

File: **8WLC-TGS1718**

July 13, 2017

John England 1-26 Earth Science Building University of Alberta Edmonton, AB, T6G 2E3

Email: john.england@ualberta.ca

Subject: 8WLC-TGS1718 – Approval for the Use of Waters and/or Deposit of Waste

Without a Licence for the "Study on nature of glacially-derived nutrients, microbes and vegetation around the retreating Teardrop Glacier, Sverdrup

pass, Ellesmere Island, Nunavut, Project"

Dear Mr. England:

Please find attached Approval No. **8WLC-TGS1718** issued to University of Alberta (the Authorized Entity) by the Nunavut Water Board (NWB or Board) 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 (the Nunavut Agreement).* The Approval has been authorized for a period of one (1) year after the day on which the Board approves the application and includes conditions related to the use of Waters or the deposit of Waste which are an integral part of this Approval required for this type of authorization under the *Nunavut Waters Regulations* (NWR).

This approval and the conditions contained therein permit the carrying out of activities involving the use of Waters and/or deposit of Waste with respect to the Application for approval. Any variation from these activities may result in a violation of this Approval and contravention of the *Nunavut Agreement*, the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA) or the NWR. The NWB would like remind the Applicant of its obligations with respect to the reclamation and reporting, which will arise as this Approval approaches its expiry.

If the activities authorized under the Approval are expected to continue longer than the term authorized, it is recommended that the Authorized Entity, upon receipt of confirmation¹ from the Nunavut Planning Commission (NPC) and the Nunavut Impact Review Board (NIRB) that relevant requirements have been satisfied, apply for a new Approval at least thirty (30) days prior to the expiry of the current authorization. Note that if the existing approval expires before the

¹Nunavut Planning Commission (NPC) and the Nunavut Impact Review Board (NIRB) requirements under the Nunavut Planning and Project Assessment Act (NuPPAA).

NWB issues a new Approval, the use of Waters and/or the deposit of Waste must cease as required by the *Nunavut Agreement* and the NWNSRTA.

If the Authorized Entity contemplates changes to its undertaking involving a change in scope or increased activity, a water licence may be required. It is the Authorized Entity's responsibility to apply to the NWB for a water licence in accordance with the timelines set out for licences.

This Approval has been posted to the NWB's Public Registry and FTP site and is accessible from the following link:

 $\frac{ftp://ftp.nwb-oen.ca/registry/8\%20MISCELLANEOUS/8WL/8WLC\%20-\%20Camp/8WLC-TGS1718\%20England/}{}$

Sincerely,

Thomas Kabloona Nunavut Water Board Chair

TK/ce/ip

Enclosure: Approval Number: **8WLC-TGS1718**

cc. Qikiqtani Distribution List



NUNAVUT WATER BOARD APPROVAL WITHOUT A LICENCE

APPROVAL DECISION

APPROVAL NUMBER: 8WLC-TGS1718

This is the decision of the Nunavut Water Board (NWB) with respect to an application for approval for the use of Waters and deposit of Waste, without a licence, dated May 3, 2017 made by:

University of Alberta

to authorize the use of Waters and deposit of Waste during camp and sampling activities in support of the study about the nature of glacially-derived nutrients, microbes and vegetation around the retreating Teardrop Glacier, Sverdrup pass, Ellesmere Island, Nunavut, located within the Southeastern Ellesmere Island Watershed (No.63). The camp will be located about 645 km from Resolute, Nunavut. The project is situated at the following general geographical coordinates:

Project Extent: Max Latitude: 79.274379° Max Longitude: -79.150098°

Min Latitude: 79.022275° Min Longitude: -80.92606°

Camp Location: Latitude: 79.133° Longitude: -79.65°

DECISION

After receiving confirmation from the Nunavut Planning Commission (NPC) that the project proposal is for an undertaking that was previously reviewed by NPC (NPC File # 148507), and a conformity determination was issued on June 13, 2007, which still applies, and in addition, the activities were previously screened by the Nunavut Impact Review Board (NIRB FILE NO.: 07YN050), and that the project proposal is exempt from screening by the Nunavut Impact Review Board (NIRB) as it belongs to a class of works or activities set out in Schedule 12-1 of the *Nunavut Agreement*, and the NPC does not have concerns regarding the cumulative impacts of the project proposal², the NWB is satisfied that the requirements of Articles 11 and 12 of the *Nunavut Agreement* and sections 3, 4 and/or 5 of the *Nunavut Waters Regulations* (NWR or *Regulations*) have been adequately addressed. In addition, through the provision of a signed Application for an Approval Without a Licence, the Applicant has agreed to adhere to sections 4(3), 5(4), and 6(1) of the *Regulations* and to comply with the associated requirements, the NWB determined that:

Approval Number 8WLC-TGS1718 be issued, and subject to the conditions of Schedule 1 contained therein (Motion # 2017-WL-022).

SIGNED this 13th day of July, 2017 at Gjoa Haven, NU.

Thomas Kabloona

Nunavut Water Board, Chair

TK/ce/ip

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² Nunavut Planning Commission (NPC) Conformity Determination, May 12, 2017



NUNAVUT WATER BOARD APPROVAL WITHOUT A LICENCE

APPROVAL NO. 8WLC-TGS1718

Nunavut Water Board, Chair

Pursuant to the *Nunavut Waters Regulations*, *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

UNIVERSITY OF ALBERTA

1-26 EARTH SCIENCE BUILDING, EDMONTON, AB, T6G 2E3

Hereinafter called the Authorized Entity, the right to the use of Water and the deposit of Waste for a period of one (1) year, after the day on which the Board approved the Application, subject to the conditions contained in Schedule 1 attached to this Approval:

THE NATURE OF GLACIALLY-DERIVED NUTRIENTS, Project Name: MICROBES AND VEGETATION AROUND THE RETREATING TEARDROP GLACIER, SVERDRUP PASS, ELLESMERE ISLAND, NUNAVUT **TEARDROP** Location: GLACIER, CENTRAL **SVERDRUP** PASS. ELLESMERE ISLAND, QIKIQTANI REGION, NUNAVUT Water Management Area: SOUTHEASTERN ELLESMERE WATERSHED (No. 63) Classification of Undertaking: OTHER UNDERTAKING SCIENTIFIC RESEARCH Purpose: USE OF WATER AND DEPOSIT OF WASTE Approval Criteria: WATER USE SHALL NOT EXCEED ONE (1) CUBIC METRE PER DAY; DEPOSIT OF GREYWATER SHALL NOT EXCEED ONE (ONE) CUBIC METRE PER DAY Date of Approval: **JULY 13, 2017** Expiry of Approval: **JULY 12, 2018** Dated this 13th day of July, 2017, at Gjoa Haven, NU Thomas Kabloona



SCHEDULE 1 CONDITIONS FOR USE OF WATER OR DEPOSIT OF WASTE WITHOUT A LICENCE

General

1. In the case of an Authorized Entity who has a mineral right and who intends to use Waters or deposit Waste in relation to that right, the Authorized Entity shall respect the priority conferred on Inuit by section 62 of the *Act* as if that applicant had a licence for the use or deposit.

Use of Waters

2. The Authorized Entity shall take measures prior to the use of Waters to minimize any alteration to the bed or banks of a watercourse whose waters are to be used, and the measures shall be maintained during the operation of the undertaking.

Deposit of Waste

- 3. The Authorized Entity shall not deposit Waste to surface water or within thirty-one (31) metres of the ordinary high water mark of any body of water. All greywater to directed to and deposited within a sump or natural depression and backfilled at the close of the 2017 activities.
- 4. The waste must not contain more than 15 milligrams per litre of petroleum or petroleum product and must not have a visible hydrocarbon sheen.
- 5. The Authorized Entity shall contain all sewage and transport off-site for appropriate disposal. No sewage/blackwater to be deposited at the site. All other waste to be removed from the site of the undertaking and disposed of at an approved facility.

Spill Contingency

- 6. Measures to deal with unforeseen petroleum and hazardous materials releases that may occur during the activities conducted under the authorization to use waters and/or deposit waste without a licence, including:
 - a. 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;
 - b. prevent any chemicals, petroleum products or wastes associated with the project from entering water;
 - c. report spills immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295;
 - d. 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 reference to the assigned spill number, the amount and type of spilled product, the GPS

SCHEDULE 1 (Cont.)



- location of the spill, and the measures taken to contain and clean up the spill site; and
- e. in addition to Item 5c, 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

Abandonment and Restoration

7. Prior to the closure or abandonment of the undertaking, or end of the period authorized for the use of Waters or deposit of waste without a licence, whichever occurs first, the site shall be restored — to the extent practicable — to the state in which it was before the use of Waters or the deposit of Waste.^a

Record Keeping

- 8. The Authorized Entity shall:
 - a. maintain accurate and detailed books and records of:
 - i. the quantity of water, in cubic metres, used each day,
 - ii. the quantity, in cubic metres, of waste deposited each day,
 - iii. the type of waste deposited each day,
 - iv. where the waste is deposited including GPS coordinates in Latitude and Longitude,
 - v. the concentration of the substance, or substances, in the deposited solid or liquid that has the effect of making the deposit waste,
 - vi. the methodology used to calculate or determine the information referred to in items (i) to (v), and
 - vii. the measures that were taken to avoid or mitigate any adverse impacts of the deposit of waste.
 - b. keep the books and records on the site of the undertaking during the period of its operation and make them available during that period to an inspector on request;
 - c. submit to the Board a report containing a summary description and supporting photographs of the restoration of the site of the undertaking within thirty (30) days after the earliest of (i) the day on which the undertaking is closed or abandoned, and (ii) the last day of the period authorized for the unlicensed use or deposit;^b and keep the books and records for two years after submitting the report describing the restoration of the site and undertakings.

Notes:

- a) A site need not be restored prior to the end of the period authorized for the use of Water or the deposit of Waste without a licence, as required by Item 5, if the Board issues a licence for the use of Water or deposit of Waste for the same undertaking on same site prior to the end of that period.
- b) The Authorized Entity need not submit the report referred to in Item 6 (c) if the Authorized Entity obtains a new approval authorizing a use of Water or deposit of Waste without a licence, or a licence authorizing a use of Water or deposit of Waste for the same undertaking on the same site within thirty (30) days after the last day of the period previously authorized.