Crown-Indigenous Relations and Northern Affairs Canada
Relations Couronne-Autochtones et Affaires du Nord Canada

Nunavut Regional Office (NRO)
P.O. Box 2200
Iqaluit, NU, X0A 0H0

April 06, 2023

Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut X0B 1J0

Re: Water Use Licence Application for Coral Harbour Remediation Project

The Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) is submitting the enclosed application for Water Use Licence for the remediation of Coral Harbour site. All supporting documents are attached.

CIRNAC completed site investigations at Coral Harbour in 2008, 2011, 2020, 2021 and 2022, developed a remedial action plan (RAP), and proposes to commence remedial activities on the site starting from June/July 2023.

In addition to applying for a Water Use Licence, CIRNAC has also applied for Nunavut Planning Commission (NPC) Conformity Check, Nunavut Impact Review Board (NIRB) Screening and the Land Use authorizations from Community and Government Services of the Government of Nunavut, Nunavut Airports, Transport Canada and the Department of Fisheries and Oceans, Canada.

If you have any questions or comments, please contact the undersigned or the Project Manager, Dele Morakinyo at dele.morakinyo@rcaanc-cirnac.gc.ca, or by telephone at (873) 354-1694

Sincerely,

Charlotte Lamontagne,
Director, Contaminated Sites Program (NRO)
Tel: (867) 975-4730; Fax: (867) 975-4736
Email: charlotte.lamontagne@ rcaanc-cirnac.gc.ca

Canada

List of Documents Submitted
(Application & Supporting Documents)

APPLICATION:

1. Letter of Application for Water Use Licence (Cover)

2. Section 1 – General Water Use Licence Application Form (Completed)

3. Section 2 – Exploration / Remote Camp Supplementary Questionnaire

SUPPORTING DOCUMENTS:

1. Executive Summary (English version)

2. Executive Summary (Inuktitut version)

3. Environmental Site Assessment Report

4. Supplementary Site Assessment Report

5. Coral Harbour Project Remedial Action Plan (RAP)

6. Fuel and Hazardous Material Spill Contingency Plan

7. Site Maps – Site Location Map; Map of Current Site Features and NTS Map Sheet

8. Coral Harbour Project Proposal Report

9. Nunavut Planning Commission (NPC) Determination (NPC Conformity Check)

10. Nunavut Impact Review Board (NIRB) Screening Decision Report

11. Archaeological Impact Assessment Report

12. Human Health and Ecological Risk Assessment (HHERA)

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

Document Date: April 2013

Application Submission Date: __*April 06, 2023*__
Month/Day/Year

P.O. BOX 119
GJOA HAVEN, NUNAVUT
XOB 1J0
TEL: (867)360-6338
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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 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)		
(7)		
(8)		
(9)		
(10)		

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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, Director,
Contaminated Sites Program,
Crown-Indigenous Relations & Northern Affairs Canada (CIRNAC) – Nunavut Region,
Government of Canada
P.O. Box 2200, Iqaluit,
NU X0A 0H0

Phone: *(867) 975 4730*
Fax: *(867) 975 4736*
e-mail: *Charlotte.lamontagne@rcaanc-cirnac.gc.ca*

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

SAME AS BLOCK 1

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

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

Coral Harbour Site Remediation Project

4. LOCATION OF UNDERTAKING

Project is located 10 km east of Coral Harbour Municipality, Nunavut

Project Extents

NW: Latitude: (64° 11' 58.55" N) Longitude: (83° 21' 12.54" W)
NE: Latitude: (64° 12' 6.10" N) Longitude: (83° 15' 50.44" W)
SE: Latitude: (64° 07' 34.08" N) Longitude: (83° 15' 3.14" W)
SW: Latitude: (64° 07' 26.30" N) Longitude: (83° 21' 6.10" W)

See the attached Site Topographical Drawing

Camp Location(s) – Extents

NW: Latitude: (64° 12' 0.52" N) Longitude: (83° 20' 17.73" W)
NE: Latitude: (64° 12' 2.75" N) Longitude: (83° 20' 9.31" W)
SE: Latitude: (64° 12' 2.75" N) Longitude: (83° 20' 9.31" W)
SW: Latitude: (64° 11' 59.59" N) Longitude: (83° 20' 23.74" W)

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

NTS Map Sheet No.: _046B03__ Map Name: _*Topo Map of Coral Harbour*_ 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 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: _*Land Use Authorizations from Nunavut Airports, NAV Canada, Transport Canada, Municipality of Coral Harbour. Also need permission to work around airport from the Nunavut Airports*_____
Date (expected date) of issuance: _*May, 2023*__ Date of expiry: __*March , 2025*_____

Name of entity(s) holding authorizations:
_____

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

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

☐ North Baffin
☐ South Baffin
☑ Keewatin
☐ Sanikiluaq

☐ Akunniq ☐ West Kitikmeot

Is a land use plan conformity determination required?

☑ Yes ☐ No

If Yes, indicate date issued and attach copy ___*June 21, 2022*_____
If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

NPC Conformity Check Report, File No. 149576 issued on June 21, 2022 is attached

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 _____*October 6, 2022* _____
If No, provide written confirmation from NIRB confirming that a screening determination is not required.
See attached, the NIRB's Screening Decision Report (No.: 22KN046)

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

Site remediation operations to include:

1. *Mobilization of equipment, Materials / wastes and personnel*
2. *Improvement of access routes and site routes*
3. *Camp set-up and operation*
4. *Hazardous material removal & off-site disposal*
5. *Construction and operation of on-site non-hazardous waste landfill*
6. *Building and structure demolition, removal and disposal in the on-site landfill*
7. *Non hazardous materials / Debris consolidation and off-site disposal*
8. *Excavation & treatment / off-site disposal of contaminated soils*
9. *Quarrying of gravel and overburden materials*
10. *Landfarm construction / operation / decommissioning*
11. *Construction/decommissioning of sewage lagoon*
12. *Site regrading*
13. *Final demobilization from site of equipment, Materials / wastes and personnel*

See the following attachments::

-Executive Summary in English and Inuktitut
-Remedial Action Plan (RAP) for Coral Harbour Site
-Project Proposal Plan (PPR) for Coral Harbour Site
- Site Maps

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

Coral Harbour site is located at about 10 km northwest of Coral Harbour, Nunavut.

A number of remedial options were proposed and evaluated, for each waste stream at the site. A technically superior option out of the proposed options for each waste streams was then adopted Details of the option analysis and selections are contained in the attached Remedial Action Plan (RAP). For instance, non-hazardous wastes will be disposed of in the on-site landfill while hazardous materials will be packaged and shipped off-site for disposal in facilities licenced to accept each waste stream. Please refer to the attached RAP for full details on the remedial options proposed and recommended..

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):

Site Remediation with remote camp setup and operation.
(See the completed Remote Camp Supplementary Questionnaire (Section 2))and 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

For both the remote camp and Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil please see the supplementary information in the enclosed "Remote Camp Supplementary Questionnaire Form". (Section 2).

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 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: _____

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):
Due to the closeness of the site to the Municipality of Coral Harbour, it is currently planned that the remediation contractors will use of municipal water supply and waste facilities. The remediation contractors look for alternative sources of water supply and waste disposal systems when they get to the site. Should that happen, CIRNAC will update the Board will the new plans.

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

The municipal water supply is portable and will be suitable for immediate usage at the site camp for drinking and for other water uses. Should the contractor not use the municipal source but choose to use another raw water source at the site, samples of the identified raw water source will be collected, tested, and analysed. If the testing results show substances exceeding Health Canada guidelines, on-site water treatment system will be used to treat the water until it is portable. In the later case, bottled water could be used as drinking water pending the time treatment to achieve portability of the site water is achieved.

Provide the overall estimated quantity of water to be used: _____*15*_____ m^3/day

Provide the estimated quantity(s) of water to be used from each source:

Quantity to be abstracted from the lake will be approximately is 15 m^3/day

Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)
Water for camp use. ~ 5 m^3/day; Water for construction ~ 10 m^3/day

Describe the method of extraction(s):

Raw water from the site lake will be pumped either directly into a pipe running between the freshwater lake and the camp or into waiting trucks using a small horsepower pump and water intake pipe equipped with a small mesh screen. The small mesh screen will prevent fish entrapment.

Estimated quantity(s) of water returned to source(s) _____*0*_____ m^3/day

Describe the quality of water(s) returned to source(s): *N/A - Used water will not be returned to source; it will be discharged into the municipal waste treatment facility or to a temporary lagoon built to treat wastewater generated on-site (more details contained in the exploration and remote camp questionnaire*

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

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

See the attached: - Exploration and Remote Camp Supplementary Questionnaire
- Coral Harbour Remedial Action Plan.

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 table below.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Non-Hazardous Material	*Barrels, demolition wastes, compressed gas cylinders, other scattered site debris*	*353 m^3*	*Collect, shred, compact for on-site disposal*	*Dispose in the on-site NHW landfill*
Hazardous Material	*PCB and/or lead amended paints*	*~1050 m^3*	*Partial abatement of poorly adhered paint, Collect lead leached substrate for off-site disposal. cut to small sizes perfectly adhered paint for on-site disposal*	*Dispose abated paint in Tier II facility; dispose paint and substrate off-site; dispose perfectly adhered painted material in NHW landfill*
Hazardous Material	*Batteries*	*~16 pieces*	*Package and containerise*	*Dispose off-site in facilities accepting the waste.*
Hazardous Material	*Asbestos*	*~25 m^3*	*Double bag*	*Dispose in NHW landfill*
Soil (PHC)	*Type B Hydrocarbon Soils*	*~1900 m^3*	*Excavate and treat in landfarm*	*Return clean soil to backfill excavations.*
Soil (PHC)	*Type A Hydrocarbon Soils*	*~1050 m^3*	*Excavate and transfer to Landfill area*	*Dispose of in an on-site NHW landfill*
Soil (other)	*Tier I Soils (low level concentrations of PCB and Lead)*	*~83 m^3*	*Excavate and transfer to Landfill area*	*Dispose of in an on-site NHW landfill*
Soil (other)	*Tier Soils II (Higher level concentrations of PCB and Lead)*	*~3200 m^3*	*Excavate and transfer to secured facility area*	*Dispose of in an on-site Tier II secured facility*
Buried Debris Areas (BDAs)	*8 BDAs (2 class Bs and 6 class Cs*	*~3160 m^3*	*Excavate, grade, compact*	*Remediate each BDA in accordance with AMSRP (INAC 2009).*
Sewage	*Black water from toilets*	*50 l/day x 38 people= 1,900 litres/day*	*Sewage Lagoon or treatment plant*	*Discharge effluent meeting criteria on the land*

Waste Oil	*Oil*	*< 600 litres (l)*	*Collected in drums*	*Shipped south for recycling or disposal*
Solid Waste (Camp)	*Camp waste (Paper, packaging, food, etc.)*	*1.0 cubic metre per day*	*Incineration (combustibles only)*	*Packaged and shipped off-site for disposal*
Grey Water (Camp)	*Water from kitchen sinks and laundry*	100 litres/day x 38 people = 3,800 l/day	*Sewage Lagoon or treatment plant*	*Discharge effluent meeting criteria on the land*

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: _____*N/A*_____

Administering Agency: _____

Project Activity: _____

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

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

Environmental Impact Assessment was carried to assess the impact of the proposed RAP on the valued Components 9VCs) on the site. The site potential residual effects after the application of mitigation measures associated with the Project are anticipated to:

• be short-term in nature, with the exception of potential effects to groundwater associated with the NHW facility
• occur occasionally throughout the Project
• be limited to areas directly disturbed by the Project (footprint) and areas within 500 m of the footprint, because the Project will use areas of existing disturbance as much as possible to mitigate potential residual effects.

Effects to all VCs are evaluated as low magnitude and will not threaten the sustainability of VCs.

See: Coral Harbour Project Proposal Report

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. *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). *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.

Community meeting was held on March 02, 2021 in Coral Harbour, the nearest community to Coral Harbour Project site. The meeting was well advertised in the hamlet, on the radio and through posters posted at strategic places in the community. The meeting was attended by the council members and the members of the community. The Crown representatives (CIRNAC and PSPC) at the meeting presented the proposed RAP and satisfactorily answered questions raised by the attendees. A translator was engaged and provided translation in Inuktitut. Additional consultation activities are planned as the project progresses.

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. *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. *N/A*

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

The key studies carried out to date include the follow

- *Environmental Site Assessments (ESA).*
- *Archaeological (Impact) Assessment (AIA)*
- *Human Health and Ecological Risk Assessment (HHERA)*
- *Supplemental Site Assessment*
- *Remedial Action Plan (RAP)*
- *Project Proposal Report (PPR)*

Most of these reports are attached to this application.

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: _*July 2023*_____ (month/year) Proposed Completion Date: ____*March 2025*__ (month/year)

Operation
Proposed Start Date: _*July 2023*____ (month/year) Proposed Completion Date: __*March 2025*___ (month/year)

Closure
Proposed Start Date: ___*Jan 2025*___ (month/year) Proposed Completion Date: ___*March 2025*____ (month/year)

Post - Closure
Proposed Start Date: ____*July 2025*__ (month/year) Proposed Completion Date: ___*October 2049*____ (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): _____*Two (2)*_____ years

Requested Date of Issuance: _*May 1 2023*__ (month/year) Requested Expiry Date: _*Macrh 30 2025* (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.
Will use NWB's 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 Licence 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 _____

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. ***N/A*** *- This application is being made by a Department of the Government of Canada*

☐ Yes ☐ No If no, date expected _____

28. **SIGNATURE**

Charlotte Lamontagne (Proponent)	*Director, Contaminated Sites Program*		*March 29, 2023*
Name (Print)	**Title (Print)**	**Signature**	**Date**

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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE

Applicant: *Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)* **Licence No:** _____
(For NWB Use Only)

ADMINISTRATIVE INFORMATION

1. Environment Manager: *Caitlin Moore, Public Services and Procurement Canada (PSPC), 9700 Jasper Avenue, Edmonton, Alberta T5J 1S6* Tel: *780-901-1148* E-mail: *Caitlin.Moore@tpsgc-pwgsc.gc.ca*

2. Project Manager: *Dele Morakinyo, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)*
Tel: *873-354-1694* E-mail: *dele.morakinyo@rcaanc-cirnac.gc.ca*

3. Does the applicant hold the necessary property rights? *Yes*

4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)? If so, please provide letter of authorization. *No*

5. Duration of the Project

   ☐ One year or less Start and completion dates: _____
   ☑ Multi Year:

   If Multi-Year indicate proposed schedule of on site activities
   Start: *May, 2023* Completion: *March, 2025*

CAMP CLASSIFICATION

6. Type of Camp

   ☐ Mobile (self-propelled)
   ☑ Temporary
   ☑ Seasonally Occupied: *June 15-September 30*
   ☐ Permanent
   ☐ Other:_____

7. What is the design, maximum and expected average population of the camp?

   The camp will be occupied by an average population of 25 people for a maximum of 105 days each year.

8. Provide history of the site if it has been used in the past.

   Coral Harbour Site consists of areas around the Hamlet of Coral Harbour used between the 1940s to the mid-1950s as training areas and base for Northern operations by the US and Canadian Militaries. These areas were used as staging areas to support operations (including the construction of DEW Line Sites)

across Northern Canada. In the 1970s, military operations ceased in these areas, the airfield became the municipal airport and the rest of the site was abandoned. Coral Harbour Site is about 10 km northwest of the Hamlet of Coral Harbour. Past legal studies indicated that, though the Land regimes around the Coral Harbour Site belong to a number of organizations, a large amount of contamination on the site could be traced to Crown's military operations on the site between 1940s to 1970s.

The areas of environmental concerns identified at the site are: area of Tar Barrels, area of Full Barrels, a Barrel Cache, a Former Amy Base, area of the debris of the Former Airport and the Former Farm Tank area. These areas contain non-hazardous wastes (barrels, structures and surface debris); hazardous wastes (batteries, asbestos, lead paint, gas cylinders and contents of barrels); contaminated soils (soil exceeding human health and ecological risk assessment targets and petroleum hydrocarbon stained surficial soils); and Waste Disposal Areas (containing buried debris). Works started on the site with site investigation conducted in 2020 followed by a supplemental site assessment in 2021. Based on the reports of the site assessment and the supplemental site assessment, an human health and ecological risk assessment report was developed together with the remedial action plan for the cleanup of the site. Also developed was the project proposal report to identify the effects of the proposed remediation plan on the Coral Harbour site and its environs. The site remediation field work is planned to commence in May/June 2023 and will be completed about September/October 2024.

The main environmental issues identified on the site are as follows:

- *Non-Hazardous Wastes (NHW)including Empty Barrels, Infrastructure (tank farm, wooden sheds, empty tanks, dilapidated building, concrete anchor and former maintenance building), Buried Debris at the solid waste disposal areas (WDAs), and Surface Debris.*
- *Contaminated Soil (PHC) including Type A (nonmobile PHCs), Type B (mobile PHCs) Soil, and Surficial Staining.*
- *Hazardous Wastes (HW) including Asbestos Minimum, Poorly adhered lead amended paint, Batteries, and Aqueous Liquids*

CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features, and water bodies.

The boundary coordinates of the proposed camp are:

NW:	*Latitude: (64° 12' 0.52" N)*	*Longitude: (83° 20' 17.73" W)*
NE:	*Latitude: (64° 12' 2.75" N)*	*Longitude: (83° 20' 9.31" W)*
SE:	*Latitude: (64° 12' 2.75" N)*	*Longitude: (83° 20' 9.31" W)*
SW:	*Latitude: (64° 11' 59.59" N)*	*Longitude: (83° 20' 23.74" W)*

This camp location will be re-examined during pre-mobilization site visit in May 2023. If found unsuitable, a new location will be selected. The ultimate camp location will be reported to NWB before the commencement of the remediation field works. Biogeographical and geomorphological features of the site including the location of the water bodies on the site were considered in selecting the current camp location. The camp location is in an area with minimal to no vegetation thus ensuring minimal vegetation disturbance when setting up the camp and grading of the camp area. The camp location is also at a safe distance from water bodies on the site. No nests or animal activity were noted in the area during the site assessments. In the vicinity of the selected camp location there is good drainage and minimal to no tundra ponding.

Please see more details in these attached documents:

- *Coral Harbour Remedial Action Plan (RAP);*
- *Site Maps; and*
- *Project Proposal Report.*

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

The camp location was selected by (i) considering locations on the site where there is minimal to no vegetation; (ii) locations that are at safe distances from water bodies on the site; and (iii) locations with little or no wildlife disturbance. The proposed camp location will have low or no vegetation disturbance during camp setup and decommissioning, and had no nests or animal activity noted during the site assessments. There is, also, good drainage and minimal to no tundra ponding in the vicinity of the proposed camp location.

11. Is the camp or any aspect of the project located on:

☐ Crown Lands Permit Number (s)/Expiry Date: _____ ____
☐ Commissioners Lands Permit Number (s)/Expiry Date: _ _____
☐ Inuit Owned Lands Permit Number (s)/Expiry Date: _____

The camp location is on Municipal Land but fairly close to the Airport's lot 7. Application for authorization of land use has been made to the Municipality of Coral Harbour, while request for permission to work near the airport has been made to Nunavut Airports.

12. Closest Communities (direction and distance in km):

The closest community to the site is Coral Harbour. The site is 10 km northwest of the Hamlet of Coral Harbour.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

Yes. Community meeting was held on March 02, 2021 in Coral Harbour, the nearest community to the project. The meeting was well advertised in the hamlet, on the radio and through posters placed at strategic locations in the community. The meeting was attended by the Hamlet council members and other community members. The Crown representatives (CIRNAC and PSPC) at the meeting presented the proposed RAP and satisfactorily answered questions raised by the attendees. A translator was engaged and provided translation in Inuktitut.

There were no concerns raised during the meeting. Community members are quite pleased that the site is about to be remediated. Some information provided by the community members (e.g. additional areas of contamination), were considered while developing the final RAP.

Three (3) additional community meetings are planned for the project and they will be held in Coral Harbour:

- *Pre-Mobilization Community Meeting (about May/June 2023) – To make the community members to be aware that the project is about to start, recruit employees and subcontractors for the project*
- *Inter-Season1 Community Meeting (May/June 2024) – to provide update on the first year and recruit for the second year*
- *Project Completion Community Meeting (October 2024) – to inform the community on project completion and future plans for the site (i.e. information on Long Term Monitoring program for the site.)*

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

It is anticipated that the activities will have no adverse impact on traditional water use and local fish and wildlife habitats. A Project Proposal Report was completed after Environmental Impact Assessment study to evaluate the potential impacts of the project. For the most part, the report concluded the project will have a net positive effect on the environment. Some potential adverse effects, identified, will be minimized or completely removed through the implementation of the proposed mitigation and monitoring plans and project design.

More details: See the attached Project Proposal Report

PURPOSE OF THE CAMP

15.
- ☐ Mining (includes exploration drilling)
- ☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.) (Omit questions # 16 to 21)
- ☑ Other ___*Contaminated Site Remediation*_____(Omit questions # 16 to 21)

16. Activities (check all applicable) *Not Applicable (N/A)*

- ☐ Preliminary site visit
- ☐ Prospecting
- ☐ Geological mapping
- ☐ Geophysical survey
- ☐ Diamond drilling
- ☐ Reverse circulation drilling
- ☐ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)
- ☐ Other: _____

17. Type of deposit (exploration focus): *N/A*

- ☐ Lead Zinc
- ☐ Diamond
- ☐ Gold
- ☐ Uranium
- ☐ Other: _____

DRILLING INFORMATION

18. Drilling Activities *N/A*

- ☐ Land Based drilling
- ☐ Drilling on ice

19. Describe what will be done with drill cuttings? *N/A*

20. Describe what will be done with drill water? *N/A*

21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable. *N/A*

22. Will any core testing be done on site? Describe. *N/A*

SPILL CONTINGENCY PLANNING

23. The proponent is required to have a site specific Spill Contingency Plan prepared and submitted with the application This Plan should be prepared in accordance with the *NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998* and *A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002*. Please include for review.

A Fuel and Hazardous Materials Spill Contingency Plan has been written for this site and is included with this application. The plan was prepared in accordance with the NWT Environmental Protection Act, Spill Contingency Planning and Reporting Regulations, July 22, 1998 and A Guide to the Spill Contingency Planning and Reporting Regulations, June 2002. The procedures in the plan will be adopted at Coral Harbour Project in the event of fuel or hazardous material spill. Any additional documentation developed prior to or during the construction relating to health and safety issues, will be submitted to the Board at and when they are available.

See the attached, Fuel and Hazardous Materials Spill Contingency Plan

24. How many spill kits will be on site and where will they be located?

There will be at least two drum spill kits present at the Coral Harbour site each capable of absorbing 174 L of liquid hydrocarbons. Both kits will be located near the fuel containment area. A smaller spill kit will be located by the pump used to transport non-potable water. Two standard spill packs, each capable of absorbing 40 L of liquid hydrocarbons will be available; a task crew will be accompanied by at least a spill pack each time they are working on the field.

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

Types and approximate quantities of fuels:

Diesel: ~ 100,000 L stored in 10 numbers of 10,000 L doubled walled tanks;
Gasoline: ~ 2,000 L stored in 10 numbers of 205 L capacity drums;
Propane: ~ 2 numbers of 100 LBS container.

Exact quantities of each fuel type and any other fuel types required will be provided prior to commencement of work

Method of Storage & MSDS Sheets:

Electric pump will be used to transfer fuel from the tanks to the site vehicles and equipment. All fuel transfers will be done in a lined area only by authorized employees. The containment area will be located on flat, even ground at a distance of no less than 30 m away from the camp and any natural drainage area or water body. Propane will be stored in 45 kg (100 lb) certified tanks near the kitchen tent.

Contractor will comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding employee training, use, handling, storage and disposal of hazardous materials, and regarding labeling and provision of Material Safety Data Sheets (MSDS), as required by WHMIS

WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

Freshwater Lake (see Appendix F)

27. Estimated water use (in cubic metres/day):

- ☑ Domestic Use: *5 m^3 /day* Water Source: *Municipal Water Supply / Site Lake*
- ☐ Drilling: _____ Water Source: _____
- ☑ Other: *10 m^3/day (Construction Activities)* Water Source: *Municipal Water Supply / Site Lake*

Total water use: *15 m^3/day*

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? (see *DFO 1995, Freshwater Intake End-of-Pipe Fish Screen Guideline*) Describe:

The primary water source proposed for the project is the municipal water supply system. Water for both domestic and construction uses will be trucked from the hamlet of Coral Harbour to the site for use. There is another small lake at the site that could be used for portable uses (after treatment) and non-portable uses. If the small lake is used, the raw water will be pumped to the camp via a small horsepower pump and water intake pipe placed overland and equipped with a small mesh screen. The pump will be placed at least 30 m from water bodies and a spill kit will be sited near the pump.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

If the municipal water supply is the source of water usage for the project, there will not be need for a separate quality monitoring since the water quality would have been ascertained to meet the required quality criteria by the municipality.

However, if the small lake water is the source, the lake will be sampled and analyzed and parameters exceeding drinking water standards (including coliforms) will be treated to levels not exceeding Health Canada guidelines. Again, if the small water lake is used, the initial sources of the drinking water on the site will be bottled water until the results of the analysis of samples of treated water from the lake water prove that the treated water from the lake is safe for drinking. Raw water from the lake will be pumped either directly into a pipe running between the water lake and the camp or into waiting trucks using a small horsepower pump and water intake pipe equipped with a small mesh screen. The small mesh screen will prevent fish entrance into the water pipe.

30. Will drinking water be treated? How?
Drinking water treatment will only be required if the tested parameters do not meet the CDWQ guidelines. The water from the municipality is expected to meet the guidelines. However, the raw water from the lake may require treatment. A potable water treatment system and polishing unit capable of bringing the raw water to drinking standard will be brought to site by the project contractor.

31. Will water be stored on site?

Non-potable water may be temporarily stored in barrels or tanks on-site; however, no reservoir or other more permanent structure will be constructed.

WASTE TREATMENT AND DISPOSAL

32. Describe the characteristics, quantities, treatment and disposal methods for:

☑ Camp Sewage (blackwater)

The camp sewage will consist primarily of human waste from toilet use with an estimated flow of 40 L/person /day making a total flow of about 1.00 m³/day (for 25 people). The project contractors will decide on whether to use the municipal sewage treatment system or a sewage to treat the sewage generated from the site. The plan that is eventually selected by the contractors will be forwarded to NWB as soon as it is available. The chosen option should treat the sewage to meet the following discharge criteria:

1. *Oil and grease – none visible;*
2. *pH – 6 to 9;*
3. *TSS – 180 mg/L;*
4. *BOD – 120 mg/L; and*
5. *Fecal Coliforms – 10,000 CFU/dl*

If the contractors build a sewage lagoon, the maximum fluid depth in the lagoon will not exceed one metre. The lagoon will have the capacity that holds sewage generation for a construction season. The location of the lagoon will be a minimum of 30 m from the construction camp or other temporary facilities and drainage paths, and a minimum of 30 m from water bodies supporting aquatic life and downwind of the construction camp (based on the prevailing wind direction).

After site remediation, the lagoon(s) will be appropriately decommissioned following all applicable regulations and guidelines for sewage lagoon decommissioning in Nunavut.

☑ Camp Greywater

The camp greywater will consist primarily of wastewater generated from the kitchen and bathroom sinks and showers. This waste could be treated at the community sewage disposal system, in the sewage lagoon or be directed to a discharge pit excavated a minimum 30 m from the camp, any natural drainage course, or water body. Upon completion of site activities the pit will be filled in and finished to grade.

☑ Solid Waste

Combustible solid waste will be incinerated on-site using an approved incinerator unit. All non-combustible solid waste will be disposed of at the on-site non hazardous waste landfill (NHWL).

☑ Bulky Items/Scrap Metal

All scrap metal and bulky items will be disposed of at on-site NHWL

☑ Waste Oil/Hazardous Waste

All waste oil and hazardous waste will be consolidated and shipped off-site, in accordance to the Transportation of Dangerous Goods Act, for disposal at an approved southern facility.

☑ Empty Barrels/Fuel Drums

Empty barrels will be collected, crushed and disposed of at the NHWL.

☐ Other:

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33. Please describe incineration system if used on site. What types of wastes will be incinerated?

Combustible solid waste will be the only solid waste incinerated on-site. Non-combustible solid wastes will be disposed of in the on-site NHWL Specifications for the type of incineration system to be used at the site will be provided by the successful remediation contractor. These details will be forward to NWB prior to mobilization to site.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

Non-combustible non-hazardous wastes will be disposed of in on-site NHWL while all hazardous wastes generated during site / camp operations will be shipped, together with the existing hazardous wastes on the site, to an approved southern facility. The remediation contractor will obtain authorization to deposit waste in the targeted southern disposal facility.

35. Describe location (relative to water bodies and camp facilities) dimensions and volume, and freeboard for all sumps (if applicable).

N/A

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?
N/A

OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

It is planned that municipal facilities will be used for the disposal of most wastes. If wastewater treatment and solid waste incineration equipment are brought in, they will be proven for use in the north. Specifications for the type of equipment used, and contingency plans in place, will be provided prior to mobilization to the site.

ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

After remediation, the temporary camp facilities will be removed from the site. The site will be stabilized; all wastes and materials, slated for off-site transport, will be removed and shipped off-site to southern facilities. The site will be fully regraded to ensure proper drainage.

BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.

- ☑ Physical Environment (Landscape and Terrain, Air, Water, etc.)
- ☑ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
- ☑ Socio-Economic Environment (Archaeology, Land and Resources Use,
- ☑ Demographics, Social and Culture Patterns, etc.)
- ☑ Other: *See list Below*

Bibliography:

- *Phase III Environmental Site Assessment Coral Harbour, Nunavut.*
- *Remedial Action Plan (RAP)*
- *Archaeological Assessment Report Coral Harbour, Nunavut*
- *Environmental Impact Assessment Report Coral Harbour, Nunavut*

REGULATORY INFORMATION

40. At a minimum, you should ensure you have a copy of and consult the documents below for compliance with existing regulatory requirements:

- ☑ ARTICLE 13 – *NCLA -Nunavut Land Claims Agreement*
- ☑ NWNSRTA – *The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002*
- ☑ *Northwest Territories Waters Regulations, 1993*
- ☑ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
- ☑ NWB - Interim Rules of Practice and Procedure for Public Hearings
- ☑ RWED – *Environmental Protection Act, R-068-93- Spill Contingency Planning and Reporting Regulations, 1993*
- ☑ RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
- ☑ NWTWB - Guidelines for Contingency Planning
- ☑ *Canadian Environmental Protection Act, 1999 (CEPA)*
- ☑ *Fisheries Act, RS 1985* - s.34, 35, 36 and 37
- ☑ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
- ☑ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
- ☑ Canadian Council for Ministers of the Environment (CCME); Canadian Drinking Water Quality Guidelines, 1987
- ☑ Public Health Act - Camp Sanitation Regulations
- ☑ Public Health Act - Water Supply Regulations
- ☑ *Territorial Lands Act* and *Territorial Land Use Regulations*; Updated 2000