

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

Document Date: April 2013

Application Submission Date:

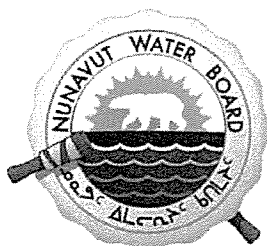
06/01/2018  
Month/Day/Year

## DOCUMENT MANAGEMENT

Original Document Date: April 2010

### DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 4	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)	Update NWB logo	April 2013
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
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NUNAVUT WATER BOARD

NUNAVUT IMALIRIYIN KATIMAYIT

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)  Phone: (867)-979-6465 Fax: (867)-979-6069 e-mail: info@towerarctic.ca	<b>2. APPLICANT REPRESENTATIVE CONTACT INFORMATION</b> if different from Block 1 (name, address)  Phone: _____ Fax: _____ e-mail: _____ (Attach authorization letter.)
<b>3. NAME OF PROJECT</b> (including the name of the project location)  Nunavut Marine Infrastructure Project (Pond Inlet)	
<b>4. LOCATION OF UNDERTAKING</b>  <b>Project Extents</b>  NW: Latitude: ( ° ' " N) Longitude: ( ° ' " W) 72°42'02.7"N 77°59'27.6"W NE: Latitude: ( ° ' " N) Longitude: ( ° ' " W) 72°42'08.3"N 77°52'12.0"W SE: Latitude: ( ° ' " N) Longitude: ( ° ' " W) 72°40'53.9"N 77°52'12.0"W SW: Latitude: ( ° ' " N) Longitude: ( ° ' " W) 72°40'54.7"N 77°59'58.0"W  <b>Camp Location(s)</b>  Latitude: ( ° ' " N) Longitude: ( ° ' " W) 72°41'40.9"N 77°58'55.3"W	
<b>5. MAP</b> - Attach a topographical map, indicating the main components of the undertaking.  (NOTE: A plan of the projected hauling road is available at ANNEX 1)  NTS Map Sheet No.: _____ Map Name: _____ Map Scale: _____	

- 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: \_\_\_\_\_

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

Name of entity(s) holding authorizations: \_\_\_\_\_

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

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

☒ North Baffin

☐ South Baffin

☐ Akunnig

☐ Keewatin

☐ Sanikiluaq

☐ 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.

(See the NIRB documents in Annex 2)

<b>8.</b>	<p><b>NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION</b></p> <p>Is an Article 12 Part 4 screening determination required?</p> <p> <input type="checkbox"/> Yes             <input checked="" type="checkbox"/> No           </p> <p>If Yes, indicate date issued and attach copy <u>26/06/2017 &amp; 02/10/2017</u></p> <p>If No, provide written confirmation from NIRB confirming that a screening determination is not required.</p>																					
<b>9.</b>	<p><b>DESCRIPTION OF UNDERTAKING</b> – List and attach plans and drawings or project proposal.</p> <p style="text-align: center;">(See Annex 3)</p>																					
<b>10.</b>	<p><b>OPTIONS</b> – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.</p> <p>The final road alignment takes place in the suggested haul road alignment pocket.</p>																					
<b>11.</b>	<p><b>CLASSIFICATION OF PRIMARY UNDERTAKING</b> - Indicate the primary classification of undertaking by checking one of the following boxes.</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Industrial</td> <td><input type="checkbox"/> Agricultural</td> </tr> <tr> <td><input type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Conservation</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Municipal (includes camps/lodges)</td> <td><input type="checkbox"/> Recreational</td> </tr> <tr> <td><input type="checkbox"/> Power</td> <td><input checked="" type="checkbox"/> Miscellaneous (describe below):</td> </tr> </table> <p style="text-align: center;">(Construction Works)</p> <hr/> <p>See Schedule II of <i>Northwest Territories Waters Regulations</i> for Description of Undertakings.</p> <p>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.</p> <table style="width: 100%; border: none;"> <tr><td><input type="checkbox"/> Hydrostatic Testing</td></tr> <tr><td><input type="checkbox"/> Tannery</td></tr> <tr><td><input type="checkbox"/> Tourist / Remote Camp</td></tr> <tr><td><input type="checkbox"/> Landfarm &amp; On-Site Storage of Hydrocarbon Contaminated Soil</td></tr> <tr><td><input type="checkbox"/> Onshore Oil and Gas Exploration Drilling</td></tr> <tr><td><input type="checkbox"/> Mineral Exploration / Remote Camp</td></tr> <tr><td><input type="checkbox"/> Advanced Exploration</td></tr> <tr><td><input type="checkbox"/> Mine Development</td></tr> <tr><td><input type="checkbox"/> Municipal</td></tr> <tr><td><input checked="" type="checkbox"/> General Water Works</td></tr> <tr><td><input type="checkbox"/> Power</td></tr> </table>	<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):	<input type="checkbox"/> Hydrostatic Testing	<input type="checkbox"/> Tannery	<input type="checkbox"/> Tourist / Remote Camp	<input type="checkbox"/> Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil	<input type="checkbox"/> Onshore Oil and Gas Exploration Drilling	<input type="checkbox"/> Mineral Exploration / Remote Camp	<input type="checkbox"/> Advanced Exploration	<input type="checkbox"/> Mine Development	<input type="checkbox"/> Municipal	<input checked="" type="checkbox"/> General Water Works	<input type="checkbox"/> Power
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<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> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> To obtain water for camp/ municipal purposes</td> <td><input type="checkbox"/> To divert a watercourse</td> </tr> <tr> <td><input type="checkbox"/> To obtain water for industrial purposes</td> <td><input type="checkbox"/> To modify the bed or bank of a watercourse</td> </tr> <tr> <td><input checked="" type="checkbox"/> To cross a watercourse</td> <td><input type="checkbox"/> Flood control</td> </tr> <tr> <td><input type="checkbox"/> To alter the flow of, or store water</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other: _____</td> <td></td> </tr> </table>	<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 checked="" type="checkbox"/> To cross a watercourse	<input type="checkbox"/> Flood control	<input type="checkbox"/> To alter the flow of, or store water		<input type="checkbox"/> Other: _____												
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<input type="checkbox"/> Other: _____																						

- 13. QUANTITY AND QUALITY OF WATER INVOLVED** - 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.

Name of water source(s) (show location(s) on map):

All rivers aren't identified due to their sizes (small rivers)

Describe the quality of the water source(s) and the available capacity: N/A

Provide the overall estimated quantity of water to be used: 0 m<sup>3</sup>/day

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

0

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

0

Describe the method of extraction(s): N/A

Estimated quantity(s) of water returned to source(s) 100 % m<sup>3</sup>/day

Describe the quality of water(s) returned to source(s): (untouched)

- 14. WASTE** – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

☐ Sewage

☐ Solid Waste

☐ Hazardous

☐ Bulky Items/Scrap Metal

☐ Animal Waste

☒ Other (describe): (No water waste)

☐ Waste oil

☐ Greywater

☐ Sludges

☐ Contaminated soil and/or water

- 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

<p><b>16.</b></p>	<p><b>OTHER AUTHORIZATIONS</b> – 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:</p> <p>Authorization: _____ N/A</p> <p>Administering Agency: _____ N/A</p> <p>Project Activity: _____ N/A</p> <p>Date (expected date) of issuance: _____ N/A      Date of expiry: _____ N/A</p>
<p><b>17.</b></p>	<p><b>PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES</b> - Describe direct, indirect, and cumulative impacts related to water and waste.</p> <p style="text-align: center;">(No impacts expected)</p>
<p><b>18.</b></p>	<p><b>WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER</b></p> <p>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.</p> <p>Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.</p>
<p><b>19.</b></p>	<p><b>INUIT WATER RIGHTS</b></p> <p>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).</p>
<p><b>20.</b></p>	<p><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.</p> <p style="text-align: center;">(A consultation meeting is planned with the locals and Government of Nunavut on 13/06/2018.)</p>
<p><b>21.</b></p>	<p><b>SECURITY INFORMATION</b></p> <p>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. <u>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.</u> The estimate must also include contingency factors appropriate to the particular work to be undertaken.</p> <p>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 <i>Mine Site Reclamation Policy for Nunavut</i>, Indian and Northern Affairs Canada, 2002.</p>

**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.

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

(NIRB reports available in Annex 2)

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

Construction

Proposed Start Date: (28/07/2018) Proposed Completion Date: (21/08/2018)  
(month/year) (month/year)

Operation

Proposed Start Date: N/A Proposed Completion Date: N/A  
(month/year) (month/year)

Closure

Proposed Start Date: N/A Proposed Completion Date: N/A  
(month/year) (month/year)

Post - Closure

Proposed Start Date: N/A Proposed Completion Date: N/A  
(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): 3 years

Requested Date of Issuance: (07/2018) Requested Expiry Date: (08/2020)  
(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.

A biologist will be permanently on site to update the content of the annual reports. The template is not currently available but is supposed to be shortly.

**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 \_\_\_\_\_ N/A

English Summary of Application.

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

Inuktitut and/or Inuinnaqtun Summary of Application.

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

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 \_\_\_\_\_ N/A

**28. SIGNATURE**

SIMON-PIER LABERGE  
Name (Print)

PROJECT ENGINEER  
Title (Print)

Simon-Pier Laberge  
Signature

01/06/2018  
Date



P.O. Box 119  
GJOA HAVEN, NU X0B 1J0  
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## NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYINGI

### Supplemental Technical Information Required for Water Crossings (linear/bridge/culverts)

**1. Waterbody name (English and Inuktitut) and location (Lat & Long)**

Construction works are located in the hamlet of Pond Inlet where every watercourse crossings take place. On the **permanent hauling route plan sheet** in Annex 1, the location of every projected culvert is identified. There is a total of 11 (900mm to 1200mm) culverts on the 6 km long road.

**2. Site photo, site map or air photo detailing location**

Annex 1 contains an air photo detailing water crossings.

**3. Other Agencies contacted to date**

N.I.R.B and N.P.C agencies have been contacted.

**4. Need for the project and alternatives considered**

The project consists in building a permanent hauling route between the quarry and the construction site.

**5. General condition of the site (s)**

**i. Slope of banks**

Actual slopes of banks vary from small rock cavities to low sandy slopes (1V:5H).

**ii. Description of substrate**

Substrate may be described as rock or silty sand considered as permafrost.

**iii. Vegetation (on banks, in-stream, to be removed)**

Actually, there's practically no vegetation on the hauling road alignment.

**iv. Expected flow rates during time of construction**

During construction works no flow rates will be modified due to the high diameter of the culverts.

**v. Channel meander pattern**

N/A

**6. Existing Habitat**

**i. Fish Community (species/common names) at and near the site**

According to the N.I.R.B, there is no fish species issues with projected construction works.

**ii. Use of impacted area as spawning, nursery, rearing, food supply or migration route**

N/A

**iii. Presence of sensitive habitat**

N/A

**iv. Assessment of impact to fish and fish habitat**

N/A

**7. Construction Details**

**i. In water work timing restriction for fishery**

N/A

**ii. Proposed start date and completion date**

Construction of the hauling route will last for 25 days between 28/07/2018 and 21/08/2018.

**iii. Type of crossing**

Crossing will be done by culverts installed parallel to the water courses.

**iv. Method of installation**

For every water crossings, a water basin will be created upstream of the culvert. Water will be pumped downstream of the work to prevent from sediment spread in the water course. After the culvert installation, water will be released.

**v. Dimensions of pipe or structure**

900mm to 1200mm diameter galvanized corrugated steel pipes will be used.

**vi. Machinery to be used**

Usual construction machinery (excavator, dump truck, bulldozer, water pump, sheet piles).

- vii. **Construction sequence (timing restriction may need to be taken into account)**
  - 1. Setting up a temporary water basin upstream of the water course
  - 2. Pump installation
  - 3. Culvert bedding preparation
  - 4. Culvert installation
  - 5. Side filling with sand and gravel
  - 6. Road construction on top
- viii. **Sedimentation and erosion control measures**  
No water works and pump utilization to divert the water stream.
- ix. **Monitoring during construction**  
There will be a specialist on site to monitor impacts of construction works.
- x. **Other mitigation measures**  
N/A
- xi. **Assessment of impact to fish and fish habitat**  
N/A
- xii. **Bank stabilization (size range of material)**  
N/A
- xiii. **Cumulative impacts to area**  
No impacts expected
- xiv. **Contingency plan**  
N/A
- xv. **Revegetation proposed**  
N/A
- xvi. **Proposed post-construction monitoring (photos taken of the site before construction, during construction and after construction; photographs should be taken from the same reference point for easy comparison)**  
The specialist will keep an up-to-date record with pictures for every culvert.

#### 8. Bridge (This section is N/A)

- i. Bridge dimensions and type
- ii. Any structures (abutments, pilings, piers) that will be placed in the water, on a temporary or permanent basis
- iii. Anticipated changes to the existing channel/shoreline morphology as a result of the proposed works
- iv. Activities or structures that may cause a temporary or permanent barrier to movement of fish or flow of water
- v. Cofferdams, dewatering, temporary watercourse diversions, excavation and temporary crossings
- vi. Total area of impact (m<sup>2</sup>)
- vii. Stabilization method and materials used at bridge abutments(include details of material size range)

#### 9. Culvert Installation

- i. **Culvert dimensions (height and width or diameter, length)**  
Lengths will vary from 7m to 9m depending on the route width. Diameters will vary from 900mm to 1200mm.
- ii. **Culvert type/material**  
Culverts are made from galvanized corrugated steel pipes.
- iii. **Impact to fisheries ability to migrate through the culvert**  
No impacts expected
- iv. **Need to realign the channel?**  
Every culvert will be placed parallel to the current water course. No realignment needed.
- v. **Open bottom or natural substrate inside?**  
Water will flow through the steel pipe.
- vi. **Slope of culvert**  
The existing slope will be preserved.
- vii. **Installation of baffles, rock weirs or other structures**  
N/A