



*“The purpose of screening a project is to determine whether the project has the potential to result in significant ecosystemic or socio-economic impacts and, accordingly, whether it requires a review by the Board...”*

To determine whether a review of a project is required, the NIRB is guided by the considerations as set out under subsection 89(1) of NuPPAA:

*“89. (1) The Board must be guided by the following considerations when it is called on to determine, on the completion of a screening, whether a review of the project is required:*

- (a) a review is required if, in the Board’s opinion,*
  - i. the project may have significant adverse ecosystemic or socio-economic impacts or significant adverse impacts on wildlife habitat or Inuit harvest activities,*
  - ii. the project will cause significant public concern, or*
  - iii. the project involves technological innovations, the effects of which are unknown; and*
  
- (b) a review is not required if, in the Board’s opinion,*
  - i. the project is unlikely to cause significant public concern, and*
  - ii. its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.”*

It is noted that subsection 89(2) provides that the considerations set out in paragraph 89(1)(a) prevail over those set out in paragraph 89(1)(b).

Where the NIRB determines that a project may be carried out without a review, the NIRB has the discretion to recommend specific terms and conditions to be attached to any approval of the project proposal. Specifically, paragraph 92(2)(a) of NuPPAA provides:

*“92. (2) In its report, the Board may also*  
*(a) recommend specific terms and conditions to apply in respect of a project that it determines may be carried out without a review.”*

## PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

### **1. Project Description**

The proposed “Operation Nunaliut” project is located in the North Baffin Region, based out of Resolute Bay, and would be used to conduct military exercises at several locations between Resolute Bay and Alert. The exercises would be supported by the Canadian Rangers and occur on land, sea ice, underwater, and in the air to further enhance the Canadian Armed Forces, Canadian Rangers, and partner agencies’ knowledge and capacity to operate in the north and demonstrate the ability to effectively respond to safety and security issues in the Canadian North. The program is proposed to take place during April 2016; however the Proponent requested the licences to be issued from March 27 to September 30, 2016.

According to the project proposal, the scope of the project includes the following undertakings, works or activities:

- Exercises conducted at sites located in and around the community of Resolute Bay and adjacent to Bathurst Island, near the Polaris Mine on Little Cornwallis Island, near the community of Grise Fiord, and the Canadian Forces Base at Alert.
  - Military would keep at least one (1) kilometre away from the boundary of the Polar Bear Pass National Wildlife Area and Seymour Island Migratory Bird Sanctuary.
- Establish a Task Force Headquarters in Resolute Bay for approximately 80 persons and use of Canadian Armed Forces Arctic Training Centre facilities at Resolute Bay for up to 225 persons at the start and end of the exercises;
- Existing or temporary camps would be used to undertake the program and all waste generated from the camps would be transported offsite for proper disposal:
  - Use of Canadian Forces Station Alert for up to 40 persons;
  - Establishment of a temporary camp on Little Cornwallis Island for approximately 110 persons;
  - Establishment of a temporary camp west of Grise Fiord for 10 persons;
- Land and Ice Based Exercises:
  - Conduct overland and over ice travel by snowmobile and qamutiik, Snow Cat, and/or Argo for transport of personnel for various exercises;
  - Construction of snow and ice defenses at Little Cornwallis Island to be used in live fire exercises;
- Dive operations to evaluate the Royal Canadian Navy's Fleet Diving Unit's (Atlantic) cold weather diving ensembles and ice diving tactics, techniques and procedures;
- Air travel and Skiway Operations:
  - Use of existing airstrips where possible;
  - Transportation of personnel and supplies via Globemaster, twin otter, Hercules aircraft or helicopter(s);
  - Potential construction of a skiway and/or ice airstrip on the sea or lake ice near Resolute Bay to be used for training and to supply materials;
- Use and storage of 4,510 litres (L) of diesel and 20,9010 L of gasoline at either the Resolute Airport or temporary facilities established for Little Cornwallis Island and Grise Fiord
- Management of wastes, fuel, and hazardous materials:
  - Hazardous materials and fuel to be stored in approved storage containers and facilities, including compliant secondary containment and would be stored in accordance with municipal, territorial, and federal regulations;
  - Hazardous waste would be appropriately packaged and transported to a suitable facility for disposal, in accordance with appropriate regulations – provided by a third party waste disposal facility if required.
  - Generators placed within suitable containment throughout the operation, and emptied for transportation;
  - Local treatment systems and municipal landfill or incineration used for the disposal of human waste. Waste generated by foot patrols would be bagged and packed out for appropriate disposal;

- Local landfill or incineration used for the disposal of combustible waste. Disposal to occur in accordance with Territorial and Municipal regulations (waste would be handled by contract); and
- Local landfill, incineration or recycling centers, where available, to be used for the disposal of non-combustible wastes. Disposal to occur in accordance with Territorial and Municipal requirements (waste would be handled and disposed by contract).

## 2. Scoping

The NIRB has identified no additional works or activities in relation to the project proposal.

## 3. Key Stages of the Screening Process

The following key stages were completed:

Date	Stage
February 8, 2016	Receipt of project proposal from the NPC
February 8, 2016	Scoping pursuant to subsection 86(1) of the NuPPAA
February 25, 2016	Public engagement and comment request
March 17, 2016	Receipt of public comments
March 23, 2016	Ministerial extension requested

## 4. Public Comments and Concerns

From February 25, 2016 to March 17, 2016 the NIRB provided opportunity for the public to provide comments and concerns regarding the project proposal. The following is a summary of the comments and concerns received:

### Government of Nunavut (GN):

- Identified 483 protected archaeological sites within the proposed operation areas, with additional unrecorded archaeological sites or cultural features possibly in the area, and further noted that it is the Proponent's responsibility to ensure no heritage resource sites are disturbed in the course of project activities. The GN specifically noted that *no person shall alter, or otherwise disturb an archaeological site, or remove any artifact from an archaeological site without the proper authorizations, and that the building of inuksuit is not recommended.*
- Noted concern with proposal, as the proposed ground disturbance activities would have high potential impact to archaeological/historical sites. Concerns were related to:
  - The presence of several hundred personnel maneuvering in the vicinity of archaeological/historical sites;
  - Transportation and movements (vehicle and on foot) within and between the operational zones; and
  - Timing of the operation and associated snow cover might mask recorded and unrecorded archaeological sites.
- Requested additional information about the precise locations of camps, travel routes and specific locations of any activities areas as the location and dimensions of the four (4) Operational Boxes cover extensive territory.

- Recommended that an archaeological overview assessment be conducted in order to determine sensitive archaeological areas and to move activities away from these locations.

**Environment and Climate Change Canada (ECCC):**

- ECCC noted as per Subsection 79(2) of the *Species at Risk Act* (SARA) that the adverse effects of the project on listed wildlife species and its critical habitat must be identified. Measures are to be taken to avoid or lessen those effects and that the effects need to be monitored. ECCC suggested that species on other Schedules and under consideration for listing on SARA be considered during a project assessment in a manner similar to listed species.
- ECCC provided a table that listed species that may be encountered in the project area that have been designed as at risk by COSEWIC as well as their current listing on the schedules of SARA.
- ECCC provided standard recommendations for any species at risk that may be encountered or affected by the proposed project.

**Indigenous and Northern Affairs Canada (INAC):**

- Reviewed the file and has no comments.

**5. Comments and Concerns with respect to Inuit Qaujimaningit**

No concerns or comments were received with respect to Inuit Qaujimaningit in relation to the proposed project.

FACTORS FOR DETERMINING SIGNIFICANCE OF IMPACTS

In determining whether a review of the project is required, the Board considered whether the project proposal had a potential to result in significant ecosystemic or socio-economic impacts.

Accordingly, the assessment of impact significance was based on the analysis of those factors that are set out under section 90 of NuPPAA. The Board took particular attention to take into account traditional knowledge and Inuit Qaujimaningit in carrying out its assessment and determination of the significance of impacts.

The following is a summary of the Board’s assessment of the factors that are relevant to the determination of significant impacts with respect of this project proposal:

1. *The size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts.*

The size of the geographic area for the project proposal is approximately 8,900 square kilometres; however, the military has designated operational boxes within that area where project activities would be concentrated, significantly reducing the area directly impacted by the exercises. The proposed activities may take place within the habitat for many far ranging wildlife species; however, neither the Proponent, nor any of the government agencies or community organizations identified any protected wildlife areas in or near the project area.

2. *The ecosystemic sensitivity of that area.*

The proposed project would occur in an area with no particular identified ecosystemic sensitivity.

3. *The historical, cultural and archaeological significance of that area.*

The Proponent has indicated that there are no known areas of historical, cultural or archaeological significance in the Project area. The Government of Nunavut noted that 483 protected archaeological sites have been identified within the proposed operation areas and noted concern with proposal, as the proposed ground disturbance activities would have high potential impact to archaeological/historical sites. Terms and conditions recommended in the following section would be expected to mitigate any potential impacts within the project areas.

4. *The size of the human and the animal populations likely to be affected by the impacts.*

The logistical support for the project as well as some personnel accommodations would occur within the Hamlet of Resolute Bay, the Hamlet of Grise Fiord, and Canadian Forces Base Alert. Therefore there may be an impact to the local human population by additional noise from traffic, and activities generated by the proposed project. Supplies and services may be outsourced from the community of Resolute Bay and Grise Fiord, which may impact overall accessibility by community members to the same supplies and services.

No specific animal populations have been identified as likely to be affected by project-specific impacts.

5. *The nature, magnitude and complexity of the impacts; the probability of the impacts occurring; the frequency and duration of the impacts; and the reversibility or irreversibility of the impacts.*

The “Operation Nunavut” project proposal is being conducted in an area that has been frequently used for military exercises and the nature of potential impacts is considered to be well-known, and limited to infrequent, localized impacts to the biophysical environment that are temporary in nature, reversible and mitigable with due care.

6. *The cumulative impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out.*

No cumulative impacts have been identified as potentially resulting from this proposed project in association with any projects that have been carried out, are being carried out or are likely to be carried out.

7. *Any other factor that the Board considers relevant to the assessment of the significance of impacts.*

No other specific factors have been identified as relevant to the assessment of this project proposal.

In considering the factors as set out above in the screening of the project proposal, the NIRB has identified a number of issues and provides the following views regarding whether or not the proposed project has the potential to result in significant impacts, and has proposed terms and conditions that would mitigate the potential adverse impacts identified.

**Administrative Conditions:**

To encourage compliance with applicable regulatory requirements and assist the Board and responsible authorities with compliance and effects monitoring for project activities, the following project-specific terms and conditions have been recommended: 1-4.

**Ecosystem, wildlife habitat and Inuit harvesting activities:**

**Issue 1:** Potential negative impacts to wildlife, wildlife habitat and migratory birds from conducting project activities. This includes potential impacts from noise generated from transportation and movement of personnel, military exercises, and use of temporary camps.

**Board views:** As discussed in the previous section, the potential for impacts are applicable to a targeted geographic area and only occur for a short duration of time while the military operations occur. Exercises are expected to be completed within the month of April. The Proponent has committed to limit temporary camps to those needed for survival training, and reducing noise generated by vehicles by ensuring that all equipment utilized by the military exercises are in good condition. Additionally, the Proponent has committed to training staff to be aware of wildlife issues, operational requirements to reduce the potential for impacts to wildlife, and the sensitivity of the tundra in the North.

**Recommended Mitigation Measures:** Specific and general measures have been recommended to mitigate any potential negative impacts. The Proponent will also be required to follow the *Migratory Birds Convention Act* and *Migratory Birds Regulations* (see Regulatory Requirements section). It is recommended that the potential negative impacts may be mitigated by measures such as requiring the Proponent to maintain minimum flight altitudes, reducing wildlife attractants and avoidance tactics. The following terms and conditions are recommended to mitigate the potential adverse impacts: 7, 10, 16 through 28, and 38.

**Issue 2:** Potential negative impacts to surface water quality, sea ice and fish and fish habitat from military activities, storage and use of fuel, potential spills as a result of re-fuelling during operations or accidents/malfunctions during the military exercises.

**Board views:** The potential for negative impacts is applicable to a specific area and the probability of impacts occurring is considered to be low, with potential adverse effects anticipated to be low in magnitude, infrequent in occurrence and reversible in nature. The Proponent has committed to using existing CAFATC and CFB Alert facilities for fuel storage where possible, use containment berms, drip trays, and spill pads as well as ensure spill cleanup supplies are present where fuel transfer activities taking place.

Further, the Proponent will require a water license from the Nunavut Water Board for the use of water for the project activities and for the storage of fuel (see Regulatory Requirements section).

**Recommended Mitigation Measures:** It is recommended that operational procedures for storing and transfer of materials, use of secondary containment, and spill response equipment would reduce the risk of uncontrolled releases of fuel or hazardous materials resulting in negative impacts to surface and ground water quality and quantity. Further, the potential negative impacts are issues relevant for consideration by the Nunavut Water Board. In addition, the following terms and conditions are recommended to mitigate the potential adverse impacts to waterbodies and sea ice: 5, 6, 8, 9, 11 through 15, and 29 through 37.

**Issue 3:** Potential negative impacts to vegetation, soils, terrain stability and potential increase to shoreline erosion from personnel and vehicle movement during the proposed military exercises and the storage and use of fuel.

**Board views:** As discussed in the previous section, the potential for impact(s) is applicable to a targeted geographic area and is limited in duration due to the short period of time the activities would occur. The Proponent has committed to providing training to those participating in the project, and provide understanding of the sensitivities of the ecosystem and encourage that personnel following existing trails where possible and only creating a new trail to limited portions where they have no choice under the direction of the Canadian Rangers. Additionally, the Proponent has committed to appointing individuals in every group to be responsible for the environment.

**Recommended Mitigation Measures:** It is recommended that the potential negative impacts may be mitigated by measures such as requiring the Proponent avoid disturbing the embankments of water courses and paying attention to the terrain or sea ice being traversed or used for temporary structures. Further, operational procedures for storing and transfer of materials, use of secondary containment, and spill response equipment would reduce the risk of uncontrolled releases of fuel or hazardous materials resulting in negative impacts to soils and vegetation. Additionally, clean up and restoration of all areas utilized would be required to preserve the integrity of the environment. The following terms and conditions are recommended to mitigate the potential adverse impacts to the land and shoreline in addition to ensuring that transportation occurs only during appropriate conditions and that site remediation activities are undertaken: 11 through 15, and 33 through 41.

**Socio-economic effects on northerners:**

**Issue 4:** Potential negative impacts to historical, cultural and archaeological sites from overland travel and temporary camps. The Proponent is proposing to work in areas of known historical significance, which may cause potential negative impacts.

**Board Views:** The Government of Nunavut noted that 483 protected archaeological sites have been identified within the proposed operation areas and the Proponent would be

required to contact the Culture and Heritage Department when encountering historical sites.

**Recommended Mitigation Measures:** The Proponent is required to follow the *Nunavut Act*. Term and condition 42 is recommended to ensure that available Inuit Qaujimaningit can inform project activities. Further, the NIRB has provided details on whether a permit would be required from the Culture and Heritage Department for land disturbance (see Appendix B).

**Issue 5:** Potential positive impact to residents and businesses of the Hamlets of Resolute Bay and Grise Fiord as the Proponent has committed to sourcing services locally, including purchasing fuel.

**Board views:** It is noted that the Proponent has committed to local purchases for required supplies to complete the military exercises, which is considered a positive impact.

**Recommended Mitigation Measures:** It is recommended that in order to maximize the potential positive impacts from the project proposal that the Proponent consult and hire local personnel and the local Canadian Rangers to assist where possible. Term and condition 42 has been recommended to ensure the Proponent hire local people.

**Issue 6:** Potential negative impact to the community from the increase in traffic, vehicular noise and possible interference with community traffic as some routes and land areas may be used by the community members and may become temporarily unavailable for use during military operations.

**Board views:** As discussed above in the previous section, the potential for impact(s) is applicable to a targeted geographic area and is limited due to the limited period of time the activities would occur. Personnel are expected to be in the Hamlet of Resolute Bay and Grise Fiord throughout the month of April only.

**Recommended Mitigation Measures:** It is recommended that the potential negative impacts may be mitigated by measures such as requiring the Proponent to communicate with local organizations and be aware of locations commonly used for hunting so as to choose routes that do not interfere with local subsistence hunting. The following terms and conditions are recommended to mitigate the potential adverse impacts: 42 and 43.

**Significant public concern:**

**Issue 7:** No significant public concern was expressed during the public commenting period for this file.

**Board Views:** Follow up consultation and involvement of local community members is expected to mitigate any potential for public concern resulting from project activities.

Recommended Mitigation Measures: Term and condition 42 is recommended to ensure that the affected community and organizations are informed about the project proposal and to mitigate any concerns that may arise from the project activities.

**Technological innovations for which the effects are unknown:**

No specific issues have been identified associated with this project proposal.

In considering the above factors and subject to the Proponent's compliance with the terms and conditions necessary to mitigate against the potential adverse environmental and social effects, the Board is of the view that the proposed project is unlikely to cause significant public concern and its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.

RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS

The Board is recommending the following specific terms and conditions to apply in respect of the project:

**General**

1. The Joint Task Force (North) (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 Nunavut Planning Commission (Application to Determine Conformity, February 8, 2016), the NIRB (Part 1 Form and project description, February 9 & February 24, 2016) and to the Indigenous and Northern Affairs (Land Use Permit, February 9, 2016), Nunavut Water Board (February 9, 2016) and Qikiqtani Inuit Association (Application for Access, February 9, 2016).
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 Storage**

8. Unless otherwise authorized by the Nunavut Water Board, 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. The Proponent shall ensure that re-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.
10. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
11. The Proponent shall use adequate secondary containment or a surface liner (e.g., self-supporting insta-berms and fold-a-tanks) when storing barreled fuel and chemicals.
12. The Proponent shall use drip pans or other equivalent device when refueling equipment. The Proponent shall also use secondary containment or a surface liner (e.g., self-supporting insta-berms and fold-a-tanks) at all refueling stations.
13. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances, and at all fuel storage sites.
14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
15. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

## **Wildlife - General**

16. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
17. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
18. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.

## **Migratory Birds and Raptors Disturbance**

19. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metre buffer around the nests). If active nests of any birds are discovered (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.

20. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.
21. The Proponent shall avoid the seaward site of seabird colonies and areas used by flocks of migrating waterfowl by 3 kilometres.
22. The Proponent shall avoid excessive hovering or circling over areas where bird presence is likely.

#### **Aircraft Flight Restrictions**

23. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
24. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
25. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

#### **Caribou and Muskoxen Disturbance**

26. 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.
27. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as movement of equipment or personnel until such time as the caribou have passed.

#### **Winter Exercises**

28. All vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.
29. The Proponent shall select routes that maximize the use of frozen water bodies.
30. The Proponent shall not erect camps or store materials, unless authorized by an agency, on the surface ice of lakes or streams, except that which is for immediate use.
31. The Proponent shall ensure that no disturbance of the stream bed or banks of any definable watercourse be permitted.
32. 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.
33. 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.
34. The Proponent shall ensure that winter lake/stream crossings are located to minimize approach grades and constructed entirely of ice and snow materials. The Proponent shall also avoid disturbance on slopes prone to natural erosion.

35. 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 if it should occur.

### **Ice-based Activities**

36. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes (including waste water) or sediment onto the ice surface of any marine waters, and shall manage wastes until final disposal at approved facilities.

37. 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 skiway and/or ice airstrip to prevent unnecessary erosion of the underlying ground surface and impact on underneath vegetation.

38. The Proponent shall ensure that all staff are aware of the Proponent's responsibilities and requirements regarding wildlife and wildlife habitat protection. This should include briefings on wildlife sensitivities and potential hazards as well as safety practices.

### **Temporary Camps**

39. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

### **Restoration of Disturbed Areas**

40. The Proponent shall remove all garbage, fuel and equipment upon abandonment.

41. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state as practical as possible upon completion of field work.

### **Other**

42. The Proponent should, to the extent possible, hire local people and consult with local residents regarding their activities in the area and available Inuit Qaujimaningit that can inform project activities.

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

## **OTHER NIRB CONCERNS AND RECOMMENDATIONS**

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

### **Change in Project Scope**

1. Responsible authorities or Proponent shall notify the Nunavut Planning Commission (NPC) and the NIRB of any changes in operating plans or conditions, including phase advancement, associated with this project prior to any such change.

### **Bear and Carnivore Safety**

2. The Proponent review the bear/carnivore detection and deterrent techniques outlined in "Safety in Grizzly and Black Bear Country" which can be down-loaded from this link: [http://www.enr.gov.nt.ca/sites/default/files/web\\_pdf\\_wd\\_bear\\_safety\\_brochure\\_1\\_may\\_2015](http://www.enr.gov.nt.ca/sites/default/files/web_pdf_wd_bear_safety_brochure_1_may_2015)

[.pdf](#). There are polar bear and grizzly bear safety resources available from the Government of Nunavut at the following link: <http://env.gov.nu.ca/wildlife/resources/polarbearsafety> and a “You are in Polar Bear Country” pamphlet from Parks Canada at the following link <http://www.pc.gc.ca/eng/lhn-nhs/mb/prince/securite-safety/ours-bear.asp> following link <http://www.pc.gc.ca/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx>.

3. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of Resolute Bay, phone: 867-252-3879).

### **Species at Risk**

4. The Proponent review Environment and Climate Change Canada’s “Environment Assessment Best Practice Guide for Wildlife at Risk in Canada”, available at the following link: [http://epe.lac-bac.gc.ca/100/200/301/environment\\_can/cws-scf/environmental\\_assessment-ef/ea\\_best\\_practices\\_2004\\_e.pdf](http://epe.lac-bac.gc.ca/100/200/301/environment_can/cws-scf/environmental_assessment-ef/ea_best_practices_2004_e.pdf). The guide provides information to the Proponent on what is required when Wildlife at Risk, including *Species at Risk*, are encountered or affected by the project.

### **Transport of Waste/Dangerous Goods and Waste Management**

5. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.
6. The Proponent shall ensure that a waste manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off site.
7. The Proponent shall provide an authorization or letter of conformation of disposal be obtained from the owner/operator of the landfill to be used for disposal of project-related wastes.

### **Winter Roads/Trails**

8. If ice bridges are constructed, the Proponent follow the mitigation measures outlined in Fisheries and Oceans Canada’s Operational Statement for Ice Bridges, available at the following internet address: <http://www.dfo-mpo.gc.ca/regions/central/habitat/os-co/provinces-territoires-territoires/nu/index-eng.htm>.
9. Cutting or filling of crossing approaches below the high water mark will require prior review and approval by Fisheries and Oceans Canada - Fish Habitat Management Branch.

## REGULATORY REQUIREMENTS

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

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 A** is a list of Species at Risk in Nunavut.
5. The *Wildlife Act* (<http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html>) which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
6. The *Nunavut Act* (<http://laws-lois.justice.gc.ca/eng/acts/N-28.6/>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix B**.
7. The *Transportation of Dangerous Goods Regulations, Transportation of Dangerous Goods Act* (<http://www.tc.gc.ca/eng/tdg/safety-menu.htm>), and the *Canadian Environmental Protection Act* (<http://laws-lois.justice.gc.ca/eng/acts/C-15.31/>). The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the Government of Nunavut, Department of Environment Manager of Pollution Control and Air Quality at 867-975-7748.
8. The *Aeronautics Act* (<http://laws-lois.justice.gc.ca/eng/acts/A-2/>).
9. The *Arctic Waters Pollution Prevention Act* (<http://laws-lois.justice.gc.ca/eng/acts/A-12/>).

#### CONCLUSION

The foregoing constitutes the Board's screening decision with respect to the Joint Task Force (North)'s (JTFN or Proponent) "Operation Nunavut".

Dated March 31, 2016 at Arviat, NU.



---

Elizabeth Copland, Chairperson

Attachments: Appendix A: Species at Risk in Nunavut  
Appendix B: Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders

## Appendix A: Species at Risk in Nunavut

Due to the requirements of Section 79(2) of the Species At Risk Act (SARA), and the potential for project-specific adverse effects on listed wildlife species and its critical habitat, measures should be taken as appropriate to avoid or lessen those effects, and the effects need to be monitored. Project effects could include species disturbance, attraction to operations and destruction of habitat. This section applies to all species listed on Schedule 1 of SARA, as listed in the table below, or have been assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), which may be encountered in the project area. This list may not include all species identified as at risk by the Territorial Government. The following points provide clarification on the applicability of the species outlined in the table.

- 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.

If species at risk are encountered or affected, the primary mitigation measure should be avoidance. The Proponent should avoid contact with or disturbance to each species, its habitat and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the species at risk Registry at <http://www.sararegistry.gc.ca> for information on specific species.

Monitoring should be undertaken by the Proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of species at risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.

For species primarily managed by the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.

Mitigation and monitoring measures must be undertaken in a way that is consistent with applicable recovery strategies and action/management plans.

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

Updated: June 2015

Species at Risk <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
Eskimo Curlew	Endangered	Schedule 1	Environment and Climate Change Canada (ECCC)
Ivory Gull	Endangered	Schedule 1	ECCC
Ross's Gull	Threatened	Schedule 1	ECCC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	ECCC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut (GN)
Peregrine Falcon	Special Concern ( <i>anatum-tundrius</i> complex <sup>3</sup> )	Schedule 1 - Threatened ( <i>anatum</i> ) Schedule 3 – Special Concern ( <i>tundrius</i> )	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Red Knot ( <i>rufa</i> subspecies)	Endangered	Schedule 1	ECCC
Red Knot ( <i>islandica</i> subspecies)	Special Concern	Schedule 1	ECCC
Horned Grebe (Western population)	Special Concern	Pending	ECCC
Red-necked Phalarope	Special concern	Pending	ECCC
Buff-breasted Sandpiper	Special concern	Pending	ECCC
Felt-leaf Willow	Special Concern	Schedule 1	GN
Porsild's Bryum	Threatened	Schedule 1	GN
Peary Caribou	Endangered	Schedule 1	GN
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Schedule 1	GN
Polar Bear	Special Concern	Schedule 1	GN/Fisheries and Oceans Canada (DFO)
Grizzly Bear	Special Concern	Pending	GN
Wolverine	Special Concern	Pending	GN
Atlantic Cod, Arctic Lakes	Special Concern	Pending	DFO
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Schedule 2	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
Bowhead Whale (Eastern Arctic population)		Schedule 2	DFO

<b>Species at Risk</b> <sup>1</sup>	<b>COSEWIC Designation</b>	<b>Schedule of SARA</b>	<b>Government Organization with Primary Management Responsibility</b> <sup>2</sup>
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO

<sup>1</sup>The Department of Fisheries and Oceans Canada has responsibility for aquatic species.

<sup>2</sup>Environment and Climate Change Canada (ECCC) 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.

<sup>3</sup>The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundrius* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was assessed by COSEWIC as Special Concern.

**Appendix B:**  
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 Indigenous and Northern Affairs Canada. These terms and conditions provide general direction to the permittee/proponent regarding the appropriate actions to be taken to ensure the permittee/proponent carries out its role in the protection of Nunavut's archaeological and palaeontological resources.

TERMS AND CONDITIONS

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

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

Note that the above-mentioned functions require either a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit. CH is authorized by way of the *Nunavut and Archaeological and Palaeontological Site Regulations*<sup>1</sup> to issue such permits.

- 2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.

<sup>1</sup>P.C. 2001-1111 14 June, 2001

- 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 Indigenous and Northern Affairs 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*<sup>2</sup>, the federal government can make regulations for the protection, care and preservation of palaeontological and archaeological sites and specimens in Nunavut. Under

---

<sup>2</sup> s. 51(1)

the *Nunavut Archaeological and Palaeontological Sites Regulations*<sup>3</sup>, 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.*

---

<sup>3</sup> 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](http://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 Indigenous and Northern Affairs 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*

## **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.