



Water Resources Division  
Nunavut Regional Office  
Iqaluit, NU X0A 0H0

Your file - Votre référence  
2BE-EQE----

January 21, 2019

Our file - Notre référence  
CIDM# 1238512

Ida Porter  
Licensing Administrator  
Nunavut Water Board  
Gjoa Haven, NU X0B 1J0

Sent via email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**Re: Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)  
response to Baffinland Iron Mines Corporation (Baffinland) Type B Water  
Licence Application 2BE-EQE---- for the EQE Bay Exploration Program.**

Dear Ms. Porter,

Thank-you for the email notice to interested parties, received on December 12, 2018, regarding Baffinland's Type B Water Licence Application 2BE-EQE---- for the EQE Bay Exploration Program.

CIRNAC reviewed and provided comment on Baffinland's Type B Water Licence Application 2BE-EQE---- pursuant to its mandated responsibilities from the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

## **SUBMISSIONS**

The following documents were reviewed:

- Water Licence Application Cover Letter
- A1 Executive Summaries English and Inuktitut
- A2 Water Licence Application Form
- A3 Regulatory Correspondence
- A4 Consultation Record
- A5 Corporate Information
- A6 SIG Concordance
- A7 Project Proposal
- A8 Vendor Information (Incinerator, STP, WTP)
- A9 Culvert Design Memo
- A10 Spill Contingency Plan
- A11 Closure & Reclamation Plan

Canada



- A12 Inspection and Monitoring Plan
- A13 Sampling Program QA-QC Plan
- A14 Waste Management Plan
- A15 Protection Plan
- A16 Figures

## COMMENTS

### Water Licence Application Cover Letter

#### Comment 1 (Figure 3)

Baffinland have provided a topographic map of the proposed exploration area layout. CIRNAC requests further explanation be provided on water management through the exploration area, such as around infrastructure to avoid erosion and sedimentation of freshwater waterways. Additionally, CIRNAC requests details of the snow management plan for the exploration layout area.

### A1 Executive Summaries English and Inuktitut

#### Comment 2 (Description of the Undertaking)

Baffinland have multiple transport options to the camp including, but not limited to: helicopters, and aircraft that will land either on floats on a lake adjacent to the camp, or on the tundra if equipped with tundra tires. Over the subsequent 5 years, the exploration program may expand to include construction of access trails to connect the camp to exploration areas, and construction of an airstrip to improve air access to the site. CIRNAC requests additional details on where the diesel and Jet-A1 fuel will be stored, and what the refueling and spill response procedures will be when unloading the fuel from sealift barges and using the fuel at the exploration camp.

#### Comment 3 (Predicted Environmental Impacts of the Undertaking and Proposed Mitigation Measures)

Baffinland indicate one or two quarries may be exploited to construct an access road and airstrip. CIRNAC requests further information on the approximate quarry sizes and anticipated volume of material to be removed from the quarries.

### A2 Water Licence Application Form

#### Comment 4 (Quantity and Quality of Water Involved)

Guidelines for water removal for lakes are based on up to 10 percent (%) below ice water volume unless more information has been provided. Baffinland have provided expected below-ice drawdown based on lake-catchment size and mean annual unit runoffs, however have not provided the volumes of the lakes. CIRNAC requests Baffinland provide the lake volumes and corresponding calculated drawdowns of the water supply lakes – ideally based on the bathymetric surveys conducted on the two lakes in 2018.



#### **Comment 5 (Quantity and Quality of Waste Involved)**

The water supply for drilling is estimated at 270 cubic metres per day (m<sup>3</sup>/day). CIRNAC asks for clarification as to why the 270 m<sup>3</sup>/day associated with drilling is not also listed under quantity and quality of waste involved.

#### **Comment 6 (Quantity and Quality of Waste Involved)**

Waste oil is listed as a type of waste involved. Composition of the waste oil was not defined. CIRNAC seeks clarification on the type and source of waste oil generated.

### **A3 Regulatory Correspondence**

#### **Comment 7 (4. Public Comments and Concerns)**

During the Nunavut Impact Review Board (NIRB) screening process, CIRNAC Impact Assessments Division noted *“concerns regarding the potential for geotechnical drilling, physical scarring, land disturbance activities to cause water and groundwater contamination, and influence acid generation and release of metal-bearing groundwater; and recommended that the Proponent submit revised management plans that account for all activities and phases of the project, including potential expansion.”* CIRNAC Waters requests the aforementioned revised management plans are submitted to the NWB for review by interested parties, in particular on assessing and mitigating the influence of acid generation and release of metal-bearing groundwater.

### **A4 Consultation Record**

#### **Comment 8 (page 5)**

At the Igloolik meeting on April 5, 2018 with the Mayor and Council, HTA Representatives and QIA Representatives, a comment was made to Baffinland that *“this site is closer to the tide water; I imagine you’ll have measures to protect the marine environment?”* CIRNAC Waters requests a map be provided to the NWB for interested parties to review of the high tide mark, including anticipated storm surge height, for the EQE Bay Exploration Program. Mitigative measures on how infrastructure will be protected from high tide water should be included in the revised management plans for review.

### **A7 Project Proposal**

#### **Comment 9 (1.1 Overview)**

Baffinland states *“equipment and materials will be delivered to Ege Bay by sealift and the camp will be established in the fall of 2018.”* CIRNAC asks for clarification on what activities have already taken place at the EQE Bay Exploration area prior to receiving a Type B Water Licence. Specifically, was a sealift delivered and a camp established in 2018? And if so, under what licence did the aforementioned activities take place.

#### **Comment 10 (Figure 3)**

Figure 3 indicates water will be removed from the unnamed lake (EB-2) for the drill water



supply, from unnamed lake (EB-1) for the camp water supply, and from two lakes labeled “additional drill water sources.” Only volumes from unnamed lakes EB-1 and EB-2 are included in the Type B Water Licence application. CIRNAC requests clarification on the volume of water intended to be removed from the two lakes labeled “additional drill water sources.”

#### **Comment 11 (2.3 Sewage and Grey Water Disposal)**

Baffinland indicates “camp sewage will be treated using a package sewage treatment plant prior to effluent being discharged to land for runoff into Ege Bay.” CIRNAC requests additional information on:

- how the treated sewage effluent flow will be managed in the winter when it freezes closest to the sewage treatment plant outlet;
- if barriers will be used to laterally contain the sewage land treatment area as Figure 3 shows the area is relatively flat; and
- if signs and/or fencing will be deployed advising pedestrians and vehicles to avoid going the treated sewage effluent area.

### **A10 Spill Contingency Plan / A9 Culvert Design Memo**

#### **Comment 12 (6.1 Fuel Spills, Figure 1)**

CIRNAC recommends that the updated Spill Contingency Plan, including the spill kit locations, is provided with the 2019 Annual Report or sooner.

#### **Comment 13 (Figure 1)**

CIRNAC requests clarification on the location of the culverts as the ‘proposed culvert in fish bearing waters’ symbol on Figure 1 is not located on a stream. CIRNAC requests the site-specific stream assessments and revised culvert designs be provided to the NWB and distributed to interested parties for review prior to construction.

### **A11 Closure & Reclamation Plan**

#### **Comment 14 (5.2.4.5 Engineering Work Associated with Closure Activity & 6 Progressive Reclamation)**

Both 5.2.4.5 Engineering Work Associated with Closure Activity & 6 Progressive Reclamation refer to “at least 30 m above the ordinary High Water Mark.” CIRNAC reminds that the value should be at least 31 m above the ordinary High Water Mark.

If you have any questions or require further information with respect to this matter, contact me at (867) 975-3877 or email [michelle.blade@canada.ca](mailto:michelle.blade@canada.ca), or Ian Parsons at (867) 222-9278 or email [ian.parsons@canada.ca](mailto:ian.parsons@canada.ca).

Regards,

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