

SCREENING DECISION REPORT NIRB FILE NO.: 07DN066

October 19, 2007

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

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

Re: <u>Screening Decision for Defense Construction Canada's FOX-2, Longstaff Bluff, DEW Line Site Clean Up Project Proposal</u>

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 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 Nunavut Land Claim Agreement 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 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. Defense Construction Canada (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
- 2. The Proponent shall ensure that all field operations staff are aware of the Proponent's commitments.
- 3. The Proponent shall forward copies of all permits obtained and required for this project to the NIRB, prior to the commencement of the project.
- 4. The NIRB shall be notified of any changes in operating plans or conditions associated with this project prior to any such change.
- 5. The Proponent shall submit, to NIRB, a comprehensive annual report by March 31st of each year. A copy is to be provided to INAC, Lands Department, Iqaluit. Annual reports will be provided until the project has been completed. The report must contain, but not be limited to, the following information:
 - A summary of activities undertaken for the year
 - A work plan for the following year;
 - An update on the extent of contamination on-site and supporting documentation;
 - Descriptions of any wildlife encounters and actions/mitigation taken;
 - A summary of local hires and initiatives;
 - A summary of site-visits by inspectors with results and follow-up actions;
 - A summary of site-visits with community members (if conducted);
 - Site photos and updated site maps;
 - The number of barges utilized;
 - A summary of how it has complied with all project Terms and Conditions and how the terms and conditions are achieving their purpose.
- 6. The Proponent should, to the extent possible, hire local people and consult with local residents regarding the project activities in their region.
- 7. The Proponent shall conduct community consultation throughout the duration of the project to ensure that community members are kept well informed about the activities, results, and plans regarding the site and are active participants in the remedial action plan development.

Water and Wastewater

- 8. The Proponent shall discharge surface water and waste water in accordance with a license issued by the Nunavut Water Board (NWB).
- 9. The Proponent shall not construct or disturb any stream, lakebed or banks of any definable water course unless authorized by the Department of Fisheries and Oceans.
- 10. The Proponent shall use water instead of calcium chloride as a dust suppressant on site.
- 11. The Proponent shall collect and dispose of sewage in accordance with the applicable *Nunavut Water Board License*.

Wildlife

- 12. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation. Deliberate feeding of any wildlife is absolutely prohibited. The Proponent shall not hunt or fish, unless the appropriate permits and licenses are acquired. Harassment of wildlife is prohibited. This includes persistently worrying or chasing animals, or disturbing large groups of animals
- 13. The Proponent shall ensure that minimum flying altitudes of 610 m above ground level in areas of nesting migratory birds, as well as in areas identified as caribou calving and post-calving, are implemented. In addition, a minimum horizontal distance of 1500 m from any observed concentrations of birds (moulting/brooding areas) shall be maintained.
- 14. The Proponent shall be aware that the project area is near the Foxe Basin Islands which have been identified as a Key Migratory Bird Site. It is important for geese, gulls, shorebirds, and sea ducks. Although the project activities will not occur within the Key Migratory Bird Site, the proponent shall ensure that its sea-lift operation is such that it be undertaken to prevent marine pollution. As well, Proponent shall ensure no low-level flights over this area at the times when birds are present.
- 15. The Proponent shall cease activities that may interfere with migration or calving of caribou, until the caribou have passed or left the area. If caribou are observed calving in the area during the period of May 15 to July 15, the Proponent shall suspend all operations outside the immediate vicinity of the camp. All personnel should remain quietly in camp or be removed from the site if possible. The Proponent may resume project activities prior to July 15 if the caribou have ceased to use the project area for calving or post-calving.
- 16. The Proponent shall document any wildlife observations in the general vicinity of their operation, noting locations and frequencies, and modify activities accordingly to avoid wildlife when possible. Special note should be taken of any designated Species at Risk (see **Appendix B**) observed in the project area. These wildlife observations shall be reported to a Regional Wildlife Biologist, (Baffin Region) Debbie Jenkins, (867) 899-8876, pondbiologist@qiniq.com, and the nearest Conservation Officer at the end of each operational season.

Physical Environment

- 17. 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.
- 18. The Proponent shall control all movement of heavy machinery, vehicles and equipment within the hazardous material management area to prevent the dispersion of potentially hazardous or contaminated materials, including dust, into the environment.
- 19. Following remediation activities, the Proponent shall ensure that the ground surface is prepared to facilitate vegetation establishment where possible. If seed mixes are used, only arctic seed mixes appropriate for the eastern arctic must be used.

Storage and Management of Waste, Hazardous Waste and other Hazardous Materials

- 20. The Proponent shall install and operate an incineration device capable of meeting the emission limits established under the *Canada-Wide Standards (CWS)* for *Dioxins and Furans* and the *CWS* for *Mercury Emissions*. The use of a dual-chamber, forced air incinerator is required.
- 21. The Proponent shall keep camp wastes inaccessible to wildlife at all times.
- 22. The Proponent shall recover and recycle material wherever practical.

- 23. The Proponent shall ensure that all hazardous materials be removed from the project site and disposed of in accordance with the *Environmental Protection Act*, *Nunavut Territorial Regulations and Guidelines*, and the *Nunavut Hazardous Waste Disposal Manual*.
- 24. The Proponent shall ensure that workers follow established protocols for working with hazardous material and contaminated soil in conducting all on site works.

Remediation of Petroleum Hydrocarbon Contaminated Soils

- 25. The Proponent shall follow guidelines recommended by Environment Canada regarding: landfarming design, siting, operation, monitoring, sampling and analytical methods, decommissioning and closure as well as record keeping and reporting for cold climate land farming facilities, which include:
 - Bioremediation of Petroleum Hydrocarbons in Soil and Groundwater Under Cold Climate Conditions: A Review, Implications for Applications in Canada, Dale Van Stempvoort and Pamela Grande, National Water Research Institute in Burlington, December 2005
 - Cold Climate Bioremediation: A Review of Field Case Histories. Pamela Rogers, Research Assistant, Department of Civil & Environmental Engineering, University of Alberta, July 2005

Transportation and Storage of Contaminated Solid Wastes

- 26. The Proponent shall ensure that all contaminated waste stored on site is removed on an annual basis.
- 27. The Proponent shall ensure that any exposed soil piles are covered to prevent migration of wind blown contaminants and migration of contaminants via runoff.

Fuel and Chemical Storage

- 28. Any releases of harmful substances, regardless of quantity, are immediately reportable to the 24 hour Spill Line at 867-920-8130 or Environment Canada's 24-hour Emergency pager 867-766-3737, where the release:
 - is near or into a water body;
 - is near or into a designated sensitive environment or sensitive wildlife habitat;
 - poses an imminent threat to human health or safety; or
 - poses an imminent threat to a listed species at risk or its critical habitat.
- 29. The Proponent shall ensure that appropriate secondary containment or surface liners are used for all fuel transfers on the project site.
- 30. The Proponent shall store all chemicals in such a manner that they are inaccessible to wildlife.

Regulatory Requirements

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

1. Section 36(3) of the *Fisheries Act* (http://laws.justice.gc.ca/en/showtdm/cs/F-14///en) which states that no person shall deposit or permit the deposit of a deleterious substance in any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.

- 2. The Migratory Birds Convention Act and Migratory Birds Regulations which state that no person disturb or destroy the nests or eggs of migratory birds, and that no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds (http://laws.justice.gc.ca/en/showtdm/cs/M-7.01)
- 3. 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. The Proponent should consult the Species at Risk Public Registry (http://www.sararegistry.gc.ca/) to identify any Species at Risk within the project location. Further, the Proponent shall develop monitoring plans for each relevant Species at Risk in accordance with any applicable status reports, recovery strategies, action plans, and management plans posted on the Species at Risk Public Registry and in consultation with the Government Organization with Primary Management Responsibility. Monitoring plans should record the locations and frequency of observing species of special concern and note any actions taken to avoid contact or cause disturbance to the species, its residence, or its critical habitat.
- 4. The *Nunavut Act* (http://laws.justice.gc.ca/en/showtdm/cs/N-28.6) which requires that no person alter or disturb any archaeological or palaeontological sites in Nunavut unless permission is first granted through the permitting process. If any archaeological or palaeontological sites are found they should remain undisturbed and their location should be reported to the Government of Nunavut Department of Culture, Language, Elders and Youth. The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C.**
- 5. 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) which presents the requirements for the handling, storing, managing and transportation of dangerous goods, including hazardous wastes, fuel and contaminated material. The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with GN-DOE by contacting Robert Eno at 867-975-7748 or reno@gov.nu.ca.
- 6. Article 13.7.1 of the NLCA and Section 173(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, state that no person shall use water or dispose of waste into water without the approval of the Nunavut Water Board (NWB). The Proponent is encouraged to contact the NWB prior to engaging in any activities to determine if a license is required (http://www.nunavutwaterboard.org/en/home).

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 19, 2007 at Sanikiluaq, NU.

Lucassie Arragutainaq, A/Chair

APPENDIX A

Procedural History

On September 4, 2007 the Nunavut Impact Review Board (NIRB or Board) received Defense Construction Canada's *FOX-2*, *Longstaff Bluff DEW Line Site Clean Up* project proposal from Indian and Northern Affairs Canada (INAC). NIRB assigned this project proposal file number 07DN066. Upon a preliminary completeness check, NIRB determined that additional information was required to conduct a Part 4 screening.

On September 5, 2007 NIRB notified Defense Construction Canada that the information provided was not sufficient to conduct an environmental screening. Additional information was requested. On September 13, 2007 NIRB received the requested information and commenced the Part 4 Screening process.

This proposing project is located on the south-western coast of Baffin Island. The nearest community is Hall Beach, 245 km to the west. The site clean up operation period is planned for each summer (June to October) from the year 2008 to 2012.

On September 17, 2007 NIRB distributed the application for comment to interested Federal and Territorial Agencies as well as municipalities most affected by the project.

On October 5, 2007, the NIRB received comments from Environment Canada (EC).

Project Activities

The proposed project activities include:

- Construction and operation of temporary and seasonal camp
- Demolition of existing facilities
- Remediation of the existing landfills
- Construction of two new landfills
- Excavation of contaminated soils
- Removal of surface debris around the site
- Land farming operation
- Grading and restoration of the site

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

	COSEWIC		Government Organization with Lead Management
Species at Risk	Designation	Schedule of SARA	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	Endangered	Pending	DFO
(Eastern Hudson Bay population)			
Beluga Whale	Threatened	Pending	DFO
(Cumberland Sound population)			
Beluga Whale	Special Concern	Pending	DFO

(Western Hudson Bay population)			
Beluga Whale	Special Concern	Pending	DFO
(Eastern High Arctic –			
Baffin Bay population)			
Bowhead Whale	Threatened ⁴	Pending	DFO
(Hudson Bay-Foxe			
Basin population)			
Bowhead Whale	Threatened ⁴	Pending	DFO
(Davis Strait-Baffin			
Bay population)			
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	Special Concern ³	Pending	Government of Nunavut
Caribou (Dolphin and			
Union population)			
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 Barrenground 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.