



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
918 Nunavut Drive
Iqaluit, NU, X0A 3H0

Your file - Votre référence
3AM-COR2232
Our file - Notre référence
GCDOCS#118689970

November 10, 2023

Robert Hunter
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
sent via e-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC) Response to the Government of Nunavut, Department of Community and Government Services (GN-CGS) response to CIRNAC's comments on the 2022 Annual Report for Water Licence 3AM-COR2232 for the Municipality of Coral Harbour in the Kivalliq Region of Nunavut

Dear Mr. Hunter,

Thank you for your November 2, 2023 invitation to review GN-CGS's October 31, 2023, response on behalf of the Licensee to CIRNAC's 2022 Annual Report comments. The annual review was for Coral Harbour's Type A Water Licence No. 3AM-COR2232. It was submitted as required by Part B Item 1, Schedule B of the Type A License.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined GN-CGS's responses in light of its obligations under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNST Act) and the *Department of Crown-Indigenous Relations and Northern Affairs Act*. We found that two of our comments, which were submitted in the attached Technical Memorandum, have not yet been addressed by the Licensee. Those responses to our comments are required to close off the 2022 Annual Report.

GN-CGS stated the following about its October 31, 2023 submission to the NWB:

"The Government of Nunavut Department of Community and Government Services (CGS), on behalf of the Municipality of Coral Harbour, has prepared the attached response to CIRNAC's response to CGS's response to inquiries on the 2022 Annual Report for Water Licence 3AM-COR2232 from the Municipality of Coral Harbour.

CGS will not be providing any further response beyond this correspondence on the 2022 Annual Report for Water Licence 3AM-COR2232. If additional comments are received, they will be taken into consideration for inclusion in the 2023 Annual Report for Water Licence 3AM-COR2232 from the Municipality of Coral Harbour."



CIRNAC acknowledges these comments and remains committed to working with all parties to ensure both compliance with the NWNSRT Act and issued Licenses. CIRNAC has a long history of working with the Government of Nunavut to achieve these goals under the applicable legislation. GN-CGS is and has always been in a position of direct and indirect oversight and control over the planning, development, installation, operation and funding of municipal water and waste-water infrastructure in Nunavut. As such, the Government of Nunavut has continued to provide Annual Reports, operations and maintenance manuals, Plans (including plans for compliance), as well as participating in annual Municipal inspections and Nunavut Water Board water licencing processes.

CIRNAC reminds GN-CGS that participation in the 2022 Annual Report review process is governed by the Nunavut Water Board and is subject to the NWNSRT Act and associated regulations. Under the NWNSRT Act, the Nunavut Water Board has the exclusive jurisdiction to decide when the commenting period has concluded, and whether unresolved comments must be addressed. The Licensee is bound by the terms and conditions of Type A Water Licence No. 3AM-COR2232, which requires submission of a complete and detailed Annual Report as set out in Schedule B of the Type A water licence. In this instance, the Nunavut Water Board has not yet agreed that the commenting period for the water licence in question is concluded and the unresolved comments addressed.

Failure to comply with the terms and conditions of the water licence can be deemed a violation of the NWNSRT Act and subject to penalties as described in Section 90.

CIRNAC remains committed to working with the GN-GCS on these and other issues that affect communities, the environment and the safety and security of Nunavut's freshwater resources. If there are any questions or concerns, please do not hesitate to contact me, Spencer Dewar Spencer.Dewar@rcaanc-cirnac.gc.ca

Sincerely,

Dewar,
Spencer
Spencer Dewar
Director, Resource management

Digitally signed by
Dewar, Spencer
Date: 2023.11.10
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Technical Review Memorandum

Date: November 10, 2023

To: Robert Hunter, Licensing Administrator, Nunavut Water Board

From: Andrew Keim, Manager- Water, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC)
Response to the Government of Nunavut, Department of Community and
Government Services (GN-CGS) response to CIRNAC's comments on the
2022 Annual Report for Water Licence 3AM-COR2232 for the Municipality
of Coral Harbour in the Kivalliq Region of Nunavut

Region: ☐ Kitikmeot ☒ Kivalliq ☐ Qikiqtani

A. BACKGROUND

The Hamlet of Coral Harbour is located on the southern shore of Southampton Island, on the northern rim of Hudson Bay. The population of the community was 1035 (2021 Census) and is projected to grow to 1253 by the year 2031. Water is extracted from the Post River, which is the community's water source, and stored in a 2-cell reservoir with a capacity of 49,500 cubic metres (m³), assuming 1 meter freeboard is maintained. The reservoir is filled during the open water season when up to 45,000 m³ of water is extracted from the Post River in approximately 25 days.

In 2020, 39,973 m³ of water was pumped from the Post River into the reservoir over a 24-day period. The daily rate of water withdrawal from the Post River during the reservoir resupply was approximately 2,000 m³ per day. Therefore, the daily amount of water used by the Applicant to resupply the reservoir during this part of the year exceeds the 300 m³ per day threshold for a Type "B" Water Licence as set out in Schedule 2 of the Nunavut Waters Regulations, so the Applicant was required to apply for a new Type "A" Water Licence to authorize the withdrawal of up to 2,000 m³ of water per day rather than simply renewing the previous Type "B" Water Licence No: 3BM-COR1521, which expired on April 23, 2021 (the Expired Type "B" Licence).

The Applicant's original application for the renewal of the Expired Type "B" Licence was received by the NWB on May 18, 2021. Subsequently, following discussions between the NWB and the Applicant, the Applicant submitted an application for a new Type "A" Water Licence to replace the Expired Type "B" Licence on September 29, 2021. Effective April 04, 2022, Type "A" Water Licence No: 3AM-COR2232 was issued for 45,000 m³ per annum.

CIRNAC provides the following for the Board's consideration. A summary of the subjects of recommendations can be found in Table 1. A detailed technical review of the two remaining outstanding issues can be found in Section B.



Table 1: Summary of Recommendations

Recommendation Number	Subject	Status
R-01	Quantity of water used	Resolved
R-02	Daily water quantity reporting requirements	Resolved
R-03	Sewage discharge reporting requirements	Unresolved
R-04	Sludge removal reporting	Resolved
R-05	Water quality monitoring and Sewage Disposal Facility grab samples	Resolved
R-06	Operation and Maintenance Plan 2021 Update	Unresolved
R-07	Structural integrity of the Sewage Disposal Facility	Resolved

B. RESULTS OF REVIEW

Recommendation #03: Sewage discharge reporting requirements

CIRNAC Comment:

Water licence 3AM-COR2232 requires reporting of the daily, monthly and annual quantities in cubic metres of any sewage discharged into the Sewage Containment Cell at Monitoring Station COR-2. The 2022 Annual Report states no meter exists to measure the sewage discharge volumes, therefore sewage discharge volumes are considered equal to the water consumption volumes of 37,123.237 cubic metres annually.

Recommendation:

(R-03) CIRNAC recommends the Government of Nunavut devise a reporting system for measuring the quantity of sewage discharged into the Sewage Containment Cell.

Government of Nunavut's Response:

Sewage quantities are conservatively measured based on water delivery billing records for all hamlets with trucked sewage collections. Designs use population projections and established northern formulas – please clarify what daily sewage discharge reporting is needed for.

CIRNAC's September 7, 2023 comment:



CIRNAC thanks the GN for this response and provides the following information. The Water license, a document that is vested in the sole authority of the Nunavut Water Board to issue or cancel pursuant to the *Nunavut Land Claim Act* and the *Nunavut Water and Nunavut Surface Rights Tribunal Act* requires the following;

Part E: CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Licensee shall direct all Sewage to the Sewage Disposal Facility or as otherwise directed by the Board.

And,

Schedule B of the License : Annual Reporting requirements

The Annual Report referred to in Part B, Item 1, shall include the following:

- b. The daily, monthly and annual quantities in cubic meters of any Sewage discharged into the Sewage Containment Cell at Monitoring Station COR-2;

In consideration of the above, it is clear that the necessity to provide this information in the Annual Report is a matter of compliance with the issued license. The license is clear that this is a requirement for reporting. Justification for such reporting requirements also is found within the legislation and in fact goes to the protection of the freshwater environment and aquatic life. CIRNAC looks forward to further engagement as required to assist the Government of Nunavut in maintaining compliance with the issued License.

Government of Nunavut's October 31, 2023 response:

Sewage quantities are conservatively measured based on water delivery billing records for all Municipalities with trucked sewage collections. Breakdown of daily, monthly and annual quantities will be included in future Annual Reports.

CIRNAC's November 10, 2023 comment:

The 2022 Annual Report measures sewage quantities based on water delivery billing records. CIRNAC considers water delivery an indirect and inadequate measure of sewage production. Water delivery does not account for releases to the environment and/or water-use not associated with sewage production.

Recommendation:

(R-03) CIRNAC reiterates recommendation #03 that the Licensee devise a reporting system for measuring the quantity of sewage discharged into the Sewage Containment Cell in order to satisfy Schedule B Part B, Item 1b of Type "A" Water Licence No: 3AM-COR2232.

CIRNAC considers recommendation #03 unresolved.



Recommendation #06: Operation and Maintenance Plan 2021 Update

Comment:

Appendix B of the 2022 Annual Report is titled “Operation and Maintenance Plan 2021 Updated.” The plan submitted with the 2022 Annual Report is dated June 30, 2021.

Recommendation:

(R-06) CIRNAC recommends the updated Operation and Maintenance plan be submitted with the 2022 Annual Report. CIRNAC recommends the Government of Nunavut add a page at the front of the plan that records updates and lists, in chronological order, what sections were updated, when they were updated and for what reason, and by whom. This would allow for ease of plan users to note the changes that have been made.

Government of Nunavut’s response:

Has been added.

CIRNAC’s September 7, 2023 comments:

CIRNAC thanks the GN for this response. CIRNAC however is unclear, what have you added. We reviewed the updated annual report and O&M manual but failed to locate a page at the front of the plan that records updates and lists, in chronological order, what sections were updated, when they were updated and for what reason, and by whom. We look forward to that document being submitted as soon as this has been completed.

Government of Nunavut’s October 31, 2023 response:

The June 30, 2021 Operation and Maintenance plan was a new document, following the standardized Operation and Maintenance Plan template for Solid Waste Disposal Facilities. Future updates of this Operation and Maintenance Plan will include a tracking page. Previous reference reports (2010, 2002) were identified in section 10.0.

CIRNAC’s October 31, 2023 comments:

CIRNAC acknowledges GN-CGS’s clarification that the June 30, 2021 Operation and Maintenance plan, in its entirety, is a new document. However, section 10.0 lists a previous report titled “*Water, Sewage and Solid Waste Operations & Maintenance Manual, Coral Harbour, NU, Nunami Jacques Whitford Limited, 2010.*” Therefore, the 2021 Operation and Maintenance plan has been updated from the 2010 Operation and Maintenance plan.

Recommendation:

(R-06) CIRNAC reiterates recommend #6 that the Licensee add a page at the front of the 2021 plan that records updates and lists, in chronological order, what sections were



updated, when they were updated and for what reason, and by whom. This would allow for ease of plan users to note the changes that have been made.

CIRNAC considers recommendation #06 unresolved

CIRNAC's October 31, 2023 review of the June 30, 2021 Operation and Maintenance plan

CIRNAC has reviewed the June 30, 2021 Operation and Maintenance plan and noted a runoff diversion berm is indicated on Figure 1. It is unclear if the runoff diversion berm is part of the regular inspection and maintenance of the berms in the June 30, 2021 Operation and Maintenance plan. Section 5.3 of the June 30, 2021 Operation and Maintenance plan states *"all hazardous wastes require special handling, storage and disposal methods to prevent human health and environmental exposure."* It does not make reference to the use of secondary containment.

Recommendation:

(R-06a) CIRNAC recommends the Licensee include details on the runoff diversion berm inspection and maintenance in the June 30, 2021 Operation and Maintenance plan, or direct CIRNAC to the Plan the runoff diversion berm inspection and maintenance details are included in.

(R-06b) CIRNAC recommends the Licensee add details on the hazardous waste storage procedures and protocols in the June 30, 2021 Operation and Maintenance plan, including for contaminated soils storage and when secondary containment is required.