



**Department of Geography**

McGill University  
Burnside Hall  
805 Sherbrooke Street West  
Montreal, Quebec, Canada  
H3A 0B9

**Département de géographie**

Université McGill  
Pavillion Burnside  
805 rue Sherbrooke ouest  
Montréal (Québec) Canada  
H3A 0B9

Tel: (514) 398-4454  
Fax: (514) 398-7437  
[www.mcgill.ca/geography/](http://www.mcgill.ca/geography/)  
[christopher.omelon@mail.mcgill.ca](mailto:christopher.omelon@mail.mcgill.ca)

Karén Kharatyan  
Manager of Licensing  
Nunavut Water Board (NWB)  
P.O. Box 119, Gjoa Haven, NU X0B 1J0

March 4, 2022

Re: Requesting approval for the use of waters and/or deposit of waste without a licence

Dear Dr. Karatyan,

On behalf of Dr. Wayne Pollard, Director of the McGill Arctic Research Station (MARS), I am requesting approval for the use of waters and/or deposit of waste without a licence for the McGill Arctic Research Station (MARS) on Axel Heiberg Island, Nunavut. MARS is a seasonal research facility for university professors, graduate and undergraduate students, and federal scientists. It is open in April-May and June-July for an approximate total of 45 days/year, and normally accommodates 5-6 people at any one time. Water is taken from Colour Lake, a freshwater lake that sits adjacent to MARS. Estimated water quantity is approximately 0.5 m<sup>3</sup>/day, with no evidence of draw down, erosion, disturbance or sedimentation of the lake in previous years. Approximately 0.25 m<sup>3</sup>/day of waste is deposited either in a sump (grey water) or incinerated (sewage). Both waste activities occur more than 40 m from Colour Lake or any other water body.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "COL", written in a cursive style.

Christopher Omelon, Ph.D.

ᐃᓄᕐᑕᐅ ᐅᒥᓚᑦ ᐃᓕᑦᓂᐘᕐᑎ Christopher Omelon, Ph.D.



P.O. Box 119  
GJOA HAVEN, NU X0B 1J0  
TEL: (867) 360-6338  
FAX: (867) 360-6369

ᓄᓇᓂᓪ ᐃᓕᓕᓂᓪ ᑲᑎᓴᓪ  
NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYIT  
OFFICE DES EAUX DU NUNAVUT

## APPLICATION FOR APPROVAL FOR THE USE OF WATERS AND/OR DEPOSIT OF WASTE WITHOUT A LICENCE

*Refer to Guide 9 - Approval for the Use of Waters and/or Deposit of Waste Without a Licence .*

APPLICATION NO: (for NWB use only)	
<b>1. APPLICANT CONTACT INFORMATION</b> (name, address)  Name: <u>Wayne Pollard</u> Title: <u>Professor</u> Company: <u>Department of Geography, McGill</u> Address: <u>805 Sherbrooke Street West</u> <u>Montreal, Quebec H3A 0B9</u> Phone: <u>514-398-4454</u> Fax: <u>514-398-7437</u> e-mail: <u>wayne.pollard@mcgill.ca</u>	<b>2. APPLICANT REPRESENTATIVE CONTACT INFORMATION</b> if different from Block 1 (name, address)  Name: <u>Christopher Omelon</u> Title: <u>Base Manager, McGill Arct</u> Company: <u>Department of Geography, Mc</u> Address: <u>805 Sherbrooke Street West</u> <u>Montreal, Quebec H3A 0B9</u> Phone: <u>514-398-4454</u> Fax: <u>514-398-7437</u> e-mail: <u>christopher.omelon@mail.n</u> (Attach authorization letter)
<b>3. OWNER OF THE LAND ASSOCIATED WITH THE WATERS TO BE USED AND/OR THE WASTE TO BE DEPOSITED</b>  <input type="checkbox"/> Inuit Owned <input checked="" type="checkbox"/> Crown <input type="checkbox"/> Commissioner's	
<b>4. NAME OF PROJECT</b> (consistent with the name of the project issued by other regulatory agencies) <u>Impacts of Climate Change on Permafrost, Ice, and Hy</u>	
<b>5. LOCATION OF UNDERTAKING</b>  <input type="checkbox"/> Kitikmeot <input type="checkbox"/> Kivalliq <input checked="" type="checkbox"/> Qikiqtani  <b>Project Extents</b>  NW: Latitude: (79 °24 '56 " N)      Longitude: (90 °45 '10 " W) NE: Latitude: (79 °24 '56 " N)      Longitude: (90 °44 '43 " W) SE: Latitude: (79 °24 '53 " N)      Longitude: (90 °45 '10 " W) SW: Latitude: (79 °24 '53 " N)      Longitude: (90 °44 '43 " W)  <b>MAP</b> - Attach a topographical map, indicating the main components of the undertaking.  NTS Map Sheet No.: <u>59-H/6</u> Map Name: <u>Monkhead Mtn</u> Map Scale: <u>1:50 000</u>	

<p><b>Camp Location(s)</b></p> <p style="text-align: center;">Latitude: (79 °24 '55 " N)      Longitude: ( 90 °44 '54 " W)</p> <p><b>Name and number of the Water Management Area (Watershed) in which the Undertaking is located.</b> (Please see Appendix D of the Guide and Schedule 4 of the Regulations):</p> <p style="text-align: center;">Name: <u>Sverdrup Islands Wa</u>      Number: <u>58</u></p>			
<p><b>6. Previous Approvals or Licences Associated with Undertaking</b> ("Type A", "Type B" or Approval Without a Licence; it should be noted that in accordance with Guide 9, the NWB cannot issue more than one authorization for the same undertaking)</p> <p><input type="checkbox"/> <b>NA or</b></p> <p>Previous Licence/Approval Number: <u>8WLC-MGU2122</u></p> <p><i><u>The Board reminds the Applicant that as stated in s. 46 of the NWNSRTA, the expiry or cancellation of any previous licence does not relieve the holder from any outstanding obligations imposed under the licence.</u></i></p>			
<p><b>7. CLASSIFICATION OF UNDERTAKING</b> - Indicate the classification of undertaking by checking one of the following boxes.</p> <table style="width: 100%;"> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> Industrial  <input type="checkbox"/> Mining  <input type="checkbox"/> Municipal  <input type="checkbox"/> Power  <input checked="" type="checkbox"/> <u>Scientific research</u> </td> <td style="vertical-align: top;"> <input type="checkbox"/> Agricultural  <input type="checkbox"/> Conservation  <input type="checkbox"/> Recreational  <input checked="" type="checkbox"/> Other: (describe) _____         </td> </tr> </table> <p>See Appendix C of Guide 9 for descriptions of classifications of undertakings.</p>		<input type="checkbox"/> Industrial <input type="checkbox"/> Mining <input type="checkbox"/> Municipal <input type="checkbox"/> Power <input checked="" type="checkbox"/> <u>Scientific research</u>	<input type="checkbox"/> Agricultural <input type="checkbox"/> Conservation <input type="checkbox"/> Recreational <input checked="" type="checkbox"/> Other: (describe) _____
<input type="checkbox"/> Industrial <input type="checkbox"/> Mining <input type="checkbox"/> Municipal <input type="checkbox"/> Power <input checked="" type="checkbox"/> <u>Scientific research</u>	<input type="checkbox"/> Agricultural <input type="checkbox"/> Conservation <input type="checkbox"/> Recreational <input checked="" type="checkbox"/> Other: (describe) _____		
<p><b>8. DESCRIPTION OF UNDERTAKING AND EQUIPMENT USED</b> – Provide a brief description of the undertaking including a description of any equipment that will be used in using water or depositing waste.</p> <p>Water is collected using a pump with hose and appropriate intake screen. Greywater is disposed of in a sump constructed from a perforated 205 litre barrel buried 50 cm into gravel, which is located &gt; 50 m from any streams or water bodies. We utilize an incinerator toilet for all human waste disposal.</p>			
<p><b>9. SCHEDULE</b> – Applicants are advised that approvals without a licence are issued for a one-year term.</p> <p>Proposed Start Date: <u>25/03/2022</u>      Proposed Completion Date: <u>24/03/2023</u>              (Day / Month / Year)      (Day / Month / Year)</p>			
<p><b>10. TYPE OF USE OF WATERS WITHOUT A LICENCE PROPOSED</b> - Check the box that</p>			

applies to the type of water use proposed. If none of the water uses listed below applies to the proposed water use, an application for a water licence will be required. See the NWB's Guide 4 – Completing and Submitting a Water Licence Application for a New Licence.

- ☐ For an undertaking other than a Power undertaking and for a use of water related to the construction of a structure across a watercourse that is less than 5 metres wide at the ordinary high water mark at the point of construction.
- ☐ For an undertaking other than a Power undertaking and for a use of water related to the training of an intermittent watercourse.
- ☐ For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that is less than 5 metres wide at the ordinary high water mark at the point of training.
- ☐ For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that involves the infilling of the watercourse, if the watercourse has no inflow or outflow and a surface area of less than 0.5 hectares.
- ☐ For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that involves removal or placement of less than 100 m<sup>3</sup> of material.
- ☐ For an undertaking other than a Power undertaking and for a use of water related to the construction of a temporary structure in a watercourse for the purpose of flood control.
- ☐ For an undertaking other than a Power undertaking and for any use of water related to the storage of 2,500 m<sup>3</sup> or less.
- ☒ For an undertaking other than a Power undertaking and for any use of water less than 50 m<sup>3</sup> per day.

**11. QUANTITY OF WATER INVOLVED** - For each type of water use indicated in Block 10, provide the source of water, the estimated quantity to be used in cubic metres per day, and the periods during which water will be extracted.

Type of Water Use indicated in Block 10	Name of Water Source(s)	Estimated Water Quantity (m <sup>3</sup> / day)	Period(s) During which Water will be Extracted	Location of Water Source(s) (Crown/IOL)
< 50 m <sup>3</sup> /day	Colour Lake	0.5	01/04-15/08/2022	Crown

**12. TYPE OF DEPOSIT OF WASTE PROPOSED** - Check the box that applies to the type of deposit of waste proposed. If none of the deposits of waste listed below apply to the proposed deposit of waste, an application for a water licence will be required. See the NWB's Guide 4 – Completing and Submitting a Water Licence Application for a New Licence.

- ☐ For an Industrial undertaking, for an activity related to hydrostatic testing or cleaning of storage tanks and pipelines, and for any deposit of waste resulting from hydrostatic testing or cleaning of unused storage tanks or pipelines.
- ☐ For an Industrial undertaking, for an activity related to quarrying and gravel washing, and for any deposit of waste that is not deposited to surface water and that results from quarrying or gravel washing above the ordinary high water mark.
- ☐ For a Mining undertaking, for an activity related to exploratory work, any deposit of sewage to a sump.
- ☐ For a Power undertaking, any deposit of sewage to a sump.
- ☐ For an Agricultural undertaking, any deposit of sewage to a sump.
- ☐ For a Recreation undertaking, any deposit of sewage to a sump.
- ☒ For any Other type of undertaking not listed above, other than Municipal, any deposit of sewage to a sump.

**13. TYPE AND QUANTITY OF WASTE INVOLVED** – For each type of waste indicated in Block 12, describe the quantity in cubic metres/day, measures to avoid or mitigate adverse impacts, and periods of deposition.

Type of Waste indicated in Block 12	Quantity to be deposited in m <sup>3</sup> / day	Measures to avoid or mitigate any adverse impacts	Periods during which waste will be deposited
Other type	0.25	Sump; containment	01/04-15/08/2021

**14. SIGNATURE**

I, \_\_\_\_\_ (print name), certify that the information given on this form is, to the best of my knowledge, correct and complete.

☐ Yes \_\_\_\_\_ ☐ No \_\_\_\_\_

OR

I, Christopher Omelon (print name), as an authorized representative of the Applicant, Wayne Pollard, certify that the information given on this form is, to the best of my knowledge, correct and complete.

☒ Yes

☐ No

I certify that the Nunavut Planning Commission's land use planning requirements under Article 11 of the Nunavut Agreement have been met.

☒ Yes

☐ No

I certify that the Nunavut Impact Review Board's development impact review requirements under Article 12 of the Nunavut Agreement have been met.

☒ Yes

☐ No

I certify that the proposed water use is of a type set out in column 2 of Schedule 2 of the Regulations that is further specified by column 3, in respect of an undertaking set out in column 1. See list in Block 10.

☒ Yes

☐ NA

☐ No

I certify that the proposed deposit of waste is an activity that is set out and then further specified in columns 2 and 3 of Schedule 3 of the Regulations, in respect of an undertaking that is set out in column 1 of Schedule 3. See list in Block 12.

☒ Yes

☐ NA

☐ No

I certify that the proposed water use or deposit of waste will not substantially affect the quality, quantity or flow of the watercourse whose waters are used.

☒ Yes

☐ No

I certify that the proposed water use or deposit of waste will not substantially affect the quality, quantity or flow of waters flowing through Inuit Owned Lands.

☒ Yes

☐ No

I certify that the proposed water use or deposit of waste will not affect the use of waters by a person who would be entitled to compensation under sections 58 or 60 of the *Nunavut Waters Nunavut Surface Rights Tribunal Act* (Act) if their use of these waters were to be adversely affected by an applicant for a licence.

☒ Yes

☐ No

I certify that a licence is not required for another use of water, or deposit of waste in respect of the proposed undertaking.

☒ Yes

☐ No

I have read and agree to comply with the following conditions outlined in sections 4(3), 5(4), 5(5) and 6 of the *Nunavut Waters Regulations*:

1. In the case of an applicant who has a mineral right and who intends to use waters or deposit waste in relation to that right, the applicant 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.

2. Measures must be taken prior to using water 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.
3. No waste is to be deposited to surface water or within 31 metres of the ordinary high water mark of any body of water.
4. The waste shall not contain more than 15 milligrams per litre of petroleum or petroleum product and must not have a visible hydrocarbon sheen.
5. Prior to the closure or abandonment of the undertaking or end of the period authorized for the use of water 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 and/or the deposit of waste.<sup>a</sup>
6. An applicant who is authorized under the Regulations to use waters or deposit waste without a licence 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,
    - 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 (iv), 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 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 use or deposit without a licence;<sup>b</sup> and
  - d. keep the books and records for two years after submitting the report describing the restoration of the site of the undertaking.

**Notes:**

<sup>a</sup> A site need not be restored prior to the end of the period authorized for the water use and/or 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 on that site prior to the end of that period.

<sup>b</sup> An applicant need not submit the report referred to in Item 6 (c), to the Board if the applicant obtains the Board's approval for a use of water or deposit of waste without a licence, or a licence for a use of water or deposit of waste, on the same site within thirty (30) days after the last day of the period authorized for the use or deposit.

☒ Yes

☐ No

I understand that any approval granted by the Board for the use of water or deposit of waste without a licence will be authorized for a period of one year after the day on which the Board approves the Application. The use or deposit is not authorized until the Board approves the Application and it is only valid as long as the applicant is in compliance with the conditions set out in the declaration above.



☒ Yes

☐ No

I understand that if I have answered "No" to any of the above statements a water licence is required from the Nunavut Water Board prior to the use of water or deposit of waste.

☒ Yes

☐ No

Christopher Omelon

Base Manager


























04/03/2022

**Name (Print)**

**Title (Print)**

**Signature**

**Date**

	Road: hard surface, more than 2 lanes; service centre Route : revêtement dur, plus de 2 voies; centre de service
	Road: hard surface, 2 lanes; less than 2 lanes; snowshed Route : revêtement dur, 2 voies; moins de 2 voies; paravalanche
	Road: hard surface, street; loose or stabilized surface, street; conduit bridge Route : revêtement dur, rue; de gravier, aggloméré, rue; pont de canalisation
	Road: loose or stabilized surface, all season, 2 lanes or more; less than 2 lanes Route : de gravier, aggloméré, toute saison, 2 voies ou plus; moins de 2 voies
	Road: loose surface, dry weather; vehicle track or winter road; trail; portage Route : de gravier, temps sec; chemin de terre ou d'hiver; sentier; portage
	Highway interchange; highway route number; built-up area Échangeur routier; numéro de route; agglomération
	Railway, single track; railway station; trestle; multiple tracks; turntable Chemin de fer, voie unique; gare; chevalet; voies multiples; plaque tournante
	Railway, abandoned; railway yard Chemin de fer, abandonné; gare de triage
	Rapid transit: rail; road; footbridge Transport rapide : voie ferrée; route; passerelle
	Causeway; covered bridge; tunnel; bridge; moveable bridge Chaussée; pont couvert; tunnel; pont; pont mobile
	Boundary: international Limite : internationale
	Boundary: provincial or territorial Limite : provinciale ou territoriale
	Boundary: unsurveyed provincial or territorial; area outline Limite : provinciale ou territoriale non arpentée; surface délimitée
	Boundary: administrative; recreational Limite : administrative; récréative
	Boundary: geographic; unsurveyed geographic Limite : géographique; géographique non arpentée
	Fort, wall; fence Fort, mur, clôture
	Power transmission line; multiple lines; submarine cable Ligne de transport d'énergie; lignes multiples; câble sous-marin
	Pipeline: oil; natural gas Pipeline : pétrole; gaz naturel
	Pipeline: multi-use; control valve; multiple lines Pipeline : utilisation multiple; valve de contrôle; lignes multiples
	Pipeline underground: oil; natural gas; multi-use Pipeline souterrain : pétrole; gaz naturel; utilisation multiple
	Mine; pit; sand, gravel, clay; quarry Mine; sablière, gravière, glaisière; carrière
	Airport or airfield; runway: hard surface; loose surface; heliport Aéroport ou terrain d'aviation; piste d'envol : revêtement dur; de gravier; héliport
	Chimney: industrial, flare stack, burner; height; lumberyard Cheminée : industrielle, torche, brûleur; hauteur; parc à bois débités