



## Nunavut Water Board

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### WATER LICENCE APPLICATION FORM

Application For (check one) ☒ New ☐ Amendment ☐ Renewal ☐ Assignment

Licence Number (NWB use only)

#### 1. Name and mailing address of applicant/licensee

Natalie Plato  
Director, Contaminated Sites  
Indian and Northern Affairs Canada  
P.O. Box 2200  
Iqaluit, NU X0A 0H0

Phone 867-979-7934 Fax 867-979-6445

E-mail platon@inac.gc.ca

#### 2. Address of corporate office in Canada (if applicable)

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_

#### 3. Location of undertaking (describe and attach a topographic map indicating the main components of the undertaking)

Remediation of the Radio Island site, located approximately 340 km southeast of Iqaluit, off the coast of Resolution Island (see Appendix A - Site Maps). The former Navigational Aid and Weather Station at Radio Island was operated by the Canadian Department of Transport from 1929 to 1961. Radio island, which is composed of Canadian Shield bedrock, is approximately 1 km long and 0.5 km wide. The terrain consists of tilted bedrock with parallel rock ridges, knolls and gullies. The only soils identified at the site are located in the gullies and valleys formed by the bedrock. Surface drainage at the site flows along the gullies to the ocean.

Latitude 61° 18' °North Longitude 64° 52' °West NTS Map Number 25H07 Scale 1:50,000

#### 4. Description of undertaking (attach plans and drawings)

The main activities proposed under this application include:

- access to site via sealift and helicopter;
  - construction of a temporary camp, for a maximum of 25 people, for two field seasons;
  - demolition of all existing facilities, except the Main House; and
  - excavation and off-site disposal of all hazardous, non-hazardous and contaminated soil.
- (see Appendix B - Remedial Action Plan)

#### 5. Type of primary undertaking (A supplementary questionnaire must be submitted with the application for undertakings marked with an asterisk. See Schedule II of the Northwest Territories Waters Regulations for description of undertakings)

☐ Industrial \*

☐ Agricultural

☐ Mining and Milling \*

☐ Conservation \*

☐ Municipal (includes camps / lodges) \*

☐ Recreational

☐ Power

☒ Miscellaneous (includes exploration / drilling) \*

(describe): Site Remediation

## 6. Water use

☒ To obtain water \_\_\_\_\_ To divert a watercourse  
\_\_\_\_\_ To modify the bed or bank of a watercourse \_\_\_\_\_ Flood control  
\_\_\_\_\_ To alter the flow of, or store, water \_\_\_\_\_ Other (describe): \_\_\_\_\_  
\_\_\_\_\_ To cross a watercourse \_\_\_\_\_

## 7. Quantity of water involved

(cubic metres per day including both quantity to be used and quantity to be returned to source)  
The estimated quantity required will be 150L/day/person for non-potable use only. All potable water will be supplied through commercially available bottled water. The majority of non-potable water will be taken from the man-made pond adjacent to the Main House. This may be augmented by water pumped, and transported by helicopter, from Lower Lake located on Resolution Island (note: water usage for this lake will not exceed Resolution Island licence NWB5RES0308). Sewage will be back hauled from the site and greywater will be treated via a portable treatment unit and discharged to land in accordance with the Guidelines for the Discharge of Treated Municipal Wastewater.

## 8. Waste

(for each type of waste describe: composition, quantity [cubic metres per day], methods of treatment and disposal, etc.)

See attached Exploration/Remote Camp Supplementary Questionnaire

☒ Sewage ☒ Waste oil  
☒ Solid waste ☒ Greywater  
☒ Hazardous \_\_\_\_\_ Sludges  
☒ Bulky items / scrap metal \_\_\_\_\_ Other (describe): \_\_\_\_\_

## 9. Persons or properties affected by this undertaking

(give name, mailing address and location; attach if necessary)

A Land Use Permit (see Appendix 3) and NIRB Screening (see Appendix 2) is being sought in conjunction with this Water Licence Application.

### Land Use Permit

DIAND Yes ☒ No \_\_\_\_\_ If no, date expected \_\_\_\_\_  
Regional Inuit Association Yes \_\_\_\_\_ No ☒ If no, date expected **not required**  
Commissioner Yes \_\_\_\_\_ No ☒ If no, date expected **not required**

## 10. Predicted environmental impacts of undertakings and proposed mitigation measures

(direct, indirect, cumulative impacts, etc.)

The remediation activities at the Radio Island Site will interact with the environment through vehicle and machinery emissions, surface disturbance and the provision of employment to local communities. There is also the potential for spills of fuel or hazardous materials. The activities will be carried out following standard good operating practices for northern Canada, with spill prevention practices and contingency plans in place. The environmental effects of the activities are assessed as being of low magnitude and not significant. The activities will benefit the area through the short-term employment of local individuals and through the clean up of the site.  
(see Appendix C - Environmental Screening and Appendix 2 - NIRB Screening)

NIRB Screening Yes ☒ No \_\_\_\_\_ If no, date expected \_\_\_\_\_

### 11. Inuit water rights

Will the project or activity substantially affect the quality, quantity, or flow of water through Inuit Owned Lands and the rights of Inuit under Article 20 of the *Nunavut Land Claims Agreement*?

Yes \_\_\_\_ No **X**

If yes, has the applicant entered into an agreement with the Designated Inuit Organization to pay compensation for any loss or damage that may be caused by the alteration?

Yes \_\_\_\_ No \_\_\_\_

If no compensation agreement has been made, how will compensation be determined?

\_\_\_\_\_

### 12. Contractors and sub-contractors (name, address and functions)

A Contract has not been posted as of the date of this application. This information will be submitted as part of the Supplementary Information (See Appendix L) provided following award of the Contract and prior to mobilization to the site.

### 13. Studies undertaken to date (list and attach copies of studies, reports, research, etc.)

Jacques Whitford, 2005 - Environmental Screening of Proposed Remediation at Radio Island ( see Appendix C)  
Jacques Whitford, 2006 - Human Health & Ecological Risk Assessment for Radio Island (see Appendix D)  
Earth Tech, 2001 - Environmental Site Delineation and Material Inventory (see Appendix E)  
ESG, 1996 - An Environmental Assessment of Radio Island, NWT (see Appendix F)  
SENEC, 2003 - Ecological Risk Evaluation for Radio Island (see Appendix J)  
SENEC, 2003 - Human Health Screening Level Risk Assessment for Radio Island (see Appendix K)

### 14. The following documents must be included with the application for the regulatory process to begin

Supplementary Questionnaire Yes **X** No \_\_\_\_ If no, date expected \_\_\_\_\_  
(where applicable; see Section 5)

Inuktitut/English project summary Yes **X** No \_\_\_\_ If no, date expected \_\_\_\_\_

Application fee \$30.00 Yes \_\_\_\_ No **X** If no, date expected **n/a** \_\_\_\_\_  
(payee Receiver General for Canada)

Water use fee Yes \_\_\_\_ No **X** If no, date expected **n/a** \_\_\_\_\_  
(see section 9 of the *NWT Waters Regulations*; payee Receiver General for Canada)

### 15. Proposed time schedule

Annual \_\_\_\_ (or) Multi-year **X** Start date **June, 2006** Completion date **December, 2007**

**Natalie Plato** **Director, Contaminated Sites**

Name (print)

Title (print)

Signature

Date

### Nunavut Water Board Use Only

Application fee Amount \$ \_\_\_\_\_

Pay ID No: \_\_\_\_\_

Water use deposit Amount \$ \_\_\_\_\_

Pay ID No: \_\_\_\_\_