

Sean Joseph
Senior Technical Advisor
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Date
August 8, 2017
Your Reference
60515379 (600/13)

Our Reference 60515379 (600)

Dear Mr. Joseph:

Water Board Licence No. 1BR-KEI722
Amendment Request – CAM-E Environmental Site Remediation

On behalf of Indigenous and Northern Affairs Canada (INAC), we would like to request an amendment to the Water License No. 1BR-KEI722 issued for the CAM-E DEW Line Environmental Remediation Project. The request is to amend the water usage quantity, as detailed below:

In **Section D. General Considerations** of the Water License, the volume of water usage is defined as “fourteen (14) cubic metres of water per day” with “five (5) cubic metres per day for domestic camp use and nine (9) cubic metres per day for construction and remediation activities”; however, it was confirmed that there will be periods of time when the construction activities may require more than the 9 m³/day. Moisture conditioning of the granular material is required for the construction of the Non-Hazardous Waste Landfill, as well as the saturated berms of the Tier II Landfill. The current borrow area is sufficiently saturated such that only minimal moisture conditioning is required; however, should this area dry out or should the other borrow sources have much lower moisture content, then additional water will be required. Based on the latter scenario, there could be the requirement for upwards of 35 m³/day assuming current production rates. Should the construction rates be slower, then the daily usage would be less but would be drawn out over a longer period of time. Overall, this translates to an amendment for water quantity usage, for construction purposes, from 9 m³/day to 35 m³/day.

It should be noted that, if required, this additional volume would be used for an approximate two week period this season and potentially a month during the 2018 construction season. Water sourced for construction purposes has been, and will continue to be, sourced from seasonal wet areas local to the borrow sources and landfill sites – not from Freshwater Lake. These water sources were visually inspected, and based on the depth and observations they believed to not be fish bearing.

Should you have questions or comments, please contact the undersigned at your convenience.
Sincerely,



Greg Wright, M.Sc.
Project Manager
AECOM Canada Ltd.
T: 780-486-5922
E: greg.wright@aecom.com

Attachment 1 – Application for Water Licence Amendment



Application for Water Licence Amendment

Existing license 1BR-KEI7722

Application Submission Date: 08/08/2017
Month/Day/Year

P.O. BOX 119
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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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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: *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.

EXISTING LICENCE NO: _1BR-KEI722_

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 name of the licensee has changed, attach a certificate of name change.

Name: _____

Address: _____

Phone: _____

Fax: _____

e-mail: _____

2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.

Name: _____

Address: _____

Phone: _____

Fax: _____

e-mail: _____

(Attach authorization letter.)

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: (68° 18' 13.4" N)	Longitude: (88° 05' 10.7" W)
NE:	Latitude: (68° 18' 13.4" N)	Longitude: (88° 10' 51.39" W)
SE:	Latitude: (68° 14' 10.8" N)	Longitude: (88° 51' 51.39" W)
SW:	Latitude: (68° 14' 10.8" N)	Longitude: (88° 05' 10.7" W)

Camp Location(s)

To be determined and provided prior to establishment

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.: _____ Map Name: _____ Map Scale: _____

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 type="checkbox"/> South Baffin | <input type="checkbox"/> Sanikiluaq |
| <input type="checkbox"/> Akunnig | <input checked="" 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 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. _____

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. _____

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. _____

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. _____

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 checked="" 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 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 checked="" 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 type="checkbox"/> Other: _____ | |

13. QUANTITY OF WATER INVOLVED

Does the proposed amendment change the source of water?

☐ Yes ☒ No

Indicate the water source(s). Identify proposed changes.:

(show location(s) on map)

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. : **40 m³/day**

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. : water sourced for construction purposes will continue to be sourced from low lying, seasonal wet areas local to the borrow sources and/or landfill sites; water from Freshwater Lake will only be used for camp use

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.:

35 m³/day for construction activities

5 m³/day for camp use

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. : _____ m³/day

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. : _____

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 checked="" type="checkbox"/> Hazardous | <input type="checkbox"/> Sludges |
| <input checked="" type="checkbox"/> Bulky Items/Scrap Metal | <input checked="" 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 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 | |
| <input type="checkbox"/> Other (describe): _____ | |

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: _____

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

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.

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.

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

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

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.

Attached report for Waste Water Treatment using Bionest Kodiak rather than sewage lagoon.

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.

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: June 20, 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: _____ Proposed Completion Date: _____
(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

☐ 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? __July 16, 2021_____

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.

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 _____

Compliance Assessment / Status Report (see Block 23).

☐ Yes ☐ No If no, date expected _____

Indication of Renewal Requirement (see Block 26)

☐ Yes ☐ No If no, date expected _____

English Summary of Amendment Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Amendment 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

Greg Wright

AECOM,
Project Manager

August 8, 2017

Name (Print)

Title (Print)

Signature

Date