



Application for Water Licence Amendment

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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 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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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.

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

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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° 50' 56.31" N)	Longitude: (68° 39' 49.87" W)
NE: Latitude: (63° 43' 48.91" N)	Longitude: (68° 18' 12.53" W)
SE: Latitude: (63° 41' 06.60" N)	Longitude: (68° 18' 18.82" W)
SW: Latitude: (63° 44' 46.02" N)	Longitude: (68° 39' 43.10" 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.

NTS Map Sheet No.: 25N10 Map Name: HILL ISLAND Map Scale: 1:30,000

Map presented in Appendix B

Only change is the addition of the bioreactor storage basin for the treatment of the contaminated water and the associated water treatment equipment.

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 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:

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the existing 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 |

Does the proposed amendment change the land use planning area?

- ☐ Yes ☒ No

If yes, indicate the land use planning area in which the amended undertaking 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 |

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. August 28, 2015 presented in Appendix C.

Does the proposed amendment 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. January 15, 2017

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. November 3, 2014 presented in Appendix D.

Does the proposed amendment 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. January 15, 2017

If No, provide written confirmation from NIRB confirming that a screening determination is not required.

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.

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.

11. CLASSIFICATION OF PRIMARY UNDERTAKING

Indicate the primary classification of undertaking for the existing licence 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 checked="" type="checkbox"/> Municipal (includes camps/lodges) | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Power | <input type="checkbox"/> Miscellaneous (describe below): |

Does the proposed amendment change the classification of primary undertaking?

☐ Yes ☒ No

If Yes, indicate the primary undertaking of the amendment: _____

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be updated and submitted with an Application for Amendment. 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

Indicate, using the boxes below, the types of water use(s) approved in the existing licence.

- | | |
|---|---|
| <input checked="" 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 type="checkbox"/> To alter the flow of, or store water | |
| <input type="checkbox"/> Other: _____ | |

Does the proposed amendment change the type(s) of water use(s)?

☐ Yes ☒ No

If Yes, indicate using the boxes below, the proposed change(s) to the type(s) of water use(s) noting any water use(s) that are to be added, continued, or removed.

- | | |
|---|---|
| <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 type="checkbox"/> To alter the flow of, or store water | |
| <input checked="" type="checkbox"/> Other: <u>To store and treat landfill leachate and contact run-off water.</u> | |

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 water to be used that applies to this amendment is from the Leachate Containment Pond at the Landfill Facility.

(show location(s) on map) – presented in Appendix B.

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.: _____

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.:

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. :

Contact water from the City of Iqaluit Landfill will be treated prior to discharge to reduce contaminants.

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.:

Does the proposed amendment change the method(s) of extraction?

☐ Yes ☒ No

Describe the method(s) of extraction. Identify proposed changes. : _____

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:

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.:

Water will not be returned to source; it will be discharged into Koojesse Inlet. It will be treated to remove metals, suspended solids, BOD¹ and Nitrogen contamination to meet target levels set by Environment and Climate Change Canada, and to pass toxicity testing with Rainbow Trout.

1 Biochemical oxygen demand

14. WASTE

Check the appropriate box(s) to indicate the types of waste(s) approved in the existing licence.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Sewage | <input type="checkbox"/> Waste oil |
| <input checked="" type="checkbox"/> Solid Waste | <input type="checkbox"/> Greywater |
| <input 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): _____ | |

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).

- | | |
|--|---|
| <input type="checkbox"/> Sewage | <input type="checkbox"/> Waste oil |
| <input checked="" type="checkbox"/> Solid Waste | <input type="checkbox"/> Greywater |
| <input type="checkbox"/> Hazardous | <input checked="" type="checkbox"/> Sludges |
| <input type="checkbox"/> Bulky Items/Scrap Metal | <input type="checkbox"/> Contaminated soil and/or water |
| <input type="checkbox"/> Animal Waste | |
| <input checked="" type="checkbox"/> Other (describe): <u>Treated landfill leachate and contact water</u> | |

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:

This waste is landfill leachate and contact water. The treatment method used will be precipitation of metals thought pH adjustment, flocculation of suspended solids, biological treatment of BOD and ammonia Nitrogen, pH adjustment and filtration (refer to process flowcharts in Appendix B). Treated water that meets discharge targets will be discharged into Frobisher Bay; waste filter media will be disposed of at an authorized facility in Southern Canada.

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
Solid Waste	Waste filter media	1,000 kg of activated charcoal and 120 kg of ULTRASORPTION™ per year	Package according to regulations and transport south for disposal	Disposal at an authorized facility in Southern Canada
Sludge	Sludges from precipitation of metals and suspended solids	100 m³ per year	None required	In the City of Iqaluit Landfill
Treated Water	Water	500,000 L annually	Treat water	Discharge into Koojesse Inlet under the supervision of ECCC and INAC

m.t. Metric tonne

ECCC Environment and Climate Change Canada

INAC Indigenous and Northern Affairs Canada

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: _____

Administering Agency: _____

Project Activity: _____

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

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.

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

If Yes, which DIO(s) _____

Does the proposed amendment substantially affect the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL)?

☐ Yes ☒ No

If Yes, 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 DIO(s) with respect to the proposed amendment.

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.

No consultations were held related to this project

21. SECURITY INFORMATION

Does the proposed amendment change the financial security assessment?

☐ Yes ☒ No

Does the proposed amendment change the estimate of the total financial security for final reclamation?

☐ 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. 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 *Mine Site Reclamation Policy for Nunavut*, Indian and Northern Affairs Canada, 2002.

Not applicable

22. FINANCIAL INFORMATION

Is the statement of financial security the same as that considered in the existing water licence?

☒ 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?

☐ Yes ☐ No – N/A

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

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.

No studies have been undertaken

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.

One inspection report is attached in Appendix E.

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.

This amendment application is in response to the observations made during the April 2016 INAC Inspection regarding the West 40 Landfill Post Fire Restorative Work.

24. PROPOSED TIME SCHEDULE

When are proposed amendments scheduled to be undertaken: June 2017

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: 06/2016 Proposed Completion Date: 06/2016
(month/year) (month/year)

Operation

Proposed Start Date: 06/2016 Proposed Completion Date: Unknown
(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 – N/A

Post - Closure

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season – N/A

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: _____ Requested Expiry Date: _____
(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)

26. ANNUAL REPORTING

Will the proposed amendment change the content of annual reports or the annual report template?

☒ Yes ☐ No

If Yes, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

Laboratory analytical reports from the treatment will be included with the annual reports.

27. CHECKLIST

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

Completed Application for Water Licence Amendment form.

☒ Yes ☐ No If no, date expected _____

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

☐ Yes ☐ No If no, date expected Not applicable

Compliance Assessment / Status Report (see Block 23).

☐ Yes ☐ No If no, date expected Not applicable

Indication of Renewal Requirement (see Block 26)

☐ Yes ☐ No If no, date expected Not applicable

English Summary of Amendment Application.

☒ Yes ☐ No If no, date expected Appendix F

Inuktitut and/or Inuinnaqtun Summary of Amendment Application.

☒ Yes ☐ No If no, date expected Appendix G

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

☐ Yes ☒ No If no, date expected January 15, 2017

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 Not applicable

28. SIGNATURE

Greg Johnson, P.Eng., M.Sc.A.

Project Director,
Qikiqtaaluk Environmental

2016-11-30

Name (Print)

Title (Print)


Signature

Date