for hazardous wastes, which will significantly reduce environmental risk. The Government of Nunavut anticipates securing the funding for and commencing the design of the solid waste facility upgrade in the 2026/2027 fiscal year.</p> <p>Timely renewal of the water licence is critical for the municipality in order to construct the water treatment plant.</p>
CIRNAC	Jan-16-2026	13	R-12	Please see the corrected updated <i>Municipality of Grise Fiord Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities January 2026</i> .
CIRNAC	Jan-16-2026	13	R-13	Please see the corrected updated <i>Municipality of Grise Fiord Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities January 2026</i> . Note that the solid waste upgrade capital project will include new full fencing around the municipal solid waste cell area.
CIRNAC	Jan-16-2026	13	R-14	Please see the uploaded Memorandum <i>Grise Fiord Hydrological Assessment</i> .
CIRNAC	Jan-16-2026	14	R-15	The aggregate is non-potentially acid-generating and non-metal leaching.
ECCC	Jan-13-2026	N/A	1. GRI-4 Effluent Quality	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.
ECCC	Jan-13-2026	N/A	2. Water Quality Guidelines	Please see the updated <i>Grise Fiord Operation & Maintenance Plan for Municipal Water Licence: Solid Waste Disposal Facilities January 2026</i> and <i>Municipality of Grise Fiord</i>

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				<i>Operation and Maintenance Plan for Municipal Water Licence: Sewage Disposal Facilities January 2026.</i>
ECCC	Jan-13- 2026	N/A	3. Solid Waste Facility	Agreed and noted to be implemented in the design of the upgraded solid waste facility.