SCREENING DECISION REPORT
NIRB FILE NO.: 09DN018

October 24, 2013

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

The Honourable Rob Nicholson
Minister of National Defence
515-S Centre Block, House of Commons
Ottawa, ON K1A 0A6

Sent via email: minister@aandc.gc.ca; bernard.valcourt@parl.gc.ca; rob.nicholson@parl.gc.ca

Re: Screening Decision for Department of National Defence's "Nanisivik Naval Facility" Project Proposal, North Baffin Region, NIRB File No. 09DN018

Dear Mr. Bernard Valcourt and Mr. Rob Nicholson;

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."*

Section 12.4.8 of the NLCA states:

> *"Where the NIRB indicates to the Minister that a proposal should be returned to the proponent for clarification, the Minister shall return the proposal to the proponent for clarification and resubmission to the NIRB to be dealt with in accordance with Sub-sections 12.4.4(a), (b) or (d)."*

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 and Section 12.4.8 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:

General

1. The Department of National Defence (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 (Clarification on Deficiencies, June 28, 2013; updated Executive Summary, August 19, 2013; and Project Specific Information Requirements, August 23, 2013).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Waste Disposal/Incineration

5. 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.

6. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at an approved facility. All such wastes shall be kept inaccessible to wildlife at all times.
7. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Fuel and Chemical Storage

8. 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, unless otherwise authorized by the Nunavut Water Board.
9. 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, unless otherwise authorized by the Nunavut Water Board.
10. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
11. The Proponent shall use adequate secondary containment or a surface liner (e.g. self-supporting insta-berms and fold-a-tanks), when storing barreled fuel and chemicals at all locations.
12. 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.
13. The Proponent shall inspect and document the condition of all fuel tanks and/or fuel caches on site on a weekly basis, or as required by relevant legislation, regulations or guidelines. All fuel and chemical storage containers must be clearly marked with the Proponent's name and examined for leaks immediately upon delivery.
14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
15. 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

16. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
17. 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.
18. 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

19. 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.

Aircraft Flight Restrictions

20. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
21. 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.
22. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
23. 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 Muskox Disturbance

24. 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.
25. 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.

Aggregate Removal within Existing Quarries

26. 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.
27. The Proponent shall not remove any material from below the ordinary high water mark of any lake or stream.
28. The Proponent shall not deposit or permit the deposit of sediment into any water body.

All-Weather Road and Ground Disturbance

29. 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.
30. 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 water body.

31. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.

Temporary Camps

32. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.

33. The Proponent shall not erect camps or store material on the surface ice of lakes or streams.

Restoration of Disturbed Areas

34. The Proponent shall remove all garbage, fuel and equipment and ensure that all disturbed areas are restored to a stable or pre-disturbed state to the extent practicable upon completion of each field season and/or upon abandonment of site.

Ship-based Activities

35. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes (including waste water) or sediment into any marine waters, and shall manage wastes on board project-related vessels prior to final disposal at approved port facilities.

36. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

Other

37. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.

38. 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:

Annual Report

1. The Proponent shall submit a comprehensive annual report to the Nunavut Impact Review Board by March 30 of each year of construction activities as well as potentially operation activities, upon request. The annual report must contain, but is not limited to, the following information:
    a. A summary of activities undertaken for the year, including:
        i. an updated map showing the infrastructure at the Nanisivik Naval Facility;
        ii. a description of aggregate source(s) used for the site development including the location of sources and the type and amounts of material extracted; evidence of existing, and potential for future thermokarst development, ice lenses, flooding, erosion, sedimentation, and slumping, as well as related control measures; and if blasting, a description of methods employed;
        iii. a description of local hires, contracting opportunities and initiatives; and
        iv. upon request, updates with respect to annual operations including the number of vessels that utilized the facility;
    b. A summary of community consultations undertaken throughout the year;

c. Information regarding the passive cathodic protection method that is proposed to be installed at the wharf/jetty. Information should include a discussion of protection measures taken as well as any confirmation received from Fisheries and Oceans Canada that components of the marine water environment that occur or are found within the vicinity of the wharf/jetty will not be adversely affected by this installation;
d. Summary of how the Proponent has met the recommended terms and conditions; and
e. Site Photos.

Fuel and Chemical Storage

2. The Proponent shall update its Spill Contingency Plan to include the up to date emergency contact numbers for the Government of Nunavut-Department of Environment, Manager of Environmental Protection (867-975-7748) and Environment Canada, Enforcement Branch (867-975-4644).
3. The Proponent shall implement the recommendations found in the 2003 CCME Guidance Document PN 1326 entitled "Environmental Code of Practice for Above Ground and Underground Storage Tank Systems containing Petroleum Product and Allied Petroleum Products".

Transport of Waste/Dangerous Goods

4. The Proponent shall ensure that a waste manifest accompanies the shipment of all waste oil/grease and is registered with the Government of Nunavut Department of Environment (GN-DoE). 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.
5. 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.

Mitigation Measures

6. The Proponent shall update the project specifications based on comments submitted on September 26, 2013 by Fisheries and Oceans Canada regarding additional recommended mitigation measures for marine mammals; and by Environment Canada regarding additional recommended mitigation measures for the Red Knot shorebird.

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: http://www.enr.gov.nt.ca/_live/documents/content/Bear_Safety.pdf. 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 http://www.nunavutparks.com/english/visitor-information/suggested-resources.html and a

"Safety in Polar Bear Country" pamphlet from Parks Canada at the following link http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx.

2. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of Arctic Bay, Mathew Akikulu, phone: (867) 439-9945, email: makikulu@gov.nu.ca).

Incineration of Wastes

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

Species at Risk

4. The Proponent review Environment Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=5407909E-10F6-4AFE-ACDF-75B9E820B4A1. 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.

Land Use Planning

5. The Nunavut Planning Commission, in developing a Nunavut Land Use Plan, give due consideration to the potential future use of the Nanisivik Naval Facility and associated transportation routes utilized by the Royal Canadian Navy, Canadian Coast Guard and any other vessels operated by the Canadian Government, as well as the potential use by commercial operators for the purposes of community resupply to the hamlet of Arctic Bay.

Nunavut Water Board

6. The Nunavut Water Board ensure the long-term ability of regulated municipal water source(s) to meet the needs of the hamlet of Arctic Bay when combined with a potential increase in drawdown associated with the Nanisivik Naval Facility.

Change in Project Scope

7. All Authorizing Agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

REGULATORY REQUIREMENTS

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

Acts and Regulations

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* (http://laws-lois.justice.gc.ca/eng/acts/M-7.01/).
4. The *Species at Risk Act* (http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
5. The *Wildlife Act* (http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html) 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* (http://laws-lois.justice.gc.ca/eng/acts/N-28.6/). 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 GN-DOE 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 *Navigable Waters Protection Act (NWPA)* (http://laws-lois.justice.gc.ca/eng/acts/N-22/index.html).
10. 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.
11. The CEPA *Storage Tank System for Petroleum Products and Allied Petroleum Products Regulations* (www.ec.gc.ca/st-rs). The Proponent must identify their tank system to Environment Canada and installation of new systems must comply with the regulations' design requirements.

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 __October 24, 2013___at Kugluktuk, NU.

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Phillip Kadlun, Acting 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 June 28, 2013 the Nunavut Impact Review Board (NIRB or Board) received correspondence from the Department of National Defence (DND or the Proponent) in response to the NIRB's January 16, 2013 Screening Decision Report for the "Nanisivik Naval Facility" project proposal, providing clarification on the deficiencies identified by the NIRB in the original project proposal. On August 19, 2013 the DND submitted an updated "Nanisivik Naval Facility" project proposal to the NIRB for Screening pursuant to Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA).

Previous Assessment

On November 14, 2008 the NIRB received the DND's "Nanisivik Naval Facility" project proposal. On November 17, 2008 the NIRB indicated to the Proponent that this project proposal appeared to be located in an area with an approved land use plan (North Baffin Regional Land Use Plan) and would consequently require a conformity determination from the Nunavut Planning Commission (NPC) prior to initiating the screening process. In addition, the NIRB requested that authorizing agencies with jurisdiction to authorize works or activities associated with this project forward copies of any such applications to the NIRB. On March 12, 2009 the NIRB received a positive conformity determination from the NPC for this file. At that time, the NIRB assigned the project proposal file number 09DN018 and commenced screening the project proposal pursuant to Part 4, Article 12 of the NLCA.

Following its assessment, on January 14, 2013 the NIRB issued its Screening Decision Report to the then-Minister of Aboriginal Affairs and Northern Development, the Honourable John Duncan and to then-Minister of National Defence, the Honourable Peter MacKay, recommending that pursuant to NLCA Section 12.4.4(c), the project proposal be returned to the Proponent for clarification. Pursuant to Section 12.4.8 of the NLCA, in correspondence dated April 8, 2013 the Minister of Aboriginal Affairs and Northern Development responded to the NIRB's Screening Decision Report noting that:

> *"[he was] required to return the proposal to the proponent for clarification and resubmission to the [NIRB], to be dealt with in accordance with [NLCA] sub-sections 12.4.4(a), (b), or (d). Should National Defence choose to resubmit its project proposal, it will need to be revised to include the outstanding information and clarification requested by the [NIRB]."*

Current Assessment

The updated Nanisivik Naval Facility project proposal received by the Board on August 19, 2013 was distributed to community organizations in Arctic Bay, Grise Fiord, Pond Inlet, and Resolute, 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 September 20, 2013 regarding:

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

On or before September 20, 2013 the NIRB received comments from the following interested parties:

- **Hamlet of Arctic Bay**
- **Qikiqtani Inuit Association**
- **Nyrstar Canada (Holdings) Ltd.**
- **Government of Canada**
    - **Aboriginal Affairs and Northern Development Canada**
    - **Environment Canada**
    - **Fisheries and Oceans Canada**
    - **Natural Resources Canada**
    - **Transport Canada**

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

http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/2013/09DN018-DND-Nanisivik%20Naval%20Facility/

On September 23, 2013 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 submissions on September 26, 2013.

On October 3, 2013 the NIRB requested an extension to the screening timeline from the Minister of Aboriginal Affairs and Northern Development.

Project Activities

The DND is proposing to develop the Nanisivik Naval Facility located approximately 33 kilometres (km) northeast of the hamlet of Arctic Bay, in the North Baffin region. The primary objective of the proposed project is to provide a berthing & refueling facility for the Arctic Offshore Patrol Ships (AOPS) and the Canadian Coast Guard (CCG) during the navigable season each year. The facility would maintain fuel supply capacity for one (1) operating season. The facility may also be used to receive, marshal, hold and distribute cargo and goods from commercial sea vessels and to provide appropriate shelter, work areas and amenities for personnel during the navigable season of the year only. The construction program is proposed to commence in 2014 with the facility proposed to be fully operational by 2016. The proposed facility has been designed for an anticipated life of at least 40 years, with the intention that it be

manned and operated from June through October, and unmanned from November to June each year.

The proposed activities include:

- Site preparation to commence in 2014 with establishment of construction camp in 2015:
  - Use of pre-built mobile trailers for construction camp (50-60 personnel);
- Use of existing Nanisivik deep-water berth to:
  - Transport equipment and bulk material during construction;
  - Refuel AOPS and other Canadian Government ships (including CCG Ships);
  - Facilitate unloading of oversize cargo that the annual resupply barge normally would use into the hamlet of Arctic Bay;
- Establishment of cargo storage and marshalling area;
- Construction of bulk liquid storage facility:
  - Naval distillate fuel – two 3.75 million litre (L) single-walled, vertical tanks (22 meter diameter) with up to 7.5 million L stored at the facility
  - Diesel – two 81,000 L doubled-walled, horizontal tanks (3 meter diameter) with up to 100,000 L stored at the facility
  - Aviation Fuel – 15 drums with total capacity of 3,000 L
- Use and upgrading of existing roads and the development of new roads to access components of the facility;
- Use of airport at Arctic Bay during construction and operation to bring in personnel and materials;
- Use of existing all-weather road between Arctic Bay and the facility during construction and operation to transport personnel and materials to the project site;
- Use of local aggregate quarry during construction (located approximately 3 km southeast of the Nanisivik Naval Facility);
- Arctic Bay to provide potable water and wastewater management during construction period (*per August 19, 2013 agreement between the Hamlet of Arctic Bay and DND*);
- Generation and treatment/disposal of wastes:
  - During construction; suitable solid waste will be incinerated while other wastes will be shipped off-site for recycling;
  - During operations; solid waste to be shipped off-site at the end of each season to an approved disposal facility;
- Development of a helicopter landing area; and
- Set-up of a general purpose storage building, wharf operator shelter and upgrades to three existing DND trailers.

Potential use of the proposed facilities by the Canadian Navy, CCG and other vessels operated by the Canadian Government, as well as potential use by commercial operators for the purpose of community resupply to the hamlet of Arctic Bay, although given consideration during this assessment, are considered to be separate and distinct activities subject to independent assessment and approval processes.

The Proponent's August 19, 2013 submission also provided additional information intended to address the specific issues that were identified by the Board in its January 14, 2013 Screening Decision Report.

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 periodically check the SARA registry (http://www.sararegistry.gc.ca/default_e.cfm) to get the current status of a species.

Updated: January 2012

Terrestrial Species at Risk [1]	**COSEWIC Designation**	**Schedule of SARA**	**Government Organization with Primary Management Responsibility** [2]
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	GN
Felt-leaf Willow	Special Concern	Schedule 1	GN
Peregrine Falcon	Special Concern (*anatum-tundrius* complex[3])	Schedule 1 - Threatened (*anatum*) Schedule 3 – Special Concern (*tundrius)*	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Peary Caribou	Endangered	Schedule 1	GN
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Schedule 1	GN

Terrestrial Species at Risk [1]	**COSEWIC Designation**	**Schedule of SARA**	**Government Organization with Primary Management Responsibility** [2]
Polar Bear	Special Concern	Schedule 1	GN
Red Knot (*rufa* subspecies)	Endangered	Pending	EC
Red Knot (*islandica* subspecies)	Special Concern	Pending	EC
Porsild's Bryum	Threatened	Pending	GN
Horned Grebe (Western population)	Special Concern	Pending	EC
Grizzly Bear	Special Concern	Pending	GN
Wolverine (Western population)	Special Concern	Pending	GN
Atlantic Cod, Arctic Lakes	Special Concern	No schedule	DFO
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
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 (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

[1] The Department of Fisheries and Oceans has responsibility for aquatic species.

[2] 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.

[3] The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. 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.

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

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*[1] to issue such permits.

[1] 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 INAC's 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*[2], 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*[3], 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*

[2] s. 51(1)
[3] 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: http://gov.nu.ca/cley/english/arch.html)

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 Department of Indian and Northern Affairs, 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, Language, Elders and Youth. 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.