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

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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 4	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)	Update NWB logo	April 2013
(4)		
(5)		
(6)		
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(9)		
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GENERAL WATER LICENCE APPLICATION
(APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: *Guide to Completing and Submitting a Water Licence Application for a New Licence* for more information about this application form.

LICENCE NO:
(for NWB use only)

1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address)

Charlotte Lamontagne
Regional Director, Contaminated Sites Nunavut
Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)

969 Sivumugiaq St., Iqaluit, NU, X0A 3H0

Phone: (867) 975-4530
Fax: (867) 975-4560
e-mail: charlotte.lamontagne@rcaanc-cirnac.gc.ca

2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address)

Phone: _____
Fax: _____
e-mail: _____
(Attach authorization letter.)

3. NAME OF PROJECT (including the name of the project location)

Bernard Harbour PIN-C Contaminated Site Remediation Project

4. LOCATION OF UNDERTAKING

The site is located approximately 100 km north of the hamlet of Kugluktuk. There are 2 areas of interest located at the site designated as follows below.

Project Extent

NW: Latitude: (68° 55' 15.32" N) Longitude: (114° 30' 39.20" W) - Main Station Area
NE: Latitude: (° ' " N) Longitude: (° ' " W)
SE: Latitude: (68° 46' 31.85" N) Longitude: (114° 45' 53.67" W) - Beach Area
SW: Latitude: (° ' " N) Longitude: (° ' " W)

Camp Location(s)

Latitude: (68° 55' 15.32" N) Longitude: (114° 30' 39.20" W) - Main Station Area

Exact location of camp to be determined based on site conditions, proximity to work areas, and selected water source east or west of the Main Station Area.

5. **MAP** - Attach a topographical map, indicating the main components of the undertaking.

See Attached Google Earth Map and Referenced Reports for more detail.

NTS Map Sheet No.: ___N8716B_____ Map Name: __NTS_____ Map Scale: _1:50,000__

6. **NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

Surface

☒ Crown Land Use Authorization from Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)
Date (expected date) of issuance: July 1, 2025 Date of expiry: September 2026

☐ 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: _____

Name of entity(s) holding authorizations:

Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

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

☐ North Baffin	☐ Keewatin
☐ South Baffin	☐ Sanikiluaq
☐ Akunniq	☒ West Kitikmeot

Is a land use plan conformity determination required?

☐ Yes ☒ No

If Yes, indicate date issued and attach copy _____
If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required. NPC letter dated August 15, 2024

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

☒ Yes ☐ No

If Yes, indicate date issued and attach copy: NIRB letter dated December 20, 2024
If No, provide written confirmation from NIRB confirming that a screening determination is not required.

9. DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project proposal.

Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) plans to complete an environmental clean-up project of the PIN-C, Bernard Harbour Former Intermediate Distant Early Warning (DEW) Line site. The site is located in the Kitikmeot Region of Nunavut, on the shores of Dolphin and Union Strait. The hamlet of Kugluktuk is the nearest community located approximately 100 km south of the site.

The site was constructed in 1958 and subsequently abandoned in 1963. CIRNAC became the custodian of the Site in 1965. A limited cleanup program was completed in 1985 on behalf of the Department of National Defense (DND), Environment Canada (ECCC), and CIRNAC. During the program, the former POL tanks at the Main Station and Beach, equipment, and hazardous materials were removed from the site.

The proposed project is the result of multiple years of assessment (1995-2022) and remediation activities that were completed at the site since its abandonment. The objective of the project is to demolish old buildings and structures, remove all remaining hazardous and non-hazardous debris, contaminated soil, and dispose of materials at offsite facilities. Some contaminated soil will also be treated on-site during the project.

It is assumed that the project will take 2 seasons to complete with site work occurring from approximately late August 2025 to September 30, 2025, and June 2, 2026 to September 15, 2026. Access to the site will be by sealift/barge and air. A temporary seasonal camp will be set-up at the site for project personnel. It is anticipated that the project will require approximately 25 people to be on site at various stages to complete the cleanup activities.

Throughout the project a strong working relationship will be developed and maintained with the nearby community of Kugluktuk. Community engagement sessions will be held with stakeholders and community members throughout the project.

Successful completion of the clean-up project will improve conditions at the former DEW Line site so there will be no unacceptable risks to human health or the ecological environment and no future monitoring requirements.

Site remediation activities at the site will include:

1. Mobilization/Demobilization of equipment, Materials / wastes and personnel
2. Enhancement of access routes and site routes
3. Camp set-up and operation
4. Hazardous material removal & off-site disposal
5. Building and structure demolition, removal and disposal off-site
6. Non hazardous materials / Debris consolidation and off-site disposal
7. Excavation & treatment/off-site disposal of contaminated soils
8. Quarrying of gravel and overburden materials
9. Temporary Land farm construction/operation/decommissioning
10. Site regrading, excavation and stabilization of former buried debris areas.

All site remediation activities will take place on Crown Land. No activities on Inuit Owned Lands (IOL).

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

Various remedial options were evaluated for each waste stream in the Remedial Action Plan - attached. Options to leave the abandoned waste on-site or construct a landfill for waste disposal were assessed but were not deemed the best options. The selected remedial option to remove wastes, remediate and remove contaminated soil were acceptable to the Community.

11. **CLASSIFICATION OF PRIMARY UNDERTAKING -** Indicate the primary classification of undertaking by checking one of the following boxes.

- ☐ Industrial
- ☐ Agricultural
- ☐ Mining and Milling (includes exploration/drilling/exploration camps)
- ☐ Conservation
- ☐ Municipal (includes camps/lodges)
- ☐ Recreational
- ☐ Power
- ☒ Miscellaneous (describe below):

Remediation with remote camp - See Remote Camp Supplementary Questionnaire – attached.

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

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

- ☐ Hydrostatic Testing
- ☐ Tannery
- ☒ Tourist / Remote Camp
- ☒ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
- ☐ Onshore Oil and Gas Exploration Drilling

☐ Mineral Exploration / Remote Camp
☐ Advanced Exploration
☐ Mine Development
☐ Municipal
☐ General Water Works
☐ Power

See Remote Camp Supplementary Questionnaire and Supplemental Information Guide – attached.

12. **WATER USE -** Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

☒ To obtain water for camp/ municipal purposes
☐ To obtain water for industrial purposes
☐ To 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 AND QUALITY OF WATER INVOLVED -** For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.

Name of water source(s) (show location(s) on map):

There are two unnamed lakes located onsite. One is located 1 km northwest of the Station Area buildings and historically served as a drinking water source during Dew Line operations (known as 'the West Lake') and the other lake, the East Lake, is located approximately 0.9 km southeast of the Station Area buildings.

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

It is accepted that either lake could be used for the project. The lakes each have sufficient capacity to meet water needs. Water quality of the lakes has not recently been tested however it will be tested and treated to meet drinking water guidelines required for potable purposes. Upon arriving on site, the initial source of drinking water will be bottled water while the treatment, sampling and analysis are conducted to confirm that the treated water from the lake is safe for drinking.

Bottled water will be supplied to the project participants for potable purposes and cooking should the treatment system fail to meet acceptable water quality criteria.

Provide the overall estimated quantity of water to be used: _____6_____ m^3/day

Provide the estimated quantity(s) of water to be used from each source:
All water will be withdrawn from the same source.

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

Water for camp use. ~ 3 m^3/day

All water related to personal consumption and hygiene and the water needed to provide other camp services such as laundry, food preparation, etc.

Estimate includes water for washing, decontamination, and possible dust suppression if required.

Water required for construction ~ 3 m^3/day

Describe the method of extraction(s): Contractors will be required to use a pump that is contained within a rigid containment unit with a liner to contain any leaks. The intake will feature a mesh screen specifically designed to prevent fish from being drawn into the pump during pumping operations.

Describe the quality of water(s) returned to source(s):

Camp wastewater will consist of greywater originating from the kitchen sink, the bathroom sinks and showers, and laundry machines. No wastewater will be returned to source; it will be discharged into temporary greywater sump chosen in an area with adequate permeability and stability for sump construction. The grey water sump will be located away from water supplies and drainage areas. The size of the sump will be based on expected volume and soil absorption capacity. The pit will be excavated to a depth that can contain the waste without overflowing, ensuring proper drainage and structural integrity. The sump will be decommissioned at the end of each season.

There will be no on-site sewage treatment systems. No blackwater will be generated. Self-contained PACTO Dry toilets will be used for sanitary sewage waste. The contents will be packed and removed for disposal in camp incinerator.

Estimated quantity(s) of water returned to source(s) _____0_____ m^3/day

14. **WASTE** – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

- [x] Sewage
- [x] Solid Waste
- [x] Hazardous
- [x] Bulky Items/Scrap Metal
- [ ] Animal Waste
- [ ] Other (describe): _____
- [x] Waste oil
- [x] Greywater
- [ ] Sludges
- [x] Contaminated soil and/or water

See Remote Camp Supplementary Questionnaire – attached.

15. **QUANTITY AND QUALITY OF WASTE INVOLVED** – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

This project's remedial action plan (RAP) contains treatment options proposed for the different waste streams at the site. These options will be used for both the historical wastes generated through previous uses and waste generated from camp operations during remediation.

The summary of these options are presented in the following table.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Solid Waste (Camp)	Camp Waste (Paper, packaging, food, etc.)	1.0 cubic metre/day	Incineration (combustibles only)	Ashes collected, packaged and removed off-site for disposal in

				licensed facility southern Canada. Non-combustible waste to be packaged and shipped off-site for disposal.
Grey Water (Camp)	Water from kitchen sinks and laundry	110 litres/day x 25 people = 2,750 l/day	Collected in sump	Discharge effluent to sump soak away pit. Pit to be backfilled upon decommissioning at project completion.
Sewage (solid)	Organic waste from PACTO Dry toilets. No blackwater will be generated.	0.25 cubic metres/day	Incinerated on-site (using cyclonator type equipment)	Ashes collected, packaged and removed off-site for disposal in licensed facility southern Canada.
Waste Oil	Oil/petroleum residuals,	~2300 litres	Collected in drums	Shipped south for recycling or disposal
Non-Hazardous Material	Barrels, demolition wastes, recovered buried debris, other scattered site debris	~590 m3	Collect, compact, containerize for disposal	Shipped south for recycling or disposal
Hazardous Material	PCB amended painted materials	~150 m3	Abatement of poorly adhered paint, cut larger material with adhered paint to smaller size, wrap and containerize for disposal	Shipped south for recycling or disposal
Contact water/liquids	Contaminated water (if encountered)	< 500 litres estimate.	Collected and treated on site.	Discharge treated effluent meeting criteria to ground surface. If treatment criteria cannot be met material will be containerized and shipped off-site for disposal
Hazardous Material	Asbestos	~11 m3	Double bag	Dispose off-site in facilities accepting the waste.
Soil (PHC)	Type B Hydrocarbon Soils	~750 m3	Excavate and treat in temporary landfarm	Return clean soil to backfill excavations.

Soil (PHC)	Type A Hydrocarbon Soils	~3.0 m3	Excavate and containerize for disposal.	Dispose off-site in facilities accepting the waste
Soil (other)	Tier I Soils (low level concentrations of PCB and metals)	~195 m3	Excavate and containerize for disposal.	Dispose off-site in facilities accepting the waste
Soil (other)	Tier Soils II (Higher level concentrations of PCB and metals)	~230 m3	Excavate and containerize for disposal.	Dispose off-site in facilities accepting the waste

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

Authorization: _____Quarry Permit_____

Administering Agency: Crown and Indigenous Relations and Northern Affairs Canada (CIRNAC)

Project Activity: Producing borrow material for backfilling and regrading.

Date (expected date) of issuance: _Jully 15, 2025 Date of expiry: Project completion 2026

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

See Attached PIN-C Project Proposal Report-FINAL for Environmental Impact Assessment and details on predicted impacts.

In the short term, species and their habitats are expected to be impacted. The majority of this impact will be in the form of disturbance from the presence of humans and machinery and the accompanying noise, dust and activity. There is the possibility of more serious impacts from spills, fires, erosion and sedimentation and encounters with wildlife, however, these will be mitigated by the development of a comprehensive set of management plans developed, reviewed, and approved prior to commencing work. Ultimately, any short term negative impacts are anticipated to be offset by an overall improved environment and habitat to support species in their medium and long-term future.

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

Not applicable - N/A

19. INUIT WATER RIGHTS

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

Not applicable - N/A

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.

A community-level RAP working meeting was held in Kugluktuk on February 28, 2023, at the Kugluktuk Community Complex. Approximately 60 members of the community attended to discuss various remedial options for the Site and provide input on preferred technical recommendations. Based on the presentation and feedback received, the options were deemed acceptable to the community. Community engagement will continue throughout the Project, and any concerns raised during ongoing engagement will be addressed.

Presentation, Meeting minutes and attendance list attached.

21. SECURITY INFORMATION

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut,* Indian and Northern Affairs Canada, 2002.

Not applicable - N/A

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.

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

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

Not applicable - N/A

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

The relevant reports are as follows:

PIN-C Project Proposal Report
PIN C Remedial Action Plan (RAP)

24. PROPOSED TIME SCHEDULE – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction
Proposed Start Date: September 2025 (month/year) Proposed Completion Date: October 2025 (month/year)

Operation
Proposed Start Date: : July 2026 (month/year) Proposed Completion Date: September 2026 (month/year)

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

Post - Closure
Proposed Start Date: _____ (month/year) Proposed Completion Date: _____ (month/year)

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

Construction
☐ Winter ☐ Spring ☒ Summer ☒ Fall ☐ All season

Operation
☐ Winter ☐ Spring ☒ Summer ☒ Fall ☐ All season

Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Post - Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): _____2_____ years

Requested Date of Issuance: __July/2025__ (month/year) Requested Expiry Date: _October/2026____ (month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING – If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

CIRNAC will use NWB standardized form for annual reporting

27. **CHECKLIST –** The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

☒ Yes ☐ No If no, date expected _____

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

☒ Yes ☐ No If no, date expected _____

Completed General Water License Application form.

☒ Yes ☐ No If no, date expected _____

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

☒ Yes ☐ No If no, date expected _____

English Summary of Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

☒ Yes ☐ No If no, date expected _____

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

☐ Yes ☒ No If no, date expected _____N/A_____

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 license.

☐ Yes ☐ No If no, date expected _____

This application is being made by the Government of Canada

28. **SIGNATURE**

Charlotte Lamontagne	Director, Contaminated Sites, Nunavut		April 29, 2025
Name (Print)	**Title (Print)**	**Signature**	**Date**