



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 following sections 1 - 6 are completed in full in English and Inuktitut (+ Inuinnaqtun, if in the Kitikmeot).

SECTION 1: APPLICANT INFORMATION

1. a) Project Number

Please indicate if applicant has submitted any previous application(s) to NIRB Yes No
related to this project proposal?

If yes, please indicate the previous NIRB project number(s): 03YN043, 06YN015, 06YN024

1. b) Project Name *Seabird studies at Prince Leopold Island*

2. Applicant's full name and mailing address:

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Wolfville, NS B4P 2R6

Fax: **902-585-1059**
Phone: **902-585-1798**
Email: **mark.mallory@acadiau.ca**

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

As Above

Fax: _____
Phone: _____
Email: _____

4. Secondary contact's full name and mailing address:



SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> | Regional Inuit Association (RIA) (<i>Exemption Permit</i>) |
| <input checked="" type="checkbox"/> | Nunavut Water Board (NWB) |
| <input checked="" type="checkbox"/> | Nunavut Planning Commission (NPC) |
| <input checked="" type="checkbox"/> | Department of Indian And Northern Development (DIAND) |
| <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"/> | Hamlet |
| <input type="checkbox"/> | Canadian Launch Safety (CLS) |
| <input checked="" type="checkbox"/> | Environment Canada (EC) |
| <input checked="" type="checkbox"/> | Government of Nunavut (GN) |
| <input type="checkbox"/> | Department of National Defense (DND) |
| <input type="checkbox"/> | Department of Culture, Language, Elders, and Youths (CLEY) |
| <input type="checkbox"/> | Parks Canada (PC) |
| <input type="checkbox"/> | Other (please specify): |

2. List the active permits, licences, or other rights related to the project and their expiry date:

INAC Land Reserve 058E02001, NWB 3BC-PLI0811 (both applied for renewal)



SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. Indicate the type of project proposal:

- Exploration (geophysical ground, geophysical air, drilling)
- Advanced Exploration/ Bulk Sampling
- Mine development
- Site remediation/ reclamation
- Research
- Dew Line Clean up / Site Investigation
- Port
- Other: _____

2. Indicate the activities related to the project proposal:

- | | |
|--|--|
| <input type="checkbox"/> Drilling other than geoscientific | <input type="checkbox"/> Quarrying |
| <input type="checkbox"/> Offshore structure | <input type="checkbox"/> All season road |
| <input type="checkbox"/> Airport/ landing strip | <input type="checkbox"/> Winter road |
| <input checked="" type="checkbox"/> Camp | <input type="checkbox"/> Access road |
| <input type="checkbox"/> Fuel storage | <input type="checkbox"/> Road modification |
| <input type="checkbox"/> Solid waste disposal | <input checked="" type="checkbox"/> Cabins |
| <input type="checkbox"/> Hazardous waste storage or disposal | <input checked="" type="checkbox"/> Sewage or grey water disposal |
| <input checked="" type="checkbox"/> Research | <input type="checkbox"/> Blasting |
| <input type="checkbox"/> Abandonment and Restoration | <input type="checkbox"/> Harvesting |
| <input checked="" type="checkbox"/> Burning | <input type="checkbox"/> Burying |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Channeling |
| <input type="checkbox"/> Cut and/or Fill | <input type="checkbox"/> Removal of vegetation |
| <input type="checkbox"/> Dam/ Impoundment (construction/ abandonment/ removal/ modification) | <input type="checkbox"/> Ditch construction |
| <input type="checkbox"/> Drainage Alteration | <input type="checkbox"/> Excavation |
| <input type="checkbox"/> Chemical Storage | <input type="checkbox"/> Ecological survey |
| <input type="checkbox"/> Explosives Storage | <input type="checkbox"/> Geoscientific sampling by trenching |
| <input type="checkbox"/> Geoscientific sampling by diamond drilling | <input type="checkbox"/> Geoscientific sampling by borehole core |
| <input type="checkbox"/> Geoscientific sampling by soil sampling | <input type="checkbox"/> Hydrological testing |
| <input type="checkbox"/> River/ stream/ lake crossing or work/ bridge | <input type="checkbox"/> Site restoration (fertilization/ grubbing/ scarification/ spraying/ recontouring) |
| <input type="checkbox"/> Soil testing | <input type="checkbox"/> Soil disposal/ Soil storage |
| <input type="checkbox"/> Tunneling | <input type="checkbox"/> Other (please specify): |

3. Personnel

Total No. of personnel on site = (4)	55 days	Total No. of person days = (A) x No. days on site	220 person days
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4. Timing

Period of operation: June 25 to August 20
 Proposed term of permit: June 25 to August 20

Please outline the phases of the proposed project (construction/ operation/ decommissioning) including the timing and scheduling of each phase.

This project will run in the summers of 2012-2014. The existing cabin at Prince Leopold Island will be used, and will remain for long-term monitoring purposes.

5. Region (check all that apply):

Baffin Kivalliq Kitikmeot Transboundary: _____

6. Land Status (check all that apply):

Crown Commissioners' Inuit Owned Surface lands Inuit Owned Sub-Surface Lands

7. Co-ordinates:

Min Lat (degree/minute) **N 74°** Min Long (degree/minute) **W 90°**
 Max Lat (degree/minute) Max Long (degree/minute)

NTS Map Sheet No: **58E**

Please ensure that maps of the project are attached (1:50,000 **if available**, 1:250, 000 **Mandatory**) available from Natural Resources Canada

If the project proposal includes a **camp**, please provide the coordinates of the camp location
Prince Leopold Island: N 74° W 90°

If different from above for the camp:

NTS Map Sheet No: **As above**

Please ensure that maps of the camp are attached (1:50,000 **if available**, 1:250, 000 **Mandatory**) available from Natural Resources Canada

8. Non-Technical Project Proposal Summary

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 project activities, their necessity and duration;
- Method of transportation;
- Any structures that will be erected (permanent/ temporary);
- Alternatives considered; and
- Long-term developments, the projected outcome of the development for the area and its timeline.

See below



SECTION 4: MATERIAL USE

1. List equipment (including drills, pumps, aircrafts, etc.):

Equipment type and number	Size – dimensions	Proposed use
Twin Otter		Travel to and from field sites
Small Generator	.5m x .5m; 1000W	Generating power for use of computer, sat. phone, etc...

2. Detail fuel and hazardous material use:

Fuels	Number of Containers	Capacity of containers (gal & litre)
• Diesel		
• Gasoline	3	20 L gerry cans
• Aviation fuel	2 drum	200 L
• Propane		
• Other	3	20 L gerry cans of naphtha
Hazardous material (please specify)		
•		
•		
•		

SECTION 5: WASTE DISPOSAL AND TREATMENT FACILITIES

1. List the types of waste:

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
Sewage	<50 L	Burned and any remnant material buried	
Greywater	<100 L	Buried in sump	
Garbage	<200 L	Incombustibles flown out at end of season	Incombustibles flown out at end of season
Overburden (organic soil, waste material, tailings)			
Hazardous waste			
Other:			



SECTION 6: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

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

We have met with the HTA in Resolute Bay (January 2006, June 2008, March 2009, March 2011 and March 2012) to discuss the results of contaminant and seabird monitoring at Prince Leopold Island.

We conducted traditional knowledge studies on marine birds of this region in Resolute Bay and Pond Inlet in 2004.

Both communities will receive our 2012 “*Coastlines*” translated newsletter, which provides the highlights of our research results each year from this and other sites, and the results of the work are also presented at Regional Wildlife Organization Wildlife Priorities Workshops, and in selected meetings of the Nunavut Wildlife Management Board.

Applicant:

Signature

Title

Date



Seabird Monitoring at Prince Leopold Island

Contaminants continue to be a key concern for Inuit of Nunavut. The Canadian Wildlife Service has been monitoring levels of various contaminants in eggs of seabirds breeding at Prince Leopold Island in Lancaster Sound since the 1970s. This 30 year record of contaminant monitoring is one of the best records of these pollutants in Arctic Canada. Recent analyses of these data show that certain contaminants continue to decline, like PCBs and DDT, but others are increasing, like mercury and flame retardants. Thus, continued monitoring is important to track the potential effects of these on seabirds, other wildlife, and as background information for Inuit health.

In 2012-2014, a crew of 4 people will spend approximately 55 days on Prince Leopold Island at the established camp (1 cabin) on top of the cliffs in July each year, arriving and departing by Twin Otter from Polar Continental Shelf Project. We will use ropes to descend the cliffs and collect 15 eggs of Northern Fulmars and 15 eggs of Thick-billed Murres in each year. These will be sent south for contaminant analyses.

We will also count numbers of northern fulmars, black-legged kittiwakes and thick-billed murres on established plots, to monitor if populations of these species are changing. In 2012, we will capture 60 birds (30 murres, 30 kittiwakes) to attach geolocators or GPS units. These are simple attachments of a tiny (thumbnail size) units attached to a steel band on the bird's leg. The unit records light levels, and using these values, we can determine its position through the year. For the GPS units (temporary, to be removed 5 days after attaching), these are attached by tape to feathers and then removed. To capture the birds, we descend the cliffs by rope, and then use a soft noose pole to capture the nesting bird. We place the bird in a cloth bag and return to the cliff top, where we measure the bird, collect a few feathers for the national tissue bank, and attach a band to the leg. We will remove the geocator equipment and download the data to determine the migratory pathways of the birds. We plan to redeploy these units on up to 30 birds again in 2012, and recover those in 2013. After being help for 5-10 minutes, the birds are released.

These methods have been used at this site since the 1970s, and have had no ill effects on the local bird populations. Geolocators have been used extensively in the past 5 years, and have proven very effective in tracking wildlife. These techniques have already been reviewed and approved by animal care committees in the government and at university.

