



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
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Your file - Votre référence
2AM-LUP2032
Our file - Notre référence
GCDocs# 142608716

January 5,2026

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

Subject: CIRNAC Review of the Request for Variance to Discharge Timing — Lupin Mine, Water Licence 2AM-LUP2032

Dear Mr. Dwyer,

Thank you for the opportunity to review the variance request submitted by Lupin Mines Incorporated on December 16, 2025. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) has reviewed the submission pursuant to its responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Crown-Indigenous Relations and Northern Affairs Act*. Please find attached CIRNAC's Technical Review Memorandum containing comments and regulatory recommendations for the Board's consideration.

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 you have any questions, please contact me at (867) 975-4550 or by email at andrew.keim@rcaanc-cirnac.gc.ca.

Sincerely,

Andrew Keim

Andrew Keim
Manager of Waters
Crown-Indigenous Relations and Northern Affairs Canada

Technical Review Memorandum

Date: January 5,2026

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

From: Andrew Keim Manager of Waters, CIRNAC

**Subject: Subject: CIRNAC Review of the Request for Variance to Discharge
Timing — Lupin Mine, Water Licence 2AM-LUP2032**

Region: Kitikmeot Kivalliq Qikiqtani

A. BACKGROUND

Lupin Mines Incorporated (LMI) (Licensee) submitted a request dated December 16, 2025 seeking Nunavut Water Board approval to commence decant from Pond 2 (SNP LUP-10) as early as May 1, 2026.

This is earlier than the July 15 start date established in Water Licence 2AM-LUP2032. The request aims to facilitate tailings exposure, drying, and cover placement during the 2026 closure season given the short Arctic working window.

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	Effluent limits (Part E, Item 6)
R2	Un-ionized ammonia monitoring requirements
R3	MDMER applicability prior to Recognized Closed Mine status
R4	Early-season pH and treatment readiness
R5	Fish timing and flow ramping requirements
R6	Erosion and sediment control (ESC) documentation
R7	Tailings exposure readiness and adaptive management materials
R8	Community communication requirements

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
Variance Request – Pond 2 Discharge (Dec 16, 2025)	Lupin Mines Incorporated (LMI)
Water Licence 2AM-LUP2032 (Type A)	Nunavut Water Board, Feb 28, 2020
Reasons for Decision – WL 2AM-LUP2032	Nunavut Water Board, Feb 28, 2020

C. RESULTS OF REVIEW

1. Effluent Limits (Part E, Item 6)

Comment:

The Licensee cites baseline limits (Part E, Item 5) but does not reference stricter limits applicable since June 2021, including arsenic (0.30 mg/L avg; 0.60 mg/L grab), cyanide (0.50; 1.00), and un-ionized ammonia (0.50; 1.00) that apply until Recognized Closed Mine status.

Recommendation:

CIRNAC recommends that the proponent explicitly incorporate all Part E, Item 6 limits into the discharge plan and demonstrate compliance prior to and during discharge.

2. Un-ionized Ammonia Monitoring

Comment:

The monitoring program does not explicitly include un-ionized ammonia, which requires calculation based on total ammonia, pH, and temperature.

Recommendation:

CIRNAC recommends that the Licensee include un-ionized ammonia monitoring and calculations consistent with the licence and report results at LUP-10 and applicable downstream stations.

3. MDMER Applicability

Comment:

The submission does not acknowledge that the Metal and Diamond Mining Effluent Regulations (MDMER) remain applicable prior to Recognized Closed Mine status, as noted in the NWB ROD.

Recommendation:

CIRNAC recommends that the Licensee confirm MDMER applicability and demonstrate how compliance will be verified during early discharge.

4. Early-season pH and Treatment Readiness

Comment:

The pH data from 2025 shows acidic values (~4) earlier in the season; soda ash treatment was required in September to meet licence criteria.

Recommendation:

CIRNAC recommends that pre-discharge, lab-verified pH results meeting licence criteria be provided, and that on-site treatment capacity (soda ash inventory and dosing plan) be confirmed.

5. Fish Timing and Flow Ramping

Comment:

Early freshet discharge may overlap fish migration periods; Part G, Item 11 restricts instream activity during fish migration unless otherwise approved by NWB and DFO.

Recommendation:

CIRNAC recommends coordinating with DFO and implementing stepwise flow ramping and adaptive reduction procedures to mitigate potential effects.

6. Erosion and Sediment Control (ESC)

Comment:

Outfall armoring, energy dissipation, and inspection details are referenced but supporting documentation was not attached.

Recommendation:

CIRNAC recommends the submission of detailed ESC designs (armoring, riprap sizing) and weekly inspection schedules consistent with Schedule G reporting.

7. Tailings Exposure Readiness

Comment:

Early drawdown will expose tailings sooner; adaptive management commitments documented in the NWB ROD (e.g., in-situ cover contingency, cross-sections, erosion control, Dam K/M details) should be confirmed as complete and ready.

Recommendation:

CIRNAC recommends that Licensee provide the technical design memos/drawings for tailings cover and Dam K/M work prior to discharge.

8. Community Communication

Comment:

Early discharge represents a change to typical timing and requires community notification under Part B, Item 20.

Recommendation:

CIRNAC recommends that the Licensee provide plain-language communications (Inuinnaqtun/Inuktitut/English) to the community of Kugluktuk prior to approval.

9. Date Inconsistency

Comment:

The submission inconsistently references May 2025 and May 1, 2026 as the proposed discharge start date.

Recommendation:

CIRNAC recommends correcting the date of proposed discharge year throughout the submission to prevent administrative error.