

SCREENING DECISION REPORT NIRB FILE NO.: 13UN037

June 26, 2014

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

and

Thomas Kabloona Chairperson Nunavut Water Board Gjoa Haven, NU

Sent via email: minister@aandc.gc.ca; bernard.valcourt@parl.gc.ca; thomas.kabloona@nwboen.ca

Re: Screening Decision for the Government of Nunavut Department of Community and Government Services' "Hamlet of Rankin Inlet: Amendment Application – Seasonal Replenishment of Nipissar Lake" Project Proposal, Kivalliq Region, 13UN037

Dear Mr. Bernard Valcourt and Mr. Thomas Kabloona:

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

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

Section 12.4.4 of the NLCA states:

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

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

NIRB ASSESSMENT AND DECISION

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

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

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

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

General

- 1. The Government of Nunavut Department of Community and Government Services (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 the NIRB and comprising its project proposal (NIRB Part 1 form, May 23, 2014, Nunavut Planning Commission Questionnaire, December 11, 2013) and the Nunavut Water Board (Amendment Application, September 3, 2014).
- 4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water Use

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

6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste Disposal

7. 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.

Fuel and Chemical Storage

- 8. Unless authorized, 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.
- 9. Unless authorized, 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.
- 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 when storing barreled fuel and chemicals at all locations. Appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) must be readily available during any transfer of fuel or hazardous substances, as well as at vehicle-maintenance areas and the pump area.
- 12. 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

- 13. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
- 14. 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.
- 15. 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

- 16. 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.
- 17. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.

Caribou and Muskoxen Disturbance

- 18. 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.
- 19. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as the movement of equipment or personnel until such time as the caribou have passed.
- 20. During the period of May 15 to July 15, when caribou are observed within 1 km of project operations, the Proponent shall suspend all operations, including the use of equipment, as well as snowmobiles and all-terrain vehicles. Following July 15, if caribou cows or calves are observed within 1 km of project operations, the Proponent shall also suspend all operations in the vicinity, including use of equipment, as well as snowmobiles and all-terrain vehicles, until caribou are no longer in the immediate area.

Ground Disturbance

- 21. Unless authorized, the Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion from the pipeline and other structures or facilities.
- 22. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction in order to prevent sediment from entering any waterbody.
- 23. 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.
- 24. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.

Winter Trail

- 25. The Proponent shall select a winter route that maximizes the use of frozen water bodies and shall ensure that no disturbance of the stream bed or banks of any definable watercourse be permitted.
- 26. The Proponent shall not move any equipment or vehicles without prior testing the thickness of the ice to ensure the lake is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.
- 27. The Proponent shall ensure that winter lake and/or stream crossings are located to minimize approach grades and constructed entirely of ice and snow materials. Ice or snow free of sediment should be the only materials used to construct temporary crossings over any ice-covered watercourse.
- 28. The Proponent shall ensure that bank disturbances are avoided, and no mechanized clearing carried out immediately adjacent to any watercourse.
- 29. The Proponent shall ensure that stream crossings and/or temporary crossings constructed from ice and snow, which may cause jams, flooding or impede fish passage and or water flow, are removed or notched prior to spring break-up.

- 30. The Proponent shall implement sediment and erosion control measures prior to, and during operations to prevent sediment entry into the water during the spring thaw. This includes ensuring that a sufficient thickness of snow and ice is present on the winter road to prevent unnecessary erosion of the underlying ground surface and impact on underneath vegetation.
- 31. The Proponent shall implement a clean-up and reclamation stabilization plan which should include, but is not limited to, re-vegetation and/or stabilization of exposed soil in road bed.

Restoration of Disturbed Areas

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

Other

- 34. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
- 35. 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.

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* (<u>http://laws-lois.justice.gc.ca/eng/acts/N-28.6/</u>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
- 7. The Canada National Parks Act (http://laws-lois.justice.gc.ca/eng/acts/n-14.01/).
- 8. The Arctic Waters Pollution Prevention Act (http://laws-lois.justice.gc.ca/eng/acts/A-12/).

- 9. The *Navigable Waters Protection Act (NWPA)* (http://laws-lois.justice.gc.ca/eng/acts/N-22/index.html).
- 10. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (http://www.tc.gc.ca/eng/tdg/safety-menu.htm), and the *Canadian Environmental Protection Act* (http://laws-lois.justice.gc.ca/eng/acts/C-15.31). The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the Government of Nunavut, Department of Environment Manager of Pollution Control and Air Quality at 867-975-7748
- 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 _____June 26, 2014____ at Churchill, MB

Elizabeth Copland, Chairperson

Attachments: Appendix A: Procedural History and Project Activities

Appendix B: Species at Risk in Nunavut

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

Permit Holders

Appendix A

Procedural History and Project Activities

Procedural History

On August 23, 2013 the Nunavut Impact Review Board (NIRB) received the Government of Nunavut, Department of Community and Government Services' (GN-CGS) "Hamlet of Rankin Inlet: Amendment Application - Seasonal Replenishment of Nipissar Lake" project proposal from the Nunavut Water Board (NWB). On December 11, 2013 the NIRB received a positive conformity determination (Keewatin Regional Land Use Plan) from the Nunavut Planning Commission (NPC) for this file. The NIRB assigned this project proposal file number 13UN037.

Following receipt of the initial application materials, the NIRB undertook a preliminary completeness check and determined that the proposal as submitted did not contain sufficient information for the NIRB to permit proper screening. On September 10, 2013 the NIRB issued correspondence to the GN-CGS advising that a conformity determination from the NPC for this file would be required prior to commencing screening and recommended that additional information, specifically the NIRB's Part 1 and Part 2 forms, be provided in support of the project proposal. On December 17, 2013, following receipt of the positive conformity determination (Keewatin Regional Land Use Plan) from the NPC on December 11, 2013, the NIRB formally requested that the GN-CGS provide additional information in support of this proposal by January 3, 2013. Further, on December 20, 2013 the NIRB requested an extension to the screening timeline for this proposal from the Minister of Aboriginal Affairs and Northern Development. On May 13, 2014 the NIRB received the additional information from the Proponent as requested and commenced screening.

On May 29, 2014 the project proposal was distributed to community organizations in Rankin Inlet, 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 June 18, 2014 regarding:

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

On or before June 18, 2014 the NIRB received comments from the following interested parties:

- Aboriginal Affairs and Northern Development Canada
- Environment Canada
- Fisheries and Oceans Canada

All comments provided to the NIRB regarding this project proposal can be obtained from the NIRB's online public registry at the following location: http://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS/

Project Activities

The proposed project is located approximately two to four kilometres (km) northwest of Rankin Inlet in the Kivalliq Region and is intended to transport water from the Char River in order to resupply the Nipissar Lake (also known as Nipissak Lake), which is in turn used to supply the municipal water needs for Rankin Inlet. The program is proposed to take place from September 2012 to September 2032, or longer if the pipeline remains functional, with yearly seasonal operation between June and September to commence in June 2014.

The activities and components associated with this proposal include:

- Use and grading of the existing access road at the intake area along Char River;
- Development and use of a temporary winter access trail along the pipeline to transport equipment, materials and personnel (fuel to be stored in Rankin Inlet);
 - Approximately 10 Litres (L) of oils and lubricants to be used annually during the operation phase;
 - Used oil and waste fuel to be disposed of at an approved disposal facility in Rankin Inlet;
- Domestic waste to be disposed of at the Rankin Inlet Solid Waste Facility;
- Construction, operation and decommissioning of a 4.05 kilometre (km) overland water intake pipeline extending from the Char River to Nipissar Lake including:
 - Installation of a water intake area with pump and 75 horsepower diesel powered generator (to be refuelled with a hand pump or electric pump and stored in a sea canister);
 - 50 m intake hose with floating base (to anchor the intake hose during operation),
 and intake screen. Hose and floating base to be stored in the sea canister at the
 end of the operation season;
 - o 250 millimetre (mm) diameter high density polyethylene (HDPE) pipeline with one low point drain and two high point air releases to facilitate draining of the pipeline at the end of the operation season; and
 - Discharge area at the high water mark of Nipissar Lake with the installation of a concrete slab (splash pad) and surrounding riprap;
- Installation of culverts under existing access roads to facilitate surface water drainage and to allow for passage of the pipeline;
- Approximately 0.5 m of granular material (sand) sourced from Rankin Inlet's community borrow pit to be placed on the pipeline in two areas to facilitate snowmobile access; and
- Amount of water required to prevent water level decreases in Nipissar Lake would be dependent on community need and expected to increase as the community increases in size, with a projected maximum 47,187 cubic metres (m³) to be transferred during the 2014 season and up to 271,924 m³ in 2030:



Appendix BSpecies at Risk in Nunavut

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

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

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

Updated: July 2013

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

Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
(islandica subspecies)			
Harlequin Duck	Special Concern	Schedule 1	EC
(Eastern population)			
Grizzly Bear	Special Concern	Pending	GN
Wolverine (Western population)	Special Concern	Pending	GN
Horned Grebe	Special Concern	Pending	EC
(Western population)			
Buff-breasted Sandpiper	Special Concern	Pending	EC
Atlantic Cod, Arctic Lakes	Special Concern	No schedule	Fisheries and Oceans Canada (DFO)
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (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* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was assessed by COSEWIC as Special Concern, and was added to Schedule 1 of SARA in July 2012.

Appendix C

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



INTRODUCTION

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

TERMS AND CONDITIONS

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

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

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.

¹P.C. 2001-1111 14 June, 2001

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

Legal Framework

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

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

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

Palaeontology and Archaeology

Under the *Nunavut Act*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: www.ch.gov.nu.ca/en/Archaeology.aspx)

Introduction

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

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

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

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

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

Palaeontological Sites Regulations.

Types of Development

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

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

Types of Studies Undertaken to Preserve Heritage Resources

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

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

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

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

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

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

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

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

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

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

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