



## PART 1 FORM PROJECT PROPOSAL INFORMATION REQUIREMENTS

For more information about the Nunavut Impact Review Board (NIRB) please visit our web site <http://nirb.nunavut.ca/> or to access NIRB documents, project screenings, and project reviews please visit the Nunavut Impact Review Board ftp site <http://ftp.nunavut.ca/nirb>.

### 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 Resolute Bay Risk Management Plan

2. Applicant's full name and mailing address:

Darryl Pederson, Superintendent, Contaminated Sites  
Management Program, Environmental Affairs,  
Transport Canada  
1100, 9700 Jasper Avenue Northwest, Edmonton  
Alberta, T5J 4E6

780 495 6046

Phone:

Fax:

Email:

780 495 4748

darryl.pederson@tc.gc.ca

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

Same as above

Phone:

Fax:

Email:

### SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

<input type="checkbox"/>	Regional Inuit Association (RIA)
<input type="checkbox"/>	Nunavut Water Board (NWB)
<input type="checkbox"/>	Nunavut Planning Commission (NPC)
<input type="checkbox"/>	Indian and Northern Affairs Canada (INAC)
<input type="checkbox"/>	Department of Fisheries and Oceans (DFO)
<input type="checkbox"/>	Community Government & Services (CG&S)
<input type="checkbox"/>	Nunavut Research Institute (NRI)
<input type="checkbox"/>	Department of Culture, Language, Elders, and Youth (CLEY)

<input type="checkbox"/>	Canadian Launch Safety (CLS)
<input checked="" type="checkbox"/>	Environment Canada (EC)
<input type="checkbox"/>	Government of Nunavut (GN)
<input type="checkbox"/>	Department of National Defence (DND)
<input type="checkbox"/>	Hamlet
<input type="checkbox"/>	Parks Canada (PC)
<input type="checkbox"/>	Canadian Wildlife Service (CWS)
<input checked="" type="checkbox"/>	Other (please specify): Transport Canada (Transportation of dangerous goods)

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

No other active permits, licenses or authorizations

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

No other pending permits, licenses or authorizations

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.

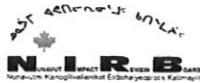
### SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. Indicate the type of project proposal (check all that apply)<sup>(1,2)</sup>:  
(See Appendix A for Project Type Definitions)

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

**Please note:**

- 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.
- Please be advised that in order to complete the NIRB process, the NIRB may request additional information at any time during the process.
- 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.

<input type="checkbox"/>	Base Metals (zinc, copper, gold, silver, etc)	_____
<input type="checkbox"/>	Diamonds	_____
<input type="checkbox"/>	Uranium	_____
<input type="checkbox"/>	Other:	_____

3a. If Project Type 13, 14 or 15 was selected above, complete the table and questions below.

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

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.

No new structures will be constructed

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.

N/A

#### 4. Personnel

Total No. of personnel on site = (A)	4	Total No. of days on-site = (B)	7	Total No. of Person days (A) × (B) = 28
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#### 5. Timing

Period of operation:	from	Summer 2009	to	Summer 2009
Proposed term of authorization:	from	Summer 2009	to	Summer 2009

#### 6a. Region (check all that apply):

<input checked="" type="checkbox"/> North Baffin	<input type="checkbox"/> Kivalliq	<input type="checkbox"/> Kitikmeot	<input type="checkbox"/> Transboundary: _____
<input type="checkbox"/> South Baffin	<input type="checkbox"/> National Park		

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 nearest community is the hamlet of Resolute and is within the Qikiqtaaluk Region of Nunavut



**6c. Discuss the history of the site if it has been used for any project activities in the past.**

The Resolute Bay Airport was established in 1949 when the Royal Canadian Air Force (RCAF) built the runway and other airport facilities. In 1964, the RCAF relinquished control and operation of the airport facility and weather station to the Airports Branch of the Department of Transportation, now known as Transport Canada. In 1995, the airport was transferred to the Government of the Northwest Territories (now Nunavut) as a result of the National Airports policy. A condition of transfer was that environmental issues that existed prior to the time of transfer would remain the responsibility of Transport Canada.

Several environmental studies have been completed at the site. In 1993, the Resolute Bay Environmental Audit Report was prepared by Public Works Canada. In 1994 Dillon Engineers prepared an environmental baseline study and most recently the airport has been characterized by Jacques Whitford in 2006.

Based on Environmental Investigations conducted by Jacques Whitford in March of 2006, remediation of all the hydrocarbon impacted areas at the Resolute Bay Airport is not a practical option based on the location (in very remote region of the high arctic), lack of disposal facilities in the areas and massive volumes of impacted soil that would have to be removed, disposed and replaced.

At this point TC required a human health and ecological risk assessment (HHERA) be completed to assess the risk posed to human and ecological receptors at and near the airport. Based on the findings of the HHERA, areas of concern will be identified that should be remediated or managed and remedial action plans (RAPs) and or risk management plans (RMPs) for those areas that can be developed.

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

No known archaeological or palaeontological historical sites in the area. The site has been developed for over 50 years

**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) 74° 43' 1" N Min Long (degree/minute) 94° 58' 10" W  
Max Lat (degree/minute) \_\_\_\_\_ Max Long (degree/minute) \_\_\_\_\_

Legal description: Lot 1001, Quad 58 F/II (Comprising all of Lots 2-1 to 2-39, Group 1687, Plan 57270 C.L.S.R., 756 L.T.O.; Lots 2-40, 2-42, 2-43 and 5, Group 1687, Plan 59560 C.L.S.R., 992 L.T.O.)

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) \_\_\_\_\_ Min Long (degree/minute) \_\_\_\_\_  
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.

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## SECTION 4: NON-TECHNICAL PROJECT PROPOSAL DESCRIPTION

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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:

The proposed project is to investigate the environmental and regulatory deficiencies under the precautionary principle of the Sustainable Development Strategy. The potential exists for adverse environmental effects in the form of migration of contamination, potentially off of airport property. The site has the potential for environmental and human health risks and must be remediated or have a formal scientifically defensible risk management plan developed and implemented for the site.

### Alternatives

- Do nothing: This alternative is not considered a viable alternative. It is essential that TC meets its environmental responsibilities under the transfer agreement and exercise due diligence on it's environmental regulatory matters.
- Implement a risk management plan at the Resolute Airport: This alternative consists of completing the Risk management Plan at the Resolute Airport. The benefits of this course of action will ensure that TC meets its responsibilities in accordance with the transfer agreement.

Much of the work involves reviewing the information current available from the site investigations that have occurred in the past (i.e. desk study). However, a preliminary examination of the data available has suggested that data gaps exist. In order to remediate this additional soil, water and vegetation samples will be required in order to fully assess the extend and degree of contamination on-site.

It is expected that additional samples will be collected over the course of one-week during the summer of 2009. A maximum of 4 people will be involved in sample collection. Personnel will utilize hand tools or light excavating equipment to collect the required samples. Experts will be flown to Resolute Bay and will stay in the Hamlet of Resolute while work is being conducted.

The work will be conducted by third party contractors who will be responsible conducting the work and for determining the specific details of that work.

**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.**

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## SECTION 5: MATERIAL USE

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

Equipment type and number	Size – dimensions	Proposed use
Hand shovel	Standard hand shovel	Collect samples
Backhoe	Small model	Dig sample trenches 1-2metres long
Sample jars	Adequately sized to contain sample (< 2L)	Contain soil samples

**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		
Gasoline	N/A		
Aviation fuel	N/A		
Propane	N/A		
Other	N/A		
<b>Hazardous Materials and Chemicals</b>		<b>Total Amount of Hazardous Materials and Chemicals (in Litres)</b>	
N/A			

**2b. Describe the proposed Spill Prevention Plan.**

Only fuel used during the investigation will be used for vehicle use (truck/backhoe). There will be no on-site fuel storage.

**3a. Detail the anticipated daily water consumption rates**

Daily amount (m <sup>3</sup> )	Proposed water retrieval methods	Proposed water retrieval location
N/A		

**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
Sewage (human waste)	N/A		
Greywater	N/A		
Combustible wastes	N/A		
Non-Combustible wastes	N/A		
Overburden (organic soil, waste material, tailings)	N/A		
Hazardous waste	N/A		
Other:	N/A		





2. Describe the proposed Waste Management Plan.

N/A

## 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
Iqaluit	Thomas Alikatuktuk	Qikiqtani Inuit Association	19 February 2008

## 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

Environmental Officer  
Title

25 June 2009  
Date



## 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.



