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

> Your file - Votre référence 3AM-GRA1631 Our file - Notre référence GCDocs# 133296605

February 14, 2025

Richard Dwyer Manager of Licensing **Nunavut Water Board** P.O. Box 119 Gjoa Haven, NU, X0B 1J0 E-mail: licensing@nwb-oen.ca

Re: Crown-Indigenous Relations and Northern Affairs Canada's Review of the Licence Modification to the Water Supply Facilities Application for the Hamlet of Rankin Inlet, Type A Water Licence No. 3AM-GRA1631

Dear Richard,

Thank you for the January 15, 2025 invitation to review the referenced licence modification to the Water Supply Facilities application, submitted by the Government of Nunavut Department of Community and Government Services Municipal Works Division on behalf of the Government of Nunavut Department of Community and Government Services Infrastructure Kivallig Division, for 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.

The applicant shall provide confirmation from the Nunavut Water Board that all outstanding water license fees have been paid in full prior to approval of this application.

If there are any questions or concerns, please contact me at (867) 975-3877 or Joyce.Demers@rcaanc-cirnac.gc.ca or Andrew Keim at (867) 975-4550 Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Joyce Demers, B.Sc., **Industrial Coordinator**



Technical Review Memorandum

Date: February 14, 2025

To: Richard Dwyer - Manager of Licensing, Nunavut Water Board

From: Joyce Demers - Industrial Coordinator, CIRNAC

Subject: Crown-Indigenous Relations and Northern Affairs Canada's Review of the Licence Modification to the Water Supply Facilities Application for

the Hamlet of Rankin Inlet, Type A Water Licence No. 3AM-GRA1631

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 Whale Cove, at the geographical coordinates 62° 49' 24" N and 92° 06' 53" W. The Hamlet operates a water supply facility and solid and sewage waste management facilities under the Type A Municipal Licence No. 3AM-GRA1631.

The Government of Nunavut's Department Community and Government Services – Municipal Works Division (GN-CGS) is applying, on behalf of the Government of Nunavut Community and Government Services – Infrastructure Kivalliq Division, for the modification to the water supply facilities project which includes:

- 1. Building a new water pumphouse at the existing site at Nipissar Lake;
- 2. Building a new Water Treatment Plant at the existing site at Williamson Lake;
- 3. Building new treated water storage tanks at the existing site at Williamson Lake;
- 4. Silt fencing installation and rip rap maintained at Nipissar Lake and Williamson Lake;
- 5. Removal of old treated water storage tanks:
- 6. Decommissioning of existing Williamson infrastructure.

There works are scheduled to be completed in the next three years, ending in 2028.

It is of note that the volume of fresh water withdrawn from Nipissar Lake will be measured by a flowmeter on each intake pump within the new pumphouse at Nipissar Lake.

CIRNAC provides the following comments and recommendations pertaining to the application package. 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.



Recommendation Number	Subject
R1	Erosion and Sediment Control
R2	Modification Request Information Missing

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and reference during the review.

Table 2: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
250115 3AM-GRA1631 2020-07-29-NPC Letter re 149381-3AM-GRA1624 Municipal Water Licence Amendment-IMLE	Nunavut Planning Commission, July 29, 2020
250115 3AM-GRA1631 2024-10-11 NPC File No. 150533 [3AM-GRA1631 Municipal Water Licence Amendment]-IMLE	Nunavut Planning Commission, October 11, 2024
250115 3AM-GRA1631 Drawings for Modifications-IMLE	EXP Services INC., December 23, 2024
250115 3AM-GRA1631 Erosion and Sedimentation Controls-IMLE	Government of Nunavut, N.D.
250115 3AM-GRA1631 NWB Water Licence	Government of Nunavut Community of
Modification Authorization Letter-IMLE	Government Services, January 8, 2024
250115 3AM-GRA1631 Request for Modifications to	Government of Nunavut Community of
Water Supply Facilities-IMLE	Government Services, December 13, 2024
250115 3AM-GRA1631 Schedule for Modifications-IMLE	N.A., January 9, 2025

C. RESULTS OF REVIEW

1. Erosion and Sediment Control

Comment:

In the document labeled Erosion and Sedimentation Controls only talks about silt fences being installed and no mention or other erosion controls or how often they will be inspected to ensure that they are still functional. The concern is that the project is projected to take several years to complete and there was no mention of a schedule to monitor for erosion or sedimentation.

In the document labeled Request for Modifications to Water Supply Facilities it states that

"... rip rap will continue to be maintained at Nipissar Lake and Williamson Lake to prevent erosion to the banks in compliance with Part D. Item 8."

There is no mention of erosion control of this nature in the document labeled Erosion and Sedimentation Controls and there is no mention of where the rip rap will come from and if it is non-PAG material.

Recommendation:

(R-01) CIRNAC recommends that the applicant add a section on erosion control within the document labeled Erosion and Sedimentation Controls as well as a schedule of when the measure will be inspected and confirm that all materials used will be non - potentially - acid generating (NPAG).

2. Modification Request Information Missing

Comment:

CIRNAC notes that the application of what is being asked is unclear. CIRNAC will need the following information in order to provide comments:

- a. A summary of what is being asked (it is unclear if it only the building modifications need approval and/or if the water source needs to be approved and/or new Water Treatment Facility plans, capacity or building needs approval);
- b. Confirmation of where the material used in pad construction and maintenance will come from (sourced) and they provide analytical evidence to show the sourced material is NPAG:
- c. Confirmation that all materials, equipment and final buildings will be 31 meters from the water during construction and afterwards;
- d. What will be done with the water that is currently being held in the old treated water storage tanks once they are decommissioned.

Recommendation:

(R-02) CIRNAC recommends that the applicant provide information on points a – d above.