

# SCREENING DECISION REPORT NIRB FILE NO.: 15TN012

AANDC File No.: N2015X0008

June 16, 2015

The Honorable Bernard Valcourt Minister of Aboriginal Affairs and Northern Development Aboriginal Affairs and Northern Development Canada 10 Rue Wellington Gatineau, QC K1A 0H3

Sent via email: minister@aandc.gc.ca, bernard.valcourt@parl.gc.ca

Re: <u>Screening Decision for Aziz Kheraj's "Ennadai Lake Lodge" Project Proposal, Kivalliq Region, NIRB File No. 15TN012</u>

Dear Mr. Bernard Valcourt:

The primary objectives of the Nunavut Impact Review Board (NIRB) are set out in Section 12.2.5 of the Nunavut Land Claims Agreement (NLCA) as follows:

"In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area."

#### Section 12.4.4 of the NLCA states:

"Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or

d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned."

#### NIRB ASSESSMENT AND DECISION

After a thorough assessment of all material provided to the Board (please see *Procedural History* and *Project Activities* in **Appendix A**), in accordance with the principles identified within Section 12.4.2 of the NLCA, the decision of the Board as per Section 12.4.4 of the NLCA is:

**12.4.4** (a): the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5.

# RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS (pursuant to Section 12.4.4(a) of the NLCA)

The Board is recommending that the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

- 1. Aziz Kheraj (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
- 2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
- 3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB (Nunavut Planning Commission Questionnaire, March 10, 2015; NIRB Part 1 Form, Oil Spill Contingency Plan and Abandonment and Restoration Plan, April 21, 2015; and NIRB Part 2 form, April 23, 2015)
- 4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

## Water Use

- 5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal unless approved by the Nunavut Water Board.
- 6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

## Waste Disposal/Incineration

- 7. The Proponent shall keep camp garbage and debris in covered metal container or equivalent and ensure that all such wastes are inaccessible to wildlife at all times.
- 8. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.

- 9. The Proponent shall ensure that no waste oil/grease is incinerated on site.
- 10. The Proponent shall ensure that the incineration of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.

## **Fuel and Chemical Storage**

- 11. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
- 12. The Proponent shall ensure that re-fuelling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body.
- 13. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
- 14. The Proponent shall use adequate secondary containment or a surface liner (e.g. self-supporting insta-berms and fold-a-tanks) at all refueling stations. Appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) must be readily available during any transfer of fuel or hazardous substances, as well as at vehicle-maintenance areas and at drill sites.
- 15. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
- 16. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

#### Wildlife - General

- 17. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
- 18. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
- 19. The Proponent shall not touch, feed or entice wildlife to approach by holding out or setting out decoys or any such devices, foodstuffs or bait of any kind.
- 20. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.

# **Migratory Birds and Raptors Disturbance**

21. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metre buffer around the nests). If active nests of any birds are discovered (i.e. with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.

- 22. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.
- 23. The Proponent shall avoid the seaward site of seabird colonies and areas used by flocks of migrating waterfowl by 3 kilometres.
- 24. The Proponent shall avoid excessive hovering or circling over areas where bird presence is likely.

## **Aircraft Flight Restrictions**

- 25. Unless otherwise permitted the Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level, which does not disturb wildlife and migratory birds.
- 26. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
- 27. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
- 28. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

#### Caribou and Muskoxen Disturbance

- 29. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
- 30. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as movement of equipment or personnel until such time as the caribou have passed.
- 31. The Proponent shall not construct or operate any camp, including cache any fuel or conduct any operations within 5 km of any paths or crossings known to be designated caribou crossings.
- 32. During the period of May 15 to July 15, when caribou are observed, the Proponent shall suspend low-level over flights. Following July 15, if caribou cows or calves are observed, the Proponent shall suspend low-level over flights until caribou are no longer in the immediate area.

### **All-weather Road and Ground Disturbance**

- 33. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles must be suspended if rutting occurs.
- 34. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction in order to prevent sediment from entering any waterbody.
- 35. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.

### **Establishment of New Quarries**

- 36. The Proponent shall clearly stake and flag pit and quarry boundaries so they remain visible to other land users.
- 37. The Proponent shall locate quarry/pit facilities so as to avoid all recreational sites and public use areas, and to protect unique geographical features and natural aesthetics.
- 38. The Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion from quarry/pit access, stockpiles, or other structures or facilities.
- 39. The Proponent shall ensure that silt fences/curtains are installed down gradient of any quarry activities.
- 40. The Proponent shall maintain an undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body that is of an adequate distance to ensure erosion control.
- 41. The Proponent shall locate screening and crushing equipment on stable ground, at a location with ready access to stockpiles.
- 42. The Proponent shall use water or other non-toxic and biodegradable additives for dust suppression as necessary to maintain ambient air quality without causing water to pool or runoff.

#### **Restoration of Disturbed Areas**

- 43. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
- 44. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season and/or upon abandonment of site.

### Other

- 45. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
- 46. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.
- 47. Any activity related to this application, and outside the original scope of the project as described in the application, will be considered a new project and should be submitted to the NIRB for Screening.

### MONITORING AND REPORTING REQUIREMENTS

In addition, the Board is recommending the following:

#### **Caribou Viewing Authorization**

1. The Proponent shall not commence viewing of caribou from the Qamanirjuaq herd without a "caribou viewing permit" or an exemption for the observation of wildlife. The Proponent shall submit copy of its caribou viewing permit or exemption authorization to the Nunavut Impact Review Board prior to undertaking activities in the proposed area. Additionally, the Proponent shall provide a copy of any wildlife mitigation or management plans to the NIRB, and further copies when updates are made thereafter, noting how the Proponent continued to

consult with Arviat Hunter and Trappers Organization (HTO) and implement HTO recommendations for minimizing impacts to caribou.

## **Archaeology**

2. The Proponent shall not commence upgrades of the airstrip and development of gravel pit area without conducting Heritage Resource Impact Assessment (HRIA) in order to prevent or minimize potential Project-related effects on known heritage areas. The assessment should include locations (i.e. latitude and longitude) of where any archaeological sites and features are encountered relative to the project development area, including information on the participation of Ghotelnene K'Odtineh Dene in the HRIA. The results of the HRIA shall be submitted to the Nunavut Impact Review Board, Government of Nunavut-Department of Culture and Heritage, and Ghotelnene K'Odtineh Dene.

## **Fishing Licence**

3. The Proponent shall ensure that all guests partaking in sport fishing activities during their stay at the lodge obtain fishing licences from the Government of Nunavut-Department of Environment.

## **Outfitting Licencing**

4. The Proponent shall submit a copy of a new outfitting licence to the Nunavut Impact Review Board, with supporting documentations from Transport Canada confirming inspections and certifications of all vessels inclusive of the proposed new watercrafts (motor boats and kayaks) prior to commencing commercial recreation and tourism activities.

## **Abandonment and Restoration Plan**

5. The Proponent shall submit a revised and final version of the Abandonment and Restoration Plan to the Nunavut Impact Review Board, Aboriginal Affairs and Northern Development Canada and Government of Nunavut- Department of Environment prior to undertaking activities in the potential development area. The revised Plan should include procedures for using native plant species for re-vegetation in order to eliminate risk of introducing invasive species to the area pursuant to the Wildlife Act.

## **Transport of Waste/Dangerous Goods**

- 6. The Proponent shall ensure that waste manifest accompanies shipment of all waste oil/grease and is registered with the Government of Nunavut Department of Environment (GN-DoE). The Proponent shall contact the Manager of Pollution Control and Air Quality at (867) 975-7748 to obtain a manifest if hazardous waste will be generated during project activities.
- 7. The Proponent shall ensure that an export manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off site.

#### OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board is recommending the following:

### **Bear and Carnivore Safety**

1. The Proponent review the bear/carnivore detection and deterrent techniques outlined in "Safety in Grizzly and Black Bear Country" which can be down-loaded from this link: <a href="http://www.enr.gov.nt.ca/\_live/documents/content/Bear\_Safety.pdf">http://www.enr.gov.nt.ca/\_live/documents/content/Bear\_Safety.pdf</a>. Note that some recommendations in this manual are also relevant to polar bears. There is a DVD about polar bears and safety available from Nunavut Parks at the following link <a href="http://www.nunavutparks.com/english/visitor-information/suggested-resources.html">http://www.nunavutparks.com/english/visitor-information/suggested-resources.html</a> and a "Safety in Polar Bear Country" pamphlet from Parks Canada at the following link <a href="http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx">http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx</a>.

#### **Incineration of Wastes**

2. The Proponent review Environment Canada's "Technical Document for Batch Waste Incineration", available at the following link: <a href="http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1">http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1</a>. The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

# **Species at Risk**

3. The Proponent review Environment Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: <a href="http://epe.lac-bac.gc.ca/100/200/301/environment\_can/cws-scf/environmental\_assessment-ef/ea\_best\_practices\_2004\_e.pdf">http://epe.lac-bac.gc.ca/100/200/301/environment\_can/cws-scf/environmental\_assessment-ef/ea\_best\_practices\_2004\_e.pdf</a>. The guide provides information to the Proponent on what is required when Wildlife at Risk, including *Species at Risk*, are encountered or affected by the project.

### **Migratory Birds**

4. The Proponent review Canadian Wildlife Services' "Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut", available at the following link: <a href="http://publications.gc.ca/site/eng/317630/publication.html">http://publications.gc.ca/site/eng/317630/publication.html</a> and "Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories", available at the following link: <a href="http://publications.gc.ca/site/eng/392824/publication.html">http://publications.gc.ca/site/eng/392824/publication.html</a>. The guide provides information to the Proponent on key terrestrial and marine habitat areas that are essential to the welfare of various migratory bird species in Canada.

### **Caribou Management**

- 5. Territorial and federal government agencies in Nunavut should work together with Regional Inuit Associations, co-management boards and industry to develop an action plan to identify and mitigate potential cumulative effects of human land use activities, including mineral exploration, on barren-ground caribou. This assessment of cumulative effects should occur at a regional scale (i.e., larger than individual project areas).
- 6. Territorial and federal government agencies update the Caribou Protection Map with updated data and information from the Beverly Qamanirjuaq Caribou Management Board (BQCMB).

# **Aboriginal Affairs and Northern Development Canada**

7. Aboriginal Affairs and Northern Development Canada (AANDC) impose mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit,

- which require the Proponent to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to the location and area; type, location, capacity and operation of facilities; use, storage, handling and disposal of chemical or toxic material; wildlife and fisheries habitat; and petroleum fuel storage.
- 8. AANDC consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.

#### **Nunavut Water Board**

9. The Nunavut Water Board (NWB) impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, waste disposal; access infrastructure; quarrying operations; spill contingency planning; abandonment and restoration planning; and monitoring programs.

#### REGULATORY REQUIREMENTS

The Proponent is also advised that the following legislation may apply to the project:

- 1. The *Fisheries Act* (http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html).
- 2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (http://www.canlii.org/ca/sta/n-28.8/whole.html).
- 3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<a href="http://lawslois.justice.gc.ca/eng/acts/M-7.01/">http://lawslois.justice.gc.ca/eng/acts/M-7.01/</a>).
- 4. The *Species at Risk Act* (<a href="http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html">http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html</a>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
- 5. The *Wildlife Act* (<a href="http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html">http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html</a>) which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
- 6. The *Nunavut Act* (<a href="http://laws-lois.justice.gc.ca/eng/acts/N-28.6/">http://laws-lois.justice.gc.ca/eng/acts/N-28.6/</a>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
- 7. The Transportation of Dangerous Goods Regulations, Transportation of Dangerous Goods Act (http://www.tc.gc.ca/eng/tdg/safety-menu.htm), and the Canadian Environmental Protection Act (http://laws-lois.justice.gc.ca/eng/acts/C-15.31/). The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the Government of Nunavut, Department of Environment Manager of Pollution Control and Air Quality at 867-975-7748.

- 8. The *Aeronautics Act* (http://laws-lois.justice.gc.ca/eng/acts/A-2/).
- 9. The *Marine Liability Act* (<a href="http://laws-lois.justice.gc.ca/eng/acts/M-0.7/">http://laws-lois.justice.gc.ca/eng/acts/M-0.7/</a>).
- 10. The *Navigation Protection Act* (*NPA*) (<a href="http://laws-lois.justice.gc.ca/eng/acts/N-22/index.html">http://laws-lois.justice.gc.ca/eng/acts/N-22/index.html</a>).
- 11. The Proponent shall undertake quarrying in accordance with the *Nunavut Mining Safety Ordinance* and the *Territorial Quarrying Regulations* (http://www.canlii.org/en/ca/laws/regu/crc-c-1527/latest/crc-c-1527.html) or equivalent.

# **Other Applicable Guidelines**

12. The Proponent shall practice progressive reclamation in accordance with the restoration guidelines outlined in Aboriginal Affairs and Northern Development Canada's *Northern Land Use Guidelines Pits and Quarries* (<a href="http://www.aadnc-aandc.gc.ca/eng/1100100023585">http://www.aadnc-aandc.gc.ca/eng/1100100023585</a>).

## **Validity of Land Claims Agreement**

### Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated \_\_\_\_June 16, 2015\_ at Churchill, MB.

Elizabeth Copland, Chairperson

Attachments: Appendix A: Procedural History and Project Activities

Appendix B: Species at Risk in Nunavut

Appendix C: Archaeological and Palaeontological Resources Terms and Conditions for Land Use

Permit Holders

# Appendix A

## Procedural History and Project Activities

## **Procedural History**

On March 10, 2015 the Nunavut Impact Review Board (NIRB or Board) received Aziz Kheraj's (Proponent) "Ennadai Lake Lodge" project proposal from the Nunavut Planning Commission (NPC) with a positive conformity determination (Keewatin Regional Land Use Plan). On March 11, 2015 the NIRB received a screening referral from Aboriginal Affairs and Northern Development Canada (AANDC). The NIRB assigned this project proposal file number **15TN012**.

Following receipt of the initial application materials, the NIRB undertook a preliminary completeness check and found that the proposal as submitted did not contain sufficient information for the NIRB to permit proper screening. On March 23, 2015 the NIRB requested that additional information from the Proponent be provided to the Board by April 6, 2015. On April 9, 2015 the NIRB distributed correspondence to the Minister of Aboriginal Affairs and Northern Development requesting an extension to the screening deadline due to the additional time required to ensure sufficient information to permit proper screening of the proposal. On April 21, 2015 the NIRB received the requested additional information in support of this project proposal.

This project proposal was distributed on April 27, 2015 to community organizations in Arviat, Whale Cove, Rankin Inlet, Chesterfield, Coral Harbour, Baker Lake, including Athabasca Denesuline, Manitoba Denesuline and Lutsel K'e Dene First Nation, as well as to relevant federal and territorial government agencies, and Inuit organizations. The NIRB requested that interested parties review the proposal, and provide the Board with any comments or concerns by May 18, 2015 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (providing any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On or before May 20, 2015 the NIRB received comments from the following interested party:

- Government of Nunavut (GN)
- Aboriginal Affairs and Northern Development Canada (AANDC)
- Nunavut Tourism (NT)
- Ghotelnene K'Odtineh Dene (GKD)

On May 25, 2015 the NIRB provided an opportunity for the Proponent to respond to the concerns raised during the public commenting period. The Proponent provided a response to concerns on May 27, 2015.

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's ftp-site, at the following location:

http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/

## **Project Activities**

The proposed project is located within the Kivalliq region, on the shore of the Ennadai Lake approximately 400 kilometres from the community of Arviat. The Proponent intends to continue operations of a sport fishing and hunting lodge, including upgrade to an existing airstrip and associated quarrying activities to maintain the facility. The Proponent has additionally indicated its intention to take visitors out by boat or foot in the fall and by snowmobile in the spring to watch and photograph migrating caribou from the Qamanirjuaq herd. Tourism activities are proposed to commence in May 2015, with upgrades to the airstrip anticipated to take place in the summer of 2015 and 2016.

The activities associated with this proposal include:

- Lodging and Tourism Activities:
  - o Guest accommodation based primarily out of the established Arctic Haven Lodge, with a capacity of 10-24 guests per week in April to June and August to September;
  - Transportation of guests around the area, on the lake by motor boat in the summer and snowmobile in the spring;
  - o Tourism to include specific activities such as wildlife viewing, hiking, snowmobiling, skiing, sea kayaking, kite-skiing and fishing;
  - o Retrieval of GPS coordinates of caribou collared by the Government of Nunavut and Federal Governments in order to locate suitable areas for viewing caribou;
  - Use of an aircraft for guest pickups and drop offs, including transportation of goods to and from the proposed site location.
- Infrastructure Upgrades and Mobilization:
  - General upgrade of existing airstrip, including water spraying onto the airstrip to facilitate compaction;
  - O Utilization of an area of approximately 100 meters by 100 metres for quarrying activities, and crushing of extracted gravel materials; as well as stockpiling of crushed rock at the end of the airstrip in 2015 to be used in the following year;
  - o Conduct pitting operations in a 50 metres by 20 metres footprint to allow for removal of sand and rock from a small hill;
  - o Retrieval of up to 3 cubic metres of water from Ennadai Lake using electric pump;
  - Use of boats, snowmobile, and heavy equipment such as dump trucks, gravel crusher, vibratory drum compactor and compact track loaders for haulage of gravel and water airstrip prior to compacting including guest transportation.
- Fuel Storage and Waste Management:
  - O Utilize drum containment units (45 gallon drums) with secondary containment in the form of a lined berm for storage of up to 6000 litres of diesel, 3000 litres of

- gasoline, 4000 litres of aviation fuel, 500 litres of engine oil, with an additional storage of up to 20 containers of propane in 100 pounds tanks;
- Onsite incineration of combustible solid wastes, with non-combustible wastes, including bulky items/scraps and hazardous wastes or oil returned to Yellowknife for proper disposal;
- o Use of septic tanks for disposal and treatment of grey water and sewage.

P.O. Box 1360 Cambridge Bay, NU X0B 0C0 Phone: (867) 983-4600 Fax: (867) 983-2594

# **Appendix B**Species at Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term "listed" species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are "pending" addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: July 2013

Species at Risk <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
Peary Caribou	Endangered	Schedule 1	Government of Nunavut
			(GN)
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Schedule 1	GN
Polar Bear	Special Concern	Schedule 1	GN
Short-eared Owl	Special Concern	Schedule 1	GN
Peregrine Falcon	Special Concern	Schedule 1	GN
	(anatum-tundrius complex <sup>3</sup> )		
Rusty Blackbird	Special Concern	Schedule 1	GN
Felt-leaf Willow	Special Concern	Schedule 1	GN
Porsild's Bryum	Threatened	Schedule 1	GN
Eskimo Curlew	Endangered	Schedule 1	Environment Canada (EC)
Ivory Gull	Endangered	Schedule 1	EC
Red Knot	Endangered	Schedule 1	EC
(rufa subspecies)			
Ross's Gull	Threatened	Schedule 1	EC
Red Knot	Special Concern	Schedule 1	EC

Species at Risk <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
(islandica subspecies)			
Harlequin Duck	Special Concern	Schedule 1	EC
(Eastern population)			
Grizzly Bear	Special Concern	Pending	GN
Wolverine (Western population)	Special Concern	Pending	GN
Horned Grebe	Special Concern	Pending	EC
(Western population)			
Buff-breasted Sandpiper	Special Concern	Pending	EC
Atlantic Cod, Arctic Lakes	Special Concern	No schedule	Fisheries and Oceans Canada (DFO)
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale	Threatened	Pending	DFO
(Cumberland Sound population)			
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale	Special Concern	Pending	DFO
(Eastern Canada – West Greenland population)			
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

<sup>&</sup>lt;sup>1</sup> The Department of Fisheries and Oceans has responsibility for aquatic species.

<sup>&</sup>lt;sup>2</sup> Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.

<sup>&</sup>lt;sup>3</sup> The *anatum* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was assessed by COSEWIC as Special Concern, and was added to Schedule 1 of SARA in July 2012.

## Appendix C

Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders



#### INTRODUCTION

The Department of Culture and Heritage (CH) routinely reviews land use applications sent to the Nunavut Water Board, Nunavut Impact Review Board and the Aboriginal Affairs and Northern Development Canada. These terms and conditions provide general direction to the permittee/proponent regarding the appropriate actions to be taken to ensure the permittee/proponent carries out its role in the protection of Nunavut's archaeological and palaeontological resources.

### TERMS AND CONDITIONS

1) The permittee/proponent shall have a professional archaeologist and/or palaeontologist perform the following **Functions** associated with the **Types of Development** listed below or similar development activities:

	Types of Development	Function	
	(See Guidelines below)	(See Guidelines below)	
0)	Large scale prospecting	Archaeological/Palaeontological	
a)	Large scale prospecting	Overview Assessment	
b)	Diamond drilling for exploration or		
	geotechnical purpose or planning of	Archaeological/ Palaeontological	
	linear disturbances	Inventory	
c)	Construction of linear disturbances,	Archaeological/ Palaeontological	
	Extractive disturbances, Impounding	Inventory or Assessment or Mitigation	
	disturbances and other land		
	disturbance activities	ivingation	

Note that the above-mentioned functions require either a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit. CH is authorized by way of the *Nunavut and Archaeological and Palaeontological Site Regulations*<sup>1</sup> to issue such permits.

<sup>&</sup>lt;sup>1</sup>P.C. 2001-1111 14 June, 2001

- 2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 3) The permittee/proponent shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 4) The permittee/proponent shall immediately contact CH at (867) 934-2046 or (867) 975-5500 should an archaeological site or specimen, or a palaeontological site or fossil, be encountered or disturbed by any land use activity.
- 5) The permittee/proponent shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation until permitted to proceed with the authorization of CH.
- 6) The permittee/proponent shall follow the direction of CH in restoring disturbed archaeological or palaeontological sites to an acceptable condition. If these conditions are attached to either a Class A or B Permit under the Territorial Lands Act Aboriginal Affairs and Northern Development Canada directions will also be followed.
- 7) The permittee/proponent shall provide all information requested by CH concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 8) The permittee/proponent shall make best efforts to ensure that all persons working under its authority are aware of these conditions concerning archaeological sites and artifacts and palaeontological sites and fossils.
- 9) If a list of recorded archaeological and/or palaeontological sites is provided to the permittee/proponent by CH as part of the review of the land use application the permittee/proponent shall avoid the archaeological and/or palaeontological sites listed.
- 10) Should a list of recorded sites be provided to the permittee/proponent, the information is provided solely for the purpose of the proponent's land use activities as described in the land use application, and must otherwise be treated confidentially by the proponent.

## Legal Framework

As stated in Article 33 of the *Nunavut Land Claims Agreement*:

Where an application is made for a land use permit in the Nunavut Settlement Area, and there are reasonable grounds to believe that there could be sites of archaeological importance on the lands affected, no land use permit shall be issued without written consent of the Designated Agency. Such consent shall not be unreasonably withheld. [33.5.12]

Each land use permit referred to in Section 33.5.12 shall specify the plans and methods of archeological site protection and restoration to be followed by the permit holder, and any other conditions the Designated Agency may deem fit. [33.5.13]

## Palaeontology and Archaeology

Under the *Nunavut Act*<sup>2</sup>, the federal government can make regulations for the protection, care and preservation of palaeontological and archaeological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*<sub>3</sub>, it is illegal to alter or disturb any palaeontological or archaeological site in Nunavut unless permission is first granted through the permitting process.

#### **Definitions**

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

"archaeological site" means a place where an archaeological artifact is found.

"archaeological artifact" means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

"palaeontological site" means a site where a fossil is found.

"fossil" includes:

Fossil means the hardened or preserved remains or impression of previously living organisms or vegetation and includes:

- (a) natural casts;
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the preserved eggs, teeth and bones of vertebrates.

<sup>&</sup>lt;sup>2</sup> s. 51(1)

<sup>&</sup>lt;sup>3</sup> P.C. 2001-1111 14 June, 2001

# GUIDELINES FOR DEVELOPERS FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES IN THE NUNAVUT TERRITORY

(Note: Partial document only, complete document at: www.ch.gov.nu.ca/en/Archaeology.aspx)

#### Introduction

The following guidelines have been formulated to ensure that the impacts of proposed developments upon heritage resources are assessed and mitigated before ground surface altering activities occur. Heritage resources are defined as, but not limited to, archaeological and historical sites, burial grounds, palaeontological sites, historic buildings and cairns Effective collaboration between the developer, the Department of Culture, Language, Elders and Youth (CH), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

CH is the Nunavut Government agency which oversees the protection and management of heritage resources in Nunavut, in partnership with land claim authorities, regulatory agencies, and the federal government. Its role in mitigating impacts of developments on heritage resources is as follows: to identify the need for an impact assessment and make recommendations to the appropriate regulatory agency; set the terms of reference for the study depending upon the scope of the development; suggest the names of qualified individuals prepared to undertake the study to the developer; issue an archaeologist or palaeontologist permit authorizing field work; assess the completeness of the study and its recommendations; and ensure that the developer complies with the recommendations.

The primary regulatory agencies that CH provides information and assistance to are the Nunavut Impact Review Board, for development activities proposed for Inuit Owned Lands (as defined in Section 1.1.1 of the Nunavut Land Claims Agreement), and the Aboriginal Affairs and Northern Development Canada, for development activities proposed for federal Crown Lands.

A developer is the initiator of a land use activity. It is the obligation of the developer to ensure that a qualified archaeologist or palaeontologist is hired to perform the required study and that provisions of the contract with the archaeologist or palaeontologist allow permit requirements to be met; i.e. fieldwork, collections management, artifact and specimen conservation, and report preparation. On the recommendation of the contract archaeologist or palaeontologist in the field and the Government of Nunavut, the developer shall implement avoidance or mitigative measures to protect heritage resources or to salvage the information they contain through excavation, analysis, and report writing. The developer assumes all costs associated with the study in its entirety.

Through his or her active participation and supervision of the study, the contract archaeologist or palaeontologist is accountable for the quality of work undertaken and the quality of the report produced. Facilities to conduct fieldwork, analysis, and report preparation should be available to this individual through institutional, agency, or company affiliations. Responsibility for the curation of objects recovered during field work while under study and for documents generated in the course of the study as well as remittance of artifacts, specimens and documents to the repository specified on the permit accrue to the contract archaeologist or palaeontologist. This individual is also bound by the legal requirements of the *Nunavut Archaeological and* 

Palaeontological Sites Regulations.

# **Types of Development**

In general, those developments that cause concern for the safety of heritage resources will include one or more of the following kinds of surface disturbances. These categories, in combination, are comprehensive of the major kinds of developments commonly proposed in Nunavut. For any single development proposal, several kinds of these disturbances may be involved

- Linear disturbances: including the construction of highways, roads, winter roads, transmission lines, and pipelines;
- Extractive disturbances: including mining, gravel removal, quarrying, and land filling;
- *Impoundment disturbances: including dams, reservoirs, and tailings ponds;*
- Intensive land use disturbances: including industrial, residential, commercial, recreational, and land reclamation work, and use of heritage resources as tourist developments.
- Mineral, oil and gas exploration: establishment of camps, temporary airstrips, access routes, well sites, or quarries all have potential for impacting heritage resources.

## **Types of Studies Undertaken to Preserve Heritage Resources**

**Overview:** An overview study of heritage resources should be conducted at the same time as the development project is being designed or its feasibility addressed. They usually lack specificity with regard to the exact location(s) and form(s) of impact and involve limited, if any, field surveys. Their main aim is to accumulate, evaluate, and synthesize the existing knowledge of the heritage of the known area of impact. The overview study provides managers with baseline data from which recommendations for future research and forecasts of potential impacts can be made. A Class I Permit is required for this type of study if field surveys are undertaken.

**Reconnaissance:** This is done to provide a judgmental appraisal of a region sufficient to provide the developer, the consultant, and government managers with recommendations for further development planning. This study may be implemented as a preliminary step to inventory and assessment investigations except in cases where a reconnaissance may indicate a very low or negligible heritage resource potential. Alternately, in the case of small-scale or linear developments, an inventory study may be recommended and obviate the need for a reconnaissance.

The main goal of a reconnaissance study is to provide baseline data for the verification of the presence of potential heritage resources, the determination of impacts to these resources, the generation of terms of reference for further studies and, if required, the advancement of preliminary mitigative and compensatory plans. The results of reconnaissance studies are primarily useful for the selection of alternatives and secondarily as a means of identifying impacts that must be mitigated after the final siting and design of the development project.

Depending on the scope of the study, a Class 1 or Class 2 Permit is required for this type of investigation.

**Inventory:** A resource inventory is generally conducted at that stage in a project's development at which the geographical area(s) likely to sustain direct, indirect, and perceived impacts can be well defined. This requires systematic and intensive fieldwork to ascertain the effects of all possible and alternate construction components on heritage resources. All heritage sites must be recorded on Government of Nunavut Site Survey forms. Sufficient information must be amassed from field, library and archival components of the study to generate a predictive model of the heritage resource base that will:

- allow the identification of research and conservation opportunities;
- enable the developer to make planning decisions and recognize their likely effects on the known or predicted resources; and
- make the developer aware of the expenditures, which may be required for subsequent studies and mitigation. A Class 1 or 2 permit is required.

**Assessment:** At this stage, sufficient information concerning the numbers and locations of heritage resources will be available, as well as data to predict the forms and magnitude of impacts. Assessments provide information on the size, volume, complexity and content of a heritage resource, which is used to rank the values of different sites or site types given current archaeological knowledge. As this information will shape subsequent mitigation program(s), great care is necessary during this phase.

**Mitigation:** This refers to the amelioration of adverse impacts to heritage resources and involves the avoidance of impact through the redesign or relocation of a development or its components; the protection of the resource by constructing physical facilities; or, the scientific investigation and recovery of information from the resource by excavation or other method. The type(s) of appropriate mitigative measures are dictated by their viability in the context of the development project. Mitigation strategies must be developed in consultation with, and approved by, the Department of Culture and Heritage. It is important to note that mitigation activities should be initiated as far in advance of the construction of the development as possible.

**Surveillance and monitoring:** These may be required as part of the mitigation program.

Surveillance may be conducted during the construction phase of a project to ensure that the developer has complied with the recommendations.

*Monitoring* involves identification and inspection of residual and long-term impacts of a development (i.e. shoreline stability of a reservoir); or the use of impacts to disclose the presence of heritage resources, for example, the uncovering of buried sites during the construction of a pipeline.