Water Resources Division Resource Management Directorate Nunavut Regional Office P.O. Box 100 Igaluit, NU, X0A 0H0

> Your file - Votre référence 3AM-GRA1631 Our file - Notre référence GCDocs# 114947828

June 27, 2023

Robert Hunter Licensing Administrator **Nunavut Water Board** P.O. Box 119 Gjoa Haven, NU, X0B 1J0

sent via e-mail: <u>licensing@nwb-oen.ca</u>

Re: Crown-Indigenous Relations and Northern Affairs Canada's Review of the 2022 Annual Report for Water Licence 3AM-GRA1631 for the Hamlet of Rankin Inlet in the Kivalliq Region of Nunavut

Dear Mr. Hunter,

Thank you for the March 29, 2023 invitation to review the referenced Annual Report, submitted by the Government of Nunavut, Department of Community and Government Services on behalf of the Licensee. This annual review is for Rankin Inlet's Type A Water Licence No. 3AM-GRA1631.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the application pursuant to its mandated responsibilities under the *Nunavut Waters and Nunavut* Surface Rights Tribunal Act and the Department of Crown-Indigenous Relations and Northern Affairs Act. Please find CIRNAC comments and recommendations in the attached Technical Memorandum.

It is unclear to CIRNAC which water quality criteria the water quality parameters for Station ID GRA-3 are being compared to. CIRNAC requests the Nunavut Water Board specify the water quality criteria as a term and condition of the water licence.

If there are any questions or concerns, please contact me at michelle.blade@rcaanccirnac.gc.ca or Andrew Keim at 305-501-4047 or Andrew.Keim@canada.ca.

Sincerely,

Michelle Blade,

Regional Water Coordinator

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Technical Review Memorandum

Date: June 27, 2023

To: Robert Hunter, Licensing Administrator, Nunavut Water Board

From: Michelle Blade, Regional Water Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's Review of the 2022 Annual Report for Water Licence 3AM-GRA1631 for the Hamlet

of Rankin Inlet in the Kivalliq Region of Nunavut

Region:	☐ Kitikmeot	⊠ Kivalliq	□ Qikiqtani	

A. BACKGROUND

The Hamlet of Rankin Inlet is located on the Kudlulik Peninsula in Nunavut, on the northwestern shores of Hudson Bay, between Chesterfield Inlet and Arviat. It is the largest hamlet and second-largest settlement in Nunavut, after the territorial capital, Iqaluit. It is the regional center for the Kivalliq Region with a population of 2842 (2016 census).

On July 8, 2021, existing Type "A" Water Licence No: 3AM-GRA1624 was amended to Type "A" Water Licence No: 3AM-GRA1631. Specific terms and conditions of note in the Amended Licence included the following:

- the term of the Licence is extended by 7 years, with the Licence set to expire in 2031;
- changing the authorized location and water source from Char River to Lower Landing Lake to authorize the Licensee's pumping of water from Lower Landing Lake during the open water season to replenish the community's drinking water source, Nippisar Lake;
- increasing the amount of water that can be pumped from the new source; Lower Landing Lake; and
- consequential amendments to various terms and conditions in the Licence necessary to reflect changes to monitoring and reporting requirements resulting from the changes to the Licence.

CIRNAC provides the following comments and recommendations pertaining to the 2022 annual report. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject
R-01	Quantity of water used
R-02	Water quality monitoring reporting
R-03	Station ID GRA-3 observed flow

B. DOCUMENTS REVIEWED

The following table (Table 2) provides a summary of the documents reviewed under the submission.

Table 2: Documents Reviewed

Document Title	Author, File No., Rev., Date
3AM-GRA1631 2022 Annual Report	Government of Nunavut, Community and Government Services (GN-CGS) on behalf of the Hamlet of Rankin Inlet
TYPE "A" WATER LICENCE NO: 3AM-GRA1631	Nunavut Water Board, 08 July 2021
TYPE "A" WATER LICENCE NO: 3AM-GRA1631 Reasons for Decision	Nunavut Water Board, 08 July 2021
Water Licence Inspection Form	CIRNAC, 20 July 2022
Written Warning	CIRNAC, 12 December 2022

C. RESULTS OF REVIEW

1. Quantity of water used

Comment:

Water licence 3AM-GRA1631 allows for 10,000 cubic metres per day of water from Lower Landing Lake to Nipissar Lake during the open water season. Schedule B item b of the water licence states that the daily, monthly and annual quantities in cubic metres of fresh Water withdrawn from Lower Landing Lake during annual resupply (spring freshet) at Monitoring Station No: GRA-7 be reported in the annual report. Table 2 of the 2022 Annual Report estimates 7,457,111 cubic metres of water was transferred from Lower Landing Lake to Nipissar Lake between July 07th, 2022 and October 6th, 2022, which exceeds the licensed daily allowance of 10,000 cubic metres per day. In addition, Table 2 reports the monthly and annual quantities but not the daily quantity of water withdrawn from Lower Landing Lake.

Recommendation:

(R-01) CIRNAC recommends the Government of Nunavut clarify the units of Table 2 of the 2022 Annual Report. CIRNAC recommends that the Government of Nunavut include the daily quantities of water withdrawn from Lower Landing Lake in the 2022 Annual Report, and specify if any daily rates exceeded 10,000 cubic metres.

2. Water quality monitoring reporting

Comment:

Water licence 3AM-GRA1631 requires water quality monitoring at active Station IDs GRA-1, GRA-3, GRA-4, GRA-5, and GRA-7. The 2022 Annual Report provides analytical results for Station ID GRA-3 only.

Recommendation:

(R-02) CIRNAC recommends the Government of Nunavut submit the water quality monitoring flow and/or analytical results as per Schedule J Table 2 of the water licence for Stations: GRA-1, GRA-3, GRA-4, GRA-5, and GRA-7 within the 2022 Annual Report, or specify if none were collected in 2022. CIRNAC recommends that the Government of Nunavut provide a summary table for Station IDs GRA-1 and GRA-7 that compares results with Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Freshwater Aquatic Life (as specified in Part J item 2 of the water licence) within the 2022 Annual Report, and specify if there were any exceedances. It should be noted that any failure to follow the terms and conditions of the water license, including conducting prescribed water quality monitoring, is an issue of non-compliance.

3. Station ID GRA-3 observed flow

Comment:

Water licence 3AM-GRA1631 requires water quality monitoring at Station ID GRA-3 when flow is observed. The 2022 Annual Report provides analytical results for three samples collected at Station ID GRA-3 on 9 February 2022, 27 April 2022, and 29 June 2022.

Recommendation:

(R-03) CIRNAC recommends the Government of Nunavut indicate the timeframe when flow was observed in 2022, and provide an explanation as to why sampling was not conducted or analytical results were not provided as per Schedule J Table 2 of the water licence.