

File No.: 2BE-HAK0915 / Renewal

March 21, 2016

Michel Boucher, General Manager Projects and Exploration Glencore Canada Corporation Suite 400 – 8801 TransCanada Highway St. Laurent, OC H4S 1Z6

Rick Schwenger, P. Eng., PMP Glencore Canada Corporation P.O. Box 3000 Bathurst, NB, E2A 3Z8

Email: <u>michel.boucher@glencore-ca.com</u> <u>rick.schwenger@glencore-ca.com</u>

**RE:** NWB Renewal Licence No. 2BE-HAK1621

Dear Mr. Boucher and Mr. Schwenger:

Please find attached Licence No. **2BE-HAK1621** issued to Glencore Canada Corporation by the Nunavut Water Board (NWB) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Land Claims Agreement or NLCA).* The terms and conditions of the attached Licence related to Water use and waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then Water use and Waste disposal must cease, or the Licensee may be in contravention of the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least three (3) months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received by interested persons on issues identified. This information is attached for your consideration.<sup>1</sup>

Sincerely,

Thomas Kabloona Nunavut Water Board

Chair

TK/sj/ip

Licence No. 2BE-HAK1621 Enclosure:

Comments - DFO EC, and INAC

Cc: Kitikmeot Distribution List

Environment and Climate Change Canada (ECCC), February 4, 2016; Department of Fisheries and Oceans Canada (DFO), February 1, 2016; and Indigenous and Northern Affairs Canada (INAC), February 4, and 5, 2016.

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#### A. BACKGROUND

The Hackett River Project (Project) is owned and operated by Glencore Canada Corporation. The Project is located on Crown Land and Inuit Owned Land, approximately 80 kilometres southwest of Bathurst Inlet and 300 kilometres south of Cambridge Bay within the Kitikmeot Region of Nunavut. The Project, which has been in existence since 2004, has operated under several consecutive Water licences issued by the NWB. The Project involves exploration activities and environmental baselines studies supported by a camp, two airstrips, three helipads and a jetty/floating dock. In 2013, the Project transitioned from active exploration to care and maintenance. Although the Project is still under care and maintenance, the Licensee indicated that the possibility exists that it will resume active operations at some point during the term of any potential renewed Water licence that the Board may issue to the Project.

The most recently issued Water licence under which the Project operated expired on December 31, 2015. Prior to expiry, the Licensee had submitted for the Board's consideration an application and supporting information (the Application) to renew the expired Licence (Licence No. 2BE-HAK0915).

#### A. APPLICATION DOCUMENTS AND SCOPE

The Application submitted by the Licensee, Glencore Canada Corporation, to renew Type "B" Water Licensee No. 2BE-HAK0915 included the following documents:

- National Topographic Map including sheet numbers #76G/03, 04, 05, 06, 07, 08, 12, 13, #76F/08, 09, 15, 16;
- Notification of Name Change Xstrata to Glencore (October 2013);
- Drill Cuttings Management Program (January 2014);
- Closure Security Information;
- 2014 Glencore Annual Report;
- Compliance Assessment/Status Report (Appendix 4);
- Abandonment and Restoration Plan (2015);
- Spill Contingency Plan (2015); and
- Executive Summaries in English, Inuktitut, and Inuinnagtun.

The scope of activities requested in the Application to renew the licence is as follows:

- Renewal of the Licence for a term of five (5) years;
- Continued use of up to 299 m<sup>3</sup> of Water daily: 30 m<sup>3</sup>/day for domestic purposes and 269 m<sup>3</sup>/day for on-land and on-ice drilling as well as for the construction of ice strips;
- Continuation of exploration work and related activities including drilling and environmental baseline studies;
- Continued operation of a land based and on-ice airstrip.
- Continued use of the existing camp infrastructure during care and maintenance and for future exploration work; and
- Progressive reclamation of the project site.

#### B. PROCEDURAL HISTORY

The NWB received the Application to renew Licence No. 2BE-HAK0915 from Glencore Canada Corporation on November 2, 2015. Following receipt and an internal preliminary review in which additional information was requested from and submitted by the Licensee, the NWB distributed the Application on January 4, 2016 for a thirty (30) day comment and/or

review period with the deadline for submissions set for February 4, 2016. Prior to the submissions deadline, comments were received from Indigenous and Northern Affairs Canada (INAC), Environment and Climate Change Canada (ECCC), and the Department of Fisheries and Ocean Canada (DFO). A follow-up submission was received from INAC on February 5, 2016.

INAC raised several issues in its submissions including matters related to Water use, Waste management and recommended changes to management plans. DFO provided advice on whether a *Fisheries Act* authorization was required for the proposal, and ECCC highlighted the need for use of an appropriate incinerator for combusting sewage sludge. On February 5, 2016, the NWB requested that the Licensee respond to intervener's comments and on February 10, 2016, License provided its relevant response(S).

With respect to pre-licensing requirements, the NWB received confirmation from the Nunavut Planning Commission (NPC) on December 10, 2015 that the Project falls outside of the areas of the two approved Land Use Plans in place and that further screening from the Nunavut Impact Review Board (NIRB) was not required as the previous screening decision(s) still applied to Project.

#### C. FILE HISTORY

The Nunavut Water Board (NWB or Board) has issued four (4) separate and consecutive Water licences, two (2) amendments, and one (1) assignment to the Hackett River Project in the past. The following provides a summary of the authorizations issued by the Board to the Project:

<u>Licence No. NWB2HAK0406</u>: Issued to Sabina Gold and Silver Corporation as the first licence for the Hackett River Project. The Licence was issued on June 1, 2004, and expired on May 31, 2006. It allowed for the use of 135 cubic metres of Water daily and the deposit of Waste for a Mining and Milling undertaking.

<u>Licence No. 2BE-HAK0606:</u> Issued on June 1, 2006 to Sabina Gold and Silver Corporation for the Hackett Project for a period of one year. This Licence, which expired on December 31, 2006, allowed for the use of up to 205 cubic metres of Water daily and the deposit of Waste in support of a Mining and Milling Undertaking.

<u>Licence No. 2BE-HAK0709</u>: Issued to the Hackett River Project on March 2, 2007 and expired on December 31, 2009. The Licence allowed Sabina Gold and Silver Corporation to use up to 198.7 cubic metres of Water daily and the deposit of Waste in support of a Mining and Milling Undertaking.

<u>Licence No. 2BE-HAK0915</u>: Currently expired Water licence issued to Sabina Gold and Silver Corporation for the Project on December 14, 2009 and expired on December 31, 2015. The Licence allowed for the use of 250 cubic metres of Water daily in support of a Mining and Milling undertaking.

<u>Licence No. 2BE-HAK0915 Amendment No. 1</u>: Issued on June 11, 2010 to allow Sabina Gold and Silver Corporation to re-allocate a faction of the existing Water quantity towards use for a temporary camp facility and to maintain an ice strip while keeping the maximum total quantity of Water use under the Licence at 250 cubic metres daily.

<u>Licence No. 2BE-HAK0915 Assignment</u>: On November 10, 2011, the Licence was assigned from Sabina Gold & Silver Corporation to Xstrata Canada Corporation.

<u>Licence No. 2BE-HAK0915 Amendment No. 2</u>: Issued to the Project on September 10, 2013 to allow Sabina Gold and Silver Corporation to increase Water use from 250 to 299 cubic metres daily in support of a Mining and Milling Undertaking.

*Name Change*: On July 30, 2013 Xstrata Canada Corporation changed its name to Glencore Canada Corporation. Consequently, Xstrata Canada Corporation is no longer in existence.

#### D. GENERAL CONSIDERATIONS

The following provides an overview some of the issues considered by the Board with respect to the inclusion of some of the specific terms and conditions in the renewed Licence:

#### Term of the Licence

In accordance with s. 45 of the Act, the NWB may issue a licence for a term not exceeding twenty-five (25) years. The Applicant requested a five (5) year licence, which the Board determined is consistent for the nature of the undertaking and has therefore granted.

## Annual Report

Similar to conditions generally included in other licences issued by the Board as well as the previously expired licence, the NWB has included under, Part B, Item 2 of this Licence, requirements for the Licensee to submit to the Board for review, prior to the 31<sup>st</sup> of March, annually, a report detailing activities related to the use of Water and the deposit of Waste that occurred over the preceding year. The Board is well aware that the Project is currently under care and maintenance; however, the Licensee should note that a report must be submitted annually irrespective of whether or not the Project is under active operations.

The Board provides public access to the information submitted in annual reports by licensees through its FTP site and public registry as well as upon request from interested parties.

The NWB has included on its website a standardized form for annual reporting that licensees can use to submit Annual Reporting information, supplemented by other relevant information. A copy of the NWB's generic annual reporting form can be obtained from the NWB upon request or electronically from the NWB's FTP site and public registry using the following link:

#### ftp://nunavutWaterboard.org/ADMINISTRATION/Standardized%20Forms/.

#### Water Use

Under the expired licence and/or associated amendments, the licensee was authorized to use up to two hundred and ninety-nine (299) cubic metres of Water daily for domestic and drilling purposes and for constructing maintaining ice strips (269 cubic metres daily for drilling and ice-strip construction and maintenance and 30 cubic metres daily for domestic use). The Licensee requested that the Water use be kept the same under the Application to renew the Licence. The NWB has therefore carried over with the issuance of the renewed licence, the Water use allowed under the expired licence and/or relevant amendment, 299 cubic metres daily.

#### Deposit of Waste

The Licence is authorized to dispose of Waste generated by the project in a manner that is suitable or consistent with applicable terms and conditions in the Licence, guidelines, and regulations. Both INAC and ECCC have expressed concerns about the methods proposed by the Licensee to address certain types of Waste, which the Licence has either addressed or planned to address subsequent to the issuance of a Licence. Conditions related to the

management of Waste have been generally included under Part D in the Licence.

## E. Management Plans

As part of the Application to renew the Licence, the Licensee submitted a Spill Contingency Plan and an Abandonment and Restoration Plan. The NWB has reviewed both Plans and approved the relevant version(s) thereof under the respective sections of the Licence, namely Part H, Item 1, and Part I, Item 1. It should be noted, however, that the updated plan, submitted following receipt of interveners' comments, instead of the initial Abandonment and Restoration Plan submitted with the Application has been approved with the issuance of this renewed licence as the updated version addressed many of the concerns expressed by the intervening parties.

The Board has also approved, under Part D, Item 10, the revised Waste Management Plan that was submitted for the Project in 2013; even though, the 2010 version of the plan was approved with the issuance of Amendment No. 1 to the expired licence. The 2010 version of the plan did not reflect the current ownership of the Project, which occurred subsequent to issuance of Amendment No.1. The Licensee is required to update the 2013 version of the Plan to address the procedural issues or administrative related to open burning.

#### F. Monitoring

The Licensee is required to conduct monitoring in accordance with the terms and conditions included under Part J of the Licence, and to submit all monitoring results to the Board for review as part of its annual report required under Part B, Item 2, of the Licence.

#### **DECISION**

#### LICENCE NUMBER: 2BE-HAK1621

This is the decision of the Nunavut Water Board (NWB) with respect to an updated application dated October 21, 2015 for a renewal of a Water Licence made by:

#### GLENCORE CANADA CORPORATION

to allow for the use of Waters and the deposit of Waste during exploration and related activities including prospecting, geological mapping, geophysical surveys, land-based and on-ice drilling, reverse circulation drilling, use of on-ice airstrip, thermistor installation, and data collection at the Hackett River Project, located within the Kitikmeot Region, Nunavut, at the following geographical coordinates:

Max. Latitude: 66° 10' N Min. Latitude: 65 10 N

Max. Longitude: 108° 45' W Min. Longitude: 106° 45' W (Project) Extents)

Latitude: 65° 55" N Longitude: 108° 22' W (Camp)

#### **DECISION**

After having been satisfied that the application was for a location that falls outside of an area with an approved Land Use Plan and does not require further screening by the Nunavut Impact Review Board (NIRB) given that previous Screening Decision(s) still apply, as determined by the Nunavut Planning Commission (NPC)<sup>1</sup>, the NWB decided that the application could proceed through the regulatory process. In accordance with s.55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (*Act*) and Article 13 of the *NLCA*, public notice of the application was given and interested persons were invited to make representations to the NWB.

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

Licence No. 2BE-HAK0915 be renewed as Licence No. 2BE-HAK1621 subject to the terms and conditions contained therein. (Motion #: 2015-B1-046)

Signed this 21st day of	March 2016	_ at Gjoa Haven, NU.

Thomas Kabloona Nunavut Water Board, Chairperson TK/sj/ip

<sup>&</sup>lt;sup>1</sup> Nunavut Planning Commission (NPC) Conformity Determination, December 10, 2015.



# NUNAVUT WATER BOARD WATER LICENCE RENEWAL

#### Licence No. 2BE-HAK1621

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

#### GLENCORE CANADA CORPORATION

(Licensee)

SUITE 400 – 8801 TRANSCANADA HIGHWAY, ST.LAURENT, QC H4S 1Z6 (Mailing Address)

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

Licence Number/Type: 2BE-HAK1621 / TYPE "B"

Water Management Area: QUEEN MAUD GULF WATERSHED (30)

Location: HACKETT RIVER PROJECT

KITIKMEOT REGION, NUNAVUT

Classification: MINING UNDERTAKING

Purpose: DIRECT USE OF WATER AND DEPOSIT OF WASTE

Quantity of Water use not

to Exceed: TWO HUNDRED AND NINETY-NINE (299) CUBIC METRES

PER DAY

Date of Licence Issuance: MARCH 21, 2016

Expiry of Licence: MARCH 31, 2021

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

Thomas Kabloona, Nunavut Water Board, Chair

#### PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

# 1. **Scope**

This Licence the use of Waters and the deposit of Waste for a Mining undertaking classified as per Schedule 1 of the *Regulations* at the Hackett River Project, located approximately 300 kilometres south of Cambridge Bay and 80 kilometres southwest of Bathurst Inlet in the Kitikmeot Region, Nunavut.

- a. This Licence is issued subject to the 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 *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of Waste that may be so deposited or under which any such Waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

#### 2. **Definitions**

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

"<u>Addendum</u>" means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report.

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

"Appurtenant Undertaking" means an undertaking in relation to which a use of Water or a deposit of Waste is permitted by a licence issued by the Board;

"Board" means the Nunavut Water Board established under the Nunavut Land Claims Agreement and the Nunavut Waters and Nunavut Surface Rights Tribunal Act;

"<u>Effluent</u>" means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;

- "Engineer" means a professional engineer registered to practice in Nunavut in accordance with the Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2 and the Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;
- "GreyWater" means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet Wastes;
- "<u>High Water Mark</u>" means the usual or average level to which a body of Water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);
- "<u>ICP Scan</u>" means the laboratory method for determining trace metals in Water through Emission Spectroscopy using inductively coupled plasma (including from approximately 22 to 32 elements, depending on the laboratory performing the analysis);
- "<u>Inspector</u>" means an Inspector designated by the Minister under Section 85 (1) of the *Act*;
- "Licensee" means the holder of this Licence;
- "<u>Modification</u>" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;
- "Nunavut 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;
- "Regulations" means the Nunavut Waters Regulations SOR/2013-69 18th April, 2013;
- "Secondary Containment" means an impermeable structure, external to and separate from primary containment, which prevents unplanned spills of hazardous materials and provides a minimum capacity of 110% of the original vessel. Where multiple vessels are stored within the containment, it must provide a minimum capacity equal to the sum of the largest vessel and 10% of the aggregate volume of all other vessels located in the containment. This structure shall also provide containment and control of hoses and nozzles
- "Sewage" means all toilet Wastes and greywater;

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

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

"<u>Toilet Wastes</u>" means all human excreta and associated products, but does not include greywater;

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

"Water" or "Waters" means Waters as defined in section 4 of the Act.

#### 3. **Enforcement**

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

## **PART B: GENERAL CONDITIONS**

- 1. The Water use fees, payable to the Receiver General for Canada, shall be sent to the Board annually for the right to the use of Waters in accordance with Section 12 of the *Regulations*.
- 2. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than the 31<sup>st</sup> of March of the year following the calendar year being reported, containing the following information:
  - a. A summary report of Water use and Waste disposal activities;

- b. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Inuit-owned lands for the reporting period;
- c. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Crown Lands reporting period;
- d. Quantity of Waste disposed of on on-site Waste disposal facility;
- e. Quantity of Waste backhauled to approved facility for disposal;
- f. A list of unauthorized discharges and a summary of follow-up actions taken;
- g. Any revisions to the Spill Contingency Plan, Abandonment and Restoration Plan, and any other Plans as required by Part B, Item 7, submitted in the form of an Addendum:
- h. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
- i. Report all artesian flow occurrences as required under Part F, Item 3;
- j. A summary of all information requested and results of the Monitoring Program;
- k. A brief Summary, including the location in degrees, minutes and seconds of all temporary camps established, in use or abandoned during the year being reported; and
- l. Any other details on Water use or Waste disposal requested by the Board by the 1<sup>st</sup> of November of the year being reported.
- 3. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
- 4. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of Water volumes as required under Part J, Item 1.
- 5. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
- 6. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
- 7. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
- 8. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.

9. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

# (a) Manager of Licensing:

Nunavut Water Board P.O. Box 119

Gjoa Haven, NU X0B 1J0 Telephone: (867) 360-6338 Fax: (867) 360-6369

Email: licensing@nwb-oen.ca

## (b) Inspector Contact:

Manager of Field Operations, INAC Nunavut District, Nunavut Region P.O. Box 100 Iqaluit, NU X0A 0H0

Telephone: (867) 975-4295 Fax: (867) 979-6445

- 10. The Licensee shall submit one paper copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut, and Inuinnaqtun.
- 11. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
- 12. This Licence is assignable as provided for in section 44 of the *Act*.
- 13. The Licence shall provide the Board and an Inspector with at least thirty (30) days' notice prior recommencing active operations of the Project.

## PART C: CONDITIONS APPLYING TO WATER USE

- 1. The Licensee shall obtain all Water for domestic camp use from Camp Lake. Total camp Water use shall not exceed thirty (30) cubic metres per day. Water use for ice airstrip(s) and for drilling shall be obtained from proximal source(s) as outlined in the Application and shall not exceed two hundred and sixty-nine (269) cubic metres per day. The total volume of Water for all purposes under this Licence shall not exceed two hundred and ninety-nine (299) cubic metres per day.
- 2. The Licensee shall provide a notice to an Inspector and the Board that includes the coordinates of potential Water sources to be used for the purposes outlined in Part C,

- Item 1, at least ten (10) days prior to commencement of the exploration program or use of the Water sources.
- 3. The use of Water from streams or any Water bodies not identified in Part C, Items 1 and/or Part C, Item 2 is prohibited unless otherwise authorized or approved by the Board in writing.
- 4. The Licensee shall submit to the Board for approval in writing, the following information at least thirty (30) days prior to the use of Water of a sufficient volume that the source Water body may be drawn down: a) volume of Water required, b) hydrological overview of the Water body, c) details of impact to the Waterbody, and d) proposed mitigation measures.
- 5. The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw Water at a rate such that fish do not become impinged on the screen.
- 6. The Licensee shall not remove any material from below the ordinary High Water Mark of any Water body unless authorized.
- 7. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
- 8. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into Water.

## PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

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

- 5. The Licensee shall provide to the Board documented authorization from all communities in Nunavut receiving Wastes from the Hackett River Project prior to any backhauling and disposal of Wastes to those communities.
- 6. The Licensee shall backhaul and dispose of all hazardous Wastes, Waste oil and non-combustible Waste generated through the course of the operation at a licensed Waste disposal site.
- 7. The Licensee shall maintain records of all Waste backhauled and records of confirmation of proper disposal of backhauled Waste. These records shall be made available to an Inspector or the Board upon request.
- 8. The Licensee shall dispose of all Toilet Wastes through collection in Pacto Toilets and Incineration or as otherwise approved by the Board in writing. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved Waste disposal facility. As per the Incinerator, the Licensee shall insure that a suitable incinerator is used for combusting such Waste and the incinerator is operated according to the manufacturer's specification.
- 9. The Board has approved with issuance of the Licence the Plan entitled *Waste Management Plan Hackett River Exploration Project, revised May 23, 2013* and submitted on June 1, 2013.
- 10. The Licensee shall revise and submit in the form of an addendum, within sixty (60) days following the issuance of the Licence, Section 4.2 of the Plan referred to in Part D, Item 10, to address the requirement for a separate authorization from the Board to open-burn acceptable Waste material.
- 11. All Effluent discharged from Sumps where drill cuttings have been deposited shall have a pH between 6.0 and 9.5. If these pH limits are not maintained, the Licensee shall either treat the Effluent to the required levels, backhaul for proper disposal, or treat as otherwise approved by the Board in writing.

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

- 1. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
- 2. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.

- 3. The Licensee shall construct all winter lake and stream crossings, including ice bridges, entirely of Water, ice or snow. The Licensee shall minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.
- 4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any Water body is prohibited. These materials shall be disposed a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the Water.
- 5. The Licensee shall not mobilize heavy equipment or vehicles unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs

# PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

- 1. The Licensee shall not conduct any land-based drilling within thirty-one (31) metres of the ordinary High Water Mark of any Water body, unless otherwise approved by the Board in writing.
- 2. The Licensee shall dispose of all drill Waste, including Water, chips, muds and salts (CaCl<sub>2</sub>) in any quantity or concentration, from land-based and on-ice drilling, in a properly constructed Sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent Water body, where direct flow into a Water body is not possible and no additional impacts are created.
- 3. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface Waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
- 4. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the Water, or are demonstrated to be non-toxic.
- 5. For "on-ice" drilling where drill additives are not being used, return Water released must be nontoxic, and not result in an increase in total suspended solids in the immediate receiving Waters, above the Canadian Council of Ministers for the Environment, *Guidelines for the Protection of Freshwater Aquatic Life* (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
- 6. The Licensee shall establish Water quality conditions prior to and upon completion of any drilling program through lake ice.

7. The Licensee shall dispose of rock saw sludge collected from the settling container (as indicated in the application) through the process of collection, drying, and placement in plastic sample bags and deposited in an approved disposal facility. These materials are to not be used as a fill material.

# PART G: CONDITIONS APPLYING TO MODIFICATIONS

- 1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
  - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
  - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
  - c. such Modifications are consistent with the NIRB Screening Decision;
  - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
  - e. the Board has not rejected the proposed Modifications.
- 2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
- 3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

# PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. The Board has approved the Plan entitled *Spill Contingency Plan, Hackett River Exploration Project*, dated October 5, 2015, submitted as additional information with the Application.
- 2. 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.

- 3. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other Waste and contain potential spills.
- 4. If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a. Employ the approved Spill Contingency Plan;
  - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
  - c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
- 5. The Licensee shall, in addition to Part H, Item 4, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

# PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING

- 1. The Board has approved the Plan entitled *Abandonment and Restoration Plan, Hackett River Exploration Project*, Revised September 30, 2015, and submitted as additional information for the Application.
- 2. The Licensee shall annually update the Project Reclamation Costs Estimate provided with the Application and the Abandonment and Restoration Plan identified in Part I, Item 1, to be included within the Annual Report requirements of Part B, Item 2.
- 3. The Licensee shall complete all restoration work prior to the expiry of this Licence.
- 4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
- 5. The Licensee shall backfill and restores all Sumps to the pre-existing natural contours of the land.
- 6. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, Water pumps and lines, material and equipment prior to the expiry of this Licence.

- 7. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
- 8. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
- 9. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
- 10. 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 Contaminated Site Remediation*, revised March 2009. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.
- 11. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. The restoration of drill holes must include the removal of any drill casing materials and if having encountered artesian flow, the capping of holes with a permanent seal.
- 12. The Licensee may store drill cores produced by the appurtenant undertaking in an appropriate manner and location at least thirty-one (31) metres above the ordinary High Water Mark of any adjacent Water body, where any direct flow into a Water body is not possible and no additional impacts are created.
- 13. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

# PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

- 1. The Licensee shall measure and record, in cubic metres, the daily quantities of Water utilized for camp, drilling and other purposes associated with the licence.
- 2. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of Water are utilized for all purposes.
- 3. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where Wastes associated with camp operations and drilling operations are deposited.

4. The Licensee shall obtain representative samples of the Water column below any ice where required under Part F, Items 5 and 6. Monitoring shall include but not be limited to the following:

**Total Suspended Solids** 

рН

Electrical Conductivity,

Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and

Trace Arsenic and Mercury

- 5. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
- 6. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
- 7. The Licensee shall include in the Annual Report required under Part B, Item 2 all data, monitoring results and information required by this Part.