



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
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Your file - Votre référence
3BM-NAU2123
Our file - Notre référence
GC Docs # : 108604454

January 10, 2023

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
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**Re: Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Review of
Water Licence Amendment Application for the Municipality of Naujaat, Type B
Water Licence No. 3BM-NAU2126**

Dear Mr. Dwyer,

Thank you for the January 3, 2023 invitation to review the water licence amendment application for the Municipality of Naujaat, Type B Water Licence No. 3BM-NAU2126.

CIRNAC examined the application package 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 Review Memorandum.

If there are any questions or concerns, please contact me at (867) 975-4282 or Christine.Wilson3@rcaanc-cirnac.gc.ca

Regards,

Christine Wilson,
Industrial Coordinator

Technical Review Memorandum

Date: January 10, 2023

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

From: Christine Wilson – Industrial Coordinator, CIRNAC

**Subject: Crown-Indigenous Relations and Northern Affairs Canada
(CIRNAC) Review of Water Licence Amendment Application for
the Municipality of Naujaat, Type B Water Licence No. 3BM-
NAU2126**

A. BACKGROUND

The Municipality of Naujaat is located within the Kivalliq Region, Nunavut, on the northern shore of Repulse Bay, on the south shore of the Rae Isthmus, at the geographical coordinates 66° 31' N and 86° 14' W. The Municipality operates a water supply facility and solid and sewage waste management facilities under the Type B Municipal Licence No. 3BM-NAU2126.

The Government of Nunavut, Community of Government Services (GN-CGS) is applying, on behalf of the Municipality of Naujaat, for an amendment of their water licence. Proposed amendments include changes to the Sewage Disposal Facility (SDF) with the addition of a pre-treatment lagoon with a 12 month holding capacity and diversion ditch to allow surface water to bypass the new lagoon. As well as an amendment to the SDF effluent parameters BOD₅ and TSS.

CIRNAC provided 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 the submissions can be found in Table 2 of Section B. Detailed technical review comments and requests for clarification can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject
R-01	Scope of Application
R-02	Term of Licence
R-03	Signage
R-04	Effluent Quality Limits and the Monitoring Program
R-05	Replacement of Effluent Parameters
R-06	Submission of Plans and Review
R-07	Pre-Design Report

B. DOCUMENTS REVIEWED AND REFERENCED

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

Table 2: Documents Reviewed

Document Title	Author, File No., Rev., Date
Application for Water Licence Amendment	Community and Government Services, December 19, 2022
Naujaat WWTF - Pre-Design Report	Dillion Consulting, June 17, 2022
Screening Decision Report	Nunavut Impact Review Board, September 28, 2022
Authorization Letter	Municipality of Naujaat, October 3, 2022
Cover Letter	Community and Government Services, December 19, 2022
CWRS Final report for Naujaat wetland study 24-01-2017	Centre of Water Resources Studies, Dalhousie University, January 27, 2017
Environmental Emergency and Spill Contingency Plan	Community and Government Services, January 2021
Environmental Monitoring and QAQC Plan	Community and Government Services, January 2021
OM Plan Sewage Naujaat 2022-IMLE	Community and Government Services, December 13, 2022
OM Plan Solid Waste Naujaat 2022-IMLE	Community and Government Services, December 13, 2022
OM Plan Water Supply Naujaat 2022-IMLE	Community and Government Services, December 13, 2022
Plan for Compliance 2022-IMLE	Community and Government Services, December 13, 2022
Summary English-IMLE	Community and Government Services, Not dated
Summary Inuktitut-IMLE	Community and Government Services, Not dated
Cover Ltr Re Screening Decision Report	Nunavut Impact Review Board, 22WA044, September 28, 2022
Screening Decision Report	Nunavut Impact Review Board, 22WA044, September 28, 2022
Water Licence 3BM-NAU2126 Inspection Report	CIRNAC, [2021-KIV07-AS] October 29, 2021
3BM-NAU2126 Renewal Licence	NWB, January 27, 2021
3BM-REP1520 Naujaat Design Update 2020-03-20	EXP, March 20, 2020

C. RESULTS OF REVIEW

1. Scope of Application

Comment: The executive summary indicates four amendments are requested in the application.

- a. Approval for the construction of a new single cell pre-treatment sewage lagoon with 12-month storage capacity;
- b. Changes in effluent criteria limits for Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD₅) at monitoring station REP-6;
- c. Request for approval to replace the parameter BOD₅ with Carbonaceous Biochemical Oxygen Demand (CBOD₅); and
- d. Changes to the term of the licence to ten years.

A document included in the application package titled “*Plan for Compliance 2022*” lists a number of comments under the heading “Short Term Plans for Compliance”, which suggests other amendments are also being requested for this water licence. However, these details are not included in the application and have not been considered in this review.

Recommendation: (R-01) CIRNAC recommends that GN-CGS clarify the scope of the application and provide the Nunavut Water Board (the Board) any outstanding information on additional amendments before this amendment be approved.

2. Term of Licence

Comment: Water Licence No. 3BM-NAU2126 was issued on January 27, 2021 for a term of five years; included in the application is a request to extend the term of the licence for ten years from 2023-2033.

Recommendation: (R-02) CIRNAC supports a 10 year term of licence with the consideration that additional monitoring stations, sampling and analyses may be required by an Inspector and or the Board to achieve legislative objectives.

3. Signage

Comment: Part B, condition 4 in the current water licence reads “*The Licence shall maintain the necessary signs, where possible, to identify the stations of the “Monitoring Program”. All signage postings shall be in the Official Languages of*

Nunavut, and shall be located and maintained to the satisfaction of the Inspector.”.

Recommendation: (R-03) CIRNAC recommends that the condition reads *“The Licence shall post signs to identify the Water Intake/ Water Treatment Facilities, Sewage and Waste Disposal Facilities. All signage postings shall be in the Official Languages of Nunavut, and shall be located and maintained to the satisfaction of the Inspector.”*

An additional condition to be included is *“The Licensee shall post the necessary signs to identify the stations of the Monitoring Program. The signs shall be located and maintained to the satisfaction of an Inspector.”.*

4. Effluent Quality Limits and the Monitoring Program

The application discusses changes in effluent criteria limits for Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD₅) at monitoring station REP-6.

Comment: CIRNAC noted no monitoring analysis for 2022 is provided and only one sampling event has occurred annually under the monitoring program over the last five years.

Recommendation: (R-04) CIRNAC recommends that regular collections of samples under the current monitoring program be completed prior to any changes to the criteria. These results and analysis should then be provided to the Board for future consideration if evidence is presented that a change is necessary. Part H, condition 14 of the Water Licence allows for modifications to the monitoring program upon request to the Board.

5. Replacement of Effluent Parameters

The application includes a request for the parameter CBOD₅ to replace BOD₅ in the monitoring program of the licence.

Comment: CIRNAC noted that no justification was provided specifically on why replacing the parameters was requested.

Recommendation: (R-05) CIRNAC recommends that the GN-CGS clarify why the parameters CBOD₅ should replace BOD₅.

6. Plan Submissions

GN-CGS included in the amendment package the following plans:

- OM Plan Water Supply Naujaat 2022
- OM Plan Solid Waste Naujaat 2022
- OM Sewage Naujaat 2022
- Environmental Monitoring and QA/QC Plan
- Environment Emergency and Spill Contingency Plan

Comments: The plans were required under conditions of the licence and not reviewed as part of this amendment application.

Recommendation: (R-06) CIRNAC recommends that the submitted plans be reviewed in a separate process by interested parties before they are approved by the Board and implemented by the Licensee.

7. Pre- Design Report

Clarification: A document titled “Naujaat WWTF - Pre-Design Report” was included in the application which details a number of design options for the improvements to the SDF and the recommendation of proceeding with Option 3, a single cell lagoon located north of the existing SDF.

Comment: CIRNAC noted that the amendment application does not indicate which conceptual design has been selected.

Recommendation: (R-07) CIRNAC recommends that GC-CGS clarify which design option has been selected and provide the constructions drawings and plans as may be required, for review by intervenors prior to any construction.