

Eqe Bay Exploration Program Type 'B' Water Licence Application

Attachment 1
Water Licence Application Executive Summary
(English and Inuktitut)



Eqe Bay Exploration Program

Water Licence Application Executive Summary

Location of the Undertaking

Baffinland Iron Mines Corporation (Baffinland) is planning to initiate a mineral exploration program at Eqe Bay in 2019. Eqe Bay is located on the west coast of Baffin Island, approximately 90 km south of Steensby Port, and 210 km east of both Igloolik and Hall Beach. The location is shown on Figures 1 and 2. The exploration area is located on Inuit Owned Land (IOL) Parcel IG-03, of which Inuit hold both surface rights and subsurface mineral rights. Baffinland holds a current exploration agreement with Nunavut Tunngavik Inc. (NTI) to explore the mineral potential in this area, and holds federal mineral claims covering adjacent Crown Lands and portions of IOL Parcel IG-02.

Description of the Undertaking

Baffinland plans to set up a camp to support the exploration program in the fall of 2019, once the camp, drills and other supplies have been delivered to the nearby beach by sealift barges. No drilling is planned in 2019.

An initial drill program will begin in the late winter or spring of 2020. The 2020 drill program is expected to involve the operation of two drills and a yet to be defined number of holes with planned depths of 100 to 300 m, totaling up to 10,000 m total depth. Other exploration activities to be undertaken in 2020 include detailed geological mapping, rock and till sampling, and a backpack drill program.

The initial drill program will be supported by an approximately 50-person camp and other outbuildings. The camp will be equipped with an incinerator, a potable water treatment plant, and a sewage treatment plant. Helicopters will be used to move drills and to transport workers between the drill locations and camp. Diesel and Jet-A1 fuel will be stored in drums within lined secondary containment areas. Workers and supplies will be delivered to the camp from either Mary River, Hall Beach or Igloolik using a Twin Otter or similar aircraft. The aircraft will land at the Eqe Bay camp either on floats on a lake adjacent to the camp, or on the tundra if equipped with tundra tires.

Based on the results of the initial drill program in 2020, Baffinland may seek to expand the scale of its exploration program at Eqe Bay. Over the subsequent 5 years, the exploration program may expand as follows:

Operate up to 9 drills;
Expand the initial camp to 100-persons;
Implement bulk fuel storage using double-walled tanks;
Source construction materials from one or two quarries;
Construct access trails to connect the camp to exploration areas to reduce helicopter use; and
Construct an airstrip to improve air access to the site.

At the conclusion of the exploration program, the exploration program's Closure and Reclamation Plan will be followed to remove all equipment and materials from the site and restore the area to the extent practical.



Water Use

Up to 29 cubic metres (m³) of water per day will be withdrawn from an unnamed lake referred to as Lake EB-1 for camp domestic use. Up to 270 m³ of water per day will be withdrawn from a second unnamed lake referred to as Lake EB-2 for exploration purposes.

Waste Disposal

The exploration program will generate camp wastes including food wastes, packaging wastes, drill cuttings, bulky non-hazardous wastes, hazardous wastes such as used oil and antifreeze, greywater and sewage. Care will be taken to contain food wastes to avoid attracting wildlife to the camp. An incinerator will dispose of combustible non-hazardous wastes. All other wastes will be removed from site on annual sealifts. Sewage will be treated in a package sewage treatment plant and treated effluent will be discharged onto land to run off into Eqe Bay. Greywater will be treated in the sewage treatment plant or may be discharged to an excavated sump located more than 31 m from the ordinary high water mark of nearby water bodies.

Other Persons or Properties Affected by the Undertaking

There are no persons occupying the general area, though it is acknowledged that the area has been occupied historically by the ancestors of local communities, mainly Igloolik and Hall Beach. The area continues to be used occasionally by individuals from these communities. The exploration program is not expected to meaningfully affect other persons or properties.

Predicted Environmental Impacts of the Undertaking and Proposed Mitigation Measures

The exploration program will generate emissions of air contaminants that are expected to be within the applicable Ambient Air Quality Standards (AAQS), as well as noise. Aircraft associated with the exploration program will adhere to minimum flight altitudes outside of the immediate camp and exploration area.

An access road may be constructed after the first or second year to reduce helicopter use and fuel consumption. The access road will involve the installation of culverts at two potentially fish-bearing stream crossings. Best practices will be followed in the construction and removal of these culverts, in accordance with the guidance provided by Fisheries and Oceans Canada (DFO).

Water withdrawals have been assessed to not meaningfully affect the source lakes. Intakes will be equipped with fish screens.

Ground disturbances will be minimized to reduce impacts to soils and permafrost. No sensitive landforms have been identified. Quarries may be exploited to construct an access road and airstrip. Development and management of the quarries will adhere to the appropriate regulatory guidelines and will be detailed in quarry-specific management plans.

The exploration program will involve modest disturbance to vegetation and wildlife habitat. Baffinland will follow the wildlife and caribou protection measures outlined in the exploration program's Environmental Protection Plan. This includes reducing activity if caribou move into the area.



A qualified archaeologist conducted archaeological surveys in the summer of 2018. Archaeological sites identified will be avoided, protected or mitigated, using a methodology consistent with the Mary River Project's Cultural Heritage Protection Plan.

The Project area is not a high use area, based on the Mary River Inuit Knowledge Study and discussions with community representatives from Igloolik and Hall Beach. Baffinland will continue to be a good neighbour and welcome other land users into camp for respite.

The following management plans have been developed specific to the Eqe Bay Exploration Program and incorporate key mitigation and management strategies used at Baffinland's Mary River Project:

)	Spill Contingency Plan
	Closure and Reclamation Plan
	Monitoring and Inspection Plan
J	Environmental Protection Plan
	Waste Management Plan

In addition to implementing the management plans listed above, Baffinland will implement the mitigation measures and management practices outlined in the following management plans prepared for the Mary River Project:

J	Cultural Resources Protection Plan
J	Sampling Program – Quality Assurance and Quality Control Plan

Water Rights

The Eqe Exploration Area is located mainly within IOL Parcel IG-03, though exploration could extend northeast of IG-03 on portions of I Crown Land mineral claims held by Baffinland or to the south on mineral claims covering portions of IOL Parcel IG-02. Baffinland holds an Exploration Agreement with Nunavut Tunngavik to explore for minerals within most of Parcel IG-03, as shown on Figure 2. The Company is seeking an Inuit Land Use Lease III from the Qikiqtani Inuit Association (QIA) to obtain temporary surface rights to use the land. Baffinland is not aware of any other land users holding rights including water rights that may be affected by the exploration program. The exploration program is not expected to substantially affect the quality or quantity or flow of waters flowing through IOL. No compensation is planned for loss or damage to Inuit Water Rights.

Proposed Time Schedule

Baffinland intends to mobilize and establish its camp in the fall of 2019, however exploration program personnel may access the area to conduct preparation works as early as June 2019.

Drilling is expected to commence in early 2020 and will continue for several years. A five-year exploration program has been contemplated at this point. Depending upon the results of exploration, the exploration program could advance through various phases of feasibility studies and to mine development. Otherwise, the exploration program will be discontinued and the Closure and Reclamation Plan will be implemented. This will include the removal of all equipment and materials, and the implementation of other closure measures to ensure the affected area is physically and chemically stable in the long-term.



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