



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

Document Date: May 2011

Application Submission Date: 11/02/2012
Month/Day/Year

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

ᓄᓇᓂᓪ ᐃᓕᓕᓂᓪᓴᓪ ᑲᓂᓂᓪᓴᓪ
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)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		



P.O. Box 119
GJOA HAVEN, NU X0B 1J0
TEL: (867) 360-6338
FAX: (867) 360-6369

ᓄᓇᓂᓪ ᐃᓕᓕᓂᓪ ᑲᓂᓕᓪ
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) Stephen Kerr Qulliq Energy Corporation P.O. Box 580 Iqaluit, Nunavut, X0A 0H0 Phone: <u>867-979-7540</u> Fax: <u>867-979-7548</u> e-mail: <u>skerr@npc.nu.ca</u>	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address) Richard Cook Knight Piésold Ltd. North Bay, Ontario, P1B 8G5 Phone: <u>705-476-2165</u> Fax: <u>705-747-8095</u> e-mail: <u>rcook@knightpiesold.com</u> (Attach authorization letter.)
3. NAME OF PROJECT (including the name of the project location) Iqaluit Hydro-Electric Project	
4. LOCATION OF UNDERTAKING Project Extents NW: Latitude: (63° 13' 28.635" N) Longitude: (-68° 25' 41.757" W) NE: Latitude: (° ' " N) Longitude: (° ' " W) SE: Latitude: (63° 33' 52.9762" N) Longitude: (-68° 56' 23.422" W) SW: Latitude: (° ' " N) Longitude: (° ' " W) Camp Location(s) Latitude: (63° 36' 28.409" N) Longitude: (68° 51' 10.123" W)	
5. MAP - Attach a topographical map, indicating the main components of the undertaking. NTS Map Sheet No.: <u>N-25</u> Map Name: <u>Armshow River</u> Map Scale: <u>1 : 250,000</u>	

- 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: January 15, 2013 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: January 15, 2013 Date of expiry: _____

☒ Commissioner's Land Use Authorization
Date (expected date) of issuance: January 15, 2013 Date of expiry: _____

☐ Other: _____
Date (expected date) of issuance: _____ Date of expiry: _____

Name of entity(s) holding authorizations:

Qulliq Energy Corporation

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

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

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

Is a land use plan conformity determination required?

☐ Yes ☒ No

If Yes, indicate date issued and attach copy _____

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

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 the attached non-technical summary and Figure 1

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

None – the work proposed is required to advance the project

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):

Geotechnical Drilling

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

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

☐ Hydrostatic Testing

☐ Tannery

☐ Tourist / Remote Camp

☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil

☐ Onshore Oil and Gas Exploration Drilling

☒ Mineral Exploration / Remote Camp

☐ Advanced Exploration

☐ Mine Development

☐ Municipal

☐ General Water Works

☐ Power

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: Geotechnical Drilling

- 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):

Armshow mainstream near camp, Armshow river (draining Armshow South Lake), Armshow South Lake, and Jaynes upper lake, main river, or lower lake.

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

Previous water quality sampling indicates the water is good quality and not impaired. Available capacity well exceeds the volume required.

Provide the overall estimated quantity of water to be used: 68 m³/day

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

Armshow main stream near camp – 3 m³/day; drilling water sources will vary depending on drillsite location: between Armshow River (draining Armshow South Lake), Armshow South Lake, and Jaynes upper lake, main river, or lower lake – 65 m³/day.

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

Camp – 3 m³/day; drilling – 65 m³/day

Describe the method of extraction(s): Temporary water lines equipped with a mesh to prevent entrapment of fish.

Estimated quantity(s) of water returned to source(s) 50 m³/day

Describe the quality of water(s) returned to source(s): The water returned will include greywater, which will be discharged to land; and brine drill water which will be recirculated but losses in a sump will occur.

- 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): _____

☐ 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
Sewage	Human	50 L / day	None	Pit latrine or incinerating toilet
Greywater	Unknown	4-6 m ³ /day	None	Buried sump
Solid Waste	Unknown	Unknown	None	Incineration/Off-site disposal in the Iqaluit landfill

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

Authorization: Land use license / Land use permit.

Administering Agency: QIA, AANDC and Government of Nunavut.

Project Activity: Camp and drilling.

Date (expected date) of issuance: March 1, 2013 Date of expiry: February 28, 2015

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

Ground disturbances from camp operation and geotechnical drilling are expected. Airborne noise from helicopter use, drill use and camp use will occur. The disturbances to existing land are expected to be negligible. To prevent disturbance to archaeological sites, surveys are to be completed before the camp is established. Drilling in stream or lake beds is to be conducted in the winter through casing to minimize the effects on the aquatic environment.

- 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.

There are no other users that have been identified.

- 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).

No substantial effect to water is expected.

- 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.

See the attached consultation summary for 2005 to 2007. Qulliq Energy Corporation plans to discuss the project with the government agencies and stakeholders in late 2012.

- 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.

- The camp and emergency shelters will be provided by a camp expeditor, and will be removed at the end of the work as part of their contract with QEC.

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.

- QEC is a Crown Corporation of the Government of Nunavut; annual reports are posted on nunavutpower.com (see Figures C to G in the 2011/12 Annual Report)

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

- Peter Mackey – President/CEO
- Richard McQuarrie – Chief Financial Officer
- Cal Clark – Legal Counsel
- David Clark – Director of Operations
- Stephen Kerr – Director of Engineering
- Catherine Cronin – Director of Human Resources
- Ryan Ramaglia – Director of Information Technology
- Edward Rideout – Director of Corporate Affairs

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

- QEC was created by legislation.

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

- Environmental baseline studies were undertaken in 2006 through 2009.
- Desktop engineering studies completed in 2006.
- All reports are available on nunavutpower.com, under 'Hydro'

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: 03/2013 Proposed Completion Date: 06/2013
(month/year) (month/year)

Operation

Proposed Start Date: 04/2013 Proposed Completion Date: 09/2014
(month/year) (month/year)

Closure

Proposed Start Date: 09/2014 Proposed Completion Date: 02/2015
(month/year) (month/year)

Post - Closure

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

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

Construction

☐ Winter ☒ Spring ☒ Summer ☐ Fall ☐ All season

Operation

☐ Winter ☒ Spring ☒ Summer ☒ Fall ☐ All season

Closure

☐ Winter ☐ Spring ☐ Summer ☒ Fall ☐ All season

Post - Closure

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☒ All season

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): 2 years

Requested Date of Issuance: March 1st, 2013 Requested Expiry Date: February 28, 2015
(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.

- QEC will utilize NWB's annual report format.

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 There is no South Baffin Regional Land Use Plan

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

☐ Yes ☒ No If no, date expected January 15th, 2013

Completed General Water Licence Application form.

☒ Yes ☐ No If no, date expected _____

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

☒ Yes ☐ No If no, date expected _____

English Summary of Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

☒ Yes ☐ No If no, date expected _____

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

☒ Yes ☐ No If no, date expected _____

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

☒ Yes ☐ No If no, date expected _____

28. SIGNATURE

Stephen Kerr Director, Engineering  Nov. 06/2012
Name (Print) Title (Print) Signature Date

☒