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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: 2BE-EQE1926

April 4, 2019

Thomas Iannelli
Head of Exploration
Baffinland Iron Mines Corporation
#300 – 2275 Upper Middle Road E.
Oakville, ON L6H 0C3

Richard Cook
Knight Piésold Ltd.
1650 Main Street West
North Bay, ON P1B 8G5

Email: thomas.iannelli@baffinland.com

Email: rcook@knightpiesold.com

RE: NWB Water Licence No. 2BE-EQE1926

Dear Messrs. Iannelli, Cook:

Please find attached Licence No. 2BE-EQE1926 issued to the Baffinland Iron Mines Corporation (BIMC) by the Nunavut Water Board (NWB) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement)*. The terms and conditions of the attached Licence related to the use of Water and the deposit of Waste are an integral part of this approval.

If the Licensee contemplates the continuing of this Undertaking after the Water Licence expires, it is the responsibility of the Licensee to apply to the NWB for a replacement water licence. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the replacement Water Licence. Note that if the Licence expires before the NWB issues a new one, then the use of Water and the deposit of Waste must cease, or the Licensee may be in contravention of the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSTRA)*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the replacement of this Licence be filed at least **three (3) months** prior to the Licence expiry date. It should be noted that in accordance with s. 75(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, the Board is not allowed to issue a permit or authorization for any project proposal that has not been submitted to the Nunavut Planning Commission (NPC) in accordance with s. 76 of *NuPPAA*.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment

process. The process and timing may vary depending on the scope of the amendment; however, a minimum of **sixty (60) days** is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received from Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and the Qikiqtani Inuit Association (QIA) on issues identified. This information is attached for your consideration.¹

Sincerely,

Lootie Toomasie
Nunavut Water Board,
Chair

LT/ak/ip

Enclosure: Renewal Licence No. 2BE-EQE1926

Comments – CIRNAC, QIA

Cc: Distribution List – Qikiqtani

¹ Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), January 21, 2019, and Qikiqtani Inuit Association (QIA), January 11, 2019.

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DECISION

LICENCE NUMBER: 2BE-EQE1926

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated December 7, 2018 for a new Water Licence made by:

BAFFINLAND IRON MINES CORPORATION

to allow for the use of Water and the deposit of Waste during camp operations and activities related to exploration that include prospecting, geophysical work, drilling, quarrying, geological mapping, rock and till sampling, a backpack drill program, and construction of access trails and airstrip at the Ege Bay Exploration Program located within the Qikiqtani Region, Nunavut, generally located at the geographical coordinates as follows:

Project Extents:

Latitude: 69° 38' 32.31" N	Longitude: 77° 13' 45.39" W
Latitude: 70° 08' 43.27" N	Longitude: 75° 42' 15.92" W
Latitude: 69° 58' 14.53" N	Longitude: 75° 13' 47.09" W
Latitude: 69° 28' 18.31" N	Longitude: 76° 45' 11.40" W

Camp Location(s):

Latitude: 69° 37' 48.95" N	Longitude: 76° 39' 47.38" W
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DECISION

After having been satisfied that the Application is for a proposal that falls outside of an area with an approved land use plan, and, as such, a conformity determination is not required subject to a 12.4.4(a) Screening Decision as determined by the Nunavut Planning Commission (NPC)¹ and as determined by the Nunavut Impact Review Board (NIRB)², a review of the Project is not required in accordance with s. 92(1)(a) of *NuPPAA*, the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (*NWNSRTA* or *Act*) and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *Nunavut Agreement* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

¹ Nunavut Planning Commission, Conformity Determination 148801, April 17, 2018.

² Nunavut Impact Review Board (NIRB) Screening Decision Report 18EN026, August 17, 2018.

New Licence No. 2BE-EQE1926 be issued subject to the terms and conditions contained therein. (Motion #: 2018-B1-037)

Lootie Toomasie
Nunavut Water Board,
Chair

LT/ak/ip



NUNAVUT WATER BOARD WATER LICENCE

Licence No. 2BE-EQE1926

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

BAFFINLAND IRON MINES CORPORATION

(Licensee)

#300 – 2275 UPPER MIDDLE ROAD E., OAKVILLE, ON L6H 0C3

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of Waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type: **2BE-EQE1926 / TYPE “B”**

Water Management Area: **SOUTHWESTERN BAFFIN BAY WATERSHED (49)**

Location: **QIKIQTANI REGION, NUNAVUT**

Classification: **MINING UNDERTAKING**

Purpose: **DIRECT USE OF WATER AND DEPOSIT OF WASTE**

Quantity of Water use not to Exceed: **TWO HUNDRED AND NINETY-NINE (299) CUBIC METRES PER DAY**

Date of Licence Issuance: **APRIL 4, 2019**

Expiry of Licence: **APRIL 3, 2026**

This Licence, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

Lootie Toomasie
Nunavut Water Board, Chair

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of Water and the deposit of Waste for a Mining undertaking classified as per Schedule 1 of the *Regulations* at the Ege Bay Exploration Program Project, located approximately 90 km east of both Igloolik and Hall Beach within the Qikiqtani Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Addendum**” means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report;

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

“**Applicant**” means the Licensee;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of Waste is permitted by a licence issued by the Board;

“**Board**” means the Nunavut Water Board established under the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Borrow Pits**” means sites for which materials, such as gravel or sand, are excavated for the purposes of constructing site infrastructure and facilities;

“Bulk Fuel Storage Facility” means the fuel storage facility as described in the Application and supporting documents submitted December 7, 2018;

“Closure and Reclamation Plan” means a Plan developed to reach the closure goal and taking in account the “Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories” 2013;

“Effluent” means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;

“Engineer” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“Final Discharge Point” means the point, at which the Licensee no longer exerts care and/or control over the quality and/or quantity of the Effluent from a treatment process;

“Greywater” means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet Wastes;

“High Water Mark” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

“Inspector” means an Inspector designated by the Minister under Section 85 (1) of the *Act*;

“Licensee” means the holder of this Licence;

“Modification” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“Nunavut Agreement” means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*”, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“Quarry or Quarries” means the areas of surface excavation for extracting rock material for use as construction materials in the development of infrastructure and facilities for the Ege Bay Exploration Program;

“Regulations” means the *Nunavut Waters Regulations* SOR/2013-69 18th April, 2013;

“Secondary Containment” means an impermeable structure, external to and separate from primary containment, which prevents unplanned spills of hazardous materials and provides a minimum capacity of 110% of the original vessel. Where multiple vessels are

stored within the containment, it must provide a minimum capacity equal to the sum of the largest vessel and 10% of the aggregate volume of all other vessels located in the containment. This structure shall also provide containment and control of hoses and nozzles;

“Sewage” means all toilet Wastes and greywater;

“Sewage Treatment Plant” means the four-stage wastewater treatment plant as described in the *Ege Bay Waste Management Plan BAF-PH1-400-P16-0005* dated February 22, 2019 and submitted with the Application;

“Spill Contingency Plan” means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

“Sump or Sumps” A structure or depression that collects, controls, and filters liquid Waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid Waste;

“Toilet Wastes” means all human excreta and associated products, but does not include greywater;

“Waste” means, as defined in s. 4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means;

“Water” or “Waters” means waters as defined in section 4 of the *Act*.

3. **Enforcement**

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of Waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

PART B: GENERAL CONDITIONS

1. The fees payable to the Receiver General for Canada for the right to use Waters shall be

sent to the Board annually in accordance with Section 12 of the *Regulations*.

2. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
 - a. A summary report of Water use and Waste disposal activities;
 - b. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Inuit-owned lands for the reporting period;
 - c. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Crown Lands reporting period;
 - d. Quantity of Waste disposed of on on-site Waste disposal facility;
 - e. Quantity of Waste backhauled to approved facility for disposal;
 - f. A list of unauthorized discharges and a summary of follow-up actions taken;
 - g. Any revisions to the management plans, as required by Part B, Item 7, submitted in the form of an Addendum;
 - h. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
 - i. Report all artesian flow occurrences as required under Part F, Item 3;
 - j. A summary of all information requested and results of the Monitoring Program;
 - k. Details pertaining to locations of sump(s) and drill holes;
 - l. GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) for the locations of all temporary camps established in support of the project if the actual coordinates differ from that provided in the application;
 - m. A summary, including photographic records before, during and after any relevant construction activities or Modifications and/or major maintenance work carried out on facilities under this Licence and an outline of any work anticipated for the next year;
 - n. Detailed discussion on the performance, installation, and evaluation, including the use of photographic record, of the primary and secondary containment functions used in fuel storage to safeguard impacts to freshwaters;
 - o. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;
 - p. Any other details on Water use or Waste disposal requested by the Board by the 1st November of the year being reported.
3. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
4. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of Water volumes as required under Part J, Item 1.
5. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance,

rejection or alteration of the Plan.

6. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
7. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
8. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
9. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:
 - (a) **Manager of Licensing:**
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca
 - (b) **Inspector Contact:**
Manager of Field Operations, CIRNAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445
10. The Licensee shall submit an electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
11. The Licensee shall ensure that all documents or correspondence submitted by the Licensee to the NWB are received and acknowledged by the Manager of Licensing.
12. This Licence is assignable as provided for in Section 44 of the *Act*.
13. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain Water for domestic camp use from the sources identified in the Plan in Part J, Item 9. Total camp Water use shall not exceed twenty-nine (29) cubic metres per day. Drill Water shall be obtained from local Water source(s), proximal to the drilling targets and shall not exceed two hundred and seventy (270) cubic metres per day. The volume of Water for all purposes under this Licence shall not exceed two hundred and ninety-nine (299) cubic metres per day.
2. The withdrawal of Water from any stream shall not exceed ten (10) per cent of the low flow of that stream unless approved by the Board in writing.
3. The Licensee shall submit to the Board for approval in writing, the following information at least thirty (30) days prior to the use of Water of a sufficient volume that the source water body may be drawn down: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
4. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw Water at a rate such that fish do not become impinged on the screen.
5. The Licensee shall not conduct any work below the ordinary High Water Mark of any water body unless approved by the Board in writing.
6. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
7. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into Water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of Water is not impaired, unless otherwise approved by the Board in writing.
2. The Licensee shall not practice on-site land filling of domestic Waste, unless otherwise approved by the Board in writing.
3. The Licensee is authorized to dispose of all acceptable food Waste, paper Waste and untreated wood products in an incinerator.
4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of Waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding Waters, unless otherwise approved by the Board in writing.

5. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving Wastes from the Ege Bay Exploration Program prior to any backhauling and disposal of Wastes to those communities.
6. The Licensee shall backhaul and dispose of all hazardous Wastes, Waste oil and non-combustible Waste generated through the course of the operation at a licensed Waste disposal site.
7. The Licensee shall maintain records of all Waste backhauled and records of confirmation of proper disposal of backhauled Waste. These records shall be made available to an Inspector upon request.
8. The Licensee shall direct all Sewage to the Sewage Treatment Plant described in the Application once the Sewage Treatment Plant is operational.
9. Discharge at Monitoring Program Station Ege-STP-1 (Final Discharge Point from the Sewage Treatment Plant) shall be 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. Discharge from Ege-STP-1 shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample
pH	6.5 to 9.0 (pH units)
Oil and Grease	5 mg/L and no visible sheen
Biological Oxygen Demand (BOD5)	120 mg/L
Total Suspended Solids	180 mg/L
Fecal Coliforms	10,000 CFU/100 mL

10. The Licensee shall dispose of Greywater to a sump located 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.
11. The Licensee shall dispose of all Toilet Wastes through incineration, chemical or composting toilets. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved Waste disposal site.
12. The Licensee shall, at least sixty (60) days prior to commissioning the Sewage Treatment Plant, submit to the Board for approval an Operation and Maintenance Manual for the Sewage Treatment Plant
13. All surface runoff and/or discharge from borrow pits and quarries, and drainage management systems, during the construction of any facilities and infrastructure associated with this project, where flow may directly or indirectly enter a water body, at Monitoring Program Station(s) Ege-Q-X shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50.0	100
Oil and Grease	15,000 and no visible sheen	15,000 and no visible sheen
pH	Between 6.5 and 9.5	Between 6.0 and 9.5

14. All Effluent discharged from the Bulk Fuel Storage Facility at Monitoring Program Station(s) Ege-CA-X shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample (µg/L)
pH	6.5 to 9 (pH units)
Oil and Grease	15,000 and no visible sheen
Lead (dissolved)	1
Benzene	370
Toluene	2
Ethylbenzene	90
Phenols	0.2

15. The Board approves the Plan entitled *Ege Bay Waste Management Plan BAF-PH1-400-P16-0005* dated February 22, 2019 with issuance of this Licence.
16. The Licensee shall provide at least ten (10) days notification to an Inspector, prior to initiating the release of effluent from any facilities listed in this Part. The notice shall include water quality results, an estimate of volume and the proposed receiving location

PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES, CONSTRUCTION, AND OPERATIONS

1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
3. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of Water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
4. Stream crossing shall be a minimum of five hundred (500) meters from spawning areas.

5. The Licensee shall only use aggregate for construction of infrastructure or facilities under this Licence that is demonstrated to be potentially non-acid generating, non-metal leaching and free of contaminants by carrying out appropriate analyses and retaining the results and reports for reference for submission on request by the NWB or an Inspector, or have the results submitted with the Annual Report under Part B, Item 2.
6. The Licensee shall designate an area for the deposition of excavated and stockpiled materials that is at least thirty-one (31) metres above the ordinary High Water Mark of any water body.
7. The Licensee shall not mobilize heavy equipment or vehicles unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.
8. Machinery is not permitted to travel up the stream bed and fording of any water body is to be kept to a minimum and limited to one area and a single activity of bridge construction or installation of any Water crossings. Machinery and equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks.
9. Equipment storage holding areas should be located on gravel, sand or other durable land, a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.
10. Sediment and erosion control measures must be used to mitigate the deposition of debris and sediment into or onto any Water body during the construction and operation. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter Water.
11. The Licensee shall not cut any stream bank or remove any material from below the ordinary High Water Mark of any water body.
12. The Licensee shall, at least sixty (60) days prior to construction, submit to the Board for review, construction plans, specifications, and design drawings that are stamped and signed by an Engineer, for the engineered infrastructure designed to contain, withhold divert and retain Waters and/or Wastes, allowed under the scope of this Licence. The submission will include proposed mitigation and monitoring during construction.
13. The Licensee shall, within ninety (90) days of completion of construction activities, submit to the Board for review a Construction Summary Report that includes stamped as-built plans and drawings, explanation for any deviation from construction drawings, and consideration of construction and field decisions and their effects on the performance of engineered facilities.
14. The Licensee shall conduct quarrying activities in accordance with all applicable legislation, guidelines, and industry standards including the *Northern Land Use Guidelines - Pits and Quarries* (2009).

15. The Licensee shall maintain a minimum of thirty-one (31) metres large undisturbed buffer zone between the periphery of quarry sites and the ordinary High Water Mark of any water body.
16. The Licensee shall not excavate and/or remove material from the quarry/borrow area beyond a depth of one (1) metre above the ordinary High Water Mark or above the groundwater table, to prevent contamination of groundwater.
17. The Licensee shall, at least sixty (60) days prior to commencing of quarrying, submit to the Board for approval, a Quarry Management Plan. The Plan shall include baseline information necessary to detect potential impacts on freshwater from proposed quarrying along with comments/recommendations made during the review of Application.
18. The Licensee shall, at least sixty (60) days prior to commencing of quarrying, submit to the Board for review all management plans and manuals that may be required to be updated in consideration of activities outlined in the Quarry Management Plan.
19. The Licensee shall notify the Board and the Inspector at least ten (10) days prior to the construction or installation of any of the Water crossings associated with the Project.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee shall not conduct any land based drilling within thirty-one (31) metres of the ordinary High Water Mark of any water body, unless otherwise approved by the Board in writing.
2. The Licensee shall dispose of all drill waste, including Water, chips, muds and salts (CaCl_2) in any quantity or concentration, from land-based 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.
3. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface Waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
4. On-ice drilling is not authorized under this Licence.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the water supply facilities and waste disposal facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at

- least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. such Modifications are consistent with the NIRB Screening Decision;
 - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
 3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Board has approved the Plan entitled “*Ege Bay Spill Contingency Plan BAF-PH1-400-P16-0002*” dated February 22, 2019 that was submitted as additional information with the Application.
2. The Licensee shall, with the 2019 Annual Report or sixty (60) days prior to a sealift fuel transfer, whichever comes first, submit to the Board for review, an update to the Plan referred to in Part H, Item 1 by:
 - a. indicating the location(s) of spill kits;
 - b. reflecting the requirement for regular inspection of drip trays and antifreeze cleanup;
 - c. including information on handling hazardous materials; and
 - d. outlining the spill response procedure during fuel transfer activities from a sealift barge.
3. The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the project from entering Water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.
4. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other Waste and contain potential spills.
5. If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. Employ the approved Spill Contingency Plan;
 - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to

- the Inspector at (867) 975-4295; and
- c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
6. The Licensee shall, in addition to Part H, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Board has approved the Plan entitled “*Ege Bay Exploration Program Closure and Reclamation Plan BAF-PH1-400-P16-0003*” dated February 22, 2019 that was submitted with the Application.
2. The Licensee shall, with the 2019 Annual Report, submit to the Board for review, an updated Plan referred to in Part I, Item 1, taking into consideration its land lease agreement provisions with the Qikiqtani Inuit Association.
3. The Licensee shall complete all restoration work prior to the expiry of this Licence.
4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
5. The Licensee shall backfill and restore all sumps, sewage / greywater pits to the pre-existing natural contours of the land.
6. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water intakes, pumps and lines, material and equipment prior to the expiry of this Licence.
7. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
8. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
9. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut’s Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.

10. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. The restoration of drill holes must include the removal of any drill casing materials and if having encountered artesian flow, the capping of holes with a permanent seal. Where drill casings cannot be removed, the Licensee shall cut off the casings at ground level and identify with signage.
11. The Licensee may leave the casings on site, if it intends to continue drilling in existing casings, but shall add signaling to keep the area safe for the other territory users. The drill casings left cannot stay on the field for more than 2 years after the drilling.
12. The Licensee may store drill core produced by the appurtenant undertaking in an appropriate manner and location at least thirty-one (31) metres above the ordinary High Water Mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created.
13. The Licensee shall contour and stabilize all disturbed areas to reduce erosion and sedimentation to Water, upon completion of work and restored to a pre-disturbance state, where practicable.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall measure and record, in cubic metres, the daily quantities of water that is used from sources located on, in or flowing through Crown Land, utilized for camp, drilling and other purposes.
2. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of Water are utilized for all purposes.
3. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where Wastes associated with camp operations and drilling operations are deposited.
4. The Licensee shall, during periods of flow and following a major precipitation event, conduct water quality testing on a monthly basis, immediately upstream and downstream of the water crossings, of any significant water seeps in contact with the roads, earthworks and flows originating from borrow pit or quarry sites prior to construction, weekly during the construction and until completion, for criteria listed under Part D, Item 13.
5. The Licensee shall monitor runoff and/or discharge from the borrow pit and quarry sites, during blasting activities, during periods of flow and following significant precipitation events, on a monthly basis, for the following parameters:

Group	Parameter
Physical Parameters	pH (field and laboratory), temperature (field), alkalinity, bicarbonate, carbonate, electrical conductivity, hardness,

	hydroxide, ion balance, total dissolved solids, total suspended sediments.
Nutrients	Ammonia-nitrogen, nitrate nitrogen, nitrite-nitrogen, ortho-phosphate.
Major Ions	Calcium, chloride, magnesium, potassium, sodium, sulphate.
Total Metals	Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, titanium, uranium, vanadium and zinc.

6. The Licensee shall maintain, at a minimum, the following existing Monitoring Program Stations or as otherwise approved by the Board in writing:

Monitoring Station	Description	Frequency	Parameters
Eqe-X	Water Supply. The Monitoring Station(s) is/are in effect only upon receiving Board approval as per Part C, Item 3.	Daily	Volume, m ³
Eqe-STP-1	Final Discharge Point of the Effluent from the Sewage Treatment Plant.	Prior to discharge	Daily discharge volume, m ³ Quality in accordance with Part D, Item 9 Ammonia-Nitrogen Total Phosphorous
		Once per year	Acute lethality to Rainbow Trout; Acute lethality to <i>Daphnia magna</i>
Eqe-Q-X, where X refers to a number of a Station	Discharge from Borrow Pit and Quarry sites. The locations for these Monitoring Stations will be determined once the Plan in Part E, Item 17 is developed.	Monthly during periods of flow	Discharge volume, m ³ Quality in accordance with Part D, Item 13
		Frequency in accordance with Part J, Item 5	Quality in accordance with Part J, Item 5
		Once per year	Acute lethality to Rainbow Trout Acute lethality to <i>Daphnia magna</i>

Monitoring Station	Description	Frequency	Parameters
Eqe-CA-X, where X refers to a number of a Station	Discharge from the Bulk Fuel Storage Facility.	Prior to discharge	Discharge volume, m ³ Quality in accordance with Part D, Item 14

7. The Licensee shall conduct toxicity testing on treated sewage effluent at the final discharge point and runoff and/or discharge from the borrow pit and quarry sites at the Monitoring Stations Eqe-STP-1 and Eqe-Q-X, respectively, once annually during open water season in accordance with the following test procedures:
 - a. Acute lethality to Rainbow Trout (as per Environment Canada’s Environmental Protection Series Biological Test Method EPS/1/RM/13); and
 - b. Acute lethality to *Daphnia magna* (as per Environment Canada’s Environmental Protection Series Biological Test Method EPS/1/RM/14).
8. The Board approves the Plan entitled “*Eqe Bay - Environmental Inspection and Monitoring Plan BAF-PH1-400-P16-0004*” dated February 22, 2019 with issuance of this Licence.
9. The Licensee shall, at least thirty (30) days prior to initiating camp Water use, submit to the Board for review, an updated Plan referred to in Part J, Item 8 including:
 - a. information as per Part C, Item 3 and addressing all recommendations made during the course of the technical review of the Application;
 - b. a requirement for regular testing to ensure the quality of used oil and waste fuel to be incinerated satisfies the requirements for maximum levels of impurities set by Government of Nunavut’s *Environmental Guideline for Used Oil and Waste Fuel* (2012); and
 - c. daily inspections of fuel storage areas for damage, leaks, spill and appropriate storage.
10. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
11. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
12. The Licensee shall annually review the *Sampling Program – Quality Assurance and Quality Control Plan BAF-PHI-830-P16-0001* dated March 29, 2017 as accepted by the Board and modify it as necessary. Revised plans shall be submitted to the NWB with an approval letter from an accredited lab that meets standards set in Part that meets standards set in Part J Items 10 and 11.

13. The Licensee shall include in the Annual Report required under Part B, Item 2 and in Construction Summary Report required under Part E, Item 13 all data, monitoring results and information required by this Part.
14. Additional monitoring requirements may be requested by the Inspector.
15. Modifications to the Monitoring Program may be made only upon written request and subsequent approval of the Board in writing.