



Water Resources Division  
Resource Management Directorate  
Nunavut Regional Office  
918 Nunavut Drive  
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Your file - Votre référence  
2AM-MRY2540  
Our file - Notre référence  
GCDOCS#143527561

February 20, 2026

Robert Hunter  
Licensing Administrator  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU, X0B 1J0  
E-mail: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**Re: Crown-Indigenous Relations and Northern Affairs Canada's Review of Baffinland Iron Mines Corporation's Aquatic Effects Monitoring Program (AEMP) Application for the Mary River Project, Type A Water Licence No. 2AM-MRY2540**

Dear Robert Hunter,

Thank you for the 14 January 2026 invitation to review the Aquatic Effects Monitoring Program, submitted by Baffinland Iron Mines Corporation (Baffinland) for Type A Water Licence No. 2AM-MRY2540.

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.

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 William Quere at [william.quere@rcaanc-cirnac.gc.ca](mailto:william.quere@rcaanc-cirnac.gc.ca) Or Andrew Keim at (867) 975-4550 or [Andrew.keim@rcaanc-cirnac.gc.ca](mailto:Andrew.keim@rcaanc-cirnac.gc.ca)

Sincerely,

William Quere, BSc  
Municipal Coordinator

Canada 



## **Technical Review Memorandum**

**Date:** February 20 2026

**To:** Robert Hunter - Licensing Administrator, Nunavut Water Board

**From:** William Quere – Municipal Coordinator, CIRNAC

**Subject: Crown-Indigenous Relations and Northern Affairs Canada’s Review of Baffinland Iron Mines Corporation’s Aquatic Effects Monitoring Program (AEMP) Application for the Mary River Project, Type A Water Licence No. 2AM-MRY2540**

**Region:**     Kitikmeot     Kivalliq     Qikiqtani

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### **A. BACKGROUND**

The Mary River Project is an operating high-grade iron mine located in the Qikiqtani Region of Nunavut, on northern Baffin Island. The mine is owned and operated by Baffinland Iron Mines Corporation (Baffinland) and includes the Mine Site, the Milne Port site, and a 100 km-long Tote Road connecting the two sites. The current approved project allows iron ore production through open pit mining.

The Project has gone through a number of important milestones prior to operating at the production rate of 6 Million Tonnes Per Annum (Mtpa), approved in 2024.

In January of 2026, Baffinland submitted an Aquatic Effects Monitoring Program as required under Part B, Item 15 of Type A water Licence 2AM-MRY2540. The Program includes updates to its water quality guidelines with new benchmarks for Selenium and Uranium as well as a decision tree for professional judgement.

CIRNAC provides the following comments and recommendations pertaining to the monitoring program. 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                  | Total Uranium Benchmark |

**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                    |
|---|---|
| BIM-5200-PLA-0023 AQUATIC EFFECTS MONITORING PLAN | Baffinland Iron Mines Corporation, January 2026 |
| Aquatic Effects Monitoring Plan                   | Baffinland Iron Mines Corporation, March 2024   |



## RESULTS OF REVIEW

### 1. Total Uranium Benchmark

**Comment:**

In section 3.2 tables 3-3 and 3-4 state the water quality benchmarks for mine site lakes and streams which contain the following uranium benchmark:

| Parameter <sup>4</sup> | Units | Water Quality Guideline | Camp/Sheardown Lake Tributaries | Mary River <sup>3</sup> | Selected Benchmark | Benchmark Method <sup>2</sup> |
|------------------------|-------|-------------------------|---------------------------------|-------------------------|--------------------|-------------------------------|
| Uranium                | mg/L  | Variable (CCME)         | Variable (CCME)                 | Variable (CCME)         | Variable (CCME)    | A                             |

**NOTES:**

1. NC = Not Calculable; CLT = Camp Lake Tributary; MR = Mary River; SDLT = Sheardown Lake Tributary
2. Method A = Water Quality Guideline from CCME, Method B = 97.5% percentile of Baseline; Method C = 3\* MDL; Method D = updated FEQG or CCME benchmark presented considers modifying factors of pH, hardness, and/or DOC
3. One sample (outlier) containing chemical concentrations orders of magnitude above other values was not included in the calculations for Mary River.
4. Total metals unless otherwise noted.
5. Assumes temperature at 10°C, and pH of 8.0.
6. 97.5<sup>th</sup> percentile was being driven by elevated detection limit; therefore, the guideline was selected.

CIRNAC is concerned that the CCME states a particular benchmark for Uranium in fresh water whereas the AEMP states a variable while using CCME as reference.

**Recommendation:**

(R-01) CIRNAC recommends that Baffinland clarify the variance and what values have been changed in the updated AEMP.