

File No.: 8WLC-LHA1718

June 5, 2017

Shannon Rupert Mars Society 11111 West 8th Ave. Ste A Lakewood, Colorado 80215-5516 USA

Email: srupert@marssociety.org

Subject: Approval-Without-A-Licence No. 8WLC-LHA1718; Application by the Mars

Society for an approval to Use Water and Deposit Waste for the Planetary Analog

Studies at the Flashline Mars Arctic Research Station Project

Dear Shannon Rupert:

Please find attached Approval Without-A-Licence No. **8WLC-LHA1718**, issued to the Mars Society 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 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 without a licence. 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 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/or the Nunavut Impact Review Board (NIRB) that

¹Nunavut Planning Commission (NPC) and the Nunavut Impact Review Board (NIRB) Requirements under NuPPA.

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 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.

It should be noted that as identified in the Application for the Approval for the use of Waters and the Deposit of Waste Without-A-Licence, the Authorized Entity has held, Type "B" Water Licence No 3BC-MAR1014 that applied to the carrying out of activities involving the use of waters or deposit of waste now included under 8WLC-LHA1718. The Board reminds the Authorized Entity that as stated in s. 46 of the NWNSRTA, the expiry or cancellation of this licence does not relieve the holder from any outstanding obligations imposed under the licence. If there are any obligations under Type "B" Water Licence No. 3BC-MAR1014 that remain outstanding (such as obligations in relation to payment of water fees, filing of plans for approval and restoration, etc.) the Authorized Entity remains responsible for fulfilling these obligations.

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

 $\frac{ftp://ftp.nwb-oen.ca/registry/8\%20MISCELLANEOUS/8WL/8WLC\%20-\%20Camp/8WLC-LHA1718\%20Mars/}{}$

Sincerely,	Si	nce	ere	ly.
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Thomas Kabloona Nunavut Water Board, Chair

TK/sj/ri

Enclosure: **Approval Number: 8WLC-LHA1718**

Cc. Qikiqtani Region



NUNAVUT WATER BOARD APPROVAL WITHOUT A LICENCE

APPROVAL DECISION

APPROVAL NUMBER: 8WLC-LHA1718

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 March 1, 2017, made by the:

MARS SOCIETY

to authorize the use of Waters and the deposit of Waste in support of scientific research and related activities at the Planetary Analog Studies at the Flashline Mars Arctic Research Station Project, located near the Haughton Crater on the northern coast of Devon Island, Nunavut, in the Eastern Devon Island (#58) Watershed Management Area and within the following general geographical coordinates:

> Latitude: 75° 27' N Longitude: 90° 16' W Latitude: 75° 27' N Longitude: 89° 01' W Latitude: 75° 17' N Longitude: 89° 01' W

Latitude: 75° 17' N Longitude: 90° 16' W (Project Extents)

Latitude: 75° 25.882' N Longitude: 89° 49.408' W (Camp)

DECISION

After receiving confirmation from the Nunavut Planning Commission (NPC)² that the Application is for a project proposal that conforms to the North Baffin Regional Land Use Plan (NBRLUP) and that the activities involved are exempt from screening by the NIRB in accordance with section 12.4.3 of the Agreement between the Inuit of the Nunavut Settlement Area and her Majesty the Queen in Right of Canada (the Nunavut Agreement), 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. Further, through 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-Without-A-Licence No. 8WLC-LHA1718 be issued, subject to the conditions of Schedule 1 contained therein (Motion # 2017-WL-010).

SIGNED this 5th day of June, 2017 at Gioa Haven, NU.

Thomas Kabloona Nunavut Water Board, Chair

TK/sj/ri

² Nunavut Planning Commission (NPC) Conformity Determination, April 7, 2017.



NUNAVUT WATER BOARD APPROVAL WITHOUT A LICENCE

APPROVAL NO. 8WLC – LHA1718

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 the

MARS SOCIETY

11111 W 8TH AVE. STE A LAKEWOOD, COLORADO 80215-5516 USA

of

Nunavut Water Board

Chair

Hereinafter called the Authorized Entity, the right to use Waters and Deposit 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:

Project Name:	PLANETARY ANALOG STUDIES AT THE FLASHLINE MARS ARCTIC RESEARCH STATION		
Location:	QIKIQTANI REGION, NUNAVUT		
Water Management Area:	EASTERN DEVON ISLAND (#57)		
Classification of Undertaking:	OTHER OF UNDERTAKING		
Purpose:	USE OF WATERS AND DEPOSIT OF WASTE		
Approval Criteria:	USE OF ONE (1) CUBIC METRE OF WATER PER DAY		
Effect Date:	JUNE 5, 2017		
Expiry of Approval:	JUNE 4, 2018		
Dated this5 th day of <u>JUNE</u> , 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.
- 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.

Spill Contingency

- 5. Measures developed to deal with unforeseen petroleum and hazardous materials releases that may occur during the operations 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 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.

SCHEDULE 1 (Cont.)



Abandonment and Restoration

6. 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

- 7. 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 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.