



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

Your file - Votre référence
8AC-EUR2331
Our file - Notre référence
GCDocs# 136293676

May 16, 2025

Robert Hunter
Licensing Administrator
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 Updated Operations and Maintenance Procedures for Waste and Water
Plan for the Eureka High Arctic Weather Station Project, Type A Water Licence
No. 8AC-EUR2331**

Dear Robert,

Thank you for the April 15, 2025 invitation to review the referenced licence updated operations and maintenance procedures for waste and water plan application, submitted by Environment and Climate Change Canada (ECCC), for Type A Water Licence No. 8AC-EUR2331.

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.

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 or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Joyce Demers, B.Sc.,
Industrial Coordinator



Technical Review Memorandum

Date: May 16, 2025

To: Robert Hunter – Licensing Administrator, Nunavut Water Board

From: Joyce Demers – Industrial Coordinator, CIRNAC

Subject: **Crown-Indigenous Relations and Northern Affairs Canada's Review of the Licence Updated Operations and Maintenance Procedures for Waste and Water Plan for the Eureka High Arctic Weather Station Project, Type A Water Licence No. 8AC-EUR2331**

Region: ☐ Kitikmeot ☐ Kivalliq ☒ Qikiqtani

A. BACKGROUND

Eureka High Arctic Weather Station (HAWS) is located on the north side of Slidre Fjord, at the north-western tip of Fosheim Peninsula on Ellesmere Island at 80° 0' N and 85° 56' W, 400 km north of the closest community of Grise Fiord. Environment and Climate Change Canada (ECCC) currently holds a Type A water license 8AC-EUR2131 at this location. The water licence allows for withdrawal of water in three locations, Station Creek, West Remus and Black Top Creeks. West Remus and Black Top Creeks water withdrawal is used only for dust suppression purposes during periods of construction. The water withdrawn from Station Creek is used for domestic and industrial purposes.

HAWS has been in operation since 1947. It is a Government of Canada facility operated by Environment and Climate Change Canada (ECCC). Its primary mission is to collect weather information for the production of public weather forecasts. It also provides support to the Arctic aviation community and serves as a staging location for science-based activities, exploration projects, tourism, etc.

The Eureka Procedures Waste and Water Plan was submitted to satisfy Part F, Item 2 of the water license

“The Licensee shall, at least sixty (60) days prior to commissioning the Wastewater Treatment Plant, submit to the Board for review updated Summary of Operations and Maintenance Procedures for Drinking Water, Sewage, Solid Waste Disposal and Waste Treatment Facilities dated June 2021 that was previously approved by the Board.”

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.



Table 1: Summary of Recommendations

Recommendation Number	Subject
R1	Section 3 – Management of Waste
R2	Section 4 – Management of Solid Waste

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
250407 8AC-EUR2331 220628 2022-06-24_Eureka OM Procedures Waste and Water_2025-IMLE	N.A., April 2025

C. RESULTS OF REVIEW

1. Section 3 – Management of Waste

Comment:

The following section numbers have unclear or missing information:

- a) Section 3.2 states that
“In spring the retention pond will be allowed to overflow naturally to the Fiord through a designed discharge or it can be pumped to the Fiord with a mechanical pump station to a location 30 m away from the Fiord”

CIRNAC is concerned that the discharge location is not at least 31 meters away from the normal high water mark of any water body. It is currently unclear if testing will be completed before it is discharged or if inspectors need to be told that a discharge is going to occur.

- b) Section 3.6 states that
“A vacuum truck collects wastewater from the wash-car and temporary work camp and transfers the wastewater into the Sewage Lagoon”

It is unclear if this sewage is treated with the mechanical/biological treatment plant or if it is just placed within the sewage lagoon. CIRNAC is concerned that the sewage may not be held for enough time for proper treatment to occur and that it would just be diluted.



- c) Section 3.7 states that there is a grey water exfiltration trench at the temporary work camp. The report does not state if the trench is at least 31 meters away from the normal high water mark of any water body and it is unclear if the sludge which is placed in polyethylene barrels are stored within secondary containment.

CIRNAC is concerned that the trench may be located within the 31 meter mark, and that contaminants may find their way into water bodies. In addition, if the sludge is not kept within secondary containment any spills that may occur would be considered hazardous and are required to be cleaned.

Recommendation:

(R-01) CIRNAC recommends that the applicant provide information on the unclear or missing information.

2. Section 4 – Management of Solid Waste

Comment:

Under section 4.4.3 it states that

“Standard operating procedures for the temporary construction worker camp related to kitchen food and waste handling/storage, solid waste segregation and disposal, and waste incineration are included in Appendix 6.”

CIRNAC notes however, that there is no appendix 6 included in the plan. There is also no mention of a land farm within this plan. CIRNAC is concerned that this information may be useful in its review and in easy access if not included in this plan.

Recommendation:

(R-02) CIRNAC recommends that the missing information be provided in the next iteration of the Procedure Waste and Water Plan.