



Application for Water License Renewal

ADM 2010

Nunavut Water  
Board  
OCT 21 2010  
Public Registry

P.O. BOX 119  
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OFFICE DES EAUX DU NUNAVUT

## **DOCUMENT MANAGEMENT**

Original Document Date: April 2010

### **DOCUMENT AMENDMENTS**

	<b>Description</b>	<b>Date</b>
(1)		
(2)		
(3)		
(4)		
(5)		
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### APPLICATION FOR WATER LICENCE 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 water source;
- 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: Licensee Requirements Following the Issuance of a Water Licence for more information about this application form.

#### EXISTING LICENCE NO: 3BC-EUR0611- TYPE "B"

#### 1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

Yes  No

#### The licensee remains Environment Canada

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 name of the licensee has changed, attach a certificate of name change.

Name:

Address:

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

e-mail: \_\_\_\_\_

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**2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.**

Name: Carl Carroll

Address: 335 River Road, Ottawa, Ontario, K1V 1C7

Phone: (613) 990-8376

Fax: (613) 949-9017

e-mail: carl.carroll@ec.gc.ca

(Attach authorization letter.) N/A. The individual listed as the licensee Representative for contact information on the previous license renewal, Stan Poznanski, is no longer applicable. Carl Carroll is an employee of Environment Canada who is now designated as the Licensee Representative for contact information.

**3. NAME OF PROJECT**

Is the name of the project the same as that considered in the existing water licence?

Yes  No

Indicate the name of the project including the name of the location: Environment Canada – Eureka High Arctic Weather Station – Renewal – Type "B"

**4. LOCATION OF UNDERTAKING**

Is the location of the undertaking the same as that considered in the existing water licence?

Yes  No

**Project Extents**

NW: Latitude: ( ° ' " N)

NE: Latitude: ( ° ' " N)

SE: Latitude: ( ° ' " N)

SW: Latitude: ( ° ' " N)

Longitude: ( ° ' " W)

**Camp Location(s)**

Latitude: (79° 59'41" N)

Longitude: (85° 48' 48" W)

**5. MAP**

Are the locations of the main components of the undertaking the same as those considered in the existing licence?

Yes  No

Attach a topographical map, indicating the main components of the undertaking.

NTS Map Sheet No.: See Appendix B Map Name: See Appendix B Map Scale: See Appendix B

**6. NATURE OF INTEREST IN THE LAND**

Is the nature of the interest in the land the same as that considered in the existing water licence?

Yes  No

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 \_\_\_\_\_

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

Yes  No

If No, a licence assignment must be completed and approved by the NWB.  
Name of entity(s) holding authorizations: Environment Canada

## 7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Is the undertaking located in the same land use planning area as that considered in the existing licence?

Yes  No

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

North Baffin  
 South Baffin  
 Akunniq

Keewatin  
 Sanikiluaq  
 West Kitikmeot

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

Yes  No

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

Does the proposed renewal change the original NPC conformity determination or the need to obtain one?

Yes  No

If Yes, indicate date issued (or expected) and attach a copy. \_\_\_\_\_

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?

Yes  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?

Yes  No

If Yes, indicate date issued (or expected) and attach a copy. \_\_\_\_\_

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?

Yes  No

The undertaking is to continue to replenish the fresh water reservoir located at the Eureka HAWS via pumping of water directly from Station Creek into the Water Lagoon, to continue to dispose of treated sewage lagoon effluent into Slidre Fiord annually by a decanting process of the sewage lagoon, the disposal of waste and handling or storage of petroleum products or hazardous materials for an undertaking classified as a "Municipal undertaking".

Please refer to Appendix C for details concerning the Summary of Operations and Maintenance Procedures for Drinking Water, Sewage, Solid Waste Disposal and Waste Treatment Facilities for the Eureka HAWS facility. The Updates to these procedures will follow within 60 to 90 days following 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

The alternative method is to pump water from Station Creek rather than diverting water from Station Creek as stated in the previously approved license.

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**11. CLASSIFICATION OF PRIMARY UNDERTAKING**

Is the primary undertaking the same as that considered in the existing water licence?

Yes  No

Indicate the primary classification of undertaking by checking one of the following boxes.

<input type="checkbox"/> Industrial	<input type="checkbox"/> Agricultural
<input type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps)	
<input type="checkbox"/> Conservation	
<input type="checkbox"/> Municipal (includes camps/lodges)	<input type="checkbox"/> Recreational
<input type="checkbox"/> Power	<input checked="" type="checkbox"/> Miscellaneous (describe below): <u>High Arctic Weather Station</u>

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

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**12. WATER USE**

Is the type(s) of water use(s) the same as that considered in the existing water licence?

Yes  No

Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

<input type="checkbox"/> To obtain water for camp/ municipal purposes	<input type="checkbox"/> To divert a watercourse
<input type="checkbox"/> To obtain water for industrial purposes	<input type="checkbox"/> To modify the bed or bank of a watercourse
<input type="checkbox"/> To cross a watercourse	<input type="checkbox"/> Flood control
<input checked="" type="checkbox"/> To alter the flow of, or store water	
<input type="checkbox"/> Other: _____	

**13. QUANTITY OF WATER INVOLVED**

Is the source of water the same as that considered in the existing licence?

Yes  No

Name of water source(s): Station Creek (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?

Yes  No

Describe the quality of the water source(s) and the available capacity(s): The quality of the water source is good and meets and/or exceeds the Canadian Drinking Water Quality Guidelines (CDWG) as indicated by the copy of the recent water test results for drinking water which is attached to this application in Appendix D. The one criteria that is above CDWG Aesthetic Objective (AO) is the level of Total Dissolved Solids (TDS) for the tap location chosen. This may be due to not letting the tap water run sufficiently before taking a sample. This location will be retested for TDS to confirm accurate readings. Station Creek has historically been able to provide adequate supply in order to pump out up to a maximum yearly requirement of approximately 10,000m<sup>3</sup> of water in order to replenish the water lagoon. This yearly amount needed depends on the fluctuating yearly population density in Eureka.

Is the overall estimated quantity of water to be used the same as that considered in the existing licence?

Yes  No

Provide the overall estimated quantity of water to be used:

Approximately an average of 5850-8775 m<sup>3</sup> of water is diverted annually to the water lagoon as stated in the previous approved license application of 2006.

Are the quantity(s) of water to be used from each source the same as those considered in the existing licence?  Yes  No

Provide the estimated quantity(s) of water to be used from each source:

There is only one source, that being Station Creek and approximately 5850-8775 m<sup>3</sup> of water, on average, is pumped annually to the water lagoon.

Are the quantity(s) of water to be used for each purpose the same as those considered in the existing licence?

Yes  No

Provide the estimated quantities to be used for each purpose (camp, drilling, etc.):

The estimated quantities to be used as stated above as being approximately 5850-8775 m<sup>3</sup> per year is for all purposes at the Weather Station.

Are the method(s) of extraction the same as those considered in the existing licence?

Yes  No

Describe the method(s) of extraction:

The water is pumped from the Station Creek into that of the Water Lagoon using a submersible pump, in order to reduce the transfer of silt, from the creek to the Lagoon. The water is then transferred from the Water Lagoon to holding tanks within the Eureka complex building and is then chlorinated. The potable water is then further treated by filtration and Reverse Osmosis and distributed accordingly.

Are the quantity(s) of water returned to source(s) the same as those considered in the existing licence?

Yes  No

Estimated quantity(s) of water returned to source(s): N/A, water is not returned to the source, Station Creek.

Are the quality(s) of water(s) returned to source(s) the same as those considered in the existing licence?

Yes  No

Describe the quality(s) of water(s) returned to source(s): N/A as water is not returned to the source, Station Creek.

**14. WASTE**

Are the type(s) of waste(s) to be generated and/ or deposited the same as those considered in the existing licence?

Yes  No

Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

<input checked="" type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Waste oil
<input checked="" type="checkbox"/> Solid Waste	<input checked="" type="checkbox"/> Greywater
<input checked="" type="checkbox"/> Hazardous	<input type="checkbox"/> Sludges
<input checked="" type="checkbox"/> Bulky Items/Scrap Metal	<input type="checkbox"/> Contaminated soil and/or water
<input type="checkbox"/> Animal Waste	
<input type="checkbox"/> Other (describe): _____	

## 15. QUANTITY AND QUALITY OF WASTE INVOLVED

Are the quantity(s) of the types of wastes involved the same as those considered in the existing licence?

Yes  No

Are the composition(s) of the types of wastes involved the same as those considered in the existing licence?

Yes  No

Are the method(s) of treatment for the types of waste involved the same as those considered in the existing licence?

Yes  No

Are the method(s) of disposal for the types of waste involved the same as those considered in the existing licence?

Yes  No

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
Grey water & sewage	See Appendix D for water sampling data	Approximately 3000 m <sup>3</sup> /year	Sewage lagoon sedimentation	Decant into Slidre Fjord once per year
Solid wastes	Household Food/organic matter	3 bags per day for incineration totaling approx. 24 205 litre barrels/year of ash	incineration	Ash is deposited in landfill & capped.
Solid wastes	Scrap metal, barrels & bulk garbage	Varies per year pending operations	Crushed and buried	Buried & capped at Landfill
Hazardous Waste	Old lead/Zinc batteries, solvent, & glycol	Varies per year pending operations	Temporary on site storage	Shipped off site.
Waste oil	Used motor oil	Varies per year pending operations	Filtered for particulates	Reused as an alternative heating fuel or shipped off site

#### 16. OTHER AUTHORIZATIONS

In addition to the sub-surface and surface land use authorizations provided in Block 6, are the same authorizations required as considered in the existing licence?

Yes  No

For each provide the following: N/A

Authorization: \_\_\_\_\_

Administering Agency: \_\_\_\_\_

Project Activity: \_\_\_\_\_

Date (expected date) of issuance: \_\_\_\_\_ Date of expiry: \_\_\_\_\_

#### 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?

Yes  No

No environmental impacts of undertaking as indicated in the previously approved license application.

#### 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?

Yes  No

There are no affects of the undertaking on any known persons or property as indicated in the previously approved license application.

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?

Yes  No

There are no affects of the undertaking on the quality, quantity or flow of waters through Inuit Owned Land as indicated in the previously approved license application.

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.  
**(N/A)**

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**21. SECURITY INFORMATION**

Is the financial security assessment the same as that considered in the existing water licence? **N/A**

Yes  No

Is the estimate of the total financial security for final reclamation the same as that considered in the existing water licence? **N/A**

Yes  No

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.

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**22. FINANCIAL INFORMATION**

Is the statement of financial security the same as that considered in the existing water licence? **N/A**

Yes  No

Provide an updated statement of financial security.

If the 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? **N/A**

Yes  No

Provide a list of the officers of the company.

Is the Certificate of Incorporation or evidence of registration of the company name the same? **N/A**

Yes  No

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

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## 23. STUDIES UNDERTAKEN TO DATE

The following list of updated studies, reports, research etc are large documents that cannot be attached to this application and will therefore be sent by hard copy CD via Canada Post as a supplement to this application:

- Golder Associates Eureka Investigation of Waste Water Treatment Options
- Stantec Eureka Fuel Storage Product Transfer Areas Analysis Report
- EBA Eureka HAWS Geophysical Investigation
- Franz Environmental Phase IIIA Environmental Site Assessment

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.

-N/A. The NWB has been forwarded the recent inspector's reports from 2008 and 2009 as well as the response to the 2008 report concerning compliance issues. The 2009 report on file with the NWB does not indicate areas requiring response or compliance from Environment Canada. The Annual Plans Submission and Reports letter of September 13<sup>th</sup> has been reviewed and corrective actions will be addressed immediately. The request to submit the 2008 EBA Eureka HAWS Geophysical Report has been addressed by attaching this report to the hard copy CD within this application, along with a letter describing the recommendations, a summary of actions taken, along with a proposed schedule of remaining issues to be addressed.

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.

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#### 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  No

Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction

Proposed Start Date: Construction in place Proposed Completion Date: Construction in place  
(month/year) (month/year)

Operation

Proposed Start Date: Currently in Operation Proposed Completion Date: None – Year round operation  
(month/year) (month/year)

Closure

Proposed Start Date: Unknown Proposed Completion Date: Unknown  
(month/year) (month/year)

Post - Closure

Proposed Start Date: Unknown Proposed Completion Date: Unknown  
(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 Unknown  
N/A

Post - Closure

Winter  Spring  Summer  Fall  All season Unknown  
N/A

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#### 25. PROPOSED TERM OF LICENCE

On what date does the existing licence expire? January,30 2011

Indicate the proposed term of the renewal (maximum of 25 years): 10 years

Requested date of renewal issuance: January 30, 2011 Requested Expiry Date: January 30, 2021  
(month/year) (month/year)

(The requested date of renewal 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)

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## 26. ANNUAL REPORTING

Is the annual report template expected to be the same as that considered in the existing licence?

Yes  No

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.

## 27. CHECKLIST

The following must be included with the application for renewal for the water licensing process to begin.

Completed Application for Water Licence Renewal form.

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

Updated plans, including designs and reports (see Block 23).

Yes  No If no, date expected Included on accompanying CD

Updated security assessment (see Block 21).

Yes  No If no, date expected N/A \_\_\_\_\_

Updated financial statement (see Block 22).

Yes  No If no, date expected N/A \_\_\_\_\_

Compliance Assessment / Status Report (see Block 23).

Yes  No If no, date expected N/A \_\_\_\_\_

English Summary of Renewal Application.

Yes  No If no, date expected SEE APPENDIX A

Inuktitut and/or Inuinnaqtun Summary of Renewal Application.

Yes  No If no, date expected SEE APPENDIX A

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

Yes  No If no, date expected N/A for Environment Canada

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 N/A for Environment Canada

28. SIGNATURE

I, CARL CARROLL (print name)

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.

CC  
Signature

OCTOBER 8 /2010  
Date