

Application for Water Licence Amendment

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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)	New NWB logo; request for background information; and change to Block 24	April 2013
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		



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GJOA HAVEN, NU XOB 1J0 Tel.: (867) 360-6338 FAX: (867) 360-6369 kNK5 wmoEp5 vtmp5 NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYIT OFFICE DES EAUX DU NUNAVUT

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.

Where possible, provide background information regarding the original licence application or attach previously submitted information.

EXISTING LICENCE NO: 3AM-IQA1626
1. LICENSEE CONTACT INFORMATION
Is the licensee the same as that referred to on the existing licence?
■ Yes □ No
If No, a licence assignment must be completed and approved by the NWB. An amendment 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: CITY OF IQALUIT
Address: P.O. BOX 460 IQALUIT, NU X0A OHO
Phone: (867) 979-5609 Fax: (867) 979-5609 e-mail: A.elgersma@iqaluit.ca
2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.
Not applicable, same as info in block 1 Name:
Address:
Phone: Fax: e-mail:

3. NAME OF PROJECT			
Has the name of the project changed?			
☐ Yes ■ No			
If Yes, indicate the name of the project including the name of the location:			
4. LOCATION OF UNDERTAKING			
Does the proposed amendment change the location of the amended undertaking?			
☐ Yes ■ No			
Provide the project extents and camp locations. Identify proposed changes.			
Project Extents			
NW: Latitude: (63°48'58.70" N) Longitude: (68°35'06.06" W) NE: Latitude: (63°49'04.94" N) Longitude: (68°33'49.85" W) SE: Latitude: (63°48'31.36" N) Longitude: (68°34'43.64" W) SW: Latitude: (63°48'33.66" N) Longitude: (68°34'10.42" W)			
Camp Location(s)			
Not applicable Latitude: (° ' "N) Longitude: (° ' "W)			
5. MAP			
Does the proposed amendment change the locations of any of the main components of the undertaking?			
■ Yes □ No			
Attach a topographical map, indicating the main components of the undertaking. Identify proposed changes. Attached a google maps screen shot, indicating the proposed site location for the second application location (i.e. Dead Dog Lake / Imiqtarviviniq)			
NTS Map Sheet No.: 25N15 Map Name: Iqaluit Map Scale: 1:50,000			

6. NATURE OF INTEREST IN THE LAND		
Does the proposed amendment change the nature of the	interest in the land?	
☐ Yes	No	
If Yes, indicate changes		
Check any of the following that are applicable to the prop 'Surface' header must be checked).	posed undertaking (at least one box under the	
Sub-surface		
☐ Mineral Lease from Nunavut Tunngavik Incorp Date (expected date) of issuance:		
☐ Mineral Lease from Indian and Northern Affairs Date (expected date) of issuance:		
Surface		
Crown Land Use Authorization from Indian and Date (expected date) of issuance:		
☐ Inuit Owned Land (IOL) Authorization from Kiti Date (expected date) of issuance:		
☐ IOL Authorization from Kivalliq Inuit Association Date (expected date) of issuance:		
☐ IOL Authorization from Qikiqtani Inuit Associati Date (expected date) of issuance:		
Commissioner's Land Use Authorization Date (expected date) of issuance: September 6, 2018 Date of expiry: TBD		
Other		
Date (expected date) of issuance:	Date of expiry:	
Is the name of the entity(s) holding authorizations the sar licence?	me as that considered in the existing water	
Yes	□No	
If No, a licence assignment must be completed and appr	oved by the NWB.	
Name of entity(s) holding authorizations: City of Iqaluit		

7.	NUNAVUT PLANNING COMMISSION	(NPC) DETERMINATION
Indica	te the land use planning area in which the	e existing project is located.
	☐ North Baffin ☐ South Baffin ☐ Akunniq	☐ Keewatin ☐ Sanikiluaq ☐ West Kitikmeot
Does	the proposed amendment change the lan	d use planning area?
		Yes No
If yes,	indicate the land use planning area in wh	nich the amended undertaking is located.
	North BaffinSouth BaffinAkunniq	☐ Keewatin ☐ Sanikiluaq ☐ West Kitikmeot
Was a		required from NPC prior to the issuance of the existing water
		Yes No
If Yes	, indicate date issued and attach copy. D	ecember 3, 2018
Does	the proposed amendment change the ori	ginal NPC conformity determination or the need to obtain one?
		☐ Yes ■ No
	s, indicate date issued (or expected) and a provide written confirmation from NPC co	attach a copy onfirming that a land use plan conformity review is not required.
8.	NUNAVUT IMPACT REVIEW BOARD	(NIRB) DETERMINATION
Was	a screening determination required from I	NIRB prior to the issuance of the existing water licence?
		Yes No
If Yes	, indicate date issued and attach copy. S	eptember 13, 2019
Does one?	the proposed amendment change the ori	ginal NIRB screening determination or the need to obtain
		Yes No
	, indicate date issued (or expected) and a provide written confirmation from NIRB of	attach a copy. September 13, 2019 confirming that a screening determination is not required.
Attac	hed: September 13, 2019 - Notice of Rele September 13, 2019 - Screening De	

9. DESCRIPTION OF UNDERTAKING
Does the proposed amendment change the description of the undertaking?
■ Yes □ No
List and attach plans and drawings or project proposal. Identify proposed changes.
The City's existing license accounts for the existing landfill operation. This application is for a new landfill that is of a different design than the current landfill. The City's existing license accounts for water extracts from Lake Geraldine. This application is for extraction of water from another water source known as Dead Dog Lake. Water would be extracted from Dead Dog Lake (Imiqtarviviniq) for the use of dust suppression for municipal roadways only. Extraction would start in the late Spring and continue into the Fall.
10. OPTIONS
Does the proposed amendment change any of the alternative methods and locations that were considered to carry out the project?
☐ Yes ■ No
Provide a brief explanation of the alternative methods or locations that were considered to carry out the project. Identify proposed changes.
Between 2011 and 2013, the City of Iqaluit evaluate multiple new locations around Iqaluit as a potential new location for the landfill. After several public consultations, the location used for the design was selected as the best location. Alternatives to landfilling such as incineration were considered but the high operating and maintenance costs did not make this a feasible option. The City currently extracts water from Lake Geraldine for the use of dust suppression for municipal roadways. Given recent water shortage challenges, along with the need to preserve water for essential purposes, the City identify Dead Dog Lake (Imiqtarviviniq) as an alternative water source, which could be used solely for dust suppression. This maximizes the amount of water which can be made available in Lake Geraldine for use by residents for essential purposes.
11. CLASSIFICATION OF PRIMARY UNDERTAKING
Indicate the primary classification of undertaking for the existing licence 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): ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Does the proposed amendment change the classification of primary undertaking?
☐ Yes ■No

If Yes, indicate the primary undertaking of the amendr	nent:N/A	
Information in accordance with applicable Supplemen submitted with an Application for Amendment. Indica	tal Information Guidelines (SIG) must be updated and te which SIG(s) are applicable to your application.	
Hydrostatic Testing Tannery Tourist / Remote Camp Landfarm & On-Site Storage of Hydrocarbo Onshore Oil and Gas Exploration Drilling Mineral Exploration / Remote Camp Advanced Exploration Mine Development Municipal General Water Works Power	n Contaminated Soil	
12. WATER USE		
Indicate, using the boxes below, the types of water us	e(s) approved in the existing licence.	
To obtain water for camp/ municipal purpose To obtain water for industrial purposes To cross a watercourse To alter the flow of, or store water Other:	es To divert a watercourse To modify the bed or bank of a watercourse Flood control	
Does the proposed amendment change the type(s) of	water use(s)?	
Yes	□No	
If Yes, indicate using the boxes below, the proposed cuse(s) that are to be added, continued, or removed.	hange(s) to the type(s) of water use(s) noting any water	
To obtain water for camp/ municipal purpose To obtain water for industrial purposes To cross a watercourse To alter the flow of, or store water Other:	To divert a watercourse To modify the bed or bank of a watercourse Flood control	
13. QUANTITY OF WATER INVOLVED		
Does the proposed amendment change the source of	water?	
Yes	□No	
Indicate the water source(s). Identify proposed changes.: The City is proposing a secondary water source, Dead Dog Lake (Imiqtarviviniq), which will be used for dust suppression for municipal roadways only. Lake Geraldine will still be utilized as the City's primary water source.		

Does the proposed amendment change the quality of the water source and/or its available capacity?
■ Yes □ No
Describe the quality of the water source(s) and the available capacity(s). Identify any changes: Not known at this time.
Does the proposed amendment change the overall quantity of water to be used?
■ Yes □ No
Provide the overall estimated quantity to be used. Identify proposed changes. : 2,500,000 L/year (2,500 m³/year)
Does the proposed amendment change the quantity of water to be used from each source?
■ Yes □ No
Provide the estimated quantity(s) of water to be used from each source. Identify proposed changes. : Proposed extraction quantity from Dead Dog Lake (Imiqtarviviniq) would be 2,500,000 L/year (2,500 m³/year)
Does the proposed amendment change the quantity of water to be used for each purpose?
■ Yes □ No
Provide the estimated quantities to be used for each purpose (camp, drilling, etc.). Identify proposed changes: 2,500,000 L/year (2,500 m³/year) for dust suppression for municipal roadways.
Does the proposed amendment change the method(s) of extraction?
■ Yes □ No
Describe the method(s) of extraction. Identify proposed changes. : Water will be extracted by means of a pump into a City water truck.
Does the proposed amendment change the quantity(s) of water returned to source(s)?
Yes No
Estimated quantity(s) of water returned to source(s). Identify proposed changes. :
Landfill - approximately 73 m3/day at full build out (total surface area of 22 ha.)
The Waste Transfer station - estimated quantity of water returned to source is 9.55 m3/day.
These estimates are associated only with surface water drainage related to precipitation. Process water usage at the Waste Transfer Station is expected to be minimal, and will be collected on site and disposed of as septage waste.
The Dead Dog Lake (Imiqtarviviniq) water extraction application does not foresee any water being returned to the source.
Does the proposed amendment change the quality(s) of water returned to source(s)?
Yes No

Describe the quality(s) of water(s) returned to source(s). Identify any changes. :The water returned to source at the landfill will have undergone treatment as leachate prior to being released		
14. WASTE	_	
Check the appropriate box(s) to indicate the types of waste(s) approved in the existing licence.		
Sewage Solid Waste Greywater Hazardous Sludges Bulky Items/Scrap Metal Animal Waste Other (describe):		
Does the proposed amendment change the type(s) of waste(s) to be generated or deposited?		
☐ Yes ■ No		
If Yes, indicate using the boxes below, the proposed change(s) to the type(s) of waste(s) to be generated and/or deposited noting the addition, removal or continued generation and/or disposal of waste(s).		
Sewage Solid Waste: addition Hazardous Suldges: addition Sludges: addition Sludges: addition Contaminated soil and/or water Animal Waste Other (describe: leachate		
15. QUANTITY AND QUALITY OF WASTE INVOLVED		
Does the proposed amendment change the quantity(s) of the types of wastes involved?		
■ Yes □ No		
Does the proposed amendment change the composition(s) of the types of wastes involved?		
■ Yes □ No		
Does the proposed amendment change the method(s) of treatment for the types of waste involved?		
■ Yes □ No		
Does the proposed amendment change the method(s) of disposal for the types of waste involved?		
■ Yes □ No		
If Yes to any of the above, describe the proposed changes:		
Wastes anticipated to be generated through landfilling operations are septage waste - to be removed and treated at the City of Iqaluit Waste Water Treatment Plant.		
Per World Bank estimates, between 1.10 and 3.7 kg of waste will be generated on site per person per day (OECD waste generation per capita, World Bank).		

This waste will be treated as other waste arriving on site - separated and either diverted from the landfill (recycling, reuse, HHW, compost) or shredded, compacted, baled and subsequently landfilled with other collected MSW.

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
Municipal waste		25,550 tonne/year		

16. OTHER AUTHORIZATIONS

Does the proposed amendment change the need for other authorizations in addition to the sub-surface and surface land use authorizations provided in Block 6?

Yes No



If Yes, indicate any additional authorizations required, which authorizations are no longer required, and which authorizations continue to be required.

For each provide the following:

Authorization: Conditional approval to proceed

Administering Agency: GN Department of Health

Project Activity: RFP and Technical Design.

Date (expected date) of issuance: August 16, 2018 Date of expiry: N/A

Authorization: Land Use

Administering Agency: NAV CANADA

Project Activity: Construction & Operation

Date (expected date) of issuance: October 2, 2018 Date of expiry: N/A

Authorization: Aeronautical assessment for obstacle evaluation		
Administering Agency: Transport Canada		
Project Activity: Construction & Operation		
Date (expected date) of issuance: September 4, 2018 Date of expiry: N/A		
17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES		
Does the proposed amendment change the predicted environmental impacts of the undertaking or the mitigation measures?		
■ Yes □ No		
Describe direct, indirect, and cumulative impacts related to water and waste. Identify any changes.		
An Environmental Protection Plan (EPP) has been prepared as part of an overarching Environmental Management Plan (EMP) and describes the environmental protection measures to be implemented during the Operations, Closure, and Post-Closure Phases of the City of Iqaluit's (the City's) proposed Waste Transfer Station (WTS) and Landfill. The purpose of the EPP is to be a resource for the City to utilize to avoid or mitigate potential adverse environmental effects to various receptors. This EPP is based on a desktop review of publically available records and site assessments conducted for the Landfill and Transfer Station locations, completed by EXP Services Inc. (Delvin, 2018a; Delvin 2018b; EXP, 2018). This EPP outlines environmental protection measures, as they relate to facility activities, and provides a reference for environmental inspection staff to support decision-making during the Operations, Closure, and Post-Closure Phases of the project. Please see attached EPP for details.		
18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS		
Was compensation paid and/or an agreement(s) for compensation been entered into with any existing or other users of water during consideration of the existing licence?		
☐ Yes ■ No		
If Yes, provide the names, addresses and the nature of water use by those persons or properties.		
Does the proposed amendment adversely affect 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?		
☐ Yes ■ No		
If Yes, provide the names, addresses and the nature of water use of those persons or properties.		
Advise the Board if compensation has been paid and/or an agreement(s) for compensation has been reached with any existing or other water users with respect to the proposed amendment.		
19. INUIT WATER RIGHTS		
Was compensation paid/ or an agreement(s) for compensation been entered into with any Designated Inuit Organization (DIO) during consideration of the existing licence?		

☐ Yes	■ No	
Does the proposed amendment substantially affect the Inuit Owned Land (IOL)?	quality, quantity or flow of waters flowing through	
☐ Yes	■ No	
If Yes, advise the Board if negotiations have commend loss or damage has been reached with one or more D		
	consultation meetings including when the meetings were encerns expressed and measures to address concerns.	
The City of Iqaluit Public Consultation for Solid Waste 2018, Food Centre, Building 655, Mattaaq Crescent. N		
Engineering and Public Works meeting with Joel Fortion Assessment Coordinator on November 23, 2018 City (
21. SECURITY INFORMATION		
Does the proposed amendment change the financial s	ecurity assessment?	
☐Yes	No No	
Does the proposed amendment change the estimate of	of the total financial security for final reclamation?	
□Yes	No 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. Identify any changes in the financial security assessment resulting from the proposed amendment.		
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.		

22. FINANCIAL INFORMATION						
Is the statement of financial security the same as that considered in the existing water licence?						
☐ Yes ☐ No N/A to Municipalities.						
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?						
☐ Yes ☐ No N/A to Municipalities.						
Provide 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 N/A to Municipalities.						
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.						
See attached supplemental information.						
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.						
Please see attached supplemental information						
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								
When are proposed amendments scheduled to be undertaken: construction to start in Summer 2020 (waste transfer station, Landfill summer 2021). Extraction of water from Dead Dog Lake (Imiqtarviviniq) would start in Spring/ Summer 2021. Extraction of water would typically last until the Fall.								
Does the proposed amendment change the time schedule considered in the existing licence for any phase of development?								
☐ Yes ■ No								
Indicate the start and completion dates for each applicable phase of development (construction, operation, closure, and post closure). Identify proposed changes.								
Construction Proposed Start Date: August 2020 Proposed Completion Date: December 2023								
Operation Proposed Start Date: December 2023 Proposed Completion Date: August 2098 (month/year) (month/year)								
Closure Proposed Start Date: August 2098 Proposed Completion Date: August 2100 (month/year) (month/year)								
Proposed Start Date: August 2100 Proposed Completion Date: December 2104 (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								
On what date does the existing licence expire? June 16, 2026								
Is the Licensee applying for a combined renewal and amendment of the existing licence?								
☐ Yes ■ No								

If Yes, indicate the proposed term of the renewal (maximum of 25 years):								
Requested date of renewal issuance:(month/			Requested Expiry Date:					
1981		(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: <u>Processing Water Licence Applications</u> for more information)</i>								
26.	ANNUAL REPORTING							
Will the	proposed amendment cl	hange the content of	of annual reports or the annual report ter	nplate?				
			Yes No					
If Yes, preport.	provide details regarding	the content of annu	ual reports and a proposed outline or ten	nplate of the annual				
The content of the annual report will be updated to indicate the amount fo waste desposited at the new landfill, as opposed to the existing West 40 landfill site. The contents of the annual report will also include the volume of water extracted from Dead Dog Lake (Imiqtarviviniq) per year. The template of the annual report will remain unchanged.								
1200								
27.	CHECKLIST							
		with the application	for Amendment for the water licensing p	process to begin.				
				process to begin.				
	owing must be included v							
	owing must be included of Completed Application Yes	for Water Licence	Amendment form.					
	owing must be included of Completed Application Yes	for Water Licence	Amendment form. If no, date expected	(see Block 11)				
	owing must be included to Completed Application Yes Information addressing	for Water Licence A No Supplement Inform	Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected	(see Block 11)				
	owing must be included to Completed Application Yes Information addressing Yes	for Water Licence A No Supplement Inform	Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected	(see Block 11)				
	owing must be included a Completed Application Yes Information addressing Yes Compliance Assessme	for Water Licence / No Supplement Inform No nt / Status Report (Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected see Block 23). If no, date expected	(see Block 11)				
	owing must be included a Completed Application Yes Information addressing Yes Compliance Assessme Yes	for Water Licence / No Supplement Inform No nt / Status Report (Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected see Block 23). If no, date expected	(see Block 11)				
	owing must be included a Completed Application Yes Information addressing Yes Compliance Assessme Yes Indication of Renewal F	for Water Licence / No Supplement Inform No nt / Status Report (No Requirement (see E	Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected see Block 23). If no, date expected Block 26) If no, date expected	(see Block 11)				
	owing must be included a Completed Application Yes Information addressing Yes Compliance Assessme Yes Indication of Renewal F	for Water Licence / No Supplement Inform No nt / Status Report (No Requirement (see E	Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected see Block 23). If no, date expected Block 26) If no, date expected	(see Block 11)				
	owing must be included of Completed Application Yes Information addressing Yes Compliance Assessme Yes Indication of Renewal F Yes English Summary of Ar	for Water Licence / No Supplement Inform No nt / Status Report (No Requirement (see E No nendment Applicati	Amendment form. If no, date expected nation Guideline (SIG), where applicable If no, date expected see Block 23). If no, date expected Block 26) If no, date expected ion.	(see Block 11)				

Application fee of \$30.00	Application fee of \$30.00 CDN (Payee Receiver General for Canada).						
Yes internal issues are resolv	No If yed to receive payme	no, date expected _ nt over the phone b	can be paid as s y credit card	soon an NWB			
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 internal issues are resolv	■ No If n	o, date expected nt_over the phone b	can be paid as so by credit card	oon an NWB			
28. SIGNATURE							
Any Elger Dna Name (Print)	CAO Title (Print)		Signature	Sept 29/202 Date			