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General Water Licence Application  
(Application for a new Water Licence)

April 2010

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NUNAVUT IMALIRIYIN KATIMAYINGI  
NUNAVUT WATER BOARD  
OFFICE DES EAUX DU NUNAVUT

## DOCUMENT MANAGEMENT

Original Document Date: April 2010

### DOCUMENT AMENDMENTS

	Description	Date
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NUNAVUT WATER BOARD

NUNAVUT IMALIRIYIN KATIMAYINGI

OFFICE DES EAUX DU NUNAVUT

**GENERAL WATER LICENCE APPLICATION  
(APPLICATION FOR NEW WATER LICENCE)**

The applicant is referred to the NWB's Guide 4: Guide to Completing and Submitting a Water Licence Application for a New Licence for more information about this application form.

LICENCE NO: (for NWB use only)	
<b>1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION</b> (name, address)  Dr John Smol Department of Biology Queen's University Kingston, ON K7L 3N6, Canada  Phone: ____ 613 _533 6147____ Fax: ____ 613 _533 6617____ e-mail: ____ smolj@queensu.ca____	<b>2. APPLICANT REPRESENTATIVE CONTACT INFORMATION</b> if different from Block 1 (name, address)  Dr Marianne Douglas Earth and Atmospheric Sciences 1-26 Earth Sciences Building Edmonton, Alberta T6G 2E3, Canada  Phone: ____ 780 492 0055____ Fax: ____ 780 492 1153____ e-mail: ____ msdougla@ualberta.ca____ (Attach authorization letter.)
<b>3. NAME OF PROJECT</b> (including the name of the project location) Water Quality and Environmental Change at Cape Herschel and Related Regions (Limnology and Paleoecology of Lake and Ponds)	
<b>4. LOCATION OF UNDERTAKING</b>  <b>Project Extents</b>  NW: Latitude: (79° 15' N) Longitude: (78° 30' W) NE: Latitude: (79° 15' N) Longitude: (74° 05' W) SE: Latitude: (78° 30' N) Longitude: (74° 05' W) SW: Latitude: (78° 30' N) Longitude: (78° 30' W)  And close to the PCSP base in Resolute Bay (74°43N 94°58'W)  <b>Camp Location(s)</b>  Latitude: ( 78° 37 ' N) Longitude: (74 ° 42'W)	
<b>5. MAP</b> - Attach a topographical map, indicating the main components of the undertaking.  NTS Map Sheet No.: ____039F11____ Map Name: Ekblaw Glacier Map Scale: 1:250,000	

6. **NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

**Sub-surface**

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

**Surface**

☐ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

☐ Commissioner's Land Use Authorization  
Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

✓ Other: Nunavut Research Licence --- water sampling  
Date (expected date) of issuance: July 2009 Date of expiry: July 2011

Name of entity(s) holding authorizations:

John Smol

7. **NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION**

Indicate the land use planning area in which the project is located.

- |                                       |   |
|---------------------------------------|---|
| ✓ North Baffin                        | <input type="checkbox"/> Keewatin       |
| <input type="checkbox"/> South Baffin | <input type="checkbox"/> Sanikiluaq     |
| <input type="checkbox"/> Akunnig      | <input type="checkbox"/> West Kitikmeot |

Is a land use plan conformity determination required?

- ☐ Yes                      ✓ No

If Yes, indicate date issued and attach copy \_\_\_\_\_

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required. In Progress, need to hear back from NWB before we can ask NPC for a letter.

**8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION**

Is an Article 12 Part 4 screening determination required?

☐ Yes

☒ No

If Yes, indicate date issued and attach copy \_\_\_\_\_

If No, provide written confirmation from NIRB confirming that a screening determination is not required. [See Attached](#)

**9. DESCRIPTION OF UNDERTAKING** – List and attach plans and drawings or project proposal.

[This undertaking includes setting up a remote field camp for up to six people while they sample local ponds for environmental monitoring purposes. The aquatic sampling collects about 2L of water from each site. We aim to sample between 30 to 40 sites.](#)

**10. OPTIONS** – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

[There are no alternative methods or locations. We have been monitoring this site since the 1980s.](#)

**11. CLASSIFICATION OF PRIMARY UNDERTAKING** - Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial

☐ Agricultural

☐ Mining and Milling (includes exploration/drilling/exploration camps)

☐ Conservation

☐ Municipal (includes camps/lodges)

☐ Recreational

☐ Power

☒ Miscellaneous (describe below):  
\_\_\_\_\_

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings.

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.

☐ Hydrostatic Testing

☐ Tannery

☒ Tourist / Remote Camp

☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil

☐ Onshore Oil and Gas Exploration Drilling

☐ Mineral Exploration / Remote Camp

☐ Advanced Exploration

☐ Mine Development

☐ Municipal

☐ General Water Works

☐ Power

<b>12.</b>	<p><b>WATER USE</b> - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p><input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes</p> <p><input type="checkbox"/> To obtain water for industrial purposes</p> <p><input type="checkbox"/> To cross a watercourse</p> <p><input type="checkbox"/> To alter the flow of, or store water</p> <p><input checked="" type="checkbox"/> Other: _environmental water monitoring (2 liters from each site are sampled)</p> </div> <div style="width: 50%;"> <p><input type="checkbox"/> To divert a watercourse</p> <p><input type="checkbox"/> To modify the bed or bank of a watercourse</p> <p><input type="checkbox"/> Flood control</p> </div> </div>
<b>13.</b>	<p><b>QUANTITY AND QUALITY OF WATER INVOLVED</b> - For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.</p> <p>Name of water source(s) (show location(s) on map):  <u>For Camp useage: water is obtained from nearby ponds and snowbanks (meltwater); Location of camp is indicated on map.</u></p> <p>Describe the quality of the water source(s) and the available capacity: _____  <u>_The water is stagnant pond water, which we boil before consuming. Available capacity is ample for 6 persons. There are well over 40 different ponds in area and snowbanks for meltwater.</u></p> <p>Provide the overall estimated quantity of water to be used: <u>&lt;2</u> m<sup>3</sup>/day</p> <p>Provide the estimated quantity(s) of water to be used from each source:  <u>Water will come local ponds for camp purposes. From each site that we sample, we will take ca. 2L.</u></p> <p>Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)  <u>cooking and cleaning purposes</u></p> <p>Describe the method of extraction(s): <u>scooped with a bucket</u></p> <p>Estimated quantity(s) of water returned to source(s) <u>none</u> m<sup>3</sup>/day</p> <p>Describe the quality of water(s) returned to source(s): <u>Not Applicable</u></p>
<b>14.</b>	<p><b>WASTE</b> – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p><input checked="" type="checkbox"/> Sewage</p> <p><input type="checkbox"/> Solid Waste</p> <p><input type="checkbox"/> Hazardous</p> <p><input type="checkbox"/> Bulky Items/Scrap Metal</p> <p><input type="checkbox"/> Animal Waste</p> <p><input type="checkbox"/> Other (describe): _____</p> </div> <div style="width: 50%;"> <p><input type="checkbox"/> Waste oil</p> <p><input checked="" type="checkbox"/> Greywater</p> <p><input type="checkbox"/> Sludges</p> <p><input type="checkbox"/> Contaminated soil and/or water</p> </div> </div>

- 15. QUANTITY AND QUALITY OF WASTE INVOLVED** – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Sewage (solid)	Human faeces	0.000 12 cubic meter/day	bagged, burned	Ash buried or brought back to PCSP base camp.
Grey water	Cooking and cleaning water	0.112 5 cubic meter/day	sieve	Scattered on tundra, away from any water body

- 16. OTHER AUTHORIZATIONS** – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following:

Authorization: Scientific Research Licence

Administering Agency: Nunavut Research Institute

Project Activity: Water sampling – environmental monitoring

Date (expected date) of issuance: July 2009 Date of expiry: July 2011

- 17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES** - Describe direct, indirect, and cumulative impacts related to water and waste.

We collect approximately 2L of water from each water body that we sample. This has no negative environmental impact.

In terms of camp use, we obtain water from nearby ponds and snowbanks (meltwater) for drinking, cooking and cleaning purposes. We do not shower while in camp (yep, it stinks!). Greywater is poured on the tundra, away from any water body. The amounts of water are minimal, see above. Human waste is bagged, burned and then the ash buried, again, away from any waterbody.

- 18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER**

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

Not applicable. This area is Crown land; no people live here.

**19. INUIT WATER RIGHTS**

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

Not applicable.

**20. CONSULTATION** – Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

None have been held. This is a two week camp on Crown Land. No persons reside in the area.

**21. SECURITY INFORMATION**

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut*, Indian and Northern Affairs Canada, 2002.

We remove all garbage with us. No reclamation is needed.

**22. FINANCIAL INFORMATION**

Provide a statement of financial responsibility.

If the applicant is a business entity, provide a list of the officers of the company.

If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

Not applicable

**23. STUDIES UNDERTAKEN TO DATE** - List and attach copies of studies, reports, research, etc.

None undertaken



**24. PROPOSED TIME SCHEDULE** – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction **NOT APPLICABLE**

Proposed Start Date: \_\_\_\_\_ Proposed Completion Date: \_\_\_\_\_  
(month/year) (month/year)

Operation

Proposed Start Date: July 2011 Proposed Completion Date: \_\_\_\_\_  
(month/year) (month/year)

Closure

Proposed Start Date: July 2011 Proposed Completion Date: \_\_\_\_\_  
(month/year) (month/year)

Post - Closure

Proposed Start Date: \_\_\_\_\_ Proposed Completion Date: \_\_\_\_\_  
(month/year) (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Operation

☐ Winter ☐ Spring ☒ Summer ☐ Fall ☐ All season

Closure

☐ Winter ☐ Spring ☒ Summer ☐ Fall ☐ All season

Post - Closure

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

**25. PROPOSED TERM OF LICENCE**

Number of years (maximum of 25 years): one years

Requested Date of Issuance: March 2011 Requested Expiry Date: September 2011  
(month/year) (month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

**26. ANNUAL REPORTING** – If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

We will use the NWB's Standardized Forms to provide a report.

**27. CHECKLIST** – The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

☐ Yes ☒ No If no, date expected \_\_\_\_\_

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Completed General Water Licence Application form.

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

☒ Yes ☐ No If no, date expected \_\_\_\_\_

English Summary of Application.

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Inuktitut and/or Inuinnaqtun Summary of Application.

☒ Yes ☐ No If no, date expected \_\_\_\_\_


Application Fee of \$30.00 CDN (Payee Receiver General for Canada).

☒ Yes ☐ No If no, date expected \_\_\_\_\_

Water Use Fee Deposit of \$30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

☐ Yes ☒ No If no, date expected \_\_\_\_\_

**28. SIGNATURE**

		<b>March 27, 2011</b>	
<b>John Smol</b> Name (Print)	<b>Dr</b> Title (Print)	<b>Signature</b>	<b>Date</b>