

File No: 8WLC-RAS2223

May 9, 2022

Emily Geyman California Institute of Technology 466 S Catalina Ave, 303B Pasadena California 91106 USA

Email: egeyman@caltech.edu

Subject: Approval Without a Licence No: 8WLC-RAS2223 – Approval for the Use of

Waters and Deposit of Waste Without a Licence

Dear Emily Geyman:

Please find attached Approval No: 8WLC-RAS2223 issued to California Institute of Technology 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 (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 and 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 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 to remind the Applicant of the obligations with respect to the reclamation and reporting requirements of the Approval, 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/or 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

¹NPC and NIRB Requirements under NuPPAA.

NWB issues a new Approval, the use of Waters and/or 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:

 $\frac{ftp://ftp.nwb-oen.ca/registry/8\%20MISCELLANEOUS/8WL/8WLC\%20-\%20Camp/8WLC-RAS2223\%20CIT}{RAS2223\%20CIT}$

Sincerely,

Lootie Toomasie Nunavut Water Board Chair

LT/ak/rqd

Enclosure: Approval No: 8WLC-RAS2223

cc. Kitikmeot Region



NUNAVUT WATER BOARD APPROVAL WITHOUT A LICENCE

APPROVAL DECISION

APPROVAL NUMBER: 8WLC-RAS2223

This is the decision of the Nunavut Water Board (NWB or Board) with respect to an application for Approval for the use of Waters and deposit of Waste without a licence, dated February 27, 2022, made by:

CALIFORNIA INSTITUTE OF TECHNOLOGY

to authorize the use of Waters and deposit of Waste during research in a sequence of carbonate rocks that are superbly exposed in this region of western Nunavut, at the Reconstructing Ancient Sea Level and Seafloor Conditions in the 1.9-Billion-Year-Old Rocknest Formation Project, located within the Kitikmeot Region, Nunavut and within Watersheds of: Coronation Gulf Watershed (29), generally at the following geographical coordinates:

Project: Max Latitude: 67°28'56.51" N Max Longitude: 113°18'28.79" W

Min Latitude : 67°21'46.54''N Min Longitude : 112°58'46.89''W

Camp: Latitude: 67°24'39.31''N Longitude: 112°59'12''W

DECISION

After having received confirmation from the Nunavut Planning Commission (NPC) that the application falls outside of an area with an approved land use plan, and, as such, a conformity determination is not required, and that a review of the Project is not required in accordance with s. 89(1)(b) of *Nunavut Planning and Project Assessment Act* (*NuPPAA*) as determined by the Nunavut Impact Review Board (NIRB), the Board is satisfied that the requirements of Articles 11 and 12 of the *Nunavut Agreement* and sections 3, 4 and 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), 5(5) and 6 of the Regulations and to comply with the associated requirements, the NWB determined that:

Approval No: 8WLC-RAS2223 be issued, subject to the conditions of Schedule 1 contained therein (Motion # 2022-WL-002).

SIGNED this 9th day of May, 2022 at Gjoa Haven, NU.

Lootie Toomasie Nunavut Water Board Chair LT/ak/rqd

3 Nunavut Planning Commission (NPC), Conformity Determination, February 25, 2022

4 Nunavut Impact Review Board (NIRB), Screening Decision Report No. 22YN012, April 12, 2022



Chair

NUNAVUT WATER BOARD APPROVAL WITHOUT A LICENCE

CALIFORNIA INSTITUTE OF TECHNOLOGY

APPROVAL NO: 8WLC-RAS2223

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

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	orized Entity, the right to use Waters and deposit of Waste for a period on which the Board approved the Application, subject to the conditions ached to this Approval:
Project Name:	RECONSTRUCTING ANCIENT SEA LEVEL AND SEAFLOOR CONDITIONS IN THE 1.9 BILLION-YEAR-OLD ROCKNEST FORMATION
Location:	KITIKMEOT REGION, NUNAVUT
Water Management Area:	CORONATION GULF WATERSHED (29)
Classification of Undertaking:	8. OTHER UNDERTAKING
Purpose:	USE OF WATERS AND DEPOSIT OF WASTE
Approval Criteria:	TOTAL WATER USE (1) CUBIC METRE PER DAY, DEPOSIT OF SEWAGE
Effect Date:	MAY 9, 2022
Expiry of Approval:	MAY 8, 2023
Dated this9th day of	May, 2022, at Gjoa Haven, NU
Nunavut Water Board	



SCHEDULE 1 CONDITIONS FOR USE OF WATERS AND 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.
- 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. All other wastes must be backhauled and disposed of at an approved waste disposal 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 NWT/NU 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4284;
 - 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 location of the spill, and the measures taken to contain and clean up the spill site; and
 - e. in addition to Item 6c, regardless of the quantity of releases of harmful substances, report to the NWT/NU 24-Hour Spill Line if the release is near or into a Water body

SCHEDULE 1 (Cont.)



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
 - d. 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 7, 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 8(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.