



SCREENING DECISION REPORT NIRB FILE NO.: 08DN056

NIRB File No.: 08DN056
INAC File No.: N2008N0027

June 19, 2008

Honourable Chuck Strahl
Minister of Indian and Northern Affairs Canada
Ottawa, ON

E-Mail: Strahl.C@parl.gc.ca

Re: Screening Decision for Defence R&D Canada-Atlantic's "Northern Watch Technology Demonstration" Project Proposal

Dear Honourable Minister:

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of the Nunavut Impact Review Board (NIRB or Board) 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 Nunavut Land Claim Agreement (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 Terms and Conditions, pursuant to Section 12.4.4(a) of the NLCA

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

General

1. Defence R&D Canada-Atlantic (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 to the NIRB obtained and required for this project prior to the commencement of the project.
3. The Proponent shall operate the project sites in accordance with all applicable Acts, Regulations and Guidelines.

Fuel Storage

4. The Proponent shall locate all fuel on the land with a minimum of thirty (30) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
5. The Proponent shall use self-supporting insta-berms at barreled fuel catch locations, spill kits and drip pans or other similar preventative measures when refueling equipments at the project site.

Waste Management:

6. The Proponent shall ensure camp sewage is directed to a properly constructed sump in such a manner as to ensure sewage does not leach into any surrounding water body.
7. The Proponent shall incinerate all combustible and food wastes daily in an appropriate device to ensure the complete combustion of wastes, a dual chamber, forced-air incinerator is recommended.

Physical Environment

8. The Proponent shall ensure that all new camp structures are located on gravel, sand or other durable land.
9. 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. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
10. The proponent shall minimize the impacts to seashore environment to the extent practical when carry out the submarine works.
11. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

Wildlife

12. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
13. 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.

14. The Proponent shall ensure that there is no hunting or fishing, unless proper Nunavut authorizations have been acquired.
15. The Proponent shall restrict aircraft activity related to the project to a minimum altitude of 610m above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife.
16. The Proponent shall ensure that aircraft do not, unless for emergency, touch-down in areas where wildlife are present.
17. The Proponent shall not disturb nesting raptors (particularly during the period from April 15 to September 1), keeping at least 1.5 km away from known nests when in transit by aircraft and avoiding close approaches while on foot, the proponent should also ensure that aircraft maintain a vertical distance of 1000 meters and a horizontal distance of 1.5 km from any observed groups (colonies) of birds and must avoid concentrations of nesting or molting waterfowl by aircraft at all times.
18. The Proponent shall follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional Biologist or the Wildlife manager for information and advice on measures which should be taken to minimize the possibility of conflicts/interactions with bears.
19. The proponent shall set up appropriate security device to protect experiments instruments/equipment from damaging by wildlife.

Restoration

20. The Proponent shall remove all garbage, fuel barrels and construction debris both on lands and waters upon abandonment.

Other

21. The Proponent should, to the extent possible, hire local people.

Monitoring and Reporting Requirements

In addition, the Board is recommending the following:

The Proponent shall submit a comprehensive annual report to the Indian and Northern Affairs Canada, Government of Nunavut, Department of Environment and NIRB by each March 31st of operation period. The report must contain, but not be limited to, the following information:

- a. A summary of activities undertaken for the reporting years, including local hires and initiatives;
- b. A work plan for the following year;
- c. A wildlife monitoring report with a "Wildlife Log" to record and map wildlife (both terrestrial and marine mammals) observations and critical habitats including:
 - Location (i.e., latitude and longitude), Number of animals and Species;
 - Description of the gender and age of animals if possible;
 - Description of the animal activity (behaviour prior to encounter and response to human presence);
 - Timing of critical life history events observed for all wildlife including terrestrial and marine species (i.e. calving, mating, denning, nesting, migration, etc.);
 - All potential impacts to wildlife from project activities;
 - All actions / mitigation measures taken to reduce adverse impacts to wildlife; and
 - An analysis of the effectiveness of mitigation measures implemented with regards to wildlife based on the results of the "Wildlife Log".

- d. Site photos before and after project conduction;
- e. A summary of how the Proponent has complied with the NIRB terms and conditions contained within this Screening Decision, and the terms and conditions associated with all authorizations for the project.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

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

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

Indian and Northern Affairs Canada

Indian and Northern Affairs Canada (INAC) 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.

INAC should also 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.

Regulatory Requirements

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

1. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14///en>).
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.justice.gc.ca/en/showtdm/cs/M-7.01>).
4. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
5. The *Nunavut Wildlife Act* 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.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**
7. The use of water, disposal of wastewater or waste as a result of the project proposal activities require a Nunavut Water Board license and the project cannot proceed until this is obtained (<http://www.nunavutwaterboard.org/en/legislation>).
8. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (<http://www.tc.gc.ca/tdg/menu.htm>), and the *Environmental Protection Act* (<http://laws.justice.gc.ca/en/C-15.31/text.html>) 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.

9. The *Aeronautics Act* (<http://laws.justice.gc.ca/en/A-2/>).

10. The *Navigable Waters Protection Act* (NWPA) (<http://laws.justice.gc.ca/en/N-22/index.html>).

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 19, 2008 at Sanikiluaq, NU.



Lucassie Arragutainaq, Chair

APPENDIX A

Procedural History and Project Activities

Procedural History

On May 13, 2008 the Nunavut Impact Review Board (NIRB or Board) received Defence R&D Canada-Atlantic's *Northern Watch Technology Demonstration* project proposal from Indian and Northern Affairs Canada, before that on May 7, 2008 the NIRB received a positive conformity determination (North Baffin Regional Land Use Plan) from the Nunavut Planning Commission with respect to this project proposal. NIRB assigned this project proposal file number **08DN056**.

This application was distributed to the Hamlet and HTO of Resolute, Grise Fiord and Pond Inlet, Inuit organizations as well as interested Federal and Territorial Agencies. The NIRB requested that interested Parties review the application and provide NIRB with comments by June 4, 2008.

By the requested date, the NIRB did not receive comments from Parties regarding this project proposal.

Project Activities

The proposed project is located in Barrow Strait, on and near the southwest corner of Devon Island, in the North Baffin Region of Nunavut. The nearest community to the proposed project areas is Resolute, approximately 110 km from the proposed camp. The purpose of the project is to identify and characterize combinations of sensors systems for cost effective surveillance of unique maritime environment of Canadian Arctic. The proposed research activities would be conducted from mid-August to mid-September annually from 2008 to 2010.

The project activities in this application include:

- Establishment of 2 temporary structures at existing camp site;
- Temporary fuel storage;
- Aircraft use for research activities;
- ATV and trailer use on site;
- Placement of four bottom-mounted underwater arrays (include acoustic, magnetic, and electric filed sensors) and connecting submarine cable;
- Installation of land-based sensors (include a marine navigation radar, an Electro-Optical system, an Electronic Intelligence receiver and an Automatic Identification system); and
- Data collection and experiments.

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 (www.sararegistry.gc.ca) to get the current status of a species.

Updated: January 3, 2007

| Species at Risk | COSEWIC Designation | Schedule of SARA | Government Organization with Lead Management Responsibility ¹ |
|--|-------------------------|------------------|--|
| Eskimo Curlew | Endangered | Schedule 1 | EC |
| Ivory Gull | Endangered ² | Schedule 1 | EC |
| Peregrine Falcon (subspecies anatum) | Threatened | Schedule 1 | Government of Nunavut |
| Ross's Gull | Threatened | Schedule 1 | EC |
| Harlequin Duck (Eastern population) | Special Concern | Schedule 1 | EC |
| Felt-leaf Willow | Special Concern | Schedule 1 | Government of Nunavut |
| Peregrine Falcon (subspecies tundrius) | Special Concern | Schedule 3 | Government of Nunavut |
| Short-eared Owl | Special Concern | Schedule 3 | Government of Nunavut |
| Fourhorn Sculpin | Special Concern | Schedule 3 | DFO |
| Peary Caribou | Endangered ³ | Pending | Government of Nunavut |
| Beluga Whale (Eastern Hudson Bay population) | Endangered | Pending | DFO |
| Beluga Whale (Cumberland Sound population) | Threatened | Pending | DFO |
| Beluga Whale (Western Hudson Bay) | Special Concern | Pending | DFO |

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|--|------------------------------|---------|-----------------------|
| population) | | | |
| Beluga Whale (Eastern High Arctic – Baffin Bay population) | Special Concern | Pending | DFO |
| Bowhead Whale (Hudson Bay-Foxe Basin population) | Threatened ⁴ | Pending | DFO |
| Bowhead Whale (Davis Strait-Baffin Bay population) | Threatened ⁴ | Pending | DFO |
| Porsild's Bryum | Threatened | Pending | Government of Nunavut |
| Atlantic Walrus | Special Concern | Pending | DFO |
| Narwhal | Special Concern | Pending | DFO |
| Rusty Blackbird | Special Concern | Pending | Government of Nunavut |
| Barren-ground Caribou (Dolphin and Union population) | Special Concern ³ | Pending | Government of Nunavut |
| Grizzly Bear | Special Concern | Pending | Government of Nunavut |
| Polar Bear | Special Concern | Pending | Government of Nunavut |
| Wolverine (Western Population) | Special Concern | Pending | Government of Nunavut |

¹ Environment Canada 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. EC = Environment Canada, DFO = Department of Fisheries and Oceans

² Designated as Endangered by COSEWIC in April 2006 and it is expected that the category of concern in SARA will also be changed from Special Concern to Endangered.

³ Peary Caribou was split into three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. The Low Arctic population also included the Barren-ground Caribou - Dolphin and Union population. In May 2004 all three population designations were de-activated, and the Peary Caribou, *Rangifer tarandus pearyi*, was assessed separately from the Barren-ground Caribou (Dolphin and Union population), *Rangifer tarandus groenlandicus*. The subspecies *pearyi* is composed of a portion of the former "Low Arctic population" and all of the former "High Arctic" and "Banks Island" populations, and it was designated Endangered in May 2004. Although SARA lists Peary Caribou on Schedule 2 as three separate populations, the most current designation is the COSEWIC designation of the subspecies *pearyi* as Endangered.

⁴ The "Eastern and Western Arctic populations" of Bowhead Whale were given a single designation of Endangered in April 1980 by COSEWIC. These were split into two populations to allow separate designations in April 1986. The Eastern population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and both these populations were designated as Threatened. Both these populations are under consideration for addition to Schedule 1. Although SARA lists the Eastern Arctic population as Endangered (Schedule 2), the most current designation is the COSEWIC designations of the Hudson Bay-Foxe Basin and Davis Strait-Baffin Bay populations as Threatened.

APPENDIX C

Government of Nunavut – Department of Culture, Language, Elders and Youth Standard Terms and Conditions



BACKGROUND

Archaeology

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

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

Palaeontology

Under the Nunavut Act¹, the federal government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*², it is illegal to alter or disturb any palaeontological 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 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:

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

Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee 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 the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.

9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:

- a) survey
- b) inventory and documentation of the archaeological or palaeontological resources of the land use area
- c) assessment of potential for damage to archaeological or palaeontological sites
- d) mitigation
- e) marking boundaries of archaeological or palaeontological sites
- f) site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.