

The purpose of screening is provided for under section 88 of the *NuPPAA*:

NuPPAA, s. 88: 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*:

NuPPAA, s. 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) of the *NuPPAA* provides that the considerations set out in paragraph 89(1)(a) prevail over those set out in paragraph 89(1)(b) of the *NuPPAA*.

As set out under subsection 92(1) of the *NuPPAA*, upon conclusion of the screening process, the Board must provide its written report the Minister:

NuPPAA, s. 92(1): The Board must submit a written report to the responsible Minister containing a description of the project that specifies its scope and indicating that:

- (a) a review of the project is not required;
- (b) a review of the project is required; or
- (c) the project should be modified or abandoned.

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 pursuant to paragraph 92(2)(a) of *NuPPAA* as follows:

NuPPAA, s. 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 REFERRAL

On April 25, 2018 the Nunavut Impact Review Board (NIRB or Board) received a referral to screen Adventure Canada's "Diving and Snorkeling" project proposal from the Nunavut Planning Commission (NPC or Commission), with an accompanying positive conformity determination with the North Baffin Regional Land Use Plan. The NPC noted that the previous conformity determinations issued on June 14, 2006, April 24, 2015, February 24, 2016, January 13, 2017 and February 5, 2018 for the activities associated with the current proposal continue to apply and has determined that the project proposal is a significant modification to the project because of the change in use to include diving and snorkeling activities.

Pursuant to Article 12, Sections 12.4.1 and 12.4.4 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement) and section 87 of the Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2 (NuPPAA), the NIRB commenced screening this project proposal. Due to the proposal containing activities that were sufficiently related to previously assessed activities under NIRB file number 06AN041, the NIRB viewed this project proposal as an amendment to the previously screened project and assigned this proposal with this previous file number. A summary of the previously screened project activities can be found in Appendix A.

PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

1. Project Scope

The "Adventure Canada-Wildlife Viewing" project activities as previously screened by the NIRB (File No.: 06AN041) included an Arctic adventure cruise of the Qikiqtani and Kitikmeot Regions with including stops within communities, wildlife and bird sanctuaries as well as National Parks and Historic sites to observe and photograph wildlife. A complete description of the scope of activities previously approved has been included within Appendix A.

Adventure Canada is currently proposing the "Diving and Snorkeling" project which would be located within the Qikiqtani (North Baffin) region, approximately 150 kilometres (km) from Pond Inlet and 160 km from Resolute Bay. The Proponent intends to amend the scope of the previously approved activities to conduct tourism activities that include diving and snorkeling at Bylot Island and Prince Leopold Island. The program is proposed to take place in August 2018.

As required under subsection 86(1) of the *NuPPAA*, the Board accepts the scope of the Diving and Snorkeling project as set out by Adventure Canada in the proposal. The scope of the project proposal includes the following undertakings, works, or activities:

- Diving and Snorkeling at Tay Bay and Cape Hay on Bylot Island and Prince Leopold Island; and
- Use of a Remote Operated Vehicle (ROV) for filming.

2. Inclusion or Exclusion to Scoping List

The NIRB has identified no additional works or activities in relation to the project proposal. As a result, the NIRB proceeded with screening the project based on the scope as described above.

3. Key Stages of the Screening Process

The following key stages were completed:

Date	Stage
April 25, 2018	Receipt of project proposal and positive conformity determination (North Baffin Land Use Plan) from the NPC
April 26, 2018 and May 4, 2018	Information requests
May 14, 2018	Proponent responded to information requests
May 14, 2018	Scoping pursuant to subsection 86(1) of the <i>NuPPAA</i>
May 16, 2018	Public engagement and comment request
May 28, 2018	Receipt of public comments

4. Public Comments and Concerns

Notice regarding the NIRB's screening of this project proposal was distributed on May 16, 2018 to community organizations in Arctic Bay, Resolute Bay and Pond Inlet, as well as to relevant federal and territorial government agencies, Inuit organizations and other parties. The NIRB requested that interested parties review the proposal and the NIRB's *proposed* project-specific terms and conditions, and provide the Board with any comments or concerns by May 28, 2018 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 or socio-economic effects; and if so, why;
- Whether the project proposal is likely to cause significant adverse impacts on wildlife habitat or Inuit harvest activities; and if so, why;
- Whether the project proposal is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (and providing any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

The following is a summary of the comments and concerns received by the NIRB:

Government of Nunavut (GN)

- Requested clarification on the purpose of the diving and snorkeling activities (exploration of flora, fauna etc.).
- Recommended that no person dive, search or approach an archaeological site; including shipwreck sites; without obtaining a permit issued by GN-Department of Culture and Heritage.

Indigenous and Northern Affairs Canada (INAC)

- Had no comments or additional terms and conditions to offer at this time.

5. Comments and Concerns with respect to Inuit Qaujimaningit, Traditional, and Community Knowledge

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

ASSESSMENT OF THE PROJECT PROPOSAL IN ACCORDANCE WITH PART 3 OF *NUPPAA*

In determining whether a review of the project is required, the Board considered whether the project proposal had 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 the *NuPPAA*. The Board took particular care to take into account Inuit Qaujimaningit, traditional and community knowledge 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 proposed additional tourism activities would occur in the Bylot Island and Prince Leopold Island Migratory Bird Sanctuaries and in close proximity to Sirmilik National Park. The proposed activities would take place within the nesting habitat for a variety of migratory seabirds and other migratory breeding birds. A variety of marine life and mammals would be found in the area including fish, benthics, beluga, narwhal, walrus, ringed seal, bearded seal and Species at Risk such as Bowhead Whale and Polar Bear. As such, the amended project activities may potentially affect both marine and bird migratory patterns.

2. *The ecosystemic sensitivity of that area.*

The proposed project would occur proximal to Sirmilik National Park as well as migratory seabirds nesting colonies within the Bylot Island and Prince Leopold Migratory Bird Sanctuaries. In addition to the importance of the islands as bird sanctuaries, the area and surrounding areas have been identified from NPC's online mapping data as having value and priority to the local community for the following:

- Walrus,
- Polar Bears,
- Narwhal and beluga whale,
- Migratory birds, especially Eider Ducks,
- Fish (Cod),
- Tourism, and
- Commercial Sport Hunts, including Polar Bears.

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

Neither the Proponent nor any parties that submitted comments for this project or the Government of Nunavut identified any known areas of historical, cultural and archaeological significance associated with the project area. However, should the project be approved to proceed, the Proponent would be required to contact the Government of Nunavut-Department of Culture and Heritage if any sites of historical, cultural or archaeological significance are encountered (including shipwrecks) to obtain a permit before diving, searching or approaching as site.

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

Although no significant public concerns were raised during the public commenting period, the NIRB notes that the close proximity of the proposed activities to the community of Pond Inlet and Resolute Bay in an area used by residents for recreational/traditional pursuits that could potentially contribute to public concern developing. NPC's online mapping data also indicates that this project is in an area where the public has indicated that ships should be given strict rules and maybe even charged for going through this space. A term and condition has been recommended to direct engagement with the community, hunters and trappers organization and interested parties, as well as the posting of public notices to ensure residents are aware of the tourism activities being or to be conducted.

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.*

As the "Diving and Snorkeling" project is a proposed amended tourism program that includes diving and snorkeling, the nature of potential impacts is considered to be well-known. Potential adverse impacts to the marine environment, including marine wildlife and seabirds are likely to be localized, of low magnitude, and restricted to the short period of project activities (45 minute dives over 2 days). However, due to the project occurring in the marine environment including marine wildlife and migratory seabird habitat, specific mitigation measures for the protection of marine mammals and birds may be necessary. Based on past evidence of similar scope of activities, potential adverse impacts will be 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.*

The proposed project would take place within a 100 kilometre radius to a number of other projects that are currently active, in addition to other projects proposed and currently undergoing assessment by the Board as listed in Table 1 below. However, it is noted that this project is not likely to result in residual or cumulative impacts. The potential for cumulative impacts to marine wildlife and seabirds resulting from the tourism activities and other projects occurring in the region has been identified and considered in the development of the

NIRB's recommendations. Terms and conditions recommended for each of these projects are expected to reduce any residual impacts, and as such would limit or eliminate the potential for cumulative effects to occur.

Table 1: Project List

NIRB Number	Project	Project Title	Project Type
<i>Proposed Developments – undergoing assessment</i>			
17TN054		Complete Expeditions Tourist Operations Prince Leopold Island MBS Interpretive Trip	Tourism
<i>Active Projects</i>			
06YN024		Contaminants in Arctic Seabirds	Research
06AN041		Adventure Canada Expeditions	Tourism
12AN025		One Ocean Expeditions	Tourism
13AN014		2018 Students on Ice Arctic Expedition	Tourism
13AN028		F.K. Warren Ltd.'s "LE SOLEAL Cruise"	Tourism
13YN010		Pond Inlet Atmospheric Measurements	Research
14AN024		Silversea Cruises	Tourism
16TN052		Silversea Cruises	Tourism
18YN017		U of Laval's ATKA Expedition	Research
<i>Past Projects</i>			
16AN072		Northwest Passage Project	Access
16TN039		MS Crystal Serenity	Tourism
16YN048		Impacts of air pollution on terrestrial and aquatic ecosystems on Baffin Island	Research
16YN070		DFO's Under-ice monitoring of the Northwest Passage	Research
17AN007		Bear Witness Arctic Expedition	Tourism
17AN031		Canada C3 Led by Students on Ice	Tourism
17CN051		Arctic Kingdom-Redbull	Camp
17YN003		GEM-2 North Baffin Bedrock Mapping Project	Research
17AN009		Our Planet – Arctic Bay Floe Edge Filming	Other
17YN014		Onshore Stratigraphy Studies, Northwest Baffin Bay	Research
17YN033		Westbaff-MSM66	Research
17YN041		A coastal Pan-Canadian Collection of Plants, microalgae and marine invertebrates for the Canadian Museum of Nature – Canada C3	Research
17TN057		MY Archimedes Northwest Passage	Tourism

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.

IEWS OF THE BOARD

In considering the factors as set out above in the screening of the project proposal, the NIRB has identified a number of issues below and respectfully provide the following views regarding whether or not the proposed project has the potential to result in significant impacts. In addition, the NIRB 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 Board has previously recommended terms and conditions 1, and 26 through 29 which continue to apply to the current project proposal. In addition, the NIRB also recommends term and condition 50.

The Board would also note that, as justified in its previous decisions for (NIRB File No. 06AN041 dated July 19, 2006 and August 22, 2017), all terms and conditions remain applicable to the project tourism activities, while the additional impacts identified for the new components of the diving and snorkeling activities proposed warrant mitigation measures as justified below.

Ecosystem, wildlife habitat and Inuit harvesting activities:

Issue 1: Potential negative impacts to marine wildlife, including marine mammals, fish, seabirds, and benthic invertebrates, and their respective habitats due to increased noise and disturbance from ship and zodiac operations, and from the diving and snorkeling excursions.

Board views: As discussed above in the assessment of factors relevant to this project proposal, the potential for impacts is applicable to a small geographic areas within the Bylot Island and Prince Leopold Migratory Bird Sanctuaries and is expected to be temporary due to intermittent tourism activities anticipated to occur for only a few hours (45 min each dive) over two (2) days during the cruise ship visits. Noise generated from vessel movement and zodiac operations could result in temporary disturbance of marine wildlife, migratory birds, fish populations and diving and snorkeling activities could have potential impacts to fish and benthic habitats. Operational restrictions regarding ship-based tourism activities are expected to mitigate potential negative impacts to marine wildlife species and their habitats, including migratory and non-migratory birds. The proponent has also committed to ensuring all divers have experience in minimizing the potential harm to the underwater environment by implementing strict criteria and mitigation measures such as proper awareness of buoyancy and having all diving done from a zodiac to ensure there is no disturbance to the shoreline or underwater environment.

The Proponent would also be required to follow the *Fisheries Act*, the *Migratory Birds Convention Act*, the *Migratory Birds Regulations*, the *Species at Risk Act*, the *Nunavut Act*, the *Arctic Waters Pollution Prevention Act*, and the *Canada Shipping Act*.

Recommended Mitigation Measures: It is recommended that potential negative impacts may be mitigated by requiring the Proponent to employ general and species-specific measures for the protection of marine wildlife during tourism activities, and to ensure that project personnel and passengers are properly briefed on wildlife protocols, sensitivities, and management procedures prior to undertaking the activities. The Board has previously recommended terms and conditions to mitigate the potential negative impacts to migratory and non-migratory birds, and marine wildlife, specifically: 12 through 17, 19, 20, 30, 32, 45 and 46 which continue to apply to the current project proposal.

Issue 2: Potential negative impacts to marine water quality and marine ecosystems from introduction of foreign species, ballast exchange, waste disposal and accidental damage to reef structures from cruise ship operations, zodiac and diving and snorkeling activities.

Board views: There is the potential for the project to negatively impact marine water quality and marine ecosystem due to the introduction of foreign species, ballast exchange, waste disposal from cruise ship operations and accidental damage to reef structures from cruise ship operations, zodiac and diving and snorkeling activities. The potential for impacts is applicable to the marine area within the Bylot Island and Prince Leopold Island Migratory Bird Sanctuaries. 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. In addition, the Proponent has committed to ensuring all divers have experience in minimizing the potential harm to the underwater environment by implementing strict criteria and mitigation measures such as proper awareness of buoyancy and having all diving done from a zodiac to ensure there is no disturbance to the shoreline or underwater environment.

The Proponent would also be required to follow the *Arctic Waters Pollution Prevention Act*, the *Transportation of Dangerous Goods Regulations*, the *Transportation of Dangerous Goods Act*, the *Canada Shipping Act*, the *Marine Liability Act*, the *Navigation Protection Act* and the *Canadian Environmental Protection Act*.

Recommended Mitigation Measures: It is recommended that potential negative impacts to marine waters and marine ecosystems may be mitigated by requiring the Proponent to implement operational restrictions, as well as complying with all relevant Canadian and international maritime regulations for preventing the introduction of unwanted aquatic organisms and pathogen from ship's ballast water, and proper wastes disposal. The Board has previously recommended terms and conditions to mitigate the potential adverse impacts to marine water quality and marine ecosystems: 5 through 11, 19 and 44, which continue to apply to the current project proposal.

Issue 3: Potential adverse impacts to public and traditional land use activities in the area due to cruise ship activities, zodiac operations and diving and snorkeling tourism excursions.

Board Views: The Proponent has indicated that the proposed activities would occur in the Bylot Island and Prince Leopold Island Migratory Bird Sanctuaries and in close proximity to Sirmilik National Park , and due to the site's close proximity to seasonal home ranges and migration routes of marine mammal species, it is possible that tourism and diving and snorkeling activities may temporarily change the distribution of several wildlife species commonly harvested in the area, which may in turn affect personal enjoyment of the land. Terms and conditions have been recommended to minimize adverse impacts to traditional land use activities, and by ensuring ongoing consultation with the community and community organizations.

Recommended Mitigation Measures: The Board has previously recommended terms and conditions to mitigate the potential adverse impacts to public and traditional land use activities in the project area 2, 24 and 49 which continue to apply to the current project proposal. In addition, the NIRB also recommends term and condition 51 to mitigate potential adverse impacts to public and traditional land use activities.

Socio-economic effects on northerners:

Issue 4: Potential adverse impacts to historical, cultural and archaeological sites; including the possibility to encounter shipwrecks while partaking in diving and snorkeling activities.

Board Views: The Proponent is proposing to work in an area of no known historical significance however there is the potential to encounter shipwrecks which may potentially cause adverse impacts. The Government of Nunavut-Department of Culture and Heritage (GN-CH) has recommended that no person dive, search or approach and archaeological sites; including shipwreck sites; without obtaining a permit issued by GN-CH. The Proponent is also required to contact GN-CH when encountering historical sites (including shipwrecks) and is required to follow the *Nunavut Act*.

Recommended Mitigation Measures: The Board has previously recommended terms and conditions 23, and 47 to ensure that the proponent is aware of the law regarding disturbance of archaeological and palaeontological sites and the removal of artifacts found and term and condition 24 to ensure that available Inuit Qaujimaningit can inform project activities, to reduce the potential for adverse impacts occurring to any historical sites, which will continue to apply to the current project proposal.

Significant public concern:

Issue 5: 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 concerns resulting from project activities.

Recommended Mitigation Measures: The Board has previously recommended term and condition 24 for the Proponent to consult with local residents regarding their activities in the region which continues to apply to the current project proposal.

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 following terms and conditions were previously issued by the NIRB in the July 19, 2006 Screening Decision Report(s) for File No. 06AN041, **and continue to apply to the Diving and Snorkeling project:**

General

1. The Proponent shall ensure that all permits and approvals are in place prior to the commencement of any work.
2. The Proponent's activities shall not impede or discourage traditional land use activities. The Proponent shall be aware that they may be conducting their activities on harvesting grounds and should respect the harvesters. The Proponent shall ask Inuit harvesters if it is ok to be nearby and to take photographs. Harvesters shall have the right of way.

Waste

3. The Proponent shall ensure that no evidence of the visit remains behind.
4. The Proponent is to follow a "pack it in, pack it out" policy and ensure that all wastes generated through the course of the operation are disposed of in approved land based garbage facilities.
5. The Proponent shall ensure that no substances, including all garbage, chemicals, fuels or wastes associated with the project are deposited into the marine environment or any other water body.
6. The Proponent shall ensure that all bilge and treated sewage is not dumped within 12 nautical miles from land or ice shelves or in the vicinity of communities and scientific stations.
7. The Proponent shall report **all** spills of fuel or other deleterious materials immediately to the Nunavut **24 hour Spill Line at (867) 920-8130.**
8. The Proponent shall have an Emergency Response & Spill Contingency Plan prepared prior to commencing project activities.
9. The Proponent shall ensure preventative measures are used when refueling.

10. The Proponent shall ensure that the transportation of fuel shall be done in compliance with the *Transportation of Dangerous Goods Act and Regulations* requirements.
11. The Proponent shall be required to undertake any corrective measures in the event of any damage to the land or marine environment as a result of the Proponent's operation.

Wildlife

12. The Proponent shall ensure that the ship be anchored well away from the breeding cliffs.
13. (*updated*) The Proponent shall not attempt to intersect or interfere with the movements of marine mammals. Strategic positioning of vessels ahead of the path being traveled by mobile whales and waiting for the whales to pass is also prohibited.
14. (*updated*) The Proponent shall maintain a distance of 100 metres if a Polar Bear is encountered on land or ice while conducting activities from a zodiac or other small craft; all interaction with Polar Bears should be avoided if possible.
15. The Proponent shall ensure that there is minimal disturbance to nesting and brooding birds and wildlife on the island. Boats should get no closer than 100 feet from cliffs.
16. Harassment of wildlife is prohibited. This includes persistently worrying or chasing animals, or disturbing large groups of animals.
17. (*updated*) The Proponent shall not touch, feed or entice wildlife to approach by holding out or setting out decoys or any such devices, foodstuffs or bait of any kind.
18. The Proponent shall not allow sport hunting or fishing, unless the appropriate permits and licenses are acquired from a Conservation Officer.
19. The harmful alteration, disruption or destruction of fish habitat is prohibited under Section 35 of the *Fisheries Act*, without authorization by the Department of Fisheries and Oceans.
20. The Proponent shall not cause disturbance to any species, especially those listed by the *Species at Risk Act*, including the Beluga Whale, Cumberland Sound Population (Threatened species - Schedule 1), the Harbour Porpoise, Northwest Atlantic population (threatened species – Schedule 2) and Fin Whale (special concern – Schedule 3).
21. (*updated*) The Proponent shall ensure that visitation of cliffs used by nesting and breeding birds is restricted to small crafts or zodiacs only, and then only during morning and early afternoon hours. Noise should be kept to a minimum when visiting these bird colonies.
22. Noise should be kept to a minimum during visits to the colony. Do not blow ship horns or discharge firearms in an attempt to cause a mass flight of adults from the colony. This causes significant losses of eggs and chicks.

Archaeological

23. The Proponent should be aware of the law regarding disturbance of archaeological and palaeontological sites and the removal of artifacts found. If a site is found it should remain undisturbed and its location should be reported to the Government of Nunavut Department of Culture and Heritage.

Other Recommendations

24. (updated) The Proponent should consult with local residents regarding their activities in the area and solicit available Inuit Qaujimaningit and information that can inform project activities.
25. (updated) The Proponent should, to the extent possible, hire local people and access local services where possible.

Additionally, the following terms and conditions were previously issued by the NIRB in the August 22, 2017 Screening Decision Report for File No. 06AN041, and **continue to apply to the Diving and Snorkeling project:**

General

26. (updated) The Proponent shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
27. 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.
28. The Proponent shall operate in accordance with all commitments stated in correspondence provided to Parks Canada (Project Description, June 30, 2017), and the NIRB (Online Application Form, Non-technical Summaries in English, French and Inuktitut, July 10, 2017).
29. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Wildlife - General

30. 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

31. 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 metres 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.
32. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.
33. The Proponent shall ensure its aircraft avoid excessive hovering or circling over areas where bird presence is likely.

Aircraft Flight Restrictions

34. The Proponent shall not alter flight paths to approach wildlife, and avoid flying directly over animals.

35. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum flight altitude of 610 metres above ground level unless except during landing, take-off or if there is a specific requirement for low-level flying, which does not disturb wildlife or migratory birds.
36. 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.
37. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
38. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

Caribou or Muskox Disturbance

39. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou have passed or left the area.
40. The Proponent shall not block or cause any diversion to caribou or muskox migration, and shall cease activities likely to interfere with migration such human disturbance until such time as the caribou or muskox have passed or left the area.

Temporary Land Use

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

Restoration of Disturbed Areas

42. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
43. The Proponent shall ensure that all disturbed areas are restored to a stable or pre-disturbed state as practical as possible upon completion of park visitation.

Ship-based Activities

44. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures.

Vessel Craft-based Tourism

45. The Proponent shall ensure that all passengers (clients and staff) are aware of the Proponent's responsibilities and requirements regarding wildlife and wildlife habitat protection. This should include pre-landing briefings on wildlife sensitivities and potential hazards, proper wildlife viewing techniques and safety practices.
46. While on the cruise ship, vessel or small craft, the Proponent shall limit viewing time of each concentration of marine mammals to a maximum of thirty (30) minutes in order to minimize disturbance.
47. (*updated*) The Proponent shall ensure that all passengers (clients and staff) are aware of the Proponent's responsibilities and requirements regarding archaeological or palaeontological sites that are encountered during activities. This should include pre-landing briefings

explaining the prohibitions regarding removal of artifacts, and defacing or writing on rocks and infrastructure.

48. The Proponent should use existing trails where possible during project activities on land.
49. The Proponent is strongly advised to provide sufficient advance notice to communities where a landing is planned as part of project activities.

In addition to the previously issued terms and conditions, the Board recommends the following project-specific terms and conditions:

General

50. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 148830), and the NIRB (Online Application Form, May 14, 2018).

Other

51. 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 has previously recommended the following on August 22, 2017:

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 should review the Government of Nunavut's booklet on Bear Safety, which can be downloaded from this link: http://gov.nu.ca/sites/default/files/bear_safety_-_reducing_bear-people_conflicts_in_nunavut.pdf. Further information on bear/carnivore detection and deterrent techniques can be found in the "Safety in Grizzly and Black Bear Country" pamphlet, which can be downloaded from this link: http://www.enr.gov.nt.ca/sites/default/files/web_pdf_wd_bear_safety_brochure_1_may_2015.pdf.
3. There are polar bear and grizzly bear safety resources available from the Bear Smart Society with videos on polar bear safety available in English, French and Inuktitut at <http://www.bearsmart.com/play/safety-in-polar-bear-country/>. Information can also be obtained from Parks Canada's website on bear safety at the following link: <http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/d.aspx> or in reviewing the "Safety in Polar Bear Country" pamphlet, which can be downloaded from the following link: http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/~/_media/pn-np/nu/auyuittuq/pdf/shared/PolarBearSafety_English.ashx.

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://www.sararegistry.gc.ca/virtual_sara/files/policies/EA%20Best%20Practices%202004.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.

Migratory Birds

5. The Proponent review Canadian Wildlife Services' "Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut", available at the following link: <http://publications.gc.ca/site/eng/317630/publication.html> and "Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories", available at the following link: <http://publications.gc.ca/site/eng/392824/publication.html>. The guide provides information to the Proponent on key terrestrial and marine habitat areas that are essential to the welfare of various migratory bird species in Canada.
6. For further information on how to protect migratory birds, their nests and eggs when planning or carrying out project activities, consult Environment and Climate Change Canada's Incidental Take web page and the fact sheet "Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and their Nests and Eggs" available at <http://www.ec.gc.ca/paom-itmb/>.

Transport of Dangerous Goods and Waste Management

7. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.

The Proponent shall ensure that proper shipping documents (waste manifests, transportation of dangerous goods, etc.) accompany all movements of dangerous goods. Further, the Proponent shall ensure that the shipment of all dangerous goods is registered with the Government of Nunavut Department of Environment, Department of Environment Manager. Contact the Manager (867) 975-7748 to obtain a manifest if dangerous goods including hazardous wastes will be transported.

The Board is currently also recommending the following:

Bear and Carnivore Safety

8. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officers of Pond Inlet, phone: (867) 899-8819 and Resolute Bay, phone: (867) 252-3879).

REGULATORY REQUIREMENTS

The Board previously recommended in the July 19, 2006 Screening Decision Report for the Adventure Canada-Wildlife Viewing project and in the August 22, 2017 Screening Decision Report for Cruise Ship Visitor Experience at Qausuittuq National Park project the following legislation, which continues to apply to the current proposal:

Acts and Regulations

1. The *Fisheries Act* (<http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html>).
2. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws-lois.justice.gc.ca/eng/acts/M-7.01/>).
3. 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.
4. The *Transportation of Dangerous Goods Regulations* (<http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm>), *Transportation of Dangerous Goods Act* (<http://laws-lois.justice.gc.ca/eng/acts/t-19.01/>), and the *Canadian Environmental Protection Act* (<http://laws-lois.justice.gc.ca/eng/acts/C-15.31/>).
5. The *Arctic Waters Pollution Prevention Act* (<http://laws-lois.justice.gc.ca/eng/acts/A-12/>).
6. The *Canada Shipping Act, 2001* (<http://laws-lois.justice.gc.ca/eng/acts/C-10.15/>).
7. The *Marine Liability Act* (<http://laws-lois.justice.gc.ca/eng/acts/M-0.7/>).
8. The *Navigation Protection Act* (<http://laws-lois.justice.gc.ca/eng/acts/N-22/index.html>).
9. The *Canada National Parks Act* (<http://laws-lois.justice.gc.ca/eng/acts/n-14.01/>).
10. The *Aeronautics Act* (<http://laws-lois.justice.gc.ca/eng/acts/A-2/>).

Other Applicable Guidelines

11. The *Guidance Document for Passenger Vessels Operating in the Canadian Arctic* (<https://www.tc.gc.ca/eng/marinesafety/tp-tp13670-menu-2315.htm>).

In addition, the Proponent is also advised that the following legislation may apply to the project:

Acts and Regulations

12. 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 C**.
13. The *Wildlife Act (Nunavut)* and its corresponding regulations (<http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html>).

APPENDIX A: PREVIOUSLY-SCREENED PROJECT PROPOSALS

The original project proposal NIRB (File No. 06AN041), was received by the Nunavut Impact Review Board (NIRB or Board) from Canadian Wildlife Service (CWS) for screening on April 19, 2006. On June 15, 2016, the NIRB received a positive conformity determination with the North Baffin Regional Land Use Plan from the Nunavut Planning Commission (NPC) for this file. The project proposal was screened by the Board in accordance with Part 4, Article 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada* (Nunavut Agreement). On July 19, 2006 the NIRB issued a *Nunavut Agreement* 12.4.4(a) screening decision to the Minister of Environment, Government of Canada which indicated that the proposed project could proceed subject to the NIRB's recommended project-specific terms and conditions.

The Adventure Canada's (Proponent) original "Adventure Canada-Wildlife Viewing" project was located in the Qikiqtani (North Baffin) region, and included stops within the communities of Resolute Bay, Pond Inlet, Clyde River, and Qikiqtarjuaq as well as visits to the Ninginganiq National Wildlife Area (Isabella Bay), Coburg Island, Bylot Island, Digges Island, Reid Bay, Cape Searle and Prince Leopold Island. The Proponent indicated that it intended to conduct an Arctic adventure cruise of the Baffin Region with stops to observe and photograph wildlife. The program was proposed to take place from August 17 and September 14, 2006.

According to the previously screened project proposal, the scope of the project included the following undertakings, works or activities:

- Conduct a cruise for approximately 118 passengers and crew through parts of the Arctic;
- Brief visits to various Baffin communities in Nunavut during the cruise;
- Use of a fleet of Zodiacs to explore remote shores with limited docking infrastructure;
- Use of Zodiacs to explore the landscape and observe marine wildlife, including seabirds and whales;
- Retrieval of water from ports in Greenland for onboard use;
- Storage of all fuels onboard ship in internationally approved and certified containers; and
- Sewage, greywater, non-combustible waste and other wastes to be treated and disposed of in accordance with The International Convention for the Prevention of Pollution from Ships (MARPOL) protocols.

Additional authorization, extension and amendment requests associated with the "Adventure Canada-Wildlife Viewing" project have also been reviewed by the NIRB following screening of the original project proposal (File No. 06AN041). In each instance, the NIRB confirmed that the applications were exempt from the requirement for further screening pursuant to Section 12.4.3 of the Nunavut Agreement and that the activities therein remained subject to the terms and conditions recommended in the original July 19, 2006 Screening Decision Report and/or issued additional terms and conditions associated with the "Adventure Canada-Wildlife Viewing" project as per Section 12.4.4(a) of the *Nunavut Agreement*. The following is a summary of the additional applications as received by the NIRB for File No.06AN041:

On May 19, 2009 the NIRB received an application for an amendment from the Canadian Wildlife Service (CWS) for an access permit to Prince Leopold Island Migratory Bird Sanctuary and Nirjutiqavvik National Wildlife Area (Coburg Island), for the purpose of conducting guided

tours as part of a cruise ship operation for the above mentioned project. After a thorough assessment of the amendment request, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the *Nunavut Agreement*, and re-issued the enclosed screening decision report on May 28, 2009.

On May 30, 2012 the NIRB received an application for an extension request from the Canadian Wildlife Service (CWS) to the Migratory Bird Sanctuary Permit (No. NUN-MBS-09-05) and the National Wildlife Area Entry Permit (NUN-NWA-09-01) for the above mentioned project. After a thorough assessment of the extension request, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the *Nunavut Agreement*, and reissued the enclosed screening decision report on June 25, 2012.

On May 15, 2013 the NIRB received an application for an amendment and extension from the Canadian Wildlife Service (CWS) to the Migratory Bird Sanctuary Permit (No. NUN-MBS-12-04) and the National Wildlife Area Entry Permit (NUN-NWA-12-02) for the above mentioned project. After a thorough assessment of the amendment and extension request, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the *Nunavut Agreement*, and reissued the enclosed screening decision report on May 21, 2013. The activities associated with the amendment included:

- Access for three additional years from July 1, 2013 to October 1, 2016;
- Increase on-board passenger capacity from 118 to 134;
- Visit Perry Island, located within the Queen Maud Migratory Bird Sanctuary; and
- Commitment to not visiting Digges Island, Reid Bay and Cape Searle as a part of ongoing tours.

On April 1, 2014 the NIRB received an application for an amendment and extension from the Canadian Wildlife Service (CWS) to the Migratory Bird Sanctuary Permit No. NUN-MBS-13-02 and CWS National Wildlife Area Permit No. NUN-NWA-13-04 for the above mentioned project. After a thorough assessment of the amendment and extension request, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the *Nunavut Agreement*, and reissued the enclosed screening decision report on June 12, 2014. The activities associated with the amendment included:

- Tours of communities and outposts to include Kugluktuk, Bay Chimo, Gjoa Haven, Taloyoak, Grise Fiord, as well as various points along the route, to include Port Epworth, Victoria Island, Cunningham Inlet, Fort Ross, Nelson Griffiths, Bathurst Island, Beechey Island, Cocker Bay, Whaler Point, Dundas Harbour, Cape Hardy, and Gibbs Fiord.

On April 13, 2015 the NIRB received an extension request from the Canadian Wildlife Service (CWS) to the Migratory Bird Sanctuary Permit (No. NUN-MBS-14-11) and National Wildlife Area Entry Permit (No. NUN-NWA-14-07) for the above mentioned project. After a thorough assessment of the extension request, the NIRB determined that the application was exempt from the requirement for further screening pursuant to Section 12.4.3 of the *Nunavut Agreement*, and reissued the enclosed screening decision report on May 12, 2015.

On June 20, 2017 the NIRB received a referral to screen Parks Canada's (PC or Proponent) "Cruise Ship Visitor Experience at Qausuittuq National Park" project proposal from Parks Canada. On August 22, 2017 the NIRB issued a screening decision pursuant to paragraph 92(1)(a) of the *Nunavut Planning and Project Assessment Act (NuPPAA)* to the Minister of Environment and Climate Change which indicated that the proposed project could proceed subject to the original terms and conditions recommended in the July 19, 2006 Screening Decision Report as well as additional terms and conditions. The scope associated with the June 30, 2017 application included:

- Conduct initial aerial scouting of the park area:
 - Undertake ground assessment and photographic documentation of cultural resources within the area prior to visitors' visit to the park, in order to avoid negative impacts;
 - Use of helicopter to scope potential zodiac landing sites, and hiking areas for a half day cruise ship visit to the southwest corner of Bathurst Island, and establish a routing plan for the visit;
- Visit by a cruise vessel, Ocean Endeavour, at pre-determined locations:
 - Offloading cruise ship for half a day for visitor's experience;
 - Use of small motorized and non-motorized vessel to access the shoreline area of the southwestern peninsula of Bathurst Island;
 - Securely anchor Ocean Endeavour vessel at an appropriate offshore location;
- Undertake organized hiking trips and onsite activities:
 - Landing of small vessels on the shore;
 - Walking along shoreline near the landing site;
 - Walking along river valleys and headlands; and
- Park staff and Nunavummiut guides to accompany up to 200 visitors around the park area.

Appendix B

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) to get the current status of a species.

Updated: September 2017

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
Migratory Birds			
Buff-breasted Sandpiper	Special concern	Schedule 1	ECCC
Eskimo Curlew	Endangered	Schedule 1	ECCC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	ECCC
Harris's Sparrow	Special Concern	Pending	ECCC
Horned Grebe (Western population)	Special Concern	Schedule 1	ECCC
Ivory Gull	Endangered	Schedule 1	ECCC
Peregrine Falcon	Special Concern (<i>anatum-tundrius</i> complex ³)	Schedule 1 - Schedule 3	ECCC
Red Knot (<i>islandica</i> subspecies)	Special Concern	Schedule 1	ECCC
Red Knot (<i>rufa</i> subspecies)	Endangered	Schedule 1	ECCC
Red-necked Phalarope	Special concern	Pending	ECCC
Ross's Gull	Threatened	Schedule 1	ECCC
Rusty Blackbird	Special Concern	Schedule 1	ECCC
Short-eared Owl	Special Concern	Schedule 1	ECCC
Vegetation			
Blanket-leaved Willow	Special Concern	Schedule 1	Government of Nunavut
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Porsild's Bryum (Moss)	Threatened	Schedule 1	Government of Nunavut
Arthropods			
Traverse Lady Beetle	Special Concern	Pending	Government of Nunavut
Terrestrial Wildlife			
Caribou (Barren-Ground population)	Threatened	Pending	Government of Nunavut
Dolphin and Union Caribou	Special Concern	Schedule 1	Government of Nunavut
Grizzly Bear (Western Population)	Special Concern	Pending	Government of Nunavut
Peary Caribou	Endangered	Schedule 1	Government of Nunavut
Peary Caribou (High Arctic Population)	Endangered	Schedule 2	Government of Nunavut
Peary Caribou (Low Arctic Population)	Threatened	Schedule 2	Government of Nunavut
Wolverine	Special Concern	Pending	Government of Nunavut
Wolverine (Western population)	Non-active	Pending	Government of Nunavut
Marine Wildlife			
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Endangered	Schedule 2	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO

Beluga Whale (Southeast Baffin Island – Cumberland Sound population)	Endangered	Schedule 2	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Arctic population)	Endangered	Schedule 2	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
Polar Bear	Special Concern	Schedule 1	Government of Nunavut/DFO
Fish			
Atlantic Cod, Arctic Lakes	Special Concern	Pending	DFO
Atlantic Wolffish	Special Concern	Schedule 1	DFO
Bering Wolffish	Special Concern	Schedule 3	DFO
Blackline Prickleback	Special Concern	Schedule 3	DFO
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Fourhorn Sculpin (Freshwater form)	Data Deficient	Schedule 3	DFO
Northern Wolffish	Threatened	Schedule 1	DFO
Roundnose Grenadier	Endangered	Pending	DFO
Spotted Whitefish	Threatened	Schedule 1	DFO
Thorny Skate	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.

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 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:

	Types of Development (See Guidelines below)	Function (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*¹ to issue such permits.

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

¹P.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 *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut 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

² s. 51(1)

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 Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut 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.*

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, and Heritage (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

³ P.C. 2001-1111 14 June, 2001

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 *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut 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 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.