

NIRB ASSESSMENT AND DECISION

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

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

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

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

General

1. North Arrow Minerals Inc. (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The NIRB shall be notified of any changes in operating plans or conditions associated with the project prior to any such change.
4. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB, including the following:
 - a. INAC application for land use permit, received May 21, 2008;
 - b. Abandonment and Restoration Plan, dated April 2008; and
 - c. Spill Contingency Plan, dated April 2008.
5. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.
7. The Proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes or sediment into any water body.
8. The Proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
9. The Proponent shall not conduct any land based drilling within 30 m of the high water mark of any water body.
10. The Proponent shall ensure all wastes generated from land based drilling are disposed of in a sump, such that contents do not enter any water body.

11. The Proponent shall ensure that drilling additives or muds are not used in connection with holes drilled through lake ice, unless they are re-circulated or contained such that they do not enter the water. All return water for on-ice drilling must be demonstrated to be nontoxic, and not result in an increase in total suspended solids above the Canadian Council of Ministers for the Environment Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those over 100 mg/L).
12. The Proponent shall ensure that if artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.
13. The Proponent shall ensure that all water intake hoses are equipped with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.

Waste

14. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of. All wastes should be kept inaccessible to wildlife at all times.
15. The Proponent shall segregate waste generated from all project activities, and shall make efforts to reduce, reuse and recycle materials otherwise bound for landfill.
16. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal. The Proponent shall not incinerate any hazardous materials or waste wood treated with preservatives.

Fuel and Chemical Storage

17. The Proponent shall locate all fuels, chemicals and other hazardous materials a minimum of 30 m away from the high water mark of any water body and in such a manner as to prevent their release into the environment. The use of secondary containment is recommended.
18. The Proponent shall mark and store all fuels, chemicals and other hazardous materials in such a manner that they are visible under all conditions and inaccessible to wildlife at all times.
19. The Proponent shall report all spills of fuel, or other deleterious materials immediately to the 24 hour Spill Line at (867) 920-8130.
20. The Proponent shall ensure a Waste Manifest accompanies all movements of hazardous wastes, and shall register with Robert Eno, Government of Nunavut – Department of Environment at (867) 975-7748 or reno@gov.nu.ca.

Wildlife

21. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this project.
22. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. Deliberate feeding or enticing of any wildlife is absolutely prohibited. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
23. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 m above ground level when groups of caribou or wildlife are observed in the project area. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 m and a horizontal distance of 1500 m from any observed groups (colonies) of migratory birds.
24. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

25. The Proponent shall avoid areas with 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 project 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.
26. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskoxen, until the caribou or muskoxen have passed or left the area. During the period from May 15 to July 15, The Proponent shall restrict all drilling, blasting, low-level flights and the use of snowmobiles and all-terrain vehicles if calving caribou are observed in the project area.
27. 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 and carnivores in the project area. Consideration should be given to setting up an electric fence around the camp.

Physical Environment

28. 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.
29. The Proponent shall ensure that the land use area is kept clean and tidy at all times.
30. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.

Restoration

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

Other

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

MONITORING AND REPORTING REQUIREMENTS

1. The Proponent shall maintain a record of wildlife observations while operating within the project area. The reports should include locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible. Prior to conducting project activities, the Proponent should map the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, and identify the timing of critical life history events (i.e., calving, mating, denning and nesting). Additionally, the Proponent should indicate potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites. A copy of this wildlife record or report should be submitted annually at the end of the operational season to the following Government of Nunavut contacts:
 - a. Dustin Fredlund – Manager, Wildlife: (867) 982-7441, drefdlund@gov.nu.ca
 - b. Allen Niptanatiak – Conservation Officer: (867) 982-7451, kugwildlfe2@qiniq.com
 - c. Mathieu Dumond – Regional Biologist: (867) 982-7444, mdumond@gov.nu.ca

Other NIRB Concerns and Recommendations

In addition to the project-specific terms and conditions, the Board is 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.

Indian and Northern Affairs Canada (INAC)

INAC should consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.

Regulatory Requirements

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

1. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14///en>).
2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>).
4. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix A** is a list of Species at Risk in Nunavut.
5. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
6. The *Nunavut Act* (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix B**.
7. The use of water, disposal of wastewater or waste as a result of the project proposal activities require a Nunavut Water Board license and the project cannot proceed until this is obtained (<http://www.nunavutwaterboard.org/en/legislation>).
8. 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.
9. The *Aeronautics Act* (<http://laws.justice.gc.ca/en/A-2/>).

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 _____ July 2, 2008 _____ at Sanikiluaq, NU.



Lucassie Arragutainaq, A/Chair



Appendix A

Procedural History and Project Activities

Procedural History

On May 21, 2008 the Nunavut Impact Review Board (NIRB or Board) received North Arrow Minerals Inc.'s "Anialik River" project proposal from Indian and Northern Affairs Canada. NIRB has assigned this project proposal file number **08EN061**.

NIRB staff undertook a preliminary completeness check and found that additional information was required for the NIRB to complete an environmental screening. Specifically NIRB requested submission of a Non-technical project proposal in Inuinnaqtun. On May 27, 2008 the NIRB received the requested information and made it available for public viewing.

This application was distributed to the communities of Kugluktuk, Cambridge Bay and Bathurst Inlet, to interested Federal and Territorial Agencies, and Inuit Organizations. The NIRB requested that interested Parties review the application and provide NIRB with comments by June 17, 2008 regarding:

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

On or before June 18, 2008 the NIRB received comments from the following interested Parties (see Comments and Concerns):

- Government of Nunavut – Department of Environment
- Kitikmeot Inuit Association
- Environment Canada
- Nunavut Water Board

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

Project Activities

The proponent intends to conduct an exploratory gold and base metal drilling program from April 25, 2008 to April 24, 2010. The project area is located approximately 180 km Southeast of Kugluktuk, Kitikmeot Region.

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

- Camp site for approximately 16 workers;
- Airborne and ground geophysical surveys (up to 10 grids per year);
- Geological mapping, prospecting, sampling and ground truthing;
- Diamond drilling up to 10 holes (up to 200 m in depth);
- Establishment of fuel caches; and
- Transport by helicopter or fixed wing aircraft.

Appendix A

SPECIES AT RISK IN NUNAVUT

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

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

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

Updated: January 3, 2007

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility ¹
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered ²	Schedule 1	EC
Peregrine Falcon (subspecies anatum)	Threatened	Schedule 1	Government of Nunavut
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (subspecies tundrius)	Special Concern	Schedule 3	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Peary Caribou	Endangered ³	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale	Special Concern	Pending	DFO

(Eastern High Arctic – Baffin Bay population)			
Bowhead Whale (Hudson Bay-Foxe Basin population)	Threatened ⁴	Pending	DFO
Bowhead Whale (Davis Strait-Baffin Bay population)	Threatened ⁴	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Rusty Blackbird	Special Concern	Pending	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern ³	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

¹ Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. EC = Environment Canada, DFO = Department of Fisheries and Oceans

² Designated as Endangered by COSEWIC in April 2006 and it is expected that the category of concern in SARA will also be changed from Special Concern to Endangered.

³ Peary Caribou was split into three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. The Low Arctic population also included the Barren-ground Caribou - Dolphin and Union population. In May 2004 all three population designations were de-activated, and the Peary Caribou, *Rangifer tarandus pearyi*, was assessed separately from the Barren-ground Caribou (Dolphin and Union population), *Rangifer tarandus groenlandicus*. The subspecies *pearyi* is composed of a portion of the former "Low Arctic population" and all of the former "High Arctic" and "Banks Island" populations, and it was designated Endangered in May 2004. Although SARA lists Peary Caribou on Schedule 2 as three separate populations, the most current designation is the COSEWIC designation of the subspecies *pearyi* as Endangered.

⁴ The "Eastern and Western Arctic populations" of Bowhead Whale were given a single designation of Endangered in April 1980 by COSEWIC. These were split into two populations to allow separate designations in April 1986. The Eastern population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and both these populations were designated as Threatened. Both these populations are under consideration for addition to Schedule 1. Although SARA lists the Eastern Arctic population as Endangered (Schedule 2), the most current designation is the COSEWIC designations of the Hudson Bay-Foxe Basin and Davis Strait-Baffin Bay populations as Threatened.

Appendix B
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.