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Proposed Terms and Conditions for Baffinland's Type A Water Licence – Working Document

~~February 26,~~ April 25, 2013

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Part A: SCOPE, DEFINITION AND ENFORCEMENT

SCOPE

1. This Licence authorizes Baffinland Iron Mines Corporation. ("BIMC" or "Licensee") to use Water and dispose of Waste associated with the Mining undertakings at the Mary River Project as outlined in the Water Licence Application~~, submitted to the Board throughout the regulatory process. BIMC~~. The Licensee may conduct mining and associated activities at the Mary River Project in the Qikiqtani Region of Nunavut, including, in general, as follows:

Milne port

- Use of water from Philips Creek and 32 km Lake (intake, pipeline and water treatment);
- Quarrying materials from specified locations;
- Construction and operation of bulk fuel storage facilities including:
  - Arctic diesel fuel tanks and fuel dispensing system;
  - Jet-A diesel fuel tanks and fuel dispensing system;
  - Installation and use of temporary fuel storage systems.
- Construction and operation of port facilities, including:
  - Temporary dock and freight dock;
  - Lay down areas for equipment and materials;
  - Equipment maintenance shops,
  - Offices and warehouses.
- Construction and operation of a ~~150 person~~ camp including sewage treatment plants and incinerators;
- Construction and operation of Polishing Waste Stabilization Ponds (PWSPs);
- Construction and operation of oily water treatment facility including a mobile oily water treatment unit;
- Use and storage of pre-packaged explosives;
- Construction and Operation of waste management facilities including:
  - Waste sorting facility;
  - Landfarm,
  - Waste transfer facilities (for hazardous and non-hazardous waste); and,
  - Solid waste transfer facility;
- Upgrade of airstrip;
- Use of temporary camps, including trucking water to camps and sewage to Mary River or Milne Port for treatment; and,
- Site drainage works.

Tote Road

- Realignment and improvements of sections of the Tote Road;
- Replacement and upgrade of water crossings;
- On-going maintenance of the road;
- Quarry materials from specified locations;
- Communication towers;
- Use of temporary camps, including trucking water to camps and sewage to Mary River or Milne Port for treatment;
- Install shelters at strategic locations along the Tote Road.

Mine Site

- Use of water (intake, pipeline and water treatment) from Camp Lake;
- Quarrying materials from specified locations;
- Construction and operation of accommodation facilities for workers including:
    - Existing exploration camp;
    - Temporary construction camp;
    - Permanent camp;
    - Sewage treatment plants;
    - Construction and operation of Polishing Waste Stabilization Ponds (PWSPs);
    - Incinerators;
- Construction and operation of Mine Site facilities including:
    - Lay down areas for equipment and materials;
    - Equipment maintenance shops,
    - Offices and warehouses,
    - Oily water treatment facility;
    - Mobile oily treatment unit;
    - Laboratory.
- Construction and operation of fuel depots including:
    - Arctic diesel fuel tanks and fuel dispensing system;
    - Jet-A diesel fuel tanks and fuel dispensing system;
    - Installation and use of temporary fuel storage systems.
- Construction and operation of waste management facilities including:
    - Waste sorting facilities;
    - Landfarm,
    - Waste transfer facilities (for hazardous and non-hazardous waste);
    - Solid waste disposal (landfill);
- Operation of the open pit mine including:
    - Heavy equipment maintenance shops;
    - Open pit mine;
    - Waste rock stockpile with associated runoff water management facilities;
    - Ore crushing facilities;
    - Ore stockpiles; with associated runoff water management facilities;
    - Waste rock test pile.
- Construction and operation of explosives storage and manufacture facilities including:
    - Use and storage of pre-package explosives,
    - Bulk storage of ammonium nitrate;
    - Explosives manufacturing facilities;
    - Mobile explosives manufacturing facilities;
    - Explosive truck wash facility;
- Construction and operation of the Mine Site railway terminal including:
    - Ore loading facilities;
    - Railcar unloading facilities including bulk fuel rail cars.
- Upgrade of Mary River Airstrip, and,
- Site drainage works.

Railway

- Use of water (intake, pipeline and water treatment)at specified locations for the construction of the railway;
- Construction of the railway embankment and railway including:
    - Construction and use of four construction camps with associated sewage treatment facilities, sewage holding ponds, and incinerators, at specified locations along the railway corridor;
    - Establishment of temporary laydown areas along the railway corridor as required for the construction;

  - Construction of all associated temporary or permanent water crossing (approximately 453 crossings) along the railway corridor (bridges and culverts);
  - Construction of temporary access roads and airstrips;
  - Extraction and use of quarry materials from specified locations along the railway corridor, including disposal of spoil material;
  - Construction of the railway embankment, railway tunnels and railway;
  - Disposal of spoil material from tunnels and disposal of waste brine associated with tunnelling work;
  - Disposal of excess cut from railway alignment along Cockburn Lake;
  - Temporary storage of supplies, material, wastes, fuel as required for the duration of the construction period of the railway.
  - Installation and use of temporary fuel storage systems (iso-containers).
- Construction of temporary and permanent shelters along the railway corridor;
- Communication towers;
- Use of temporary camps, including trucking water to camps and sewage to Mary River or Milne Port for treatment.

Steensby Port

- Use of water (intake, pipeline and water treatment) from 3 km Lake and 10 km Lake;
- Quarrying materials from specified locations;
- Construction and operation of accommodation facilities for workers including:
  - Existing exploration camp;
  - Temporary construction camp;
  - Permanent camp;
  - Sewage treatment plants;
  - Construction and operation of Polishing Waste Stabilization Ponds (PWSPs);
  - Incinerators;
- Construction and operation of Steensby Port facilities including:
  - Temporary construction docks,
  - Permanent freight dock;
  - Lay down areas for equipment and materials;
  - Equipment maintenance shops,
  - Offices,
  - Warehouses,
  - Mobile oily treatment unit;
- Construction and operation of bulk fuel depots including:
  - Arctic diesel fuel depot and fuel dispensing system;
  - Jet-A diesel fuel depot and fuel dispensing system;
  - Marine diesel fuel depot and fuel dispensing system;
  - Use of temporary fuel storage systems.
- Construction and operation of waste management facilities including:
  - Waste sorting facilities;
  - Landfarm,
  - Waste transfer facilities (for hazardous and non-hazardous waste);
  - Solid waste disposal (landfill);
- Operation of railway terminal:
  - Railway / Heavy equipment maintenance shops;
  - Rail yard;
  - Fuel tanker car loading system;
  - Oily water treatment facility;
- Construction and operation of explosives storage and manufacture facilities including:
  - Use and storage of pre-package explosives,
  - Bulk storage of ammonium nitrate;
  - Explosives manufacturing facilities;

  - Mobile explosives manufacturing facilities;
  - Explosive truck wash facility;
- Construction and operation of the ore unloading terminal including:
  - Ore unloading facilities;
  - Ore stockpile;
  - Ore reclaiming system;
  - Ore dock;
- Construction and operation of permanent Steensby Port airstrip;
- Site drainage works;
- Use of temporary camps, including trucking water to camps and sewage to Mary River or Milne Port for treatment and,
- Communication towers.

ENFORCEMENT

2. 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.

3. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.

4. 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.

5. This Licence is issued subject to conditions contained herein with respect to the taking of Water and the depositing 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 Act, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed to be subject to such requirements.

6. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines and directives.

DEFINITIONS

7. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

Baffinland

Part B: GENERAL CONDITIONS

~~1. This Licence incorporates the previously issued Type B licence, 2BB-MRY1114. To the extent that any reports, studies and plans pursuant to the Type B licence are not yet received or approved by the Board, the requirement(s) becomes part of this Licence.~~

~~2. In the event of a conflict between the previously issued Type B licence and this Type A Licence, the condition of this Type A Licence prevail.~~

1. ~~3.~~ The amount of Water use fees shall be determined in accordance with the section 9(b) of the *Regulations*.

2. ~~4.~~ Payment of fees shall be made in accordance with section 9(6)(b) of the *Regulations*.

3. ~~5.~~ The Licensee shall file an Annual Report with the Board no later than March 31 in the year following the calendar year being reported. The Annual Report shall be developed in accordance with Schedule B.

4. ~~6.~~ The Licensee shall ensure a copy of this Licence is maintained at the sites of operation at all times in English and Inuktitut.

5. ~~7.~~ Any communication with respect to this Licence shall be made in writing to the attention of:

   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@nunavutwaterboard.org

6. ~~8.~~ Any notice made to an Inspector shall be made in writing to the attention of:
   Water Resources Officer
   Nunavut District, Nunavut Region
   P.O. Box 100
   Iqaluit, NU X0A 0H0
   Telephone: (867) 975-4295
   Fax: (867) 979-6445

7. ~~9.~~ Any notice made to an Analyst shall be made in writing to the attention of:
   Taiga Laboratories
   Department of Indian and Northern Affairs
   4601 – 52 Avenue, P.O. Box 1500
   Yellowknife, NT X1A 2R3
   Telephone: (867) 669-2781
   Fax: (867) 669-2718

8. ~~10.~~ The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board or as otherwise requested by the Board. Reports or studies submitted to the Board by the Licensee shall include an executive summary in English and Inuktitut.

9. ~~11.~~ This Licence is assignable as provided in section 44 of the Act.

10. ~~12.~~ The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.

11. ~~13.~~ The Licensee shall notify the NWB of any changes in development plans or conditions associated with this project, including the intent to begin Operations, at least sixty (60) days prior to any such change.

12. ~~14.~~ The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facilities and the Waste Disposal Facilities. All signs must be in English and Inuktitut.

13. ~~15.~~ The following Management Plans are required under this Licence:
    a. Emergency Response and Spill Contingency Plan
    b. Surface Water, Aquatic Ecosystems, Fish and Fish Habitat Management Plan
    c. Fresh Water Supply, Sewage and Wastewater Management Plan
    d. Waste Management Plan
    e. Waste Rock Management Plan
    f. Hazardous Material and Hazardous Waste Management Plan
    g. Borrow Pit and Quarry Management Plan
    h. Environmental Protection Plan
    i. Environmental Monitoring Plan
    j. Explosives Management Plan
    k. Blasting Management Plan
    l. Preliminary Closure and Reclamation Plan

14. ~~16.~~ Provisions outlined in the Management Plans listed in Part ~~C~~B-15 ~~are applicable~~ shall be complied with. For 2013, the Licensee shall comply with these Management plans submitted with the Licence Application. These plans shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

15. ~~17.~~ In the event that a Plan is not found acceptable to the Board, the Licensee shall provide a revised version to the Board for review within thirty (30) days of notification by the Board.

16. ~~18.~~ The Licensee shall implement the Management Plans.

17. ~~19.~~ The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

Baffinland

PART C : CONDITIONS APPLYING TO SECURITY

~~1. The Licensee shall furnish and maintain security with the Minister in the form, of the nature, and subject to such terms and conditions satisfactory to the Minister.~~

1. Subject to the provisions of Items 2 and 3 below, the Licensee shall furnish and maintain security with the Minister according to the following schedule:
   a. within thirty (30) days of issuance of this Licence, an initial security deposit of $----- and
   b. such further or other amounts as may be required by the Board, on an annual basis, based on the annual estimates of anticipated mine restoration liability in accordance with Part K, item 2 of this Licence.

2. With respect to Item 1(a) of this Part, where the Licensee confirms in writing to the Board, with notice to the Minister and the QIA, that it has furnished and maintained security with the QIA, in the form specified in item ____, in the amount of $ _____, representing the 2013 year estimate of anticipated mine closure and reclamation costs for the portion of the Project on Inuit Owned Lands, the amount of security to be furnished and maintained with the Minister shall be reduced to _____, representing the 2013 estimate of anticipated mine closure and reclamation costs for the portion of the Project on Crown lands.

3. With respect to Item 1 (b) of this Part, where the Licensee confirms in writing to the Board with notice to the Minister and the QIA, that it has furnished and maintained with the QIA in the form specified in Item 4, security in an amount determined under Part K, representing the estimate anticipated mine closure and reclamation costs on Inuit Owned Lands for the applicable year, the amount of security to be furnished and maintained with the Minister shall be equal to the estimated anticipated mine closure and reclamation costs on Crown lands for the applicable year.

4. ~~3. In determining, on an annual basis, the amount of security which the Licensee is required to furnish and maintain with the Minister, the Board may take into account any security furnished and maintained by the Licensee under alternative security instruments, including any security furnished and maintained under leases, permits or other dispositions of Inuit Owned Lands or Crown lands.~~ To meet the requirements of Item 1(a) or 1(b), the form of security, whether furnished and maintained by the QIA or by the Minister, shall be in the form, of the nature, subject to such terms and conditions as prescribed by the regulations, or that is satisfactory to the Minister.

5. ~~4.~~ The Licensee may submit to the Board for approval, from time to time, a written request for a reduction to the amount of security. The submission shall include supporting evidence to justify the request.

6. ~~5.~~ The security ~~referred to in Part C, Item 1~~ furnished and maintained with the Minister shall be maintained until such time as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act. This clause shall survive the expiry of this Licence or renewals thereof and until full and final reclamation has been completed to the satisfaction of the Minister.

7. The Board may issue further directions under this Part to resolve any issues relating to the provisions of this Part, including directions involving the amount of security required to be furnished and maintained from time to time.

Baffinland

PART D : CONDITIONS APPLYING TO CONSTRUCTION

Construction Drawings and As-built Drawings

1. All final design and construction drawings shall be stamped and signed by ~~a Professional~~an Engineer.

2. For the following facilities, the Licensee shall submit to the Board for review, at least forty-five (45) days prior to Construction, issued for construction drawings:
   a. Water intake structures;
   b. ~~Water crossings~~;
   b. ~~c.~~ Sedimentation ponds
   c. ~~d.~~ Sewage Treatment Facilities;
   d. ~~e.~~ Oily Wastewater Treatment Facilities;
   e. ~~f.~~ Polishing Waste Stabilization Ponds (PWSPs);
   f. ~~g.~~ Emulsion Plants;
   g. ~~h.~~ Waste Sorting Areas;
   h. ~~i.~~ Incinerators;
   i. ~~j.~~ Waste transfer stations;
   j. ~~k.~~ Hazardous and Non-Hazardous Waste Storage Facilities (indoor and outdoor);
   k. ~~l.~~ Landfarms;
   l. ~~m.~~ Landfills;
   m. ~~n.~~ Bulk fuel storage facilities;
   n. ~~o.~~ East Waste Rock Runoff Water Management Pond;
   o. ~~p.~~ West Waste Rock Runoff Water Management Pond;
   p. ~~q.~~ Ore stockpile drainage plans; and,
   q. ~~r.~~ Site drainage plans.

3. ~~3.~~ For the Milne Inlet Tote Road, issued for construction drawing including water crossings shall be submitted to the Board within thirty (30) days after the issuance of this Licence. For other water crossings the Licensee, shall submit to the Board for review, within thirty (30) days prior to the commencement of construction, standard water crossing designs that are proposed to be used during construction:
   a. The Licensee shall obtain any necessary authorization from the Department of Fisheries and Oceans for water crossings;
   b. The Licensee shall ensure that all project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams or rivers.

~~3~~ 4 The Inspector must receive written notification a minimum of ten (10) days prior to commencement of Construction activities.

~~4~~ 5 ~~4.~~ The Licensee shall ensure that Construction of engineered structures is supervised by ~~a Professional~~an Engineer.

~~5~~ 6 ~~5.~~ The Licensee shall submit to the Board as-built drawings stamped by ~~a Professional~~an Engineer for each installation listed in paragraph D-2 above, within 90 days of completion of construction. These installations and facilities shall exclude temporary sumps, drainage and sedimentation control structures during construction.

~~6~~ 7 ~~6.~~ The as-built drawings shall be accompanied by a consolidated design report that includes documentation of field decisions that deviate from original plans and any data used to support these decisions.

Baffinland

7.8. 7. In addition to the final design drawings, once construction is completed, the Licensee shall also provide an accompanying consolidated design report that includes the description of the facilities including changes to design criteria and design.

8.9. 8. The Licensee shall develop Operation and Maintenance manuals for each facility listed in Part D-2 prior to the use or operation of the facility.

9.10. 9. The Licensee shall maintain all constructed facilities listed in Part D-2, to the satisfaction of the Inspector.

Changes in Construction Plans

10.11. 10. During the construction period, the Licensee shall notify the Inspector of changes in construction plans or conditions associated with this project. Such changes shall be reflected in as-built construction drawings.

Borrow Pits and Quarries

11.12. 11. For 2013, the Licensee shall comply with the preliminary "Borrow Pit and Quarry Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence. The plan will include criteria that will be used to distinguish ARD and non-ARD rock.

12.13. 12. A quarry specific management plan shall be submitted to the Inspector for each quarry site. This plan shall contain a drainage and closure plan. This plan shall ~~address~~ use best management practices for blasting and for management of blasting residues.

13.14. 13. The Licensee shall use fill material for construction from an approved source, which has been demonstrated not to produce Acid Rock Drainage and to be non-Metal Leaching.

14.15. 14. The Licensee shall ensure that all fill material used during construction is from an approved source and shall be free of contaminants.

16. 15. All quarries shall be located at a minimum distance of 31 m from water bodies.

17. The Proponent shall ensure that all Project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams and rivers.

18. The Proponent shall engage with Fisheries and Oceans Canada and the Qikiqtani Inuit Association in exploring possible Project specific thresholds for blasting that would exceed the requirements of Fisheries and Oceans Canada's *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters* (D.G. Wright and G.E. Hopky, 1998).

15.

Surface Water Management

16.19. 16. Provisions outlined in the Surface Water and Aquatic Ecosystems, Fish and Fish Habitat Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary

"Surface Water, Aquatic Ecosystems, Fish and Fish Habitat Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

17.20 ~~17.~~ All surface runoff during the construction of facilities, where flow may directly or indirectly enter a water body, shall meet the following effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Concentration of any grab sample (mg/L)
Total Suspended Solid	50	100

18.21 ~~18.~~ The Licensee shall conduct daily visual inspections for all construction activity and during spring freshet and during and after remarkable rainfall events with sampling of runoff where turbidity is evident.

19.22 ~~19.~~ Construction activities shall be conducted in such a way as to minimize impacts on surface drainage. Where construction activities necessitate temporary structures, the Licensee shall undertake corrective measures to minimize impacts on surface drainage.

20.23 ~~20.~~ The construction of engineered earthworks shall be supervised and field checked by a qualified Engineer. Construction records shall be maintained and available at the request of the Inspector.

Stream and River Crossings

21.24 ~~21.~~ In winter, lake and stream crossings, including ice bridges, shall be constructed of water, ice or snow. The Licensee should 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. All water crossing shall be constructed in accordance with applicable DFO operational statements or guidelines.

22.25 ~~22.~~ The Licensee shall not cause erosion to the banks of water bodies and shall provide necessary controls to prevent such erosion.

23.26 ~~23.~~ The Licensee shall develop a detailed Sediment and Erosion Management Plan to prevent and or mitigate sediment loading into surface water within the Project area, and shall implement ~~sediment and erosion control~~such measures ~~prior to and maintain such measures during the undertaking~~ to prevent entry of sediment into water.

24.27 ~~24.~~ The Licensee shall inspect daily, all construction activities for signs of erosion.

25.28 ~~25.~~ With respect to access road, pad construction or other earthworks, the deposition of ~~debris or sediment~~materials into or onto any water body frequented by fish is prohibited unless authorized to do so under DFO approval. These materials shall be disposed of at a distance of at least thirty-one (31) metres from the ordinary high water mark in such a manner that they do not enter the water. The Licensee shall ensure that any chemicals or waste associated with undertakings do not enter any water body.

26.29 ~~26.~~ Equipment storage holding areas shall be located on gravel, sand or other durable land, a distance of at least thirty-one (31) metres from the ordinary high water mark of any water body in order to minimize impacts on surface drainage and water quality. Such sites shall be graded to avoid pooling of water.

27 30. ~~27.~~ Unless authorized to do so under DFO approval, the Licensee shall not cut any stream bank or remove any material from below the ordinary high water mark of any water body.

28 31. ~~28.~~ The Licensee shall locate stream crossings to minimize approach grades. Approaches shall be stabilized during construction and upon completion of the project, to control runoff, erosion and subsequent siltation to any water body.

29 32. ~~29.~~ Machinery is not permitted to travel up the stream bed and fording of any water body is to be kept to a minimum. Equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks.

33. ~~30.~~ The Licensee shall ensure that pollutants from machinery fording the crossings do not enter water.

30 34. The Proponent shall ensure that it develops and implements adequate monitoring and maintenance procedures to ensure that the culverts and other conduits that may be prone to blockage do not significantly hinder or alter the natural flow of water from areas associated with the proposed mine.

Site Drainage

31 35. ~~31.~~ To minimize impacts on surface drainage, the Licensee shall prepare all sites in such a manner as to minimize rutting of the ground surface.

32 36. ~~32.~~ For the Milne Port site, the Mine Site and the Steensby Port Site, the Licensee shall submit to the Board for review, at least sixty (60) days prior to Construction, a ~~site~~ Site Drainage and Silt Control Management Plan~~drainage plan(s~~), design basis for drainage works (ditches, ponds, diversions), and, design drawings for the site drainage works. Design documentation and drawings must be stamped by an Engineer.

33 37. ~~33.~~ During construction, for sites where facilities may be installed and in use for more than six (6) months (railway camps, equipment lay down areas, temporary shelters, or other facilities required to support construction), the Licensee shall prepare a drainage plan.

34 38. ~~34.~~ 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 or approved by the Inspector. Camps and temporary shelters shall be located such as to minimize impacts on surface drainage.

39. ~~35.~~ The Licensee shall inform the Board by means of update(s) to the Surface Water, Aquatic Ecosystem, Fish and Fish Habitat Management Plan, major changes made to drainage plans for Milne Port, the Mine Site and Steensby Port.

40. The Proponent shall maintain a minimum a 30-metre naturally-vegetated buffer between the mining operation and adjacent water bodies. *As used in this Item, "mining operation" is intended to include the site of active ore removal, including excavations resulting from the extraction of ore but does not include quarries, transportation corridors or other mine infrastructure.*

35 41.

Bulk Fuel Tank Farms and Temporary Fuel Storage

Baffinland

36.42 ~~36.~~ Permanent fuel storage (bulk or day storage) shall be designed and erected in accordance with the CCME guidance document "Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)".

37.43 ~~37.~~ Bulk fuel tank farms shall be erected within impermeable secondary containment. Runoff water collected within such secondary containment shall be directed to a sump. The Licensee shall monitor runoff quality from secondary containment areas and determine whether treatment is required prior to discharge of this runoff to the receiving environment.

38.44 ~~38.~~ Double-wall iso-containers shall be used for temporary fuel storage during the construction period. All temporary storage tanks 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. The Licensee shall ensure that any petroleum products or wastes associated with spills do not enter water.

39.45. ~~39.~~ Dispensing of fuel at permanent fuel storage facilities shall be done on an impermeable surface.

40.46. ~~40.~~ The Licensee shall perform weekly inspection of fuel containment facilities for leaks and settlement and shall keep a written log of inspections to be made available to the Inspector upon request.

Outdoor Hazardous and Non Hazardous Waste Transfer/Temporary Storage of Waste

41.47. ~~41.~~ Provisions outlined in the Waste Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary "Waste Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

42.48. ~~42.~~ Provisions outlined in the Hazardous Materials and Hazardous Waste Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary "Hazardous Materials and Hazardous Waste Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

43.49 ~~43.~~ Outdoor waste transfer stations and temporary waste storage areas shall be located a distance of at least thirty-one (31) metres from the ordinary high water mark in such a manner that the stored material does not enter the water.

44.50. ~~44.~~ Temporary waste storage areas and transfer stations shall be graded to prevent pooling of water.

Baffinland

Part E: CONDITIONS APPLYING TO WATER USE

1. Subject to Item 10, The Licensee shall obtain all water for domestic and industrial purposes from the locations identified in Table E.1, as approved by the Board.

Table E.1: Fresh Water Quantity Limits

Camp / Site	Intake	Coordinates (approximate)	Permit Limit (m3/yr)
Milne Inlet (Port)	Phillips Creek (summer) Km 32 Lake (winter)	N: 7964579 E: 521714 N: 7951862 E:514503	25,000
Mary River (Mine Site)	Camp Lake	N:7914695.647 E:557818.253	240,000
Steensby Port	Unnamed Lake (ST 347 Lake) (permanent camp) Unnamed Lake (3 km Lake) (dust suppression & other minor uses)	N: 7804826.580 E: 596600.563 N: 7800206.654 E: 596698.129	155,000
Ravn River Area	Unnamed Lake (Ravn Camp Lake)	N: 7895658.80 E:594510.99	53,000
Mid-Rail Area	Unnamed Lake (Nivek Lake) (summer) Unnamed Lake (Ravn Camp Lake) (winter)	N: 7876430.04 E:595602.59	29.000
Cockburn Lake Tunnels Camp	Cockburn Lake	N: 7833929.50 E:603882.25	37,000
Cockburn South Camp	Cockburn Lake	N: 7820563.84 E:597661.01	41,000

2. Table E.1 provides approximate coordinates for the water intake locations. Exact intake location shall be established with the Inspector at time of installation.

3. During the construction period, the total water volume for camp and associated use from all sources referenced above shall not exceed five hundred and eighty thousand (580,000) cubic metres per year, unless otherwise authorized by the Nunavut Water Board in writing.

4. For the operation period total water volume for camp and associated use from all sources shall not exceed two hundred and thirty thousand (230,000) cubic metres per year.

5. Provisions outlined in the Fresh Water Supply, Sewage and Wastewater Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary "Fresh Water Supply, Sewage and Wastewater Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

6. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of water and waste volumes, to be operated and maintained to the satisfaction of an Inspector.

7. The drawdown of natural water bodies shall be minimized and will not exceed limits to be established in the Fresh Water Supply, Sewage and Wastewater Management Plan.

8. The Licensee may utilize recycle water for road watering and associated uses from time to time from existing containment facilities by submitting a request to the Inspector along with proposed source location, sampling frequency, and water quality criteria to be met.

9. The Licensee shall maintain the "Water Supply Facilities" to the satisfaction of the Inspector.

10. During construction and operation of the Mary River project, water bodies cannot be used as a temporary water source unless authorized and approved by the Inspector.

11. The freshwater intake pumps shall operate in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline, 1995, or subsequent editions.

Sewage Treatment

1. The Licensee shall provide treatment for all sewage water generated by the temporary and permanent camps associated with the construction and operation of the Mary River Project. The Sewage Treatment Facilities authorized by this Licence are located at:
   a. Milne Port Sewage Treatment Plant,
   b. Mine Site Exploration Camp,
   c. Mine Site Construction and Operation Camp,
   d. Mid-Rail Railway Construction Camp,
   e. Ravn River Railway Construction Camp,
   f. North Cockburn Lake Railway Construction Camp,
   g. South Cockburn Lake Railway Construction Camp,
   h. Steensby Port Pioneer Camp,
   i. Steensby Port Construction and Operation Camp.

2. Provisions outlined in the Fresh Water Supply, Sewage and Wastewater Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary "Fresh Water Supply, Sewage and Wastewater Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

3. The treated sewage effluent quality shall comply with the discharge standards presented in Table F.1. With the exception of plant start-up period, a discharge exceeding discharge effluent quality criteria listed in Table F-1 shall be a non -compliance. The treated sewage effluent quality for the start-up period will be specified in the approved Fresh Water Supply, Sewage and Wastewater Management Plan. The Licensee shall take corrective action as required and inform the Board of action taken in ~~his annual report~~its Annual Report.

Table F-1: Treated Sewage Effluent Discharge ~~to Freshwater Quality~~ Criteria

Treated Sewage Effluent Discharge to Freshwater	
Parameter	Maximum Average Concentration
BOD5	30 mg/L
Total Suspended Solids	35 mg/L
Fecal Coliform	1000 CFU/100 mL
Ammonia	4 mg/L average concentration; 8 mg/L max. grab concentration
Phosphorus	4 mg/L average concentration; 8 mg/L max. grab concentration
Oil and Grease	No visible sheen
pH	between 6.0 - 9.5
Treated Sewage Effluent Discharge to Marine Waters (Milne Inlet and Steensby Inlet)	
Parameter	Maximum Average Concentration
BOD_5	100 mg/L
Total Suspended Solids	120 mg/L
Fecal Coliform	10,000 CFU/100 mL
Oil and Grease	No visible sheen
pH	between 6.0 - 9.5

4. For the discharge to Sheardown Lake, the Phosphorus discharge criteria shall be 1 mg/L average concentration and 2 mg/L maximum grab concentration.

5. The Licensee shall maintain the sewage treatment plant and its associated ponds to the satisfaction of the Inspector. Records of maintenance of the sewage treatment plant shall be available for review upon request from the Inspector.

Oily Water Treatment Plant and Mobile Oily Water Treatment System

6. The Licensee shall provide treatment facilities for oily water generated at the maintenance facilities and equipment wash facilities.

7. Oily water treatment facilities associated with maintenance facilities are located at:

   a. Milne Port,
   b. the Mine Site, and,
   c. Steensby Port.

8. The treated effluent quality for oily water treatment facilities at maintenance wash facilities shall comply with the discharge criteria presented in Table F-2. A discharge exceeding these discharge effluent quality criteria shall be a non compliance. The Licensee shall take corrective action as required and inform the Board of action taken in his annual report.

Table F-2: Oily Water Treatment Plant Effluent Discharge Quality Criteria

Parameter	Discharge Limit (mg/L)
pH	6 – 9.5
TSS	35
Ammonia	4 mg/L average concentration; 8 mg/L max. grab concentration
Phosphorous	4 mg/L average concentration; 8 mg/L max. grab concentration
Benzene	0.370
Ethylbenzene	0.090
Toluene	0.002
Oil and Grease	15 and no visible sheen
Arsenic	0.5
Copper	0.30
Lead	0.20
Nickel	0.50
Zinc	0.50

9. For the mobile oily water treatment system (treatment of storm water collected within secondary containments), the treated effluent quality shall comply with the discharge criteria presented in Table F.3. The Licensee shall take corrective action as required and inform the Board of action taken in ~~his~~ its annual report. Release of this runoff to the receiving environment at an appropriate discharge point to the land to be determined in consultation with the Inspector or another AANDC official, may be permitted if the runoff quality meets the contact water quality discharge criteria listed in Table F-3.

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Table F-3: Bulk Fuel Storage Facility Contact Water

Parameter	Maximum Average Concentration (~~µg~~mg/L)
Benzene	~~370~~0.370
~~Toluene~~	~~2~~
Ethyl benzene	~~90~~0.090
Toluene	0.002
Lead	1
Oil and Grease	~~15,000~~15 and no visible sheen

10. The Licensee shall maintain the oily water treatment facilities to the satisfaction of an Inspector. Records of maintenance of the oily water treatment facilities shall be available for review upon request from the Inspector.

Treated Sewage Effluent Discharge

11. At Milne Port, treated effluents meeting effluent discharge criteria from both the sewage treatment plant and the oily water treatment facilities shall be discharged to Milne Inlet via an open ditch.

12. At Steensby Port, all treated effluents shall discharge to Steensby Inlet via a common outfall.

13. At the Mine Site, until a suitable year round discharge location can be identified, the Licensee shall provide storage for the treated effluent during the winter period. The treated sewage effluent shall be discharged to the Mary River during the ice free summer period.

14. Treated effluent from the oily water treatment plants can be discharged with the treated sewage effluent stream. Final blended effluent shall meet the requirements of Tables F-1 and F-2.

15. For the Mine Site, the Licensee shall continue investigations to identify a suitable location for year round discharge of treated effluent. Once a suitable discharge location is identified, the Licensee will present to the Board a report detailing the routing of the pipeline and the coordinates of the proposed alternative discharge location. This report shall contain an environmental assessment for discharge of treated effluent at this alternative location.

16. For the Ravn River and Mid-Rail construction camps, all sewage effluent shall be collected and transported to the Mary River sewage treatment plant. The Licensee shall continue investigations to identify suitable locations for year round discharge of treated effluent at these sites. Once suitable discharge locations are identified, the Licensee will present to the Board a report detailing the routing of the pipeline and the coordinates of the proposed alternative discharge locations. This report shall contain an environmental assessment for discharge of treated effluent at these alternative locations.

17. For the South Cockburn and North Cockburn construction camps, all sewage effluent shall be collected and transported to the Steensby Port sewage treatment plant. The Licensee shall continue investigations to identify suitable locations for year round discharge of treated effluent at each of these sites. Once suitable discharge locations are identified, the Licensee will present to the Board a report detailing the routing of the pipeline and the coordinates of the proposed alternative discharge locations. This report shall contain an environmental assessment for discharge of treated effluent at these alternative locations.

Landfarms

18. Runoff collected within the landfarms shall be contained and monitored for quality. The Licensee shall monitor water quality from secondary containment areas and determine whether treatment is required prior to discharge of this runoff to the receiving environment in accordance with ~~the Wastewater Management Plan.~~ Table F-4.

~~19. Runoff pooling in the landfarm shall be treated within the landfarm facility by means of a mobile oily water treatment system. Water quality for discharge to the receiving environment shall meet the criteria listed in Table F-4.~~

Table F-4: Landfarm Contact Water

Parameter	Maximum Average Concentration (~~ug~~mg/L)
pH	~~6.06~~ ~~-9.0~~ 9
Total Suspended Solids	~~15,000~~15
Oil and Grease	15 and no sheen
Total Lead	~~1~~0.01
Benzene	~~37~~00.370
~~Toluene~~	~~2~~
Ethylebenzene	~~90~~0.90
Toluene	0.002

19. ~~20.~~ Sludge recovered from the landfarms demonstrated to be non-hazardous may be disposed of in the Mine Site landfill or Steensby Port landfill.

20. Remediated sludge that meets CCME Agricultural Soil Quality Guidelines for placement of soil for may be used for site reclamation activities. Where naturally occurring concentrations of parameters exceeds CCME guidelines, the Licensee shall develop site specific soil quality criteria and submit such site specific guidelines to the Board for approval.

General Conditions for Solid Waste Management Facilities

21. Provisions outlined in the Waste Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary "Waste Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

22. The Waste Management Plan is a document that identifies best management practices for the handling, sorting, treatment and disposal of all solid waste, combustible waste, petroleum waste products, hazardous waste and biomedical waste generated during the ongoing construction and operation of the Mary River Project. The Waste Management Plan shall address:
    a. Waste Sorting and Segregation
    b. Solid Waste Temporary Storage/Transfer Area
    c. Onsite Treatment of Used Petroleum Product
    d. Open Burning
    e. Landfill Operation and Management
    f. Landfarm Operation and Management
    g. Incineration Operation and Management
    h. On-site Storage of Hazardous Waste
    i. Biomedical Waste

23. The Licensee shall maintain constructed waste management facilities to the satisfaction of the Inspector.

24. The Licensee shall perform regular inspection of all waste management facilities. Records of inspections shall be available for the Inspector upon request.

Waste Sorting and Segregation

25. The Licensee shall implement waste reduction and recycling practices.

26. To the extent possible, the Licensee shall sort waste at the source.

Solid Waste Temporary Storage/Transfer Facilities

27. The Licensee shall locate areas designated for solid waste transfer or temporary storage at a minimum distance of thirty-one (31) metres from the ordinary high water mark of any water body such that the quality or flow of water is not impaired, unless otherwise approved by the Board in writing.

28. Recyclable waste material (scrap metal/machinery) shall be stored separately from general debris and solid waste.

Open Burning of Combustible Waste

29. The Licensee shall comply with the Government of Nunavut Department of Environment guidelines for the open burning of solid waste.

30. The Licensee shall not open bum plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood so as 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.

Incineration of Combustible Waste

31. The Proponent shall develop and implement an Incineration Operation and Management Plan that takes into consideration the recommendations provided in Environment Canada's Technical Document for Batch Waste Incineration (2010).

~~31.~~32. The Licensee is authorized to dispose of all acceptable non hazardous waste as itemized in the Incineration Operation ~~Manual~~ and Management Plan (attachment to Waste Management Plan). Incinerators are located at each camp.

~~32.~~33. Prior to commencing incineration of on-site wastes, the Licensee shall conduct one stack test immediately following the commissioning of each temporary and permanent incinerator.

~~33.~~34. Ashes produced by incinerators that meet disposal criteria shall be disposed of in the non-hazardous landfill in accordance with the landfill operation manual. Ash that does not meet the criteria will be stored and shipped off site to an approved waste disposal facility. The disposal criteria to be used will be specified in the Waste Management Plan and will be based, as a minimum, on the "Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities", Department of Environment of the Government of Nunavut (2011)" Analytical test method to be used is the "Toxicity Characteristic Leaching

Procedure (TCLP), per United States Environmental Protection Agency (USEPA) Test Method 1311".

Non Hazardous Waste Landfill

34.35 The Licensee shall dispose of solid waste in the permitted landfill sites located at the Mine Site and at Steensby Port.

35.36. All solid waste generated at temporary construction sites or at Milne Port shall be transported to either the Mine Site landfill or the Steensby Port landfill for ultimate disposal.

36.37. Dewatered sludge generated by the sewage treatment facilities and demonstrated to be non-hazardous in accordance with disposal criteria may be disposed of in the landfills. The disposal criteria to be used will be specified in the Waste Management Plan and will be based, as a minimum, on the "Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities", Department of Environment of the Government of Nunavut (2011)" Analytical test method to be used is the "Toxicity Characteristic Leaching Procedure (TCLP), per United States Environmental Protection Agency (USEPA) Test Method 1311".

37.38 Seepage discharged from the Non-Hazardous Waste Landfill shall not exceed the Effluent quality criteria presented in Table F-3.

38.39. For the Mine Site, the Board has previously approved the document entitled "Landfill Design and Operations (REF. NO. NB 102-00181/10-6)" dated March 31, 2008. This document remains valid under this Licence.

39.40 Runoff and seepage from the landfills shall be monitored for quality.

40.41 Runoff or seepage water quality shall comply with the contact water quality discharge criteria listed in Table F-5.

Table F-5: Landfill Runoff / Seepage Water Quality Criteria

Parameters	Maximum Average Concentration (mg/L)
pH	**6.0-9.5**
As	0.5
Cu	0.3
Pb	0.2
Ni	0.5
Zn	0.5
Total Suspended Solids	15
Oil and Grease	No visible sheen

41.42 The Licensee may place dredged material from Steensby Inlet in appropriate locations on land at Steensby Port, to be selected in consultation with the Inspector and -provided such material is demonstrated to be non-hazardous in accordance with US Environmental Protection Agency Method 1311, *Toxicity Characteristic Leaching Procedure*.

On Site Storage of Hazardous Waste

42-43. ~~41.~~ The Licensee shall upon issuance of this Licence implement the Hazardous Material and Hazardous Waste Management Plan submitted in the Water Licence application. The Licensee shall submit to the Board for review, an update of this management plan sixty (60) days prior to start of mine pre-stripping operation. This Management Plan shall present the waste rock pile configuration, drainage plan and associated sedimentation ponds. The drainage plan shall identify the runoff discharge locations to the receiving environment.

43-44 ~~42.~~ The Licensee shall backhaul and dispose of all hazardous wastes generated through the course of the construction and operation, at licensed hazardous waste treatment facilities.

44-45 ~~43.~~ Transportation, handling and storage of hazardous waste shall comply with the regulations on Transportation of Dangerous Goods.

45-46 ~~44.~~ The Licensee shall designate permanent hazardous waste transfer areas at Milne Port, the Mine Site and Steensby Port. These designated transfer areas shall be used for the temporary storage of hazardous waste on site, until the waste can be shipped to a licensed hazardous waste treatment facility. The designated areas will be secured. Access to these transfer areas shall be by authorized personnel only.

46-47 ~~45.~~ The Licensee shall ensure that any chemicals or waste associated with Hazardous Material and Hazardous Waste Storage sites do not enter any water body. These sites shall be graded and maintained to prevent pooling of water.

47-48 ~~46.~~ Warning signage identifying the hazardous waste transfer area shall be posted on the perimeter of the transfer area. Signage shall provide the contact information in case of emergency response.

48-49 ~~47.~~ The design of the hazardous waste transfer area shall prevent pooling of water.

49-50 ~~48.~~ Hazardous wastes temporarily stored within the transfer area must be placed within appropriate and secured containers.

50-51 ~~49.~~ Waste oils and lubricants can be recycled or reused in waste oil heaters.

51-52 ~~50.~~ 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 by the Board in writing and shall be detailed in the Annual Report.

Biomedical Wastes

52-53 ~~51.~~ Biomedical waste generated from onsite clinics shall be sorted. Combustible waste shall be disposed of in the incinerators. Non combustible waste shall be stored in appropriate containers for shipment off site for ultimate treatment and disposal.

Waste Rock Stockpile Runoff

53-54 ~~52.~~ The Licensee shall upon issuance of this Licence implement the Waste Rock Management Plan submitted in the Water Licence application. The Licensee shall submit to the Board for review, an update of this management plan sixty (60) days prior to start of mine pre-stripping operation. This Management Plan shall present the waste rock pile configuration,

drainage plan and associated sedimentation ponds. The drainage plan shall identify the runoff discharge locations to the receiving environment.

54-55. ~~53.~~ The Licensee shall undertake an ongoing waste rock characterization program for the duration of the Mine life. Geochemical monitoring results for the waste rock shall be transmitted to the Board on an annual basis as part of the Annual Report.

55-56. ~~54.~~ The Licensee shall keep records of waste rock quantities generated on a monthly and annual basis in accordance with the Waste Rock Management Plan.

56-57. ~~55.~~ The use of waste rock that satisfies ARD / ML criteria as defined in the Waste Rock Management Plan can be used for construction purposes. Waste rock with ARD / ML potential shall be disposed of in the waste rock stockpile area.

57-58. ~~56.~~ The Licensee shall ensure that runoff from the waste rock stockpile is contained and routed to sedimentation ponds. Discharge of this runoff to the receiving environment must meet discharge quality standard listed in Table F-6.

58-59. ~~57.~~ The Licensee shall provide treatment for the waste rock runoff if the runoff quality does not comply with the discharge criteria established in Table F-6.

59-60. ~~58.~~ The Licensee shall report monthly/annually on quantities of runoff discharges from the waste rock sedimentation ponds.

60-61. ~~59.~~ The Licensee shall implement an Environmental Effects Monitoring plan as per the requirements of the Schedule 5 of the MMER regulation.

Mine Pit Runoff

61-62. ~~60.~~ Mine pit water shall meet the discharge criteria listed in Table F-6 prior to discharge to the receiving environment. Non compliant pit water may be recycled for dust suppression within the drainage area of the pit, or transported to the waste rock stockpile drainage area via pipeline or truck).

Ore Stockpiles Runoff

62-63. ~~61.~~ For all ore stockpiles, runoff from the ore stockpile shall be directed to sedimentation ponds for settling of suspended solids. The discharge from the sedimentation pond shall comply with the discharge criteria listed in Table F-6 prior to release to the receiving environment.

Table F-6: Waste Rock and Ore Stockpiles Runoff Water Quality Criteria

Deleterious Substance	Maximum Authorized Monthly Mean Concentration (mg/L)	Maximum Authorized Concentration in Composite Sample (~~Mg~~mg/L)	Maximum Authorized Concentration in Grab Sample (mg/L)
pH			6.0 < pH < 9.0
Ammonia			Non-acutely toxic
Nitrate			Non-acutely toxic
~~Deleterious Substances - mg/L (MMER Schedule 4)~~			
Arsenic	0.50	0.75	1.00
Copper	0.30	0.45	0.60

Lead	0.20	0.30	0.40
Nickel	0.50	0.75	1.00
Zinc	0.50	0.75	1.00
TSS	15.00	22.50	30.00
Acute toxicity			
Fish			MMER Schedule 5

Baffinland

Part G: CONDITIONS APPLYING TO EXPLOSIVES AND EMULSION

1. The Licensee's Explosives Management Plan as submitted in the water license application is the basis of this water license. This Explosives Management Plan shall be updated and submitted to the Board sixty (60) days prior to usage of explosive on site.

2. All explosives material (pre-packaged or fabricated on site) shall be stored in accordance to permits issued by NRCan related to the handling, use and storage of explosives.

Storage of Ammonium Nitrate

3. Ammonium nitrates required for the fabrication of emulsion shall be stored in dedicated and secured facilities.

4. Ammonium nitrate containers laydown areas shall be contoured and graded to prevent pooling of water.

5. The Licensee shall maintain accurate records of quantities of ammonium nitrate stored on site.

6. The Licensee shall perform regular inspection of storage facilities. Records of inspection shall be available for the Inspector upon request.

Emulsion Plant

7. All effluent generated by the emulsion facility (mobile units, explosive truck wash, or permanent emulsion plant) shall be collected and treated in an evaporator. Unless specifically authorized by the Inspector, there shall be no discharge of liquid effluent from these facilities.

8. Hazardous waste generated from this facility will be stored in appropriate containers. Quantities of hazardous generated shall be recorded.

Use of Explosives

9. The Licensee shall meet or exceed the guidelines set by Fisheries and Oceans Canada for blasting thresholds and implement practical and effective measures to ensure that residue and by-products of blasting do not negatively affect fish and fish habitat.

~~9~~10. The Licensee shall implement best management practices for the use of explosives for blasting. The Licensee shall submit to the Board for review, a Blasting Management Plan sixty (60) days prior to start of blasting operations.

Baffinland

Part H: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out modifications to the facilities regulated by the Board 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 above have not been met can be carried out only with written approval from the Board.

Part I: CONDITIONS APPLYING TO EMERGENCY RESPONSE

1. The Licensee shall submit to the Board for review, within thirty (30) days of the approval of this Licence, a revised and consolidated "Emergency Response and Spill Contingency Plan". The updated Emergency Response and Spill Contingency Plan shall cover the activities included in the scope of the Licence. The Emergency Response and Spill Contingency Plan shall be reviewed and updated annually. Periodic updates or revisions to the Emergency Response and Spill Contingency Plan shall be submitted to the Board.

2. Provisions outlined in the Hazardous Materials and Hazardous Waste Management Plan are applicable. For 2013, the Licensee shall comply with the preliminary "Hazardous Materials and Hazardous Waste Management Plan" submitted with the Licence Application. This shall be updated for submission to the Board, sixty (60) days after issuance of this Licence.

3. The Licensee shall provide a report, to be approved by the Board, within ninety (90) days of completion of construction of Fuel and Ancillary Facilities completed by an appropriately qualified Engineer registered in Nunavut, which clearly details that the requirements of the CCME guidance document "*Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)*" have been met by the Licensee. This report will be included as an addendum to the As-Built Report requirements as specified in Part D of this Licence.

4. 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.

5. The Licensee shall ensure that any equipment maintenance and servicing be conducted only 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.

6. 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 Emergency Response and Spill Contingency Plan;

    b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4289;

    c. For each reportable 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.

7. Quantities of hazardous substances spilled which require reporting are listed in schedule B of the Nunavut Spill Contingency and Reporting Regulation.

Baffinland

Part J: CONDITIONS APPLYING TO MONITORING PROGRAM

General

1. The Licensee shall submit to the Board for review, within thirty (30) days of the approval of this Licence, a consolidated and updated Environmental Monitoring Plan.

2. The Licensee shall post signs in the appropriate areas to identify the location of Monitoring and Surveillance Stations. All signs shall be located and maintained to the satisfaction of an Inspector.

3. The Licensee shall, at a minimum, maintain Monitoring and Surveillance Stations at the locations identified in Aquatic Effects Monitoring Program (AEMP) Framework attached in Schedule J.1.

Monitoring Frequency

1. The Licensee shall sample every monitoring site for analyses and at the frequencies specified in the Aquatic Effects Monitoring Program Framework attached in Schedule J.1. The Monitoring Program specified in the Licence may be modified at the discretion of the Board.

2. The Licensee shall conduct toxicity testing on the final effluent discharge points identified in Schedule M once annually during open water season in accordance with the following test procedures:
    a. Acute lethality to Rainbow Trout, *Oncorhynchus mykiss* (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).

3. The Licensee shall measure and record, in cubic metres, the daily volume of water utilized for camp, drilling and other purposes.

4. The Inspector may impose additional monitoring requirements.

Quality Control and Quality Assurance

5. The Licensee shall submit to ~~the Board~~an Analyst a Quality Assurance/Quality Control Plan (QA/QC) within 90 days of issuance of this water license.

6. The Licensee's QA/QC Plan shall be based on the guideline document entitled: "Quality Assurance (QA) and Quality Control (QC) for use by Class "A" Licensees in meeting Surveillance Network Program (SNP) Requirements and for submission of a QA/QC Plan" (AANDC, July 1996).

7. 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~~an Analyst.

8. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.

9. 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~~an Analyst in writing.

Recording and Reporting

10. A Monthly Monitoring Program summary report shall be submitted to the Board for review within thirty (30) days following the month being reported.

11. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly monitoring Report. The Report shall include:
    a. All data and information required by this Part and generated by the SNP contained within the Aquatic Effects Monitoring Program attached in Schedule J.1;
    b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Parts E and F.

12. 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. The Licensee shall report these coordinates to the Inspector prior to utilizing water.

13. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations of temporary and permanent storage areas where wastes associated with camp, drilling and Infrastructure operations are deposited. The Licensee shall report these coordinates to the Inspector prior to depositing waste.

14. Licensee shall include in the Annual Report all data, monitoring results and information required by Part J.2.

Aquatic Effects Monitoring Program (AEMP) Framework

15. The Aquatic Effects Monitoring Program (AEMP) Framework prepared in consultation with QIA, Environment Canada, Department of Fisheries and Oceans, and AANDC is approved with this Licence. This AEMP Framework is attached in Schedule J.1.

16. The AEMP shall be implemented in two Phases. Phase I of the AEMP shall be implemented within ninety (90) days of issuance of this Licence. Phase 2 of the AEMP shall be implemented at the commencement of mining operation.

Part K: CONDITIONS APPLYING TO ABANDONMENT, CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Licensee shall submit within thirty (30) days prior to start of the mine operation, an Interim Abandonment and Reclamation Plan in accordance with the *Mine Site Reclamation Guidelines for the Northwest Territories, 2007* and consistent with the INAC *Mine Site Reclamation Policy or Nunavut, 2002*. The Plan shall cover mine related components and shall include:
   a. Detailed description, including maps and other visual representations, of the preconstruction conditions for each site, accompanied by a detailed description of the proposed final landscape, with emphasis on the reclamation of surface drainage over the restored area;
   b. A description of how progressive reclamation will be employed and monitored throughout the life of the mine, plus reclamation scheduling and coordination of activities with the overall sequence of the project; details of reclamation scheduling and procedures for coordinating reclamation activities within the overall mining sequence and materials balance;
   c. Implications of any updated water balance and water quality model prediction results and any adaptive management measures that may be required;
   d. An evaluation of closure and reclamation measures for each mine component, including the goals, objectives, closure criteria and the rationale for selection of the preferred measures;
   e. A comprehensive assessment of materials suitability, including geochemical and physical characterization and a schedule of availability for reclamation needs. Particular attention on to cover materials, including maps showing sources and stockpile locations of all reclamation construction materials;
   f. An assessment and description of any required post-closure treatment for pit water that is not acceptable for discharge;
   g. Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;
   h. Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and Ground Water, parameters;
   i. Monitoring schedules and overall timeframes;
   j. QA/QC procedures for managing the demolition landfill and other waste disposal areas;
   k. A list of non-salvageable materials and disposal locations;
   l. Rock storage facility closure design plans and sections including the types of material placed and volumes;
   m. Protocol for the disposal of any contaminated soil;
   n. An assessment of the long-term physical stability of all remaining project components;
   o. Detailed criteria for the final breaching of dams (East and West Waste Rock Stockpile Sedimentation Ponds);
   p. A revised closure and reclamation cost estimate; and
   q. A detailed implementation schedule for completion of reclamation work.

2. The Licensee shall annually by November 1st ~~(and by March 31 in each year),~~ submit to the Board a preliminary work plan and an updated estimate of the anticipated mine closure and reclamation costs for the coming year broken down into the following two components:
   a. for the proportion of the Project on Inuit Owned Lands; and
   b. for the proportion of the Project on Crown lands.

   The annual estimate shall include the expected liability for closure and reclamation costs at the end of the upcoming year, for each of the two components.
   c. The Licensee will arrange for a meeting or other opportunity to provide input between November and December each year with the QIA, the NWB, and AANDC to review the preliminary work plan and updated Closure Cost Estimate for the upcoming year. Where agreement is not reached on the estimated costs, the Board shall determine the amounts.
   ~~c~~ d. The Licensee will by March 1st of each year, post security for the upcoming year as outlined in Part C above.

3. The Licensee shall carry out progressive reclamation of components of the project no longer required for the Licensee's operations. Such sites must be restored to the satisfaction of an Inspector.

4. In order to promote growth of vegetation and the needed microclimate for seed deposition, disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.

5. 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 the Inspector.

6. When the Interim Closure and Reclamation Plan (C&RP) is updated, the Plan will report on all additional geochemical and other relevant data that will influence closure planning of the open pit. Appropriate mitigation measures as well as contingency options will be identified in the updated Interim C&RP and the security bonding adjusted accordingly.

7. The Licensee shall submit to the Board for approval, a Final Closure and Reclamation Plan at least twelve (12) months prior to the expected end of mining. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:

   a. Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut *Environmental Guideline for Site Remediation*;
   b. Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and
   c. An evaluation of the Human Health and Ecological Risk associated with closure options.

8. The Licensee shall notify the Board in writing, a soon as practically possible, of any intent to enter into a Care and Maintenance Phase. The notification shall include plans for maintaining compliance with the Terms and Conditions of the Licence.

9. The Licensee shall review the Plans referred to in this Part as required by changes in operation and/or technology and modify the Plan accordingly. Revisions to the Plan shall incorporate design changes and adaptive engineering required and implemented during construction and on the basis of actual site conditions and monitoring results over the life of the project.

10. The Licensee shall carry out continued analysis over time to confirm and update, accordingly, the approximate fill time for the mine pit lake identified in the FEIS.

~~9.~~11.

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Schedule A: DEFINITIONS

In this licence:

"**Abandonment**" means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;

"**Act**" means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

"**Acid Rock Drainage (ARD)**" means the production of acidic leachate, seepage or drainage from mine workings, open pits, ore piles, waste rock, construction rock that can lead to the release of metals to groundwater or surface water during the life of the Project and beyond closure;

"**Acutely Lethal Effluent**" means effluent as defined in the *Metal Mining Effluent Regulations* SOR/2002-222 dated 6 June 2002;

"**Adaptive Management**" means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework for mitigation measures to be implemented and actions to be taken when specified thresholds are exceeded;

"**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. Also considered to be an appendix or supplement;

"**Amendment**" means a change to any terms and conditions of this Licence, through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence;

"**Analyst**" means an Analyst designated by the Minister under section 85 (1) of the *Act*;

"**Annually**" means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

"**Aquatic Effects Monitoring Program (AEMP)**" means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects and shall include, at minimum, monitoring of non-point sources of discharge, selection of appropriate reference sites, measures to ensure the collection of adequate baseline data and the mechanisms proposed to monitor and treat runoff, and sample sediments;

"**Batch Concrete Plant**" means the plant used to mix cement, aggregate, and water to produce concrete for footings, foundations and floors during construction;

"**Biannual**" means, in the context of monitoring frequency, one sampling event occurring every six months with a minimum of one hundred eighty days between sampling events;

"**Board**" means the Nunavut Water Board established under Article 13 of the *Nunavut Land Claims Agreement* and under section 14 of the Act;

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"**Canadian Council of the Minister of Environment (CCME)**" means the organizations of Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life;

"**Care and Maintenance**" in respect of a mine, means the status of the facility when the Licensee ceases production or commercial operation temporarily for an undefined period of time;

"**Chief Administrative Officer**" means the Executive Director of the Nunavut Water Board;

"**Closure**" means when an Operator ceases operations at a facility without the intent to resume mining activities in the future;

"**Commercial Operation**" in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design capacity of the mine over a period of ninety consecutive days;

"**Construction**" means any activities undertaken to construct or build any component of, or associated with, the development of the Mary River Project, as described in the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;

"**Contact Water**" means any water that may be physically or chemically affected by mining activities;

"**Contact Water Collection System**" means the system of trenches and attenuation ponds designed to manage water that may be affected physically or chemically by ore stockpile or waste rock stockpile activities as described in the "*Waste Rock Management Plan*";

"**Deleterious Substances**" means a substance as defined in section 34(1) of the *Fisheries Act;*

"**Deposit**" means the placement of waste rock, tailings or other solids materials on land or in water;

"**Discharge**" means the release of any water or waste to the receiving environment;

"**Dissolved Metals**" means the suite of metals referred to in Group *, Schedule M.3 - Surveillance Monitoring Parameters of this Licence. Dissolved metals shall be analyzed on a filtered sample;

"**Domestic Waste**" means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding those hazardous wastes associated with the mining and processing of ore;

"**East Sedimentation Pond**" means the storage pond located in the east side of the waste rock stockpile which discharges to the Mary River;

"**Effluent**" means the liquid discharge from all site water management facilities;

"**Emulsion Plant (Explosives Mixing Facility)**" means the facility designed for storage of Ammonium Nitrate, detonators, and explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as presented in the *Explosives Management Plan*;

"**Engineer**" means a professional engineer registered to practice in Nunavut in accordance with the *Engineering, Geological and Geophysical Act (Nunavut)* S.N.W.T. 1998, c.38, s.5;

"**Engineered Structure**" means any facility, which was designed and approved by ~~a Professional~~an Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

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"**Final Discharge Point**" in respect of an effluent, means an identifiable discharge point beyond which the operator of the mine no longer exercises control over the quality of the effluent (Metal Mining Effluent Regulations, SOR/2002-222, 6 June, 2002);

"**Geotechnical Engineer**" means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

"**Grab Sample**" means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

"**Greywater**" means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding sewage;

"**Groundwater**" means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

"**Hazardous Materials**" means a contaminant which is a dangerous good that is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage;

"**ICP Metals Scan**" means, for the purpose of the Licence, elements detected in an inductively coupled plasma (ICP) mass spectrometer. Metal parameters should be consistent with baseline data previously collected and include any other metals of concern or interest;

"**Incinerator**" means the dual chamber, high temperature facilities designed with the capacity to service the camps as described in the "*Waste Management Plan*" submitted in support of this Water Licence Application.

"**Inspector**" means an Inspector designated by the Minister under section 85 (1) of the Act;

"**Interim Closure and Reclamation Plan**" means a conceptual detailed plan on the reclamation of mine components which will not be closed until the end of the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life;

"**Landfill (Construction and Operations Landfill)**" means the facility to be designed, constructed and operated to contain non-salvageable, non-organic, nonhazardous, solid wastes from mining activities that cannot be incinerated, as described in the Waste Management Plan;

"**Landfarm**" means the lined, engineered facility designed to treat petroleum hydrocarbon contaminated snow and soil that may be generated during mining activities using bioremediation as described in the Waste Management Plan;

"**Licence**" means this Type "A" Water Licence xxxxxx, issued by the Nunavut Water Board in accordance with the *Act*, to Baffinland Iron Mines Corporation, (BIMC) for the Mary River project;

"**Licensee**" means to whom Licence xxxxx is issued to or assigned;

"**Maximum Average Concentration**" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

"**Maximum Monthly Mean**" means the average concentration of all samples collected over a thirty day period from the identical sampling location;

"**Metal Leaching**" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

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Baffinland

"**Milne Port Bulk Fuel Storage Facility**" means the facilities, constructed and operated to contain and dispense bulk diesel fuel and bulk jet-A fuel at Milne Port;

"**Mine Site Bulk Fuel Storage Facility**" means the facilities, constructed and operated to contain and dispense bulk diesel fuel and bulk jet-A fuel at the Mary River Mine Site;

"**Mine Water**" means any water, including Ground Water, that is pumped or flows out of the mine open pit;

"**Minister**" means the Minister of Aboriginal Affairs and Northern Development Canada;

"**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;

"**Monitoring Program**" means the program to collect data on surface water and ground water quality to assess impacts to the environment of an appurtenant undertaking;

"**Monthly**" means, in the context of monitoring frequency, one sampling event occurring every 30 days with a minimum of 21 days between sampling events;

"**Non-Contact Water**" means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

"**Nunavut Land Claims Agreement**" (NLCA) 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;

"**Operations**" means the set of activities associated with mining and crushing of iron ore; excluding construction and decommissioning activities;

"**Operator**" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;

"**Progressive Reclamation**" means actions that can be taken during mining operations before permanent closure, to take advantage of cost and operating efficiencies by using the resources available from mine operations to reduce the overall reclamation costs incurred. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals;

"**Project**" means the Mary River Project as outlined in the Final Environmental Impact Statement and supplemental information submitted by Baffinland Iron Mines Corporation to the Nunavut Impact Review Board (NIRB) as well as the Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted by the Baffinland Iron Mines Corporation to the Nunavut Water Board throughout the regulatory process. It comprises an open pit mine at Mary River, an all weather Tote Road linking the Mary River Mine site to Milne Port, Milne Port, a railway corridor linking the Mine Site to Steensby Port, and, Steensby Port;

"**Quarry**" means the areas of surface excavation for extracting rock material for use as construction materials at Milne Port, along the Tote Road, at the Mine Site, along the railway corridor, or, at Steensby Port;

"**Quality Assurance / Quality Control (QA/QC)**" Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

"**Quarterly**" means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

Field Code Changed

Baffinland

"**Reclamation**" means the process of returning the mine sites and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities;

"**Receiving Environment**" means both the aquatic and terrestrial environments that receive any discharge resulting from the Project;

"**Recognized Closed Mine**" means a recognized closed mine as defined by section (1) of the *Metal Mining Effluent Regulations* SOR/2002-222 dated 6 June 2002;

"**Seepage**" means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged through open pits, runoff from waste rock storage facilities, ore stockpile areas, quarries, landfill or landfarm areas;

"**Sewage**" means all toilet wastes and greywater;

"**Sewage Treatment Plant**" means the sewage treatment plant described in the Waste Water Management Plan;

"**Oily Water Treatment Plant**" means the oily water treatment plant described in the Waste Water Management Plan;

"**Project**" means the Mary River Project as approved by the Nunavut Impact Review Board as per Project Certificate No. 005;

"**Mobile Oily Water Treatment System**" means the mobile (portable) oily water treatment unit described in the Waste Water Management Plan. This unit is used to treat water contaminated with hydrocarbon collected in secondary containment structures;

"**Short Term Maximum**" means the maximum concentration of all samples collected over a 24 hour period or less taken from the identical sampling location;

"**Steensby Port Bulk Fuel Storage Facility**" means the facilities, constructed and operated to contain and dispense bulk diesel fuel, bulk jet-A fuel and marine diesel fuel at Steensby Port;

"**Stormwater Management Pond**" means the facilities designed, constructed and operated to contain runoff from Project areas as described in the Surface Water and Aquatic Ecosystems Management Plan;

"**Sump**" means an excavation in impermeable soil for the purpose of catching or storing water or waste;

"**Traditional Knowledge**" means the practical knowledge that has been gathered through the experience of living in close contact with nature and has been passed along or communicated orally, and handed down from generation to generation;

"**Total Metals**" means the suite of metals referred to in Group *, Schedule M.3 - Surveillance Monitoring Parameters of this Licence. Total metals shall be analyzed on an un-filtered sample;

"**Use**" means use as defined in section 4 of the Act;

"**Waste**" means waste as defined in section 4 of the Act;

"**Waste Rock**" means all unprocessed rock materials that are or were produced as a result of mining operations and have no current economic value;

Field Code Changed

"**Waste Rock Stockpile East Sedimentation Pond and Dam**" means the dam and pond designed and construct to contain runoff originating on the east side of the waste rock stockpile;

"**Waste Rock Stockpile West Sedimentation Pond and Dam**" means the dam and pond designed and construct to contain runoff originating on the west side of the waste rock stockpile;

"**Wastewater**" means the water generated by site activities or originates on-site that requires treatment or any other water management activity;

"**Water**" means water as defined in section 4 of the Act;

"**Water Supply Facilities**" means the facilities designated for the supply of water;

"**Waste Disposal Facilities**" means all facilities designated for the disposal of waste;

"**Water Licence Application**" for the purposes of this Licence includes the Project as described in ~~totality of the NWB and NIRB Public Registries established as a result of the filing of the~~ applications to the NWB and NIRB related to the Project dated March, 2008, including Supporting Documents, ~~and~~ Technical Meeting Information Supplement documents, oral submissions, and all subsequent related submissions made by the Licensee to the Nunavut Water Board and appearing on the ~~NWB~~ unavut Water Board Public Registr~~ierys~~;

"**Weekly**" means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events.

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Schedule J: CONDITIONS APPLYING TO MONITORING AND REPORTING

Schedule J.1: AQUATIC EFFECTS MONITORING FRAMEWORK

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Schedule J.2: CONTENT OF THE ANNUAL REPORT

The Licensee shall file with the Board no later than March 31st of the year following the calendar year being reported, an Annual Report on the appurtenant undertaking which shall contain the following information:

Measuring and Reporting on Water and Waste:

1. The monthly and annual volumes, in cubic metres, of all fresh water obtained for the Project as listed in Part E, Table E.1.
2. The monthly surface water elevations of water bodies during open water for active water intake locations as detailed in Part E, Table E.1.
3. The monthly and annual volume in cubic meters of treated effluent(s) discharged by the Project as listed in Table J.2.
4. The monthly and annual volumes in cubic metres of sludge removed from the Waste Water Treatment Facilities;
5. The monthly and annual quantities in cubic metres of minewater pumped from the open pit, if any, and seepage from waste rock stockpile sedimentation ponds;
6. The source and volume (on a monthly and annual basis in cubic metres) of recycled water, identifying both source and use;
7. Tabular summaries of data generated under the Environmental Monitoring Plan;
8. Quantities of non-hazardous waste landfilled at the Mine Site landfill and the Steensby landfill.
9. Quantities of hazardous wastes backhauled from the Project site.

Management Plans and Activities:

10. A summary of Construction activities and an updated Mine Plan.
11. A summary, including photographic records before, during and after construction activities, of Modifications in accordance with Part D of this Licence.
12. Maintenance work carried out on the regulated facilities, including all associated structures, and an outline of any work anticipated for the next year.
13. A summary of work carried out over the last year under the approved relevant Management Plans listed in this Licence.
14. An update of the management plans and summary of revisions to the management plans and operating manuals submitted in support of this Licence.
15. The quantity of Waste Rock and Overburden from the pit deposited in the Waste Rock Storage Areas.
16. A summary of the results of seepage surveys conducted in accordance with the Waste Rock Management Plan.

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Baffinland

17. Updated results of ongoing ARD/ML and related geochemical test work in accordance with the Waste Rock Management Plan.

18. A progress report on any studies requested by the Board that relate to waste management, water use or mine site reclamation and a brief description of any future studies planned by the Licensee.

19. A summary of the results of the Aquatic Effects Monitoring Program in accordance with Schedule J.3 of this Licence

Spills and Unauthorized Discharges:

20. A list and description including volumes of Unauthorized Discharges and summaries of follow-up action taken.

21. An outline of any spill training and communications exercises carried out.

Closure and Reclamation:

22. A summary of any revisions to the approved Interim or Final Closure and Reclamation Plan in accordance with Part C of this Licence.

23. A summary of any closure and reclamation work undertaken during the year and an outline of any work anticipated for the next year.

24. An updated estimate of the current restoration liability ~~(as at December 31 of the preceding year)~~ required under Part C, based upon the results of progressive restoration, restoration research, project development monitoring, and any changes or modifications to the project. The estimate will be generated using the current version of RECLAIM, its equivalent or some other method acceptable to the Board.

Other Reporting Requirements:

25. A brief description of follow-up action(s) taken to address concerns presented within inspection and compliance reports prepared by the Inspector.

26. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted.

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