

NUNAVUT IMPACT REVIEW BOARD
PART 2 FORM
PROJECT PROPOSAL INFORMATION REQUIREMENTS

PROJECT DESCRIPTION

Section	Details		
General			
1.	<p>Radio Island Remediation Project</p> <p>Radio Island is located south of Resolution Island, which is located at the southeastern tip of Baffin Island, at the mouth of Frobisher Bay. It is situated at Latitude 61° 18' N and Longitude 64° 52' W. The nearest community is the City of Iqaluit, located approximately 340km northwest of the site.</p> <p>The 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.</p>		
2.	<table border="0"> <tr> <td> Lou Spagnuolo Contaminated Sites Project Manager Indian & Northern Affairs Canada P.O. Box 2200 Iqaluit, NU X0A 1H0 (867) 979-7936 (867) 979-6445 spagnuolol@inac.gc.ca </td><td> Jared Buchko Manager, Environmental Engineering Public Works & Government Services 5th Floor, 10025 Jasper Avenue Edmonton, AB T5J 1S6 (780) 497-3886 (780) 497-3842 jared.buchko@pwgsc.gc.ca </td></tr> </table>	Lou Spagnuolo Contaminated Sites Project Manager Indian & Northern Affairs Canada P.O. Box 2200 Iqaluit, NU X0A 1H0 (867) 979-7936 (867) 979-6445 spagnuolol@inac.gc.ca	Jared Buchko Manager, Environmental Engineering Public Works & Government Services 5th Floor, 10025 Jasper Avenue Edmonton, AB T5J 1S6 (780) 497-3886 (780) 497-3842 jared.buchko@pwgsc.gc.ca
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3.	<p>Nunavut Land Claim Agreement</p> <p>NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide</p> <p>NWB - Interim Rules of Practice and Procedure for Public Hearings</p> <p>NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT</p> <p>NWTWB - Guidelines for Contingency Planning</p> <p>DFO - Freshwater Intake End of Pipe Fish Screen Guideline</p> <p>DFO - Fisheries Act - s.35</p> <p>RWED - Environment Protection- Spill Contingency Regulations</p> <p>Canadian Drinking Water Quality Guidelines</p> <p>Public Health Act Camp Sanitation Regulations</p> <p>Public Health Act Water Supply Regulations</p> <p>Territorial Land Use Act and Regulations</p> <p>Canadian Environmental Protection Act</p> <p>Canadian Environmental Assessment Act</p>		
4.	<p>Nunavut Water Board – Water License, applied for in conjunction with this screening</p> <p>Indian & Northern Affairs Canada – Land Use Permit, applied for in conjunction with this screening</p>		

Project Information	
5.	From 1929 to 1961, the Canadian Department of Transport operated a navigational aid and weather station at the site. In 1961 the site was reestablished on the BAF-5 (Resolution Island) site.
6.	See Appendix A – Site Maps
7.	See Appendix A – Site Maps. Additional information regarding exact location of camp accommodations will be provided following award of Contract and prior to mobilization (See Appendix L – Supplemental Information).
8.	The Radio Island site is contaminated with high levels of heavy metals, Lead in particular. Radio Island will be remediation to mitigate any additional potential migration of the contamination within the site, see Appendix D – Human Health & Ecological Risk Assessment.
9.	<p><u>Borrow sites:</u> no borrow sources available on-site.</p> <p><u>Landfill sites:</u> due to lack of borrow sources and suitable location, no landfill will be constructed on-site.</p> <p><u>Site access:</u> due to the lack of airstrip and limited space, site access can only be accomplished through sealift or helicopter flights. In addition, due to the high currents, tides and ice conditions around Radio Island, an ice road will not be used to mobilize to the site.</p> <p><u>Cleanup criteria:</u> see Appendix G - Abandoned Military Sites Remediation Protocol.</p> <p><u>Disposal/clean-up method:</u> due to lack of borrow sources and suitable landfill locations, all contaminated soil, hazardous and non-combustible non-hazardous waste will be shipped off-site for disposal.</p>
10.	Consultations were held in Kimmirut on December 12, 2005 and Iqaluit on December 13, 2005 to provide information gathered to date and obtain suggestions for the development of a Remedial Action Plan. In addition, a meeting with regulatory stakeholders was held on December 14, 2005. See Appendix I – Community Consultation Q&A's.
11.	As a result of discussions with the communities, it has been decided to clean and set aside the Main House as an emergency shelter. All remaining equipment and supplies is not considered salvageable.
12.	Approximately 1,290 m ³ of soil impacted with heavy metals has been identified on Radio Island. Of this soil, approximately 8 m ³ has a leachable lead concentration greater than 5.0 mg/L. These soils are classified under the Transportation of Dangerous Goods Act as Class 9.3, Dangerous Waste. Finally, there was 15 m ³ of hazardous waste and approximately 200 m ³ of non- hazardous waste, of which half is combustible, identified. See Appendix E –Environmental Site Delineation and Materials Inventory and Appendix F – Environmental Site Assessment.
13.	See question 12, above, and Appendix A – Site Maps.
14.	Due to lack of borrow source and suitable location for a landfill, all contaminated soil and waste will be shipped off-site for disposal.
15.	All contaminated soil and hazardous waste will be shipped to an approved southern disposal facility. All soil will be All non-combustible non-hazardous waste (approximately 100 m ³) will potentially be shipped to Iqaluit for disposal. All material shipped off-site will be accomplished in accordance with the Transportation of Dangerous Goods Act.

16.	See Appendix B – Remedial Action Plan
17.	n/a
18.	n/a
19.	n/a
Transport	
20.	Due to lack of airstrip, site mobilization will take place by sealift via Acadia Cove (see Appendix A – Site Maps). Movement of personnel to and from the site will take place by helicopter from Iqaluit.
21.	n/a
Camp Site	
22.	The existing facility used for accommodation during operation (Beach Hut) has been burned, see Appendix A – Site Maps. It is proposed that a temporary camp be constructed adjacent to the site of the original accommodations (details to be provided following award of the Contract and prior to mobilization, see Appendix L – Supplemental Information).
23.	Temporary, seasonal camp.
24.	Maximum number of people expected is 25, with an average of 20.
25.	Power for the camp will be provided by a portable diesel generator (details to be provided following award of the Contract and prior to mobilization, see Appendix L – Supplemental Information).
Equipment	
26.	See Appendix 2 – Nunavut Impact Review Board Part 1 Form, section 4.
27.	n/a
Water	
28.	See Appendix A – Site Maps. 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).
29.	3,000 L/day for non-potable use, based on an average camp capacity of 20 people.
30.	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.
31.	The dam at the man-made pond will be removed and the water level will be allowed to return to natural levels.
Waste (Grey water, Sewage, Other)	
32.	See Appendix 2 – Nunavut Impact Review Board Part 1 Form, section 5
33.	No dumps, landfills, landfarms or any other disposal facility will be constructed. A portable wastewater treatment unit, to be used for treating greywater only, will be used. All sewage will be collected and disposed of off-site. The exact location will be provided following Contract award and prior to mobilization see Appendix L – Supplementary Information.
34.	No existing landfills or dumps have been identified on Radio Island.
35.	n/a

Fuel	
36.	See Appendix 2 – Nunavut Impact Review Board Part 1 Form, section 4. All liquid fuels will be stored in barrels on pallets within a containment area surrounded by a 0.5 m berm and lined with hydrocarbon resistant material. 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.
37.	n/a
38.	Refueling activities will occur directly from the barrels in the containment area into the respective vehicle.
Chemicals and Hazardous Materials	
39.	Small volumes of oil, grease and antifreeze will be used onsite. These materials will be stored within the containment area constructed for fuel storage. Final quantities and types are currently not available but will be provided following Contract award and prior to mobilization see Appendix L – Supplementary Information.
40.	See above.
41.	n/a
Explosives	
42.	n/a
Public Involvement/Traditional Knowledge	
43.	Consultations were held in Kimmirut on December 12, 2005 and Iqaluit on December 13, 2005 to provide information gathered to date and obtain suggestions for the development of a Remedial Action Plan. As a result of discussions with the communities, it has been decided to clean and set aside the Main House as an emergency shelter. No additional concerns were expressed. In addition, a meeting with regulatory stakeholders was held on December 14, 2005. See Appendix I – Community Consultation Q&A's.
Workforce	
44.	n/a
45.	Consultations with the communities of Kimmirut and Iqaluit will be held in April/May, by the successful Contractor, to facilitate discussion regarding employment and sub-contracting opportunities.
46.	To be provided following Contract award and prior to mobilization, see Appendix L – Supplementary Information.

DESCRIPTION OF EXISTING ENVIRONMENT

Section	Details
Description of Existing Environment	
1.	<p>The site has a low arctic ecoclimate, marked by short cold summers and long winters. Meteorological data collected at Iqaluit between 1946 and 1990, identify mean daily temperatures ranging from –26.8°C in February to +7.7°C in July. The average mean daily temperature over the year is –9.5°C. An average annual precipitation of 424.1mm falls in this area, 60% of which is in the form of snow.</p> <p>The flora in this region is limited to the gullies and valleys where there is soil present. Mosses were found throughout the site where soils were present. Marine mammals, such as walrus, seal, whale and polar bears are common to this region. Shorebirds and waterfowl are also found in this region.</p>

See Appendix C – Environmental Screening, Appendix E –Environmental Site Delineation and Materials Inventory and Appendix F –Environmental Site Assessment.

IDENTIFICATION OF IMPACTS

Section	Details
Identification of Impacts	
1.	See Appendix C –Environmental Screening
2.	See Appendix C –Environmental Screening
3.	See Appendix C –Environmental Screening
4.	See Appendix C –Environmental Screening

MITIGATION OF IMPACTS

Section	Details
Mitigation of Impacts	
1.	See Appendix C –Environmental Screening

CUMULATIVE EFFECTS

Section	Details
Cumulative Effects	
1.	Se See Appendix C –Environmental Screening

SUPPORTING DOCUMENTS

Section	Details
Supporting Documents	
1.	<p><u>Abandonment/Decommissioning Plan:</u> Following the completion of the remediation activities the temporary camp facilities will be removed from the site. No long-term monitoring will be initiated since all non-hazardous, hazardous and contaminated soil will be removed from the site (see Appendix B – Remedial Action Plan).</p> <p><u>Existing Site Photos with Descriptions:</u> see Appendix B – Radio Island Remedial Action Plan, Appendix E –Environmental Site Delineation and Materials Inventory and Appendix F –Environmental Site Assessment.</p> <p><u>Emergency Response/Spill Contingency Plan:</u> A Preliminary Contingency Plan (see Appendix H) has been developed for the site. The successful Contractor will be required to provide a Site Specific Contingency Plan based on proposal submitted prior to mobilization to site (see Appendix L – Supplemental Information).</p> <p><u>Monitoring Plan:</u> Monitoring activities will take place in the following areas:</p> <ol style="list-style-type: none"> onsite confirmatory sampling for contaminated soil excavation, in accordance with the Abandoned Military Sites Remediation Protocol (see Appendix G); on-site monitoring of greywater discharge, in accordance with the Guidelines for the Discharge of Treated Municipal Wastewater; on-site monitoring of H&S requirements; on-site monitoring of wildlife observed at the site; and assessment of potential Archaeological sites prior to mobilization (see Appendix L – Supplementary Information) <p>Note: drinking water and sewage effluent will not be monitored since commercial bottled water will be used and all sewage will be collected and disposed of off-site.</p>