



July 2016

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NUNAVUT IMALIRIYIN KATIMAYIT
NUNAVUT WATER BOARD
OFFICE DES EAUX DU NUNAVUT

Amendment Application of Resolute Bay- 2001 built fully fenced Solid Waste site



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NUNAVUT WATER BOARD

NUNAVUT IMALIRIYIN KATIMAYIT

OFFICE DES EAUX DU NUNAVUT

**APPLICATION FOR WATER LICENCE AMENDMENT AND RENEWAL
FOR HAMLET OF RESOLUTE BAY AIRPORT SEWAGE LAGOON**

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: NWB-YRB 0308: TYPE- B.

1. LICENSEE CONTACT INFORMATION

Is the licensee the same as that referred to on the existing licence?

X ☐ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB. If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: **Todd McKay**

Address: Director of Nunavut Airport Operation; GN-ED&T, Rankin Inlet.

Phone: 867- 645-8023

Fax: 867- 645- 8246

E-mail: tmckay@gov.nu.ca

**2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.
Same as item 1.**

Name: BHABESH ROY, M.A.Sc., P.Eng.

Address: GN-CGS-CS, Pond Inlet, Box-379

Phone: 867-899-7314

Fax: 867-899-7330

E-mail: broy@gov.nu.ca

3. NAME OF PROJECT: Resolute Bay Airport Sewage Lagoon

Has the name of the project changed?

☒ Yes ☐ No

If Yes, indicate the name of the project including the name of the location:

The existing licence is requested to make amendment by deleting Item 10 (i and ii) of Part D of this licence. The reasons are as follows:

The proposed Licence will deal with only Sewage Lagoon as the standalone facility.

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: (74 ° 42' 00 " N)	Longitude: (94 ° 50' 00" W)
NE:	Latitude: (° ' " N)	Longitude: (° ' " W)
SE:	Latitude: (° ' " N)	Longitude: (° ' " W)
SW:	Latitude: (° ' " N)	Longitude: (° ' " W)

Camp Location(s)

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: _____

• **Site Map is attached in QA/QC Plan**

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

Commissioner's Land (under Lease to Airports)

(Lease No: R-41726T-Lot1001 Plan 2549 Resolute Bay) (no Land Use Authorization issued)

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: **GN- ED&T**

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

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

☒ North Baffin

☐ South Baffin

☐ Akunnig

☐ Keewatin

☐ Sanikiluaq

☐ 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.

- ☐ North Baffin
☐ South Baffin
☐ Akunnig

- ☐ Keewatin
☐ Sanikiluaq
☐ 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.

Note: The project proposal excludes Water supply system and Waste management site

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.

Location MAP is attached in QA/QC Plan. The proposed licence will deal only with Sewage Lagoon as the standalone facility.

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.

Note: Water supply source and waste site are excluded from the proposed Licence.

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 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
- ☐ Land farm & 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: Not applicable

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

- | | |
|---|---|
| ☐ 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: _____ | |

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.

- | | |
|---|--|
| ☐ 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: _____ | |

Note: Water source is now Signal Hill Water Treatment Plant and treated water from there.

13. QUANTITY OF WATER INVOLVED: Not applicable

Does the proposed amendment change the source of water? ☒ Yes ☐ No

Indicate the water source(s). Identify proposed changes. **Signal Hill WTP is the treated water Source from where treated water is extracted for delivery.**

(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). **Treated water from the Signal Hill WTP. Potable source is now South Lake.**

Identify any changes. The original Source Strip Lake was abandoned.

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. : 14 m³/day (roughly)

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. **14 cubic meters/day from the Signal Hill WTP.**

Identify proposed changes. : **Treated water is collected directly from the Signal Hill WTP.**

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.). **14 Cubic meters per day**

Identify proposed changes. **This huge change is due to increasing the foreigners in the community especially during the summer season.**

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

☒ Yes ☐ No

Describe the method(s) of extraction: **Water is filled by pump from the WTP to the Tank of the delivery Truck.**

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). **14 cubic meters per day (roughly)**

Identify proposed changes. : 600 cubic meters to 5000 cubic meters annually

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). **Same Quality Sewage as it was before.**

Identify any changes. : **Sewage quality remains same, only volume increases due to high growth of users.**

14. WASTE

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

☒ Sewage

☐ Solid Waste

☐ Hazardous

☐ Bulky Items/Scrap Metal

☐ Animal Waste

☐ Other (describe): _____

☐ Waste oil

☐ Greywater

☒ Sludges

☒ Contaminated soil and/or water

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

☐ 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: Not applicable

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. **Unknown**

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. Do not foresee any impact.

Identify any changes. **No**

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS: Not applicable

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 public meeting. Discussions were made with SAO of Hamlet of Resolute Bay and ED&T and CGS personnel many times over telephone and face to face many times.**

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. **Todd McKay, Director of Nunavut Operations, GN-ED&T, Rankin inlet.**

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.: **Yes, attached. Interim sewage management study was conducted until sewage is directed to future WWTP which is expected to be built in 2022.**

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: **From the Amendment date of the Licence.**
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? **This was expired on November 30, 2008.**

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 : August 2016 August 2021
(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

26. ANNUAL REPORTING

☐ Yes **X** ☐ No

27. CHECKLIST

Completed Application for Water Licence Amendment form.

☒ 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.

X ☐ Yes ☐ No If no, date expected :
Submitted with the renewal application

Inuktitut and/or Inuinnaqtun Summary of Amendment Application.

X ☐ Yes ☐ No If no, date expected ;
Submitted with the renewal application

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

☐ Yes ☒ No If no, date expected: Submitted with the renewal application.

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 required

28. SIGNATURE

Todd McKay

Todd McKay
Name (Print)

**Director, Nunavut
Airport operations,
GN-ED&T**

Title (Print)

Signature

July 18/16
Date



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Building Nunavut Together
Nunavutluqatigiinnig
Bâtir le Nunavut ensemble

ᐅᐅᐅᐅ ᐅᐅᐅᐅ ᐅᐅᐅᐅ ᐅᐅᐅᐅ
Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

Karen Kharatyan
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Phone: (867) 360-6338, Ext. 27
Fax: (867) 360-6369
Email: Karen.kharatyan@nwb-oen.ca : licensing@nwb-oen.ca

July 16, 2016

Re: Hamlet of Resolute Bay Airport Sewage Lagoon: Water Licence # NWB 3YRB0308-Type B: Amendment and Renewal application

Dear Mr. Kharatyan,

Following the Telephone conversation with Sean Joseph, Technical Advisor, NWB dated July 15, 2016, I am writing you to clarify as follows:

I would like to confirm that currently the water supply and waste site are no longer under this licence.

Transport Canada is planning to decommission the waste (landfill) site under Water Licence # 1BR-RBL1419 and Strip Lake water source was abandoned a long time ago. As a result the water supply and waste site will not be included under the renewal licence and the Lagoon will be the only facility under the renewal licence.

Therefore, to renew and amend the Water Licence #3BM-YRB0308, the following documents are attached to support this application.

1. Amendment and Renewal Water Licence application
2. Annual Reports of 2014 and 2015
3. O&M manual
4. QA/QC Plan
5. Spill Contingency Plan
6. The Plan for Compliance
7. A Study on the interim Sewage management until WWTP is built and operational



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Building Nunavut Together
Nunavut iluqatigingniq
Bâtir le Nunavut ensemble

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Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

8. List of Airport Sewage Lagoon users

Please contact me if you have any issue or concern with this Renewal and Amendment application. I will also appreciate if you keep me in the loop for this water licence approval process.

Thank You.

Bhabesh Roy, M.A.Sc., P.Eng.
Municipal Planning Engineer
Community Government Services
Baffin Region, Government of Nunavut
P.O.Box 379, Pond Inlet, X0A 0S0
Ph-867 899 7314
Fax-867 899 7328
E-mail: broy@gov.nu.ca

Copy: Ralph Ruediger, Director of Community Development, GN-CGS
Timoon Toonoo, Director of Community Support, GN-CGS
James Currie, A/Director, Infrastructure, GN-CGS
Todd McKay, Director of Nunavut Airports, GN-ED&T
Steve Piercey, Regional Airport Manager (N), GN-ED&T
Angela Idlout, Senior Administrative Officer, Hamlet of Resolute Bay