

## **Application for Water Licence Renewal**

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P.O. BOX 119 GJOA HAVEN, NUNAVUT XOB 1J0

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## DOCUMENT MANAGEMENT

Original Document Date: April 2010

## **DOCUMENT AMENDMENTS**

|      | Description  | Date      |
|------|--|-----------|
| (1)  | Updated for public distribution as separate document from NWB Guide 7      | June 2010 |
| (2)  | Updated NWB logos and reformatted table to allow rows to break across page | May 2011  |
| (3)  |  |           |
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## APPLICATION FOR WATER LICENEC RENEWAL

Your application may be classified as a **renewal** only if all operations remain the same as previously licensed and only the term of the licence requires change. If your application contemplates:

- a change to the volume of water authorized for use;
- a new activity related to water use or waste disposal;
- a new component related to water use or waste disposal;
- a change in predicted environmental impacts(s); and/or
- a change to any term or condition of the original licence

your application is **NOT** classified as a renewal but rather an amendment and will require submission of an Application for Water Licence Amendment. Licensees applying for combined renewal / amendment are also referred to the Application for Water Licence Amendment.

The applicant is referred to the NWB's Guide 7: <u>Licensee Requirements Following the Issuance of a Water Licensee</u> for more information about this application form.

| EXISTING LICENCE NO: 3BC-ACS1111  |
|---|
| 1. LICENSEE CONTACT INFORMATION   |
| Is the licensee the same as that referred to on the existing licence?   |
| X Yes No  |
| If No, a licence assignment must be completed and approved by the NWB. A renewal will only be issued in the name of the current licensee in the absence of assignment of the licence. |
| If the licensee is the same, but the <u>name</u> of the licensee has changed, attach a certificate of name change.  |
| Name:   |
| Address:  |
|   |
| Phone: Fax:   |
| Fax:e-mail:   |
|   |

| 2.                       | LICENSEE REPRESENTATIVE   | CONTACT INFORMATION – If different from Block 1.  |
|--------------------------|---|---|
| Name                     | e: Benoit Beauchamp   |   |
| Addre                    | ess:  |   |
| Univ                     | ertment of Geoscience<br>ersity of Calgary<br>ary, AB<br>1N4  |   |
| Phon<br>Fax:             | e: <b>403 220-8266</b>  |   |
|                          | il: bbeaucha@ucalgary.ca  |   |
| (Attac                   | ch authorization letter.)   |   |
| 3.                       | NAME OF PROJECT   |   |
| Indicat                  | te the name of the project including  | X Yes  No g the name of the location: and volcanic rocks, NW Ellesmere Island                               |
| 4.                       | LOCATION OF UNDERTAKING   | )   |
| Is the                   | location of the undertaking the sar   | me as that considered in the existing water licence?  |
| Projec                   | et Extents  | ☐ Yes X No  |
| NW:<br>NE:<br>SE:<br>SW: | Latitude: (81°17'14.93"N) Latitude: (81°25'34.77"N) Latitude: (81°22'19.12"N) Latitude: (81°14'13.43"N) | Longitude: (85°58'17.51"W) Longitude: (84°24'30.42"W) Longitude: (84°12'35.99"W) Longitude: (85°45'22.79"W) |
| Camp                     | Location(s)   |   |
| Latitu<br>Latitu         | de: (81°25'4.28"N)<br>de: (81°22'48.88"N)<br>de: (81°18'0.26"N)<br>de: (81°15'34.69"N)                  | Longitude: (84°25'52.74"W) Longitude: (84°38'9.09"W) Longitude: (85°23'59.94"W) Longitude: (85°50'32.46"W)  |
| 5.                       | MAP   |   |
| Are the                  |   | s of the undertaking the same as those considered in the existing   |

|        |  | ☐Yes   | X No   |  |
|--------|--|--|--|--|
| Attach | Attach a topographical map, indicating the main components of the undertaking. |  |  |  |
| Map at | tached   |  |  |  |
|        |  |  |  |  |
| NTS M  | ap Sheet No.: <b>340C</b>  | Map Name: Otto Fiord                         | Map Scale: 1:250,000                           |  |
|        |  |  |  |  |
|        |  |  |  |  |
| 6.     | NATURE OF INTERES  | T IN THE LAND                                |  |  |
| Is the | nature of the interest in t  | he land the same as that co                  | nsidered in the existing water licence?        |  |
|        |  | X Yes  | □No  |  |
|        | any of the following that<br>ce' header must be chec                           |  | sed undertaking (at least one box under the    |  |
|        | Sub-surface  |  |  |  |
|        |  | Nunavut Tunngavik Incorpo<br>f issuance:     | rated (NTI) Date of expiry:                    |  |
|        |  | Indian and Northern Affairs fissuance:       | Canada (INAC) Date of expiry:                  |  |
|        | Surface  |  |  |  |
|        |  |  | Northern Affairs Canada (INAC) Date of expiry: |  |
|        |  | OL) Authorization from Kitiki<br>f issuance: | meot Inuit Association (KIA) Date of expiry:   |  |
|        |  | om Kivalliq Inuit Association fissuance:     | (KivIA) Date of expiry:                        |  |
|        |  | om Qikiqtani Inuit Associatio<br>f issuance: | n (QIA)<br>Date of expiry:                     |  |
|        | Commissioner's Lan Date (expected date) of                                     |  | Date of expiry:                                |  |
|        | X Other<br>Small-scale universi<br>supported by PCSP.                          |  | and (NW Ellesmere Island, Nunavut)             |  |
|        | Date (expected date) of  | f issuance:                                  | Date of expiry:                                |  |

| Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?      |
|---|
| X Yes No  |
| If No, a licence assignment must be completed and approved by the NWB.  |
| Name of entity(s) holding authorizations:   |
| University of Calgary   |
|   |
|   |
| 7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION  |
| Is the undertaking located in the same land use planning area as that considered in the existing licence?           |
| X Yes No  |
| Indicate the land use planning area in which the project is located.  |
| X North Baffin  |
| Akunniq West Kitikmeot  |
| Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence? |
| X Yes   |
| If Yes, indicate date issued and attach copy.   |
| Does the proposed renewal change the original NPC conformity determination or the need to obtain one?               |
| X Yes   |
| If Yes, indicate date issued (or expected) and attach a copy.   |
| Application is currently being processed through our application for a NRI Research License                         |
| If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.     |
| 8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION   |
| Was a screening determination required from NIRB prior to the issuance of the existing water licence?               |
| X Yes X No  |
| If Yes, indicate date issued and attach copy.   |
| Does the proposed renewal change the original NIRB screening determination or the need to obtain one?               |
| X Yes   |

| If Yes, indicate date issued (or expected) and attach a copy. <b>Issued May 21, 2011 (attached copy)</b> If No, provide written confirmation from NIRB confirming that a screening determination is not required. |  |  |
|---|--|--|
| 9. DESCRIPTION OF UNDERTAKING   |  |  |
| Is the description of the undertaking the same as that considered in the existing water licence?  |  |  |
| X Yes No  |  |  |
| Small-scale university research supported by PCSP. Three to five people will set up four tents at four localities on NW Ellesmere, and will spend 4 to 6 days at each locality on average                         |  |  |
| List and attach plans and drawings or project proposal.   |  |  |
| Summary of research proposal is attached to this application  |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
| 10. OPTIONS   |  |  |
| Are the alternative methods and locations that were considered to carry out the project the same as those considered in the existing water licence?   |  |  |
| ☐ Yes ☐ No  |  |  |
| Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.  |  |  |
| There are no alternative methods nor locations  |  |  |
| 11. CLASSIFICATION OF PRIMARY UNDERTAKING   |  |  |
| Is the primary undertaking the same as that considered in the existing water licence?   |  |  |
| X Yes No  |  |  |
| Indicate the primary classification of undertaking by checking one of the following boxes.  |  |  |
| ☐ Industrial ☐ Agricultural ☐ Mining and Milling (includes exploration/drilling/exploration camps) ☐ Conservation ☐   |  |  |
| <ul><li>☐ Municipal (includes camps/lodges)</li><li>☐ Power</li><li>☐ Recreational</li><li>X Miscellaneous (describe below):</li></ul>  |  |  |
| Small-scale university research supported by PCSP. Three to five people will set up four tents at four localities on NW Ellesmere, and will spend 4 to 6 days at each locality on average                         |  |  |
| See Schedule II of the Northwest Territories Waters Regulations for Description of Undertakings.  |  |  |

| 12. WATER USE  |          |
|--|----------|
| Is the type(s) of water use(s) the same as that considered in the existing water licence?  |          |
| X Yes  |          |
| Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.  |          |
| ☐ To obtain water for camp/ municipal purposes ☐ To obtain water for industrial purposes ☐ To cross a watercourse ☐ To alter the flow of, or store water X To obtain water for small fly camps ☐ To obtain water for small fly camps |          |
| 13. QUANTITY OF WATER INVOLVED   |          |
| Is the source of water the same as that considered in the existing licence? X Yes  | □No      |
| Name of water source(s): Water to be used will come from melting snow patches or small unnamed creeks if there is no snow available  |          |
| (show location(s) on map)  |          |
| Is the quality of the water source and its available capacity the same as that considered in the existing  | licence? |
| X Yes  |          |
| Describe the quality of the water source(s) and the available capacity(s):  Quality is excellent as snow is pure / same quality for small creeks which are fed by mel snow patches. Available capacity is unlimited                  | ting     |
| Is the overall estimated quantity of water to be used the same as that considered in the existing licence  | ?        |
| ☐ Yes X No It is less  |          |
| Provide the overall estimated quantity of water to be used: 20 litres/day (equal to .02 m³/day)  |          |
| Are the quantity(s) of water to be used from each source the same as those considered in the existing licence?   |          |

| ☐ Yes X No It is less  |
|--|
| Provide the estimated quantity(s) of water to be used from each source: 20 litres/day (equal to .02 m³/day)  |
| Are the quantity(s) of water to be used for each purpose the same as those considered in the existing licence?   |
| ☐ Yes X No It is less  |
| Provide the estimated quantities to be used for each purpose (camp, drilling, etc.):  10 litres/day for drinking water (0.02 m³/day)  5 litres/day for personal use (0.01 m³/day)  5 litres/day for grey water (0.01 m³/day) |
| Are the method(s) of extraction the same as those considered in the existing licence? X Yes \sum No  |
| Describe the method(s) of extraction:  Scooping water with a plastic container such as a salad bowl or a water bottle  |
| Are the quantity(s) of water returned to source(s) the same as those considered in the existing licence?   |
| X Yes No   |
| Estimated quantity(s) of water returned to source(s):  No water will be returned to the source   |
| Are the quality(s) of water(s) returned to source(s) the same as those considered in the existing licence?   |
| X Yes No   |
| Describe the quality(s) of water(s) returned to source(s):  No water will be returned to the source  |
| 14. WASTE  |
| Are the type(s) of waste(s) to be generated and/ or deposited the same as those considered in the existing licence?  |
| X Yes No   |
| Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.  |
| Sewage Waste oil   X Solid Waste X Greywater   Hazardous Sludges   Bulky Items/Scrap Metal Contaminated soil and/or water   Animal Waste Other (describe):   |

| Are the quantity(s) of                    |  | ASTE INVOLVED   |                             |  |
|---|--|---|-----------------------------|--|
|   | the types of wastes in                 | nvolved the same as   | those considered in t       | he existing licence?   |
|   |  | ☐ Yes X No I  | Less                        |  |
| Are the composition(s                     | s) of the types of was                 | tes involved the same   | e as those considered       | d in the existing licence?   |
|   |  | X Yes   | No                          |  |
| Are the method(s) of licence?             | treatment for the type                 | es of waste involved t  | he same as those cor        | nsidered in the existing   |
|   |  | X Yes 🗌 N   | 10                          |  |
| Are the method(s) of icence?              | disposal for the types                 | of waste involved th  | e same as those cons        | sidered in the existing  |
|   |  | X Yes 🗌 N   | No                          |  |
| For each type of wast reatment and method |  | 4, describe its compo   | osition, quantity in cub    | pic meters/day, method   |
| Type of Waste                             | Composition                            | Quantity<br>Generated   | Treatment<br>Method         | Disposal<br>Method   |
| Grey water                                | Water left<br>after washing<br>dishes  | Less than 0.005 cubic metre (less than 5 litres) per day of grey water will be produced |                             | Grey water to be disposed in small dug out pits; pits to be backfilled after usage |
| Human waste                               | Solid and liquid by- products of human | About 3 kg<br>per day   | Burned as much as possible. | Unburned material packed and shipped to  |
|   | digestion                              |   |                             | Resolute for dispposal.  |

| A Research License has been applied for this research activity  |
|---|
| Administering Agency: Nunavut Research Institute (NRI) Polar Continental Shelf Program (PCSP)   |
| Project Activity:  Geoscientific research in support of graduate students projects at the university  |
| Date (expected date) of issuance: June 12 2013 Date of expiry: August 06 2013   |
| 17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES   |
| Are predicted environmental impacts of the undertaking and proposed mitigation measures the same as those considered in the existing water licence?   |
| X Yes No  |
| Describe direct, indirect, and cumulative impacts related to water and waste.   |
| Ours is a very small PCSP-supported operation which will leave no environmental impact. The grounds will be returned to their original pristine conditions with no visual or hidden impacts.  |
| 18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS  |
| Are the effects of the undertaking on any known persons or property including those that hold licences for water use in precedence 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, the same as those considered in the existing water licence?               |
| X Yes   |
| 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. |
| There are no other known users of that water on NW Ellesmere Island   |
| Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.   |
| 19. INUIT WATER RIGHTS  |
| Are the effects of the undertaking on the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL) the same as those considered in the existing water licence?  |
| X Yes  No   |
| 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).   |

|                                | oplicable. This work is to be done on Crown Land and nothing we will do can affect the quality, ty or flow of waters flowing through IOL.  |
|--------------------------------|--|
| 20.                            | <b>CONSULTATION</b> - 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.  |
| 21.                            | SECURITY INFORMATION   |
| Is the                         | financial security assessment the same as that considered in the existing water licence?   |
|                                | ☐ Yes ☐ No   |
|                                | estimate of the total financial security for final reclamation the same as that considered in the existing water   |
| licenc                         | e?<br>Yes No   |
| liability<br>Estima<br>third p | le an estimate of the total financial security for final reclamation equal to the total outstanding reclamation of for land and water combined sufficient to cover the highest liability over the life of the undertaking. The ates of reclamation costs must be based on the cost of having the necessary reclamation work done by a party contractor if the operator defaults. The estimate must also include contingency factors appropriate to rticular work to be undertaken. |
| respec                         | e applicable, the financial security assessment should be prepared in a manner consistent with the principals cting mine site reclamation and implementation found in the <i>Mine Site Reclamation Policy for Nunavut</i> , and Northern Affairs Canada, 2002.   |
| 22.                            | FINANCIAL INFORMATION  |
| Is the                         | statement of financial security the same as that considered in the existing water licence?   |
|                                | X Yes No   |
| Provid                         | le an updated statement of financial security.   |
| All me<br>Calgar               | mbers of the research team are part of the Department of Geoscience at the University of Calgary,<br>y, AB   |
| If the a                       | applicant is a business entity please answer the questions below:  |
| Is the                         | list of the officers of the company the same as those considered in the existing water licence?  |
|                                | ☐ Yes ☐ No   |
| Provid                         | le a list of the officers of the company.  |
|                                |  |
|                                |  |
|                                |  |
|                                |  |

| Is the Certificate of Incorporation or evidence of registration of the company name the same?  |
|--|
| Yes No   |
| Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.   |
| 23. STUDIES UNDERTAKEN TO DATE   |
| List and attach updated studies, reports, research etc.  |
| This is a new research project conducted by graduate students. We do not have publications yet.  |
| Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report.                   |
| If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach plans/reports for consideration. Application will not be processed if significant issues of non-compliance exist. |
| 24. PROPOSED TIME SCHEDULE   |
| Is the time schedule for all phases of development (construction, operations, closure and post closure) the same as that considered in the existing licence?   |
| Yes X No Just minor date changes   |
| Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).  |
| Construction Proposed Start Date: Proposed Completion Date: (month/year) (month/year)  |
| Operation Proposed Start Date: June 15 2015 Proposed Completion Date: August 01 2013   |
| <u>Closure</u>   |
| Proposed Start Date: 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 X Summer Fall All season  |
| <u>Closure</u><br>☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season   |
| Post - Closure   |

| ☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season  |  |  |  |  |
|---|--|--|--|--|
| 25. PROPOSED TERM OF LICENCE  |  |  |  |  |
| On what date does the existing licence expire? August 2011  |  |  |  |  |
| Indicate the proposed term of the renewal (maximum of 25 years): 5 years  |  |  |  |  |
| Requested date of renewal issuance: <b>June 12 2013</b> Requested Expiry Date: <b>August 10 2018</b> (month/year) (month/year)  |  |  |  |  |
| (The requested date of renewal issuance must be <u>at least</u> three (3) months from the date of application for a type B water licence and <u>at least</u> 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 <i>Guide 5: Processing Water Licence Applications</i> for more information) |  |  |  |  |
| 26. ANNUAL REPORTING  |  |  |  |  |
| Is the annual report template expected to be the same as that considered in the existing licence?   |  |  |  |  |
| X Yes No  |  |  |  |  |
| If not using the NWB's <u>Standardized Form for Annual Reporting</u> , provide details regarding the content of annual reports and a proposed outline or template of the annual report.   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
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|   |  |  |  |  |

| 27.     | CHECKLIST   |   |  |  |  |
|---------|---|---|--|--|--|
| The fo  | llowing must be inclu   | owing must be included with the application for renewal for the water licensing process to begin. |  |  |  |
|         | Completed Application for Water Licence Renewal form.   |   |  |  |  |
|         | X Yes   | □No   | If no, date expected                       |  |  |
|         | Updated plans, including designs and reports (see Block 23).  |   |  |  |  |
|         | X Yes Map   | □No   | If no, date expected                       |  |  |
|         | Updated security assessment (see Block 21).   |   |  |  |  |
|         | ☐Yes  | □No   | If no, date expected                       |  |  |
|         | Updated financial statement (see Block 22).   |   |  |  |  |
|         | ☐Yes  | □No   | If no, date expected                       |  |  |
|         | Compliance Assessment / Status Report (see Block 23).   |   |  |  |  |
|         | ☐Yes  | □No   | If no, date expected                       |  |  |
|         | English Summary of Renewal Application.   |   |  |  |  |
|         | X Yes   | □No   | If no, date expected                       |  |  |
|         | Inuktitut and/or Inuinnaqtun Summary of Renewal Application.  |   |  |  |  |
|         | X Yes   | ( Yes   |  |  |  |
|         | Application fee of \$30.00 CDN (Payee Receiver General for Canada).   |   |  |  |  |
|         | ☐Yes  | X No  | Will call NWB with credit card information |  |  |
|         | 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   | X No  | Will call NWB with credit card information |  |  |
| certify | Renoit Beauchamp, Professor  Certify that the application requires no changes to water use or waste disposal as previously authorized and that the information given on this form is, to the best of my knowledge, correct and complete.                      |   |  |  |  |
|         |   |   |  |  |  |

3 Sean 8

March 27 2013

Signature Date