



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

Document Date: April 2013

Application Submission Date:

December/04/2017

Month/Day/Year

P.O. BOX 119
GJOA HAVEN, NUNAVUT
XOB 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

kNK5wmoEp5vtmpq
NUNAVUT IMALIRIYIN KATIMAYIT
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

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)		
(10)		



P.O. Box 119

GJOA HAVEN, NU X0B 1J0

TEL: (867) 360-6338

FAX: (867) 360-6369

kNK5 wmoEp5 vtmp5

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)	
1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address) Jacob Saunders – Technical Coordinator Inukshuk Construction Ltd 1869 Upper Water St. Suite 202 Halifax, NS B3J 1S9 Phone: 902 429-0272 Fax: 902 429-7762 e-mail: jacob_saunders@inukshukconstruction.ca	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address) Phone: _____ Fax: _____ e-mail: _____ (Attach authorization letter.)
3. NAME OF PROJECT (including the name of the project location) 303 – QEC Iqaluit Bulk Fuel Storage Farm Upgrade	
4. LOCATION OF UNDERTAKING Project Extents NW: Latitude: (63°45'28.0" N) Longitude: (68°30'32.0" W) NE: Latitude: (63°45'28.0" N) Longitude: (68°30'14.0" W) SE: Latitude: (63°45'15.0" N) Longitude: (68°30'14.0" W) SW: Latitude: (63°45'15.0" N) Longitude: (68°30'32.0" W) Camp Location(s) N/A Latitude: (° ' " N) Longitude: (° ' " W)	
5. MAP - Attach a topographical map, indicating the main components of the undertaking. See Attached	

NTS Map Sheet No.: 25-N-15

Map Name: Iqaluit

Map Scale: 1:50 000

- 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: _____

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.

Application Submitted to NPC

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.

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

See Attached – “Project Proposal”

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

N/A

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 License 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

12. WATER USE - 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 divert a watercourse

☐ To cross a watercourse

☐ To modify the bed or bank of a watercourse

☐ To alter the flow of, or store water

☐ Flood control

☐ 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):

Lake near Anuri Rd. Sub-Division, Iqaluit, NU. (see attached map). Two lakes nearby have been identified as standby lakes in case the Anuri Rd. Sub-Division lake does not have sufficient capacity.

Describe the quality of the water source(s) and the available capacity: Source is fresh water, lake area is approximately 3 times that of the containment area. The primary source lake and two standby lakes are present year-round and appear deep on satellite images

Provide the overall estimated quantity of water to be used: **299 m³/day**

Provide the estimated quantity(s) of water to be used from each source: **5,700 m³**

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

All water shall be used for hydrostatic testing.

Describe the method of extraction(s):

Water will be extracted from the Primary Source Lake as shown in Appendix A using a centrifugal pump and hoses. Water will be pumped directly into the tank.

Estimated quantity(s) of water returned to source(s): **0 m³/day**

Describe the quality of water(s) returned to source(s): Water will be returned to the original source using the same transfer pump and hose. Tank being tested will be brand new and will not contain any contaminants.

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

- | | |
|---|---|
| <input type="checkbox"/> Sewage | <input type="checkbox"/> Waste oil |
| <input type="checkbox"/> Solid Waste | <input type="checkbox"/> Greywater |
| <input type="checkbox"/> Hazardous | <input type="checkbox"/> Sludges |
| <input type="checkbox"/> Bulky Items/Scrap Metal | <input type="checkbox"/> Contaminated soil and/or water |
| <input type="checkbox"/> Animal Waste | |
| X Other (describe): <u>Clean water. Only in contact with steel, no contaminants</u> | |

- 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
Water	Clean Water	5,700m ³	N/A	Discharge into

- 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: **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** - Describe direct, indirect, and cumulative impacts related to water and waste.

No anticipated negative environmental impact.

- 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.

N/A

- 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).

N/A

- 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

- 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.

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.

See Attached – "ICL Organization Chart"

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

See Attached – "Business License"

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

N/A

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: July/2018 Proposed Completion Date: September/2018
(month/year) (month/year)

Operation

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

Closure

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


Post - Closure

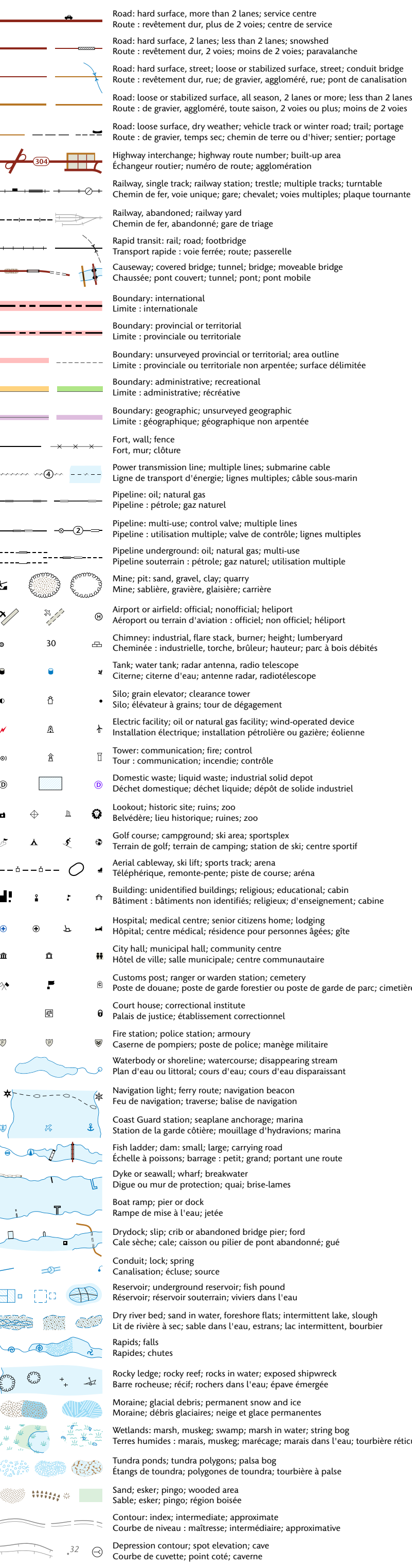
Proposed Start Date: _____ Proposed Completion Date: _____
(month/year) (month/year)

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

Construction

NWB General Water License Application Rev-01130401 7

<p>Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.</p> <p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, date expected <u>December 20, 2017</u> </p>			
<p>Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.</p> <p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, date expected <u>Unsure, NWB will forward application</u> </p>			
<p>Completed General Water Licence Application form.</p> <p> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, date expected _____ </p>			
<p>Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)</p> <p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, date expected <u>N/A</u> </p>			
<p>English Summary of Application.</p> <p> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, date expected _____ </p>			
<p>Inuktitut and/or Inuinnaqtun Summary of Application.</p> <p> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, date expected _____ </p>			
<p>Application Fee of \$30.00 CDN (Payee Receiver General for Canada).</p> <p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, date expected <u>December 15, 2017</u> </p>			
<p>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.</p> <p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, date expected <u>December 15, 2017</u> </p>			
<p>28. SIGNATURE</p>			
<p>Jacob Saunders</p> <p>Name (Print)</p>	<p>Technical Coordinator</p> <p>Title (Print)</p>	 <p>Signature</p>	<p>04/12/2017</p> <p>Date</p>



Produced on December 21, 2010, by the Centre for Topographic Information, Natural Resources Canada.

Établi le 21 décembre 2010, par le Centre d'information topographique, Ressources naturelles Canada.

The paper copy of this map meets the print quality standards of Natural Resources Canada when it bears a Certified Map Printer holographic label.

La copie papier de cette carte respecte les normes de qualité d'impression de Ressources naturelles Canada quand elle porte l'étiquette holographique de l'imprimeur de cartes accrédité.

Map content validity dates

- Road network, 1962 - 2010
- Hydrographic network, 2002
- Vegetation, 1962
- Buildings, 1962
- Boundaries, 2009 - 2010
- Toponymy, 2004 - 2010

Detailed metadata can be found at: <http://GeoGratis.gc.ca>

For corrections, additions or comments concerning the content of this map, please contact Natural Resources Canada at: topo.mails@NRCan.gc.ca

Visit our Web site: <http://maps.NRCan.gc.ca>

© 2010. Her Majesty the Queen in Right of Canada.

This map is not to be used for air or marine navigation.

Dates de validité du contenu de la carte

- Réseau routier, 1962 - 2010
- Réseau hydrographique, 2002
- Végétation, 1962
- Bâti, 1962
- Limites, 2009 - 2010
- Toponymie, 2004 - 2010

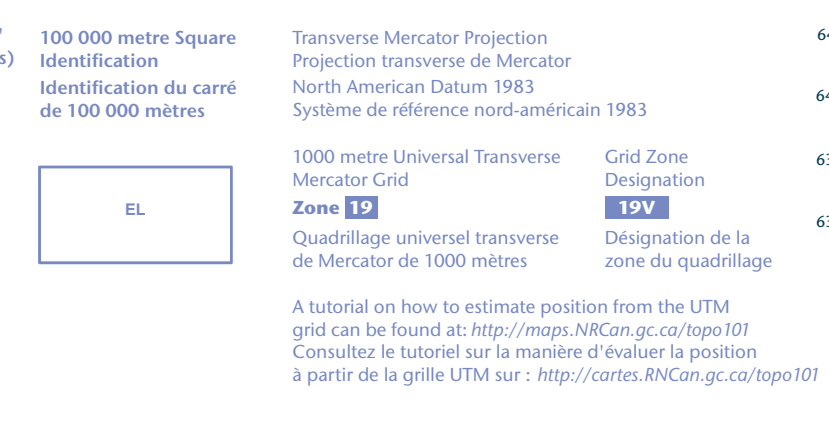
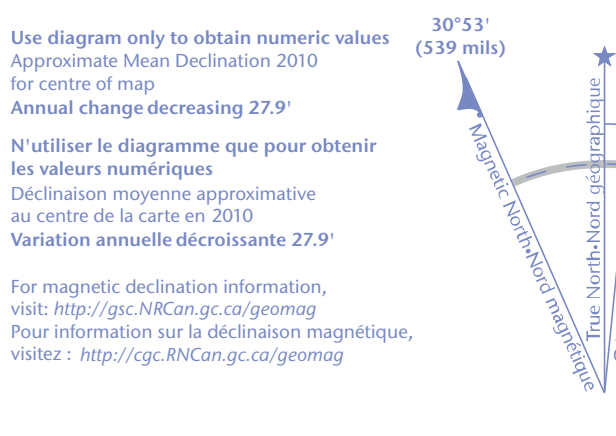
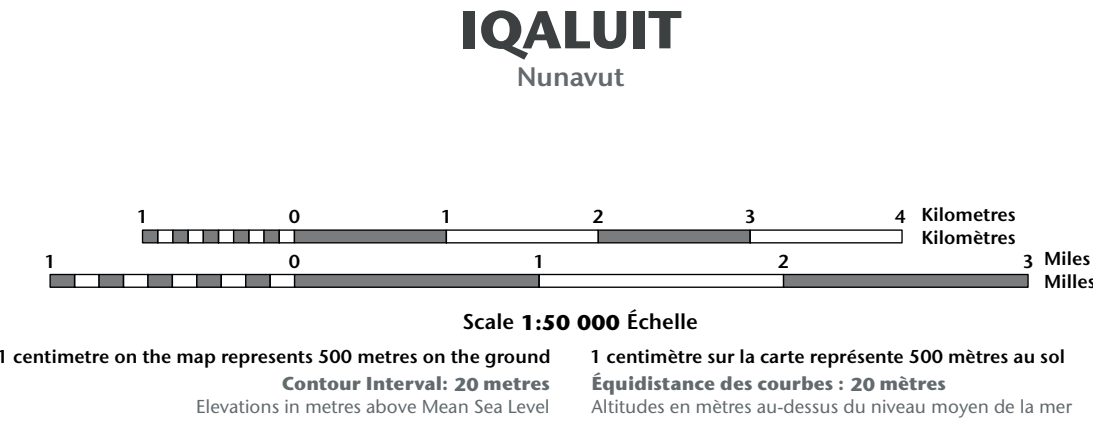
Consultez les métadonnées détaillées sur: <http://GeoGratis.gc.ca>

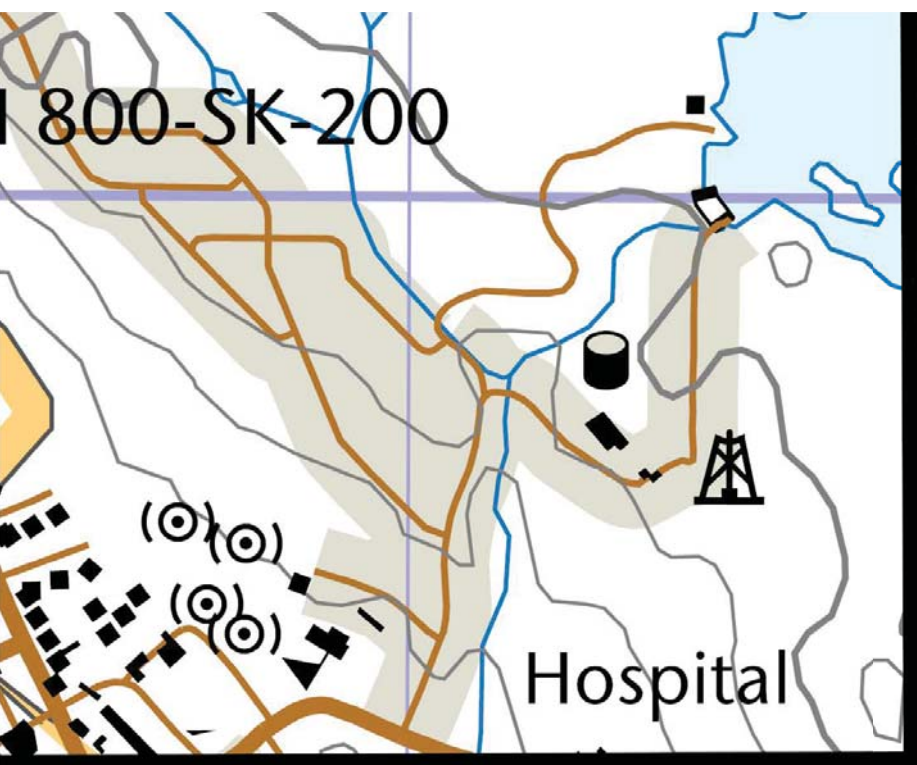
Pour toutes corrections, additions ou commentaires concernant le contenu de cette carte, veuillez contacter Ressources naturelles Canada par courriel électronique à: cartes.topo@NRCan.gc.ca

Veuillez noter site Web: <http://cartes.NRCan.gc.ca>

© 2010. Sa Majesté la Reine du chef du Canada.

Cette carte ne doit pas être utilisée pour la navigation aérienne ou maritime.





70

24



$63^{\circ}45'$



$68^{\circ}31'$

$68^{\circ}30'$

APPENDIX A - Map of Project Undertaking



Inukshuk Construction Ltd.
P.O. Box 654
Rankin Inlet, Nunavut
X0C 0G0

Tel: (867) 645-4030
Fax: (867) 645-4030

Project Description for Fuel Tank Hydrostatic Testing General Water License

Inukshuk Construction Ltd. has been awarded a contract by the Qulliq Energy Corporation (QEC) to upgrade the fuel storage capacity at the Iqaluit Power Plant.

Part of the contract consists of constructing a new 5700cum Fuel Storage Tank which will require hydrostatic testing before it can be commissioned for use.

The newly constructed 5700cum tank will be filled with water for the purpose of checking the integrity of the weld joints. The water will be pumped from a nearby lake as shown in the map and drawing also attached with this application. A centrifugal water pump and hose will be used to pump the water. The tank will be filled at a rate of 299cum/day.

The water will remain in the tank for at least 24 hours once the tank is filled to be able to detect any leakage. After the inspection of all weld joints confirms that there is no leakage, the water will be returned to the source via a hose.

We expect to build the tank from June – August 2018 and begin testing the tank mid-August 2018.

Jacob Saunders
Technical Coordinator
Inukshuk Construction Limited

NWB Water License Application
Project 303 – QEC Iqaluit Bulk Fuel Storage Upgrade
Executive Summary

This application is for a water license to perform hydrostatic testing on a new Field Erected Fuel Storage Tank to be constructed at the QEC Power Plant in Iqaluit. There is an existing Fuel Storage Tank Farm at the plant, this project is to expand the capacity of that Tank Farm by constructing a new single tank with a capacity of 5,700m³. The location of the new tank shall be approximately 63°45'17.2"N 68°30'24.7"W.

The hydrostatic testing will consist of filling the tank at a rate of 299m³ / day for a total of 5,700m³ of water. The intended source of the water shall be a nearby lake adjacent to the Anuri Road sub-division, South-East of the Iqaluit Power Plant. On completion of the test, the water shall be discharge back to the original source via a hose. See “Appendix A – Map of Project Undertaking” for more details on the location of the source lake and discharge area. Should the primary source lake (near Anuri Rd. Sub Division) not have sufficient water to supply the entire 5,700m³ of water, ICL has proposed two additional standby lakes to the North West of the Power Plant as potential supplementary water sources.

The tank will be clean prior to filling and will contain no contaminants, the anticipated “waste water” will be clean and have only contacted steel. The purpose of the testing is to inspect the soundness of all welds and joints in the tank. If a leak is detected the tank will need to be emptied, the affected area repaired, and the testing will need to recommence.

The tentative schedule for the project has the tank’s construction being completed by late August 2018, with hydrostatic testing beginning late August / early September. Provided there are no leaks detected the testing should take 21 days.

