

NIRB ASSESSMENT AND DECISION

The NIRB has completed a review of a quarry permit application from the Government of Nunavut – Community and Government Services (GN-CGS) in support of Qikiqtaaluk Corporation’s “Clyde River Road & Bridge” project (NIRB File No. 08RN070).

After a thorough assessment of the original project proposal, the application information and the comments received (please see *Procedural History* and *Project Activities* in **Appendix A**), in accordance with Section 12.4.3 of the NLCA, the Board has determined that this request will result in a change to the original scope of the project. Therefore, the NIRB is re-issuing the recommended project-specific terms and conditions contained in the July 24, 2008 and September 30, 2009 Screening Decisions Reports to the Ministers of GN-CGS, and Fisheries and Oceans Canada (DFO) respectively in addition to new terms and conditions which are recommended to mitigate any potential impacts to the environment as per Section 12.4.4(a) of the NLCA.

PREVIOUSLY APPROVED PROJECT-SPECIFIC TERMS AND CONDITIONS

The following terms and conditions were previously approved by the NIRB for file 08RN070 in Screening Decision Reports issued to GN-CGS, dated July 24, 2008 and to DFO dated September 30, 2009, and are available from NIRB’s ftp site using the following link <http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/>:

General

1. Qikiqtaaluk Corporation (the Proponent) shall maintain a copy of the *NIRB Screening Decision Report* at the site of operation at all times.
2. The Proponent shall ensure all employees, contractors and persons associated with the project are aware of the Proponent’s obligations to mitigate impacts to the environment. This includes instructing all personnel on the provisions of the *Spill Contingency Plan*, the *Erosion, Drainage and Sediment Control Plan* and the Terms and Conditions contained within the *NIRB Screening Decision Report*.
3. 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.
4. The NIRB shall be notified of any changes in operating plans or conditions associated with the project prior to any such change.
5. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB (*Spill Contingency Plan* and *Erosion, Drainage and Sediment Control Plan*) and Government of Nunavut – Community and Government Services (Application for Land Use Permit).
6. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.
7. The Proponent shall ensure the residents of Clyde River are notified of the proposed works and advised of appropriate safety precautions. The Proponent shall ensure adequate signage is installed at the project area with safety precautions clearly stated in English and Inuktitut.

Water

8. 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.
9. The Proponent shall not extract water from any fish-bearing waterbodies unless the water intake hoses are equipped with screens of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal.

Physical Environment

10. 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. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
11. The Proponent shall ensure that any water crossings are located to minimize approach grades.
12. The Proponent shall stabilize approaches during construction and upon completion of the project to control run off, erosion and siltation into the water bodies.
13. The Proponent shall not stockpile materials, nor deposit any excavated materials within thirty (30) metres of the high water mark of any waterbody.
14. The Proponent shall avoid causing disturbances to natural drainage patterns or exposing permafrost. Any such disturbances must be repaired immediately.
15. The Proponent shall ensure areas impacted by construction are re-vegetated and restored to their original condition using native seed mixes.
16. The Proponent shall ensure all equipment is well-cleaned and free of contaminated materials, oil and grease.
17. The Proponent shall obtain gravel and fill materials only from approved sources, and must ensure all such materials are clean and free of contaminants prior to use.

Waste

18. 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 wastes should be kept inaccessible to wildlife at all times.

Fuel and Chemical Storage

19. The Proponent shall locate all fuel and other hazardous materials more than thirty (30) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
20. The Proponent shall store all fuels and chemicals in such a manner that they are inaccessible to wildlife.
21. The Proponent shall inspect and document the condition of all large fuel caches (in excess of 20 drums) on a weekly basis.
22. The Proponent shall use secondary containment or a surface liner (drip pans, fold-a-tanks, etc) at all refueling spots.

23. The Proponent shall report all spills of fuel, or other deleterious materials immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife

24. The Proponent shall ensure that there is no damage to wildlife habitat as a result of project activities.
25. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. Deliberate touching, feeding or enticing of wildlife with decoys or any such devices, foodstuffs or bait of any kind is absolutely prohibited. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
26. The Proponent shall avoid raptor nesting sites and concentrations of nesting or moulting waterfowl at all times and ensure that there is minimal disturbance to any nesting birds, migratory birds and wildlife in the area. If nests containing eggs or young are encountered, the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
27. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
28. The Proponent shall follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional Biologist or the Wildlife Manager for information and advice on measures which should be taken to minimize the possibility of conflicts/interactions with bears.

Other Recommendations

29. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
30. It is recommended that the Proponent work to better communicate the intentions and outcomes of project activities throughout the life of the project. The Proponent should also give appropriate notification to the Hamlet Council and residents of Clyde River if there are to be any changes in operating plans or conditions associated with the project prior to any change.
31. The Proponent shall consult with CLEY to establish whether all areas of proposed disturbance have been subject to an archaeological assessment, and shall perform this assessment if consultation with Public Works indicates the assessment had not been undertaken previously.

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

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

Quarrying

1. The Proponent shall clearly stake and flag pit and quarry boundaries, and shall maintain an undisturbed buffer zone of at least 100 metres between quarry site and any high water mark of any water body.
2. The Proponent shall properly locate quarry/pit facilities so as to avoid all present and planned recreational sites and public use areas, and to protect unique geographical features and scenic resources.
3. The Proponent shall ensure the excavation slope of quarry sites have a horizontal/vertical ratio of 2 to 1 to ensure public safety.
4. The Proponent shall locate screening and crushing equipment on stable ground, at a location with ready access to stockpiles.
5. The Proponent shall ensure that overburden is disposed of in an orderly fashion near quarry sites, to facilitate remediation efforts.

MONITORING AND REPORTING REQUIREMENTS

The Board has previously recommended the following, and it is still valid for this amendment:

1. The upstream migration of Arctic char in the Clyde River is known to occur during the late summer (August) in the project area. Therefore, the Proponent shall establish a monitoring program to ensure the upstream migration of Arctic char in Clyde River has ended before any in-stream work takes place. The Proponent shall consult with Fisheries and Oceans Canada (DFO) for expert advice on appropriate procedures and technique for the monitoring program. Monitoring should be implemented during the first week of September and continue until it is evident that char migration has been completed and after consultation with DFO.
2. The Proponent shall submit a comprehensive annual report with copies provided to the GN-CSG, DFO, Nunavut Water Board, and Government of Nunavut, Department of Culture, Language, Elders and Youth by March 31st of each year of permitted activities. The annual report must contain, but not limited to, the following information:
 - a. A summary of all activities and earthworks undertaken for the year.
 - b. A map showing the approximate location of roads, bridges and culverts.
 - c. A description of local hires and initiatives.
 - d. Documentation of all consultation undertaken with the Hamlet Council of Clyde River, and the community of Clyde River (meaning the general public).
 - e. Documentation outlining the result of consultation undertaken with CLEY regarding the archaeological assessment of all disturbed areas. A detailed description of how the Proponent has complied with Terms and Conditions contained within this Screening Decision Report and any subsequently approved Terms and Conditions.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

The Board has previously recommended the following:

1. The proponent should ensure that the height of the bridge is sufficient to avoid damage during ice break-up in the spring.

The Board is currently also recommending the following:

General

All Authorizing Agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

The Proponent

1. The Proponent review the bear/carnivore detection and deterrent techniques outlined in “Safety in Grizzly and Black Bear Country” which can be down-loaded from this link: <http://www.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm>. Note that some recommendations in this manual are also relevant to polar bears. There is a DVD about polar bears and safety available from Nunavut Parks at the following link <http://www.nunavutparks.com/english/visitor-information/suggested-resources.html> and a “Safety in Polar Bear Country” pamphlet from Parks Canada at the following link <http://www.pc.gc.ca/pn-np/nu/auyuittuq/pdf/PolarBearEnglish2007final.pdf>.
2. The Spill Contingency Plan should be updated to provide direction regarding response action for spills on various types of terrain (e.g. spills on land, water, snow/ice, etc.)

REGULATORY REQUIREMENTS

The Proponent has been previously advised that the following legislation may apply to the project:

1. The Fisheries Act (<http://laws.justice.gc.ca/en/showtdm/cs/F-14///en>).
2. The Nunavut Waters and Nunavut Surface Rights Tribunal Act (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
3. The Migratory Birds Convention Act and Migratory Birds Regulations (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>).
4. The Species at Risk Act (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
5. The Nunavut Wildlife Act which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
6. Nunavut Act (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
7. The Transportation of Dangerous Goods Regulations, Transportation of Dangerous Goods Act (<http://www.tc.gc.ca/tdg/menu.htm>), and the Environmental Protection Act (<http://laws.justice.gc.ca/en/C-15.31/text.html>) The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the GN-DOE Manager of Pollution Control and Air Quality at 867-975-7748.
8. The Navigable Waters Protection Act (NWPA) (<http://laws.justice.gc.ca/en/N-22/index.html>).

Validity of Land Claims Agreement

Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated June 4, 2010 at Sanikiluaq, NU.



Lucassie Arragutainaq, Chairperson

Attachments: Appendix A – Procedural History and Project Activities
Appendix B – Species at Risk in Nunavut
Appendix C – Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders.

Appendix A

Procedural History and Project Activities

On May 13, 2010 the Nunavut Impact Review Board (NIRB or Board) received a quarry permit application from the Government of Nunavut – Community and Government Services (GN-CGS) in support of Qikiqtaaluk Corporation’s “Clyde River Road & Bridge” project (NIRB File No: 08RN070). The proposed quarry permit is required to provide granular materials for the noted project.

Original Project

The original project proposal (NIRB File No: 08RN070) was received by the NIRB from GN-CGS on June 18, 2008 and screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA). On July 24, 2008 the NIRB issued the a 12.4.4 (a) screening decision to the Minister of GN-CGS indicating the proposed project could proceed subject to NIRB’s recommended project-specific terms and conditions. Project components/activities included the following:

- Installation of a free-span bridge over the Clyde River
- Installation of culverts in shallow streams
- Grading of road between Clyde River and the former LORAN site at Cape Christian

On September 14, 2009 the NIRB received an amendment application from Fisheries and Oceans Canada (DFO) in respect to the Proponent’s *Fisheries Act* authorization associated with the project, in which some changes to culvert locations were proposed. The NIRB screened the application in accordance with Part 4, Article 12 of NLCA, and on September 30, 2009 the Board issued a 12.4.4 (a) screening decision to the Minister of DFO allowing the proposed amendment to proceed subject to project-specific recommended terms and conditions.

The Proposed Amendment

The current quarry permit application is to allow for the development of small quarries along the road leading from Clyde River to Cape Christian, site of a former military installation which is currently being remediated. The Hamlet of Clyde River’s quarry does not have enough aggregate material to finish the previously-screened work, therefore several new small quarries are proposed to be established along the road to provide the reconstruction material required. Each site would be fully restored at the end of the 2010 field season.

Public Commenting

As the proposed quarrying activities will result in an amendment to the scope of the previously-screened project, this application was distributed to community organizations in Clyde River, as well as to relevant federal and territorial government agencies, and Inuit organizations. The NIRB requested that interested parties review the proposal and the NIRB’s previously recommended terms and conditions and provide the Board with any comments or concerns by May 25, 2010 regarding:

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

On or before May 25, 2010 the NIRB received comments from the following interested parties:

- Environment Canada (EC)
- Government of Nunavut, Department of Environment (GN-DoE)

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's ftp-site, at the following location:

<http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/>

Appendix B Species at Risk in Nunavut

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

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

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

Updated: August 4, 2009

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility ¹
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (<i>anatum-tundrius</i> complex)	Special Concern	Schedule 1 (<i>anatum</i>) Schedule 3 (<i>tundrius</i>)	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Peary Caribou	Endangered	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Red Knot (<i>rufa</i> subspecies)	Endangered	Pending	EC

Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Atlantic Cod (Arctic population)	Special Concern	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Red Knot (<i>islandica</i> subspecies)	Special Concern	Pending	EC
Horned Grebe (Western population)	Special Concern	Pending	EC
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

¹ Environment Canada (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. The Department of Fisheries and Oceans (DFO) has responsibility for management of aquatic species.

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



BACKGROUND: Archaeology

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

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

BACKGROUND: Palaeontology

Under the Nunavut Act¹, the federal Government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*², it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

Definitions

¹ s. 51(1)

² P.C. 2001-1111 14 June, 2001

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.

- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
- 9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
 - a. survey
 - b. inventory and documentation of the archaeological or palaeontological resources of the land use area
 - c. assessment of potential for damage to archaeological or palaeontological sites
 - d. mitigation
 - e. marking boundaries of archaeological or palaeontological sites
 - f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.