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

Your file - Votre référence
(Licence No. 2BE-HIG2328)
Our file - Notre référence
GCDocs#143830375

March 03, 2026

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 Amendment & Renewal Application for the High Lake project, Type B Water Licence No. 2BE-HIG2328

Dear Richard,

Thank you for the February 2, 2026, invitation to review the referenced licence amendment and renewal application, submitted by MMG Resources Inc. for Type B Water Licence No. 2BE-HIG2328.

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's 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 Jordan Beer at jordan.beer@rcaanc-cirnac.gc.ca or Joyce Demers at joyce.demers@rcaanc-cirnac.gc.ca.

Sincerely,

Jordan Beer, M.Sc.,
Water Management Coordinator

Canada

Technical Review Memorandum

Date: March 03, 2026

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

From: Jordan Beer – Water Management Coordinator, CIRNAC

Subject: **Crown-Indigenous Relations and Northern Affairs Canada's Review of the Licence Amendment & Renewal Application for the High Lake project, Type B Water Licence No. 2BE-HIG2328**

Region: ☒ Kitikmeot ☐ Kivalliq ☐ Qikiqtani

A. BACKGROUND

The High Lake project is a mineral exploration project undertaken by MMG Resources Inc. The project is located in the Kitikmeot region, Nunavut, approximately 185 km SE of Kugluktuk and 300 km SW of Cambridge Bay, with the main camp located at the geographical coordinates 67° 22' 45" N and 110° 50' 37" W.

MMG Resources Inc. is applying for an amendment and renewal for their existing type B Water License 2BE-HIG2328. The existing license allows the licensee to use up to 100 cubic metres of water per day for drilling, exploration and camp purposes, with restrictions on how much of this can be used for camp operations. All water for camp is obtained from High Lake, whereas drill water is obtained from sources proximal to the drilling targets. Waste management for this project involves a mixture of incineration, sumps, and backhauling to approved waste management facilities. The High Lake project has been in care and maintenance since 2015.

MMG Resources Inc. is seeking a 10-year renewal for the project, with amendments to encompass their newly acquired CIRNAC mineral claims. They would like to extend the project bounds such that the minimum latitude changes from 66° 45' 00" N to 66° 30' 00" N and the maximum longitude changes from 111° 30' 00" W to 112° 30' 00" W. This extension will allow MMG Resources Inc. to undergo exploration at 16 newly acquired CIRNAC mineral claims outside of the current water license extent. The applicant is also proposing to take this project out of care and maintenance in 2026 to restart active exploration activities.

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
R-01	Photographic Records of Reclamation Work
R-02	Secondary Containment for Batteries
R-03	Sump Management
R-04	Waste Storage Location
R-05	Fuel Storage Location
R-06	Quality Assurance / Quality Control Plan
R-07	Incineration Plan

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
260119 2BE-HIG2328 Amendment Cover Letter-IMLE	MMG Resources Inc., January 16 2026
260119 2BE-HIG2328 Att_1_High_Lake_Application_for_Water_Licence_Amendment_260119_MMG-IMLE	MMG Resources Inc., January 19 2026
260119 2BE-HIG2328 Att_2_123221786_008_High_Lake_Overview_NWB-IMLE	Stantec, May 16 2025
260119 2BE-HIG2328 Att_3_Auth letter_260119_MMG-IMLE	MMG Resources Inc., January 19 2026
260119 2BE-HIG2328 Att_4_Licences_Permits_Authorizations-IMLE	MMG Resources Inc., January 2026
260119 2BE-HIG2328 Att_5_2025-04-16 NPC File No. 150635 [Izok Corridor Project]-IMLE	Nunavut Planning Commission, April 16 2025
260119 2BE-HIG2328 Att_6_Non_Tech_Summary_20250707-IMLE	MMG Resources Inc., July 7 2025
260119 2BE-HIG2328 Att_7_Spill_Contingency_Plan_Revised_June_2025_20250630-IMLE	MMG Resources Inc., June 30 2025
260119 2BE-HIG2328 Att_8_Closure_Reclamation_Plan-IMLE	MMG Resources Inc., November 2022
260119 2BE-HIG2328 Att_10_Izok_Corridor_Waste_Management_Plan_MMG_20250805-IMLE	MMG Resources Inc., August 5 2025
260119 2BE-HIG2328 Att_11_Certificate_Amalgamation-IMLE	Province of British Columbia, January 1 2017
260119 2BE-HIG2328 Att_12_Inspections_and_Responses-IMLE	MMG Resources Inc., December 19 2024
260119 2BE-HIG2328 Att_12-2_2024-KIT-021-JB High Lake-IMLE	Crown Indigenous Relations and Northern Affairs Canada, July 31 2024
260119 2BE-HIG2328 Att_12-3_241219_High Lake_CIRNAC Inspection Response_2024_sh edit-IMLE	MMG Resources Inc., December 19 2024
251222-25EN034-Minsiter Response-IR1E	Crown Indigenous Relations and Northern Affairs Canada, December 22 2025
230213 2BE-HIG2328 Water Licence Renewal-OAKE	Nunavut Water Board, February 13 2023
240328 2BE-HIG2328 2023 Annual Report-IMLE	MMG Resources Inc., March 2024

Document Title	Author, File No., Rev., Date
250328 2BE-HIG2328 Annual Report 2024-IMLE	MMG Resources Inc., March 2025

C. RESULTS OF REVIEW

1. Photographic Records of Reclamation Work

Comment:

Part B-2h of Water License 2BE-HIG2328 requires the licensee to provide "a description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after the completion of operations" with its annual reports. Progressive reclamation work was described in both the 2023 and 2024 annual reports, but no photographic evidence was provided in either report. The concern is that CIRNAC cannot evaluate the state of the reclaimed site without photographic evidence.

Recommendation:

R-01) CIRNAC recommends that the applicant commit to providing photographic records of site conditions before, during and after the completion of operations in all future annual reports.

2. Secondary Containment for Batteries

Comment:

Section 7.5 of the document "260119 2BE-HIG2328 Att_7_Spill_Contingency_Plan_ Revised_ June_2025_20250630-IMLE" states that "All batteries will be (…) stored safely when not in use. (…) Batteries that no longer hold a charge will be flown out and disposed of in the appropriate facilities". The applicant does not define what entails safe storage of batteries, or how spent batteries will be managed until they can be flown out. The concern is that hazardous materials will not be stored in appropriate secondary containment, potentially resulting in spills or leaching.

Recommendation:

R-02) CIRNAC recommends that the licensee update the Spill Contingency Plan to state that batteries will be stored in appropriate secondary containment at all times when not in use.

3. Sump Management

Comment:

Part F-2 of Water License 2BE-HIG2328 requires that "The Licensee shall dispose of all drill waste, including Water, chips, muds and salts ($CaCl_2$) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed Sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created."

Similarly, part D-8 of the license requires that “The Licensee shall contain all greywater in a Sump located at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing”

Section 4.2 of the document “260119 2BE-HIG2328 Att_10_Izok_Corridor_Waste_Management_Plan_MMG_20250805-IMLE” states that “Drilling wastes, including drill water, chips, muds and salts will be deposited in sumps. Sumps will be located greater than 31 m from the ordinary high-water mark of waterbodies”, and section 4.4 states that “Greywater from domestic use at the camps will be directed into a sump located on site near kitchen/dry facilities. Greywater sumps will be located greater than 31 m from the ordinary high-water mark of waterbodies”.

There is no other information provided on how the sumps will be constructed, how sump locations will be chosen, or how the licensee will ensure that no additional impacts are created. The concern is that drilling waste and greywater will be deposited in poorly located or poorly designed sumps, allowing contaminants to flow towards and pollute downstream freshwater sources.

Recommendation:

R-03) CIRNAC recommends that the licensee update its waste management plan to describe how it will ensure that direct flow from sumps into water bodies is not possible and that no additional impacts will be created by the sumps. For sumps that will be maintained for longer periods of time (e.g., the greywater sump at High Lake camp), CIRNAC recommends implementing a monitoring plan to ensure the sump continues to function as intended.

4. Waste Storage Location

Comment:

CIRNAC was unable to locate information describing where waste will be stored at High Lake camp. The concern is that waste may be stored within 31 m of the high water mark.

Recommendation:

R-04) CIRNAC recommends updating the Waste Management Plan to clarify the location of its waste storage and fuel storage areas, and confirm that they are not within 31 m of the ordinary high water mark.

5. Fuel Storage Location

Comment:

Section 7.3 of the document “260119 2BE-HIG2328 Att_7_Spill_Contingency_Plan_Revised_June_2025_20250630-IMLE” states that “Liquid fuel in steel drums will be stored

at least 30 m back from the lakeshore on hard ground". However, part H-2 of Water License 2BE-HIG2328 requires all fuel to be stored at least 31 m from the high water mark of any water body. The concern is that fuel may be stored too close to the ordinary high water mark and increase the risk of spills.

Recommendation:

R-05) CIRNAC recommends amending the Spill Contingency plan to state that fuel will be stored at least 31 m away from the high water mark of any water body.

6. Quality Assurance / Quality Control Plan

Comment:

Parts J-4 Water License HBE-2328 require the licensee to obtain water samples from the Water column below the ice when "on-ice" drilling operations are conducted. However, the applicant has not provided any explanation for how it will ensure these samples are taken, transported, and analyzed appropriately. The concern is that water samples could be contaminated or improperly managed, leading to incorrect conclusions on the effects of drilling activities.

Recommendation:

R-06) CIRNAC recommends that the applicant provide a QA/QC plan that meets the standards of the "Quality Assurance (QA) and Quality Control (QC) Guidelines For Use By Class "B" Licensees In Collecting Representative Water Samples in the Field" (Department of Indian and Northern Affairs Canada Water Resources Division, 1996) and the "Standard Methods for the Examination of Water and Wastewater" (Jenkins, 1982).

References

1. Department of Indian and Northern Affairs Canada Water Resources Division. (1996). *Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "B" Licensees in Collecting Representative Water Samples in the Field and for Submission of a QA/QC Plan*. DIAND Water Resources.
2. Jenkins, S. H. (1982). *Standard methods for the examination of water and wastewater*. Water Research, 16(10), 1495–1496. https://doi.org/10.1016/0043-1354(82)90249-4

7. Incineration Plan

Comment:

Section 4.1.1 of the document "260119 2BE-HIG2328 Att_10_Izok_Corridor_Waste_ Management_Plan_MMG_20250805-IMLE" states that "Combustible wastes will be collected for incineration. (…) Following steps outlined in the Technical Document for Batch Waste Incineration (Environment Canada, 2010), and guidance provided in the Nunavut

Environmental Guideline for the Burning and Incineration of Solid Waste (Government of Nunavut, 2012), the wastes will be incinerated". CIRNAC appreciates the licensee's commitment to following established incineration guidelines, but would like to see a more specific plan for how they will achieve these standards. The waste management plan does not provide any information on what the licensee considers combustible waste, what type of incinerator will be used, where the incinerator will be stationed, how the incinerator will be operated, or how the licensee will maintain accurate records. The concern is that without a specific plan for compliance, the licensee will miss important steps for preventing incineration-related pollution.

Recommendation:

R-07) CIRNAC recommends that the applicant update the Waste Management Plan to explain how it will meet the standards of the "Technical Document for Batch Waste Incineration" (Environment Canada, 2010) and the "Nunavut Environmental Guideline for the Burning and Incineration of Solid Waste" (Government of Nunavut, 2012), as well as the other missing information listed above.

References:

1. Environment Canada. (2010, January). *Technical Document for Batch Waste Incineration*. Publications.gc.ca; Government of Canada. https://publications.gc.ca/collections/collection_2010/ec/En14-17-1-2010-eng.pdf
2. Government of Nunavut. (2012). *Environmental Guideline for the Burning and Incineration of Solid Waste*. Government of Nunavut. https://assembly.nu.ca/library/GNedocs/2012/001321-e.pdf