



SCREENING DECISION REPORT

NIRB File No.: 09YN042
KIA File No.: KVL109B392

June 23, 2009

Honourable Daniel Shewchuck
Minister of Environment
Iqaluit, NU

Via email: dshewchuck@gov.nu.ca

Re: Screening Decision for Geologic Survey of Canada - Charles Jefferson's "Geomapping for Energy and Minerals" project proposal, NIRB File No.: 09YN042

Dear Honourable Daniel Shewchuck:

The primary objectives of the Nunavut Land Claims Agreement (NLCA) 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 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 the following or similar project-specific terms and conditions are imposed upon the Proponent through all relevant legislation:

General

1. The Geological Survey of Canada – Charles Jefferson (the Proponent) shall operate in accordance with commitments stated in all documentation provided to the Nunavut Impact Review Board (NIRB or Board).
2. The Proponent shall maintain a copy of the Screening Decision Report issued by the NIRB at the site of operation at all times and shall ensure that all employees/contractors associated with the project are aware of the terms and conditions therein.
3. The NIRB shall be notified of any changes in operating plans or conditions associated with this project prior to any such change.
4. The Proponent shall operate the project in accordance with all applicable Acts, Regulations and Guidelines.

Wildlife

5. The Proponent shall ensure that there is no damage to wildlife habitat as a result of project activities.
6. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. Deliberate feeding of any wildlife is absolutely prohibited. The Proponent and its employees and contractors shall not hunt or fish within the project area unless proper Nunavut authorizations have been acquired.
7. During the period from **May to August** of each year, prior to conducting aeromagnetic surveys the Proponent shall undertake high altitude (>610 metres) aerial reconnaissance with the assistance of an independent wildlife monitor, to determine whether caribou cows and calves are present within a 20 kilometre radius of the targeted survey area, or if caribou are migrating close by. If caribou are observed, the Proponent shall suspend any low-level (<610 metres) surveys within 10 kilometre of the sightings.

8. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as aeromagnetic surveys or movement of equipment and personnel until such time as the caribou have passed.
9. The Proponent is advised that the project overlaps with part of the Thelon River/Aberdeen Lake area and may overlap with Middle Back River/Garry Lake areas, both of which have been identified as Key Migratory Bird Sites. The Proponent shall ensure that any airborne surveys over these Key Sites shall be **delayed until after August 20**, to avoid disturbance to moulting geese.
10. The Proponent shall ensure that aircraft maintain a minimum altitude of 610 metres above ground level in places where there are occurrences of wildlife. In areas where there are observed nesting raptors or large concentrations of birds, flight level is to be restricted to 1,000 metres vertical distance and 1,500 metres horizontal distance from the birds. It is recommended aircraft avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors. The Proponent shall advise all pilots of these restrictions and enforce their application over the project area and flight paths to/from the project area.
11. The Proponent shall not disturb nesting birds and should treat all nest sites with equal precaution, regardless of the response of the bird. It is especially important not to disturb raptor nests during periods of poor weather (rain, snow or high winds), and nesting (late May through July).
12. The Proponent shall avoid any and all activity within 100 metres of a raptor nest site during the latter part of the nesting stage (August 10-20 for peregrine falcons in this region).

Waste

13. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
14. 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.
15. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of. All wastes shall be kept inaccessible to wildlife at all times.

Camp

16. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
17. The Proponent shall not erect camps or store material on the surface ice of lakes or streams.

Fuel and Chemical Storage

18. 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.
19. The Proponent shall store all chemicals in such a manner that they are inaccessible to wildlife.

20. The Proponent shall use secondary containment or a surface liner (drip pans, fold-a-tanks, etc) at all refueling stations. The Proponent shall ensure that appropriate spill kits are located at every fuel cache.
21. The Proponent shall report all spills of fuel, or other deleterious materials immediately to the 24 hour Spill Line at (867) 920-8130.

Restoration

22. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
23. The Proponent shall complete all clean-up and restoration of the lands used prior to the expiry date of the permit.

Other

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

Other NIRB Concerns and Recommendations

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

Kivalliq Inuit Association

As an overriding consideration, the Kivalliq Inuit Association (KivIA) impose as strict as possible mitigation measures, conditions and monitoring requirements pursuant to its land use license, which require the Geological Survey of Canada – Charles Jefferson (the Proponent) to respect the sensitivities and importance of the area given the proximity of the proposed surveys to the Thelon Game Sanctuary and Beverly caribou calving grounds.

It is also recommended that:

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.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm>. Note that some recommendations in this manual are also relevant to polar bears. There is a DVD about bear conflict prevention, responses to bear encounters 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/pn-np/nu/auyuittuq/pdf/PolarBearEnglish2007final.pdf>. In addition, information on bear safety for industry, exploration or research camps is available from *Safety in Bear Country – A reference manual*, Northwest Territories Renewable Resources by M. Bromley.

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 *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.
8. The *Aeronautics Act* (<http://laws.justice.gc.ca/en/A-2/>).
9. 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 23, 2009 at Sanikiluaq, NU.



Lucassie Arragutainaq, Chairperson

Appendix A Procedural History and Project Activities

Procedural History

On April 27, 2009 the Nunavut Impact Review Board (NIRB) received a project proposal from the Kivalliq Inuit Association (KIA) for the Geological Survey of Canada – Charles Jefferson’s (GSC) “Geomapping for Energy and Minerals” project proposal. On May 26, 2009 the NIRB received a positive conformity determination (Keewatin Regional Land Use Plan) from the Nunavut Planning Commission for this file and begin Screening of the project proposal. Charles Jefferson supplied a copy of the Nunavut Research Institute (NRI) application to the NIRB on June 4, 2009. The NIRB has assigned this project file number **09YN042**.

This application was distributed to community organizations in Baker Lake and to interested federal and territorial agencies, and Inuit organizations. NIRB requested that interested parties review the application and provide NIRB with comments by **June 15, 2009** 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, (please provide any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On or before June 15, 2009, NIRB received comments from the following interested Parties (see Comments and Concerns):

- Environment Canada
- Transport Canada
- Government of Nunavut – Department of Culture, Language, Elders and Youth
- Government of Nunavut – Department of Environment

All comments provided to NIRB regarding this project proposal can be viewed on NIRB’s ftp-site, at the following location: <http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/>

Project Activities

The proponent intends to low level surveying from September 1, 2009 to March 30, 2010. This project is located in the Kivalliq region over Rankin Inlet.

The proposed major activities for the program involve the following components:

- Low level (125 m) aeromagnetic surveying to obtain geophysical data between July 15, 2009 and August 30, 2009
- On foot geological surveying from July 15, 2009 and August 30, 2012
- Use of accommodations in Baker Lake (primarily), and existing exploration camp sites
- Some geological work using small portable tents for field crews of 2-3 that will be set out as fly camps for up to 7 days, carrying 10L gasoline, and 20L propane to support ground crews
- Transport in fixed wing aircraft, aircraft on floats, or helicopters operating from Baker Lake

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 population)	Special Concern	Pending	DFO

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



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]

BACKGROUND: 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.

¹ s. 51(1)

² P.C. 2001-1111 14 June, 2001

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:

- (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.