PART 1 FORM
PROJECT PROPOSAL INFORMATION REQUIREMENTS

To access NIRB documents, project screenings, and project reviews please visit the Nunavut Impact Review Board's ftp site http://ftp.nirb.ca/. The NIRB's website (www.nirb.ca) is currently under construction. Please contact info@nirb.ca should you have any questions or require further information.

IMPORTANT!
Please be advised that your application will not be processed until the Sections 1 - 9 are completed in their entirety, in both English and Inuktitut (+ Inuinnaqtun, if in the Kitikmeot).

SECTION 1: APPLICANT INFORMATION

1. Project Name Iqaluit Metal Dump Remediation and Risk Management Project

2. Applicant's full name and mailing address:

Darryl Pederson, Superintendent, Contaminated Sites Management Program, Environmental Affairs, Transport Canada	Phone:	780 495 6046
1100, 9700 Jasper Avenue Northwest, Edmonton	Fax:	780 495 4748
Alberta, T5J 4E6	Email:	darryl.pederson@tc.gc.ca

3. Primary contact's full name and mailing address:

Michael Molinski – Environmental Officer	Phone:	204-984-0440
344 Edmonton Street, Winnipeg	Fax:	204-983-5048
Manitoba, R3C 0P6	Email:	Michael.molinski@tc.gc.ca

SECTION 2: AUTHORIZATION NEEDED

1. Indicate <u>all</u> authorizations associated with the project proposal:

	Regional Inuit Association (RIA)		Canadian Launch Safety (CLS)
x	Nunavut Water Board (NWB)		Environment Canada (EC)
	Nunavut Planning Commission (NPC)		Government of Nunavut (GN)
x	Indian and Northern Affairs Canada (INAC)		Department of National Defense (DND)
	Department of Fisheries and Oceans (DFO)		Hamlet
	Community Government & Services (CG&S)		Parks Canada (PC)
	Nunavut Research Institute (NRI)		Canadian Wildlife Service (CWS)
	Department of Culture, Language, Elders, and Youth (CLEY)		Other (please specify):

2. List the <u>active</u> permits, licenses, or other authorizations related to the project proposal, and their expiry date(s):

3. **List the pending permits, licenses, or other authorizations related to the project proposal:**

Schedule III - Nunavut Water Board Water License

Land Use Permit - INAC

4. **Has this project or any components of this project been previously screened or reviewed by NIRB?**

☑ **YES** ☐ **NO**

If YES, indicate the previous project name and NIRB File No.

SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. **Indicate the type of project proposal (check all that apply)[1,2]:**
(See Appendix A for Project Type Definitions)

1	All-Weather Road/Access Trail	☐	**9**	Site Cleanup/Remediation	☑
2	Winter Road/ Winter Trail	☐	**10**	Oil and Natural Gas Exploration/Activities	☐
3	Mineral Exploration	☐	**11**	Marine Based Activities	☐
4	Advanced Mineral Exploration	☐	**12**	Scientific/International Polar Year Research*	☐
5	Mine Development /Bulk Sampling	☐	**13**	Harvesting Activities*	☐
6	Pits and quarries	☐	**14**	Tourism Activities*	☐
7	Offshore Infrastructure (port, break water, dock)	☐	**15**	Other[2]:	☐
8	Seismic Survey	☐			☐

Please note:

1. All project types listed above, except those marked with an asterisk (*), will also require the Proponent to submit a **Part 2 Project Specific Information Requirement (PSIR) Form**. The NIRB application process will not be considered complete without the Part 2 PSIR Form.
2. Please be advised that in order to complete the NIRB process, the NIRB may request additional information at any time during the process.
3. If "Other" is selected, contact NIRB for direction on whether a Part 2 PSIR Form is required.

2. If Project Type 3, 4 or 5 was selected above, please indicate the mineral of interest that is being extracted. Include a brief description.

- ☐ Base Metals (zinc, copper, gold, silver, etc)_____
- ☐ Diamonds
- ☐ Uranium
- ☐ Other: _____

3a. If Project Type 12, 13 or 14 was selected above, complete the table and questions below.

Transportation Type	Quantity	Proposed Use	Length of Use
E.g. Helicopter	*1*	*Site to site pick ups and drop offs*	*6 days*

3b. Describe any docks, piers, air strips or related structures that are to be used in conjunction with the proposed project activities. **Please note**: *the building of new structures may require a Part 2 Form.*

3c. If a temporary camp site is to be established, describe the proposed structures in detail and indicate the type and source of power for the camp site if applicable.

4. Personnel

Total No. of personnel on site = (A) 10

Total No. of days on-site = (B) 120 days

Total No. of Person days (A) × (B) = 1200

5. Timing

Period of operation: from **June 2010** to **December 2015**

Proposed term of authorization: from **Same** to **same**

6a. Region (check all that apply):

- ☐ North Baffin
- ☑ South Baffin
- ☐ Kivalliq
- ☐ National Park
- ☐ Kitikmeot
- ☐ Transboundary: _____

6b. Describe the location of the proposed project activities in a regional context, noting the proximity to the nearest communities and any protected areas.

- The project site is the Iqaluit Vehicle Dump and Community Landfill. which is located approximately 1.7 km southwest of the city of Iqaluit, Nunavut. Universal Transverse Mercator (UTM) co-ordinates taken from the center of the site are E521904.94, N7067812.69. The site is located adjacent to Sylvia Grinnell Territorial Park. The total area of the Landfill and Vehicle dump occupies an area of approximately 7.25 ha (72,500 m^2), which includes the up-gradient debris area.

6c. Discuss the history of the site if it has been used for any project activities in the past.
The area has been used as a military and municipal landfill since the late 1950's to early 1960's.

- The United States Air Force (USAF) used this site from between 1955 to 1963 as a metal dump for vehicles, truck bodies, barrels and scrap metal. The majority of materials were deposited in 1963 when the US Military left Frobisher Bay. Shops, buildings, and other materials were simply bulldozed over the cliff. The cliff is a bedrock outcrop rising approximately 50 m above the tidal area where the Sylvia Grinnell River meets Frobisher Bay. The area to the north side of the slope was used by the USAF, and the community of Iqaluit, as a landfill site for household garbage until sometime in the 1970's.

6d. Indicate if there are any known archaeological /palaeontological historical sites in the area.

- No known archaeological/palaeontological historical sites in the area. The Project Site remains undeveloped and part of Transport Canada's inventory of sites. No land claims have been made on the subject property.

7. Land Status (check all that applies):

☑ Crown	☐ Commissioners'	☐ Municipal
☐ Inuit Owned Surface Lands	☐ Inuit Owned Sub-Surface Lands	

8a. Co-ordinates:

Min Lat (degree/minute) _____ Min Long (degree/minute) _____
Max Lat (degree/minute) _____ Max Long (degree/minute) _____

NTS Map Sheet No: _____
(Please ensure that maps of the project are attached (1:50,000 **if available**, 1:250, 000 **Mandatory**) available from Natural Resources Canada)

8b. If the project proposal includes a **camp**, please provide the coordinates of the camp location

Min Lat (degree/minute) 63°44'14.12"N Min Long (degree/minute) 68°33'22.77"W
Max Lat (degree/minute) _____ Max Long (degree/minute) _____

If different from above for the camp:
NTS Map Sheet No: _____
Please ensure that maps of the project are attached (1:50,000 **if available**, 1:250, 000 **Mandatory**) available from Natural Resources Canada

Please note that additional location information may be required in a subsequent Project Specific Information Requirement (PSIR) submission. This may take the form of a digital Geographic Information Systems (GIS) file.

SECTION 4: NON-TECHNICAL PROJECT PROPOSAL DESCRIPTION

Please include a non-technical description of the project proposal, no more than 500 words, in English and Inuktitut (+Inuinnaqtun, if in the Kitikmeot). The project description should outline the following:

Project Plan

- The first objective will be the removal of physical hazards and contaminant sources (vehicles in the vehicle dump and waste debris in the main landfill).
- The second objective will be to haul in; place and compact low permeability fill material to the impacted landfill site. Fill material will then be brought in to cover the fill and to re-vegetate the site. Annual groundwater monitoring will be required for a period of years to ensure previously identified impacts are being mitigated.
- Low permeability compacted soil covers will be installed over the land filled areas to inhibit infiltration and reduce the potential for leachate generation. The areas will then be covered with topsoil and reseeded. Continued groundwater monitoring and monitoring well installation, where required, will be necessary to prove the effectiveness of the low permeability covers. This project will reduce TC's liability at the Iqaluit Airport. This will also satisfy TC's contractual requirements under the Arctic A Transfer Agreement.

Schedule

- The schedule for this project will be one hundred twenty (120) days from contactor mobilization to the site, until receipt of the final report. However, one fiscal year has been allotted to complete the work in case of delays in contracting and contractor(s) availability in conducting the fieldwork (mobilization of equipment and personnel, laboratory analysis, etc).

Alternatives

1. **Do Nothing**: The do nothing alternative is not considered a viable alternative. Transport Canada has a legal obligation to honor its environmental responsibilities under the Airport Transfer Agreement and exercise due diligence on its environmental regulatory matters. A lack of action by TC could lead to strained relations with the Nunavut government, as well as possible litigation.

2. **Implement Remedial Action Plans as Required by Current Legislation, Regulations, and Standards:** This alternative consists of implementing the project activities associated with the Iqaluit Metal Dump Remediation project. The benefits of this course of action will ensure that TC meets its responsibilities in accordance with the transfer agreement, as well as reducing liability. This is the recommended alternative.

Performance Outcome Measurement

- The project outcome will be measured by the state of the groundwater within the monitoring wells located at the landfill site at the Iqaluit Airport, compared to the applicable regulatory criteria. The regulatory criteria that apply are: the Canada Wide Standard for Petroleum Hydrocarbons in Soil (industrial land use criteria), and the Canadian Council of Ministers of the Environment Canadian Environmental Quality Guidelines for soil and groundwater. Final groundwater analytical results will be compared to said criteria as a performance outcome measurement for this project in future years to demonstrate a downward trend in contaminate levels to demonstrate the capping has been successful in lowering/eliminating the chemicals of concern.

IMPORTANT: IF THE PROPOSED ACTIVITIES REQUIRE SUBMISSION OF A NIRB PART 2 PSIR FORM, PLEASE COMPLETE SECTION 8 ONLY, OTHERWISE CONTINUE ON WITH SECTION 5.

SECTION 5: MATERIAL USE

1. List equipment to be used (including drills, pumps, aircraft, vehicles, etc.):

Equipment type and number	Size – dimensions	Proposed use
• A list of equipment will be provided by the contractor upon award of the contract. Note that all heavy equipment will be brought to the site by the contractor and removed upon completion of the project. This information will be provided prior to mobilization.		

2a. Detail fuel and hazardous material use:

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Diesel	N/A		(Contractor to confirm)
Gasoline	N/A		(Contractor to confirm)
Aviation fuel	N/A		(Contractor to confirm)
Propane	N/A		(Contractor to confirm)
Other	N/A		(Contractor to confirm)
Hazardous Materials and Chemicals		**Total Amount of Hazardous Materials and Chemicals (in Litres)**	

2b. Describe the proposed Spill Prevention Plan.

- Contractor to confirm containment and spill contingency plan upon award of the contract.

3a. Detail the anticipated daily water consumption rates

Daily amount (m^3)	Proposed water retrieval methods	Proposed water retrieval location

3b. Have you applied for a water License with the Nunavut Water Board?

☑ **YES** ☐ **NO**

If yes, what class of licence?

☑ **Class A Water Licence** ☐ **Class B Water Licence**

SECTION 6: WASTE DISPOSAL AND TREATMENT METHODS

1. **List the types of waste associated with the proposed project activities:**

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
• A complete summary of waste materials to be removed and associated inventories can be found in *Field Report – Phase III Environmental Site Assessment Vehicle Dump and Community Landfill, Iqaluit, Nunavut. Section 7.8.1, Table 7-22. pgs 76-78*			

2. **Describe the proposed Waste Management Plan.**

   • All waste and hazardous material will be hauled off-site for disposal.

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

1. **List the community representatives that have been contacted and provide the minutes of the meetings if available:**

Community	Name	Organization	Date Contacted

SECTION 8: GENERAL QUESTIONS

1. **Will you be disturbing any known archaeological sites?**

☐ **YES** ☑ **NO**

SECTION 9: APPLICANT SIGNATURE

Please sign and date your application:

Signature	Title	Date
M. Molinski	**Environmental Officer**	**May 12, 2010**

APPENDIX A
Project Type Definitions

Access Trail: A project proposal with the objective of providing vehicular access to an area of interest involving minimal alteration to the terrain.

Advanced Exploration: A project proposal with the objective of identifying size, grade, and physical characteristics of a mineral occurrence and to assess the economic and technical feasibility of developing the mineral deposit into a producing mine

All-Weather Road: A project proposal with the objective of road construction for use in all seasons.

Bulk Sampling: A project proposal with the objective of extracting of large samples of mineralized material involving hundreds to thousands of tonnes. Samples are selected as representative of the potential mineral deposit being sampled. May involve crushing/milling (on small-scale)

Harvesting activities: A project proposal with the objective of harvesting animals, marine mammals and/or fish from their natural habitats by means of hunting or trapping for traditional and commercial use.

Marine Based Activities: Any activity occurring in the marine environment, such as vessel use associated with land-based activities or disposal at sea.

*Please note that normal community re-supply or individual ship movements not associated with land-based project proposals shall not be screened by NIRB (Section 12.12.2 of NLCA).

Mine Development: A project proposal with the objective of extracting broken rock with mineralization of sufficient grade and tonnage to sustain commercial mining operations (ore). Mining a body of ore can be achieved by either open pit and/or underground development. Mine development may involve milling. Milling involves treatment of the extracted ore through a combination of mechanical and chemical processes to selectively recover the valuable mineral.

Mineral Exploration: A project proposal with the objective of exploring an area to find geological anomalies. It involves site reconnaissance (ground and/or air) to locate broad and fiscal mineral deposits.

Offshore Infrastructure: A project proposal with the objective of building off loading facilities constructed off the shoreline and connected to the mainland of the marine or freshwater environment. Examples include a jetty, dock, or port facility.

Oil and Gas Exploration/Activities: A project proposal that includes 1) exploration, such as seismic or geological mapping, 2) drilling of oil and gas wells, 3) construction and operation of a pipeline, a gas processing plant or any oil and gas facility within Nunavut.

Pits and Quarries: A project proposal with the objective of pitting, which involves the extraction of granular material (i.e. sands and gravels) and quarrying, which involves the removal of consolidated rock (i.e. bedrock, frozen soil).

Scientific Research: A project proposal with the objective of implementing a series of site activities comprised of observation of phenomena, measurement and collection of data necessary for scientific investigation in designated areas within a limited time period.

Seismic Survey: A project proposal with the objective of conducting a survey to map the depths and contours of rock strata by timing the reflections of sound waves released from the surface. Survey site locations may be offshore (not within 12 nautical miles of any coast), near shore, and extended onshore.

Site Cleanups: A project proposal with the objective of site cleanups (includes DEW line site cleanups), which focuses on the remediation of chemically contaminated soils, stabilization of landfills and dumps, demolition/disposal of infrastructure and debris and monitoring after cleanup is completed.

Tourism Activity: A project proposal with the objective of conducting travel predominantly for recreational, sport or leisure purposes within a designated area and limited time period.

Winter Road: A project proposal with the objective of building a road for winter use by leveling and compacting surface snow and ice. Winter road is removed at end of season.

Winter Trail: A project proposal with the objective of building a trail for winter use by a single pass of a tracked vehicle using a blade, if necessary.