



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#144492822

March 24, 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 Response to Comments for the High Lake project Licence Amendment & Renewal Application, Type B Water Licence No. 2BE-HIG2328

Dear Richard,

Thank you for the March 17, 2026, invitation to review the referenced responses to comments, submitted by MMG Resources Inc. for Type B Water Licence No. 2BE-HIG2328.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the responses 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 Andrew Keim at Andrew.keim@rcaanc-cirnac.gc.ca.

Sincerely,

Jordan Beer, M.Sc.,
Water Management Coordinator



Technical Review Memorandum

Date: March 24, 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 Response to Comments for the High Lake project Licence Amendment & Renewal Application, 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 | Status |
|-----------------------|--|-----------------------|
| R-01 | Photographic Records of Reclamation Work | Resolved |
| R-02 | Secondary Containment for Batteries | Resolved with Comment |
| R-03 | Sump Management | Unresolved |
| R-04 | Waste Storage Location | Resolved |
| R-05 | Fuel Storage Location | Resolved with Comment |
| R-06 | Quality Assurance / Quality Control Plan | Resolved with Comment |
| R-07 | Incineration Plan | Resolved with Comment |

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 |



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



C. RESULTS OF REVIEW

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.

Response:

MMG will update the Spill Contingency Plan before exploration operations begin in 2026 to state that batteries will be stored in appropriate secondary containment.

Reply to Response:

CIRNAC is satisfied with this response, so long as the updated Spill Contingency Plan is submitted a minimum of 30 days before exploration operations begin in 2026, as required by Part B-3 of the License.

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 (CaCl₂) 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.

Response:

MMG operates within the conditions outlined in our Land Use Permit (LUP; N2024C0021), which includes management of sumps (drilling sumps and sewage sumps). As stated in section 4.4 of the MMG Waste Management Plan:

*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**, as per current LUP conditions.*

The LUP conditions and manner in which MMG currently operates will be updated in the Waste Management Plan to more explicitly include the conditions such as where sumps can be located, how the sumps will be managed, both short and longer term, how backfilling and reclamation is managed, and how monitoring of the longer term sumps are managed. Currently, camp greywater sumps are emptied annually and covered, as described in the Closure and Reclamation Plan. No long-term effects are anticipated at the greywater sump location.

The Waste Management Plan will be updated and provided to the NWB and NIRB to include these details prior to the start of the 2026 exploration and drilling work.

**Reply to Response:**

CIRNAC appreciated MMG's commitment to provide further clarity on its sump management. However, CIRNAC continues to recommend that MMG provide further details on its sumps management prior to the receiving a license renewal.

Specifically, CIRNAC recommends that MMG provide the following information for review:

- Conditions placed regarding where sumps can be located
- Details pertaining to how sumps will be managed
- Details on how sumps will be designed/constructed
- Details on how backfilling and reclamation will be managed
- How longer term sumps will be monitored

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.

Response:

The High Lake camp has been in care and maintenance since 2015. No fuel is currently stored on site. As per the LUP (N2024C0021), MMG:

- Shall not place any petroleum fuel storage containers within 31 m of the normal high water mark of any water body
- Shall locate mobile fuel storage facilities on land when stationary for any period of time exceeding 12 hours. The Spill Contingency Plan will be updated prior to the reopening of the camp to clarify that fuel will be stored at least 31 m away from the high water mark of any water body and will include locations of fuel storage at the camp.

Reply to Response:

CIRNAC is satisfied with this response, so long as the updated Spill Contingency Plan is submitted a minimum of 30 days prior to storing any fuel on site, as required by Part B-3 of the License.



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).

Response:

No drilling through ice is currently planned. Management plans and standard operating procedures are reviewed annually, and updated to reflect planned activities, including drilling on ice. A procedure will be developed to address this sampling if required.

Reply to Response:

CIRNAC is satisfied with this response, so long as MMG submits a QA/QC plan to the NWB a minimum of 30 days before any anticipated on-ice drilling, as required by Part B-3 of the License.

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.

Response:

There is an incinerator on site at the High Lake camp (Ketek Cyclonator - CY-14-CA). The Waste Management Plan will be updated prior to the reopening of the camp to include an Incineration Management Plan for the equipment on-site, including:

Incinerator Operation Procedures:

- Sort waste - remove wastes containing chlorinated compounds, wastes containing mercury and other heavy metals, and hydrocarbons;
- Mix waste according to incinerator specifications to achieve good combustion;
- Supervise burn cycle to monitor operation;
- Once complete and cool, ash will be removed;
- Ash management

Additional details to be included in the Incineration Management Plan:

- Regulatory Requirements;
- Pollutants of concern;
- Record keeping and monitoring;
- Acceptable/unacceptable waste for incineration;
- Ash management

The Incinerator Management Plan will include a summary table of applicable regulations, including 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, 2010a). The table will identify the applicable document and summarize actionable items.

Reply to Response:



CIRNAC is satisfied with this response so long as MMG submits an updated Waste Management Plan and Incinerator Management Plan a minimum of 30 days prior to beginning any waste incineration on site.