Crown-Indigenous Relations and Northern Affairs Canada
Relations Couronne-Autochtones et Affaires du Nord Canada

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

Your file - Votre référence
3BM-KUG2030
Our file - Notre référence
149609868

August 27, 2026

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 Applicant's Reply to Comments on the Action Remediation (AR) Plan for the Hamlet of Kugluktuk, Type B Water Licence No. 3BM-KUG2030

Dear Robert,

Thank you for the August 21, 2026 invitation to review the referenced Action Remediation (AR) Plan, submitted by the Hamlet of Kugluktuk, for Type B Water Licence No. 3BM-KUG2030.

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*. CIRNAC provides the following Technical Review Memorandum for the Board's consideration.

If there are any questions or concerns, please contact me at (873) 800-5240 or Pauline.Firmin@rcaanc-cirnac.gc.ca or Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Pauline Firmin

Pauline Firmin, M. Sc,
Regional Coordinator

Canada

Table 1: Summary of Recommendations

Recommendation Number	Subject	Status
R-01	Missing Information On Design Of Rip-Rap	Unresolved
R-02	Clarification On Hazardous Waste Management Practices For Batteries	Resolved with Commitment
R-03	Reminder About The Land Farm Remedial Action Plan	Resolved with Commitment
R-04	Non-Compliance Issues Not Addressed In The Action Remediation Plan	Partially Resolved

A. 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
Hamlet of Kugluktuk Action Remediation (AR) Plan	Manager of Infrastructure & Projects, March 2026
Renewal Water Licence 3BM-KUG2030	Nunavut Water Board, December 8, 2020
2025 Annual Report for the Municipality of Kugluktuk	Municipality of Kugluktuk, 2025

B. RESULTS OF REVIEW

1. Missing Information On Design Specification for use Of Rip- Rap

Comment:

CIRNAC notes that the proponent proposes erosion mitigation measures at the Backwash Pond consisting of placement of geotechnical filter cloth overlain by riprap along erosion-prone areas (AR Plan, Section 5.1). However, no design drawings or supporting design information have been provided to describe the proposed works in sufficient detail. In the absence of detailed design documentation, CIRNAC is unable to assess whether the proposed measures are appropriate for the site conditions (AR Plan, Section 5.1).

CIRNAC further notes that, under the Water Licence, construction or modification of structures intended to contain, divert, or retain water or waste requires submission of stamped design drawings by a qualified engineer sixty days prior to construction (Water Licence No. 3BM-KUG2030, Part E, Item 1).

Recommendation:

(R-01) CIRNAC recommends that the proponent provide stamped design drawings and additional design information to support review of the proposed erosion mitigation measures at the Backwash Pond, including:

- core design assumptions (e.g., subgrade condition and stability of the berm substrate);
- key design parameters such as slope, riprap size and thickness, material source, hydraulic design basis (e.g., design flows or frequency), and details of anchorage or toe protection; and
- identification of anticipated failure modes (e.g., riprap sliding, toe loss, geotextile damage) and justification of how the design addresses these risks.

This information would assist CIRNAC in understanding the adequacy of the proposed approach and its likelihood of achieving the stated erosion control objectives.

Proponent’s Reply

Erosion at the Backwash Pond is not identified as a non-compliance item in the Inspectors' reports. The Proponent has taken proactive measures to address the erosion concern associated with the emergency overflow discharge from the Backwash Pond. A geotextile filter cloth and riprap will be installed fall 2026, and these measures have successfully mitigated further erosion since implementation. The installed mitigation measures will continue to be monitored and maintained as part of routine operations and maintenance. The erosion condition is expected to remain mitigated because the overflow channel has a relatively wide cross-section, resulting in low flow velocities despite the

temporary peak overflow rate of up to 1,800 L/min during backwash events. The overflow occurs only intermittently and is not expected to generate erosive velocities that would compromise the installed erosion protection. In addition, the overflow consists of filter backwash water, which is not expected to adversely affect the surrounding environment. Consequently, the primary objective of the mitigation measures is to maintain the physical stability of the channel and prevent localized erosion.

On this basis, the Proponent considers the current erosion control measures to be effective and proportionate to the site conditions.

CIRNAC's Response

CIRNAC thanks the proponent for the clarification regarding the rationale for the proposed erosion mitigation measures, however, the response does not address whether the proposed installation constitutes construction work subject to the design submission requirements of the Water Licence.

Section 5.1 of the AR Plan identifies the installation of geotechnical filter cloth and riprap as actions required to stabilize erosion and protect the overflow channel. Under Part E, Item 1 of Water Licence No. 3BM-KUG2030, the Licensee is required to submit construction design drawings stamped by a qualified Engineer sixty (60) days prior to the construction of any structures intended to contain, withhold, divert, or retain water or waste.

CIRNAC recommends that the Nunavut Water Board clarify whether the proposed erosion protection works of installing geotextile and riprap fall within the scope of Part E, Item 1 of the Licence and, if so, whether additional engineering design information or stamped drawings should be submitted to support the Board's review.

2. Clarification On Hazardous Waste Management Practices For Batteries

Comment:

CIRNAC notes that the Action Remediation (AR) Plan proposes to address improper storage of waste batteries through cleanup actions and "routine" inspections with recording of volumes (AR Plan, Section 5.4). However, the AR Plan does not define the frequency or scope of these inspections, unlike other compliance measures in the Plan where inspection intervals (e.g., quarterly or seasonal) are clearly specified (AR Plan, Sections 5.5 and 6.1).

CIRNAC further notes that improper storage of used batteries has been a recurring issue at this site. Similar concerns were identified during the 2020 inspection, where used batteries were observed mixed with general waste at the garbage dump and required corrective action at that time (2020 Inspection Report, Section 2, Item 7; Section 3, Item

7). Subsequent inspections indicate that this issue has reoccurred, suggesting that prior corrective measures may not have been sustained over the longer term.

Given that hazardous wastes, including used batteries, are required to be segregated, stored, and managed to prevent the deposit of deleterious substances into water (Water Licence No. 3BM-KUG2030, Part D, Item 11), the lack of specificity regarding inspection frequency and broader management controls limits the ability to assess whether the proposed approach will effectively prevent recurrence.

Recommendation:

(R-02) CIRNAC recommends that the proponent clarify how “routine” inspections and hazardous waste management will be implemented in practice, including consideration of inspection frequency, record-keeping, and handling procedures for used batteries.

CIRNAC further recommends that additional detail be provided on how the plan addresses ongoing hazardous waste management requirements, including storage, segregation, and transportation of hazardous wastes to approved facilities, to support long-term compliance with applicable legislative and licence requirements.

Proponent’s Reply

Please see the revised compliance implementation plan below:

5.4 Battery Storage Compliance Objective: Maintain compliant hazardous waste storage.

Actions:

- Continue storing used batteries in designated poly-lined containment units within the hazardous waste storage area.

- Segregate used batteries from general waste and separate lithium batteries from other battery types. Exposed terminals on lithium batteries will be covered or taped to prevent short circuits, and damaged lithium batteries will be isolated in appropriate non combustible containers.

- Maintain clear signage and public awareness to encourage proper battery disposal. • Conduct monthly inspections of battery storage areas from the spring to fall to ensure compliance

- Transport used batteries to an approved recycling or disposal facility in accordance with applicable territorial requirements and operational logistics when sufficient quantities are accumulated – contingent on funding and capacity.

Timeline:

- Extensive earthworks at the waste facility were completed in the spring to improve drainage and overall site efficiency to address ongoing hazardous waste management requirements.

- Signage to be implemented fall 2026.

- Inspections, segregation, and proper storage on an ongoing basis

- Facility to be maintained according to the water licence and to the satisfaction of the Inspector on an ongoing basis

CIRNAC's Response
CIRNAC thanks the proponent for their response and recommends that the proponent document implementation of these commitments through annual reporting and facility inspections as required under the Licence.

3. Reminder About The Land Farm Remedial Action Plan

Comment:
CIRNAC notes that the Action Remediation (AR) Plan identifies development of a Land Farm Remedial Action Plan as a key remediation measure, with submission proposed for Winter 2025–2026 and field implementation anticipated in Spring 2026 (AR Plan, Section 5.6; Section 7). At the time the Action Remediation (AR) Plan was submitted, the Land Farm Remedial Action Plan had not been submitted.

CIRNAC further notes that, under the Water Licence, plans required pursuant to the Licence form part of the regulatory approval framework and cannot be implemented unless reviewed and accepted by the Nunavut Water Board (Water Licence No. 3BM-KUG2030, Part B, Items 7–10).

Recommendation:
(R-03) CIRNAC recommends that the proponent submit the Land Farm Remedial Action Plan for regulatory review as proposed, in advance of any planned field activities, to allow regulators to assess the scope, methods, and compliance of the proposed works.

CIRNAC reminds the proponent that remediation activities not authorized by the current licence should not be undertaken at the land farm until the plan has been reviewed and approved by the Nunavut Water Board.

Proponent's Reply
The Proponent will submit an updated Plan for the Solid Waste Disposal Facility for review and approval by regulators as per Part F, Item 2 of the water licence. The Plan will detail

the remediation objectives, methods, monitoring, and expected timelines for remediating the existing contaminated soil at the land farm facility. The Plan will be submitted by November 30, 2026.

As per the AR Plan (Hamlet of Kugluktuk, 2026), the planned field activities to be implemented in 2026 to comply with the water licence and Inspectors' requests remain to:

- Conduct post-fire cleanup
- Remove and dispose of all drums and containers.
- Incinerate petroleum products from compromised containers and dispose of all compromised containers following incineration.
- Inspect liner for damage and repair as necessary
- Stockpile contaminated soil, which is anticipated to be remediated at the landfarm following approval of the Solid Waste Disposal Facility Plan that will be drafted in 2026.

CIRNAC's Response

CIRNAC thanks the proponent for their response and notes the commitment to provide an updated Plan for the Solid Waste Disposal Facility, including the remediation objectives, methods, monitoring, and expected timelines for remediating the existing contaminated soil at the land farm facility.

4. Non-Compliance Issues Not Addressed In The Action Remediation Plan

Comment:

CIRNAC notes that the 2024 Inspection Report identified non-compliance issues requiring action, as documented under Section 3 of the 2024 Inspection Report and several of these items are not clearly addressed in the Action Remediation (AR) Plan. Specifically:

- the AR Plan does not address installation of flow meters on the decanting line, which is required under Part B, Item 6 of the Water Licence;
- while erosion mitigation is proposed for the backwash pond, the AR Plan does not address the ongoing active leakage, cracking, and slumping of the sewage lagoon east wall and the erosion caused by trucks discharging into the lagoon, identified in the 2024 Inspection Report (Section 1, item 2, 5 and 6; Section 2 item 1; Section 3); and
- the AR Plan references improvements to hazardous waste storage, but does not clearly confirm whether issues related to consolidation and segregation of hazardous wastes and white wastes identified in the 2024 Inspection Report have

been fully resolved (AR Plan, Sections 5.2–5.6; 2024 Inspection Report Section 3).

CIRNAC notes that it is unclear from the information provided whether these action items have been completed, or, if outstanding, when they are proposed to be addressed.

Recommendation:

(R-04) CIRNAC recommends that the proponent clarify the status of the non-compliance items identified in the 2024 Inspection Report, including whether the actions required have been completed or, if not, how and when they are proposed to be addressed. CIRNAC further recommends that the AR Plan propose remediation measures to all outstanding inspection findings, to ensure compliance with Water Licence conditions.

Proponent's Reply

Flowmeter on wastewater decanting line: The proponent will not be installing a flow meter on the wastewater decanting line. The Monitoring Program as per Part H, Item 1 requests for the volume of raw sewage disposal from the truck to the lagoon, rather than the decanting line.

Sewage lagoon leakage, cracking, slumping and erosion: The observed leakage, cracking, slumping, liner displacement, and associated erosion at the existing sewage lagoon require a detailed geotechnical and engineering assessment to determine the underlying causes, evaluate the extent of the issues, and identify appropriate remedial measures. As such, a site-specific remedial action plan cannot be developed until the necessary investigations have been completed. The Government of Nunavut – Department of Community Services is seeking funding in the 2026–2027 fiscal year to undertake the required engineering and geotechnical investigations and develop a remedial action plan for the existing sewage lagoon. Subject to funding approval, the Proponent anticipates submitting the remedial action plan by March 31, 2027, with the 2026 Annual Report.

Separately, the Government of Nunavut is undertaking a business case to evaluate the development of a replacement sewage lagoon at a new site. The business case is expected to be completed in 2027, after which detailed design of the preferred option would proceed, subject to funding and regulatory approvals.

Segregation and Consolidation of hazardous Wastes and White Wastes: 2026 Hazardous Waste and White Waste Consolidation Plan

Objective: Consolidation and segregation of hazardous wastes and white wastes.

Actions:

• Conduct a site-wide inspection of the Solid Waste Disposal Facility to identify hazardous wastes and white wastes

• Consolidate and sort hazardous wastes, including waste fuels and batteries, within the designated storage area for containment and shipment preparation.

Conduct a follow-up inspection to verify that waste segregation has been maintained and address any deficiencies identified.

Progress to Date:

- Placed used batteries in properly sealed containers, and relocated them to the hazardous waste area as requested.
- Burned propane tanks were removed from the landfarm disposed of appropriately.

Target Completion: Fall 2026

CIRNAC's Response

CIRNAC thanks the Proponent for their response.

With respect to sewage volume measurement, CIRNAC notes that Part B, Item 6 of Water Licence No. 3BM-KUG2030 requires the Licensee to install flow meters or implement other methods approved by the Board in writing for measuring water volumes required under Part H of the Licence. Part H, Item 4 further requires the Licensee to measure and record the monthly and annual quantities of effluent discharged from Monitoring Program Station KUG-3, which is the raw sewage disposal location from truck to lagoon. According to the 2025 annual report, the quantity of sewage waste discharged is not measured and recorded at station KUG-3, but rather estimated based of the volume of water consumed. Estimate of discharge volume do not account for water releases to the environment and/or water use not associated with sewage production.

CIRNAC recommends that the Nunavut Water Board clarify whether the proponent's existing method for estimating sewage discharge volumes is consistent with the requirements of Part B, Item 6 and Part H, Item 4 of the Licence, or whether written Board approval of an alternative measurement method has been provided. If the proponent's existing method is deemed not suitable by the Board, CIRNAC recommends that a suitable method of obtaining sewage volume measurement be implemented as soon as possible at station KUG-3, in accordance with licence requirements.

Regarding the sewage lagoon leakage, cracking, slumping, and erosion issues, CIRNAC notes the proponent's commitment to undertake engineering and geotechnical investigations and to develop a remedial action plan following completion of those assessments.

Regarding the segregation and consolidation of hazardous wastes and white wastes, CIRNAC thanks the Proponent for providing additional details on the proposed actions, implementation schedule, and progress completed to date and notes the commitment to continue corrective actions.