

SCREENING DECISION REPORT NIRB FILE NO.: 08EA084

KIA File No.: KTL312C003, KTL304C017 AANDC File No.: N2012C0003

NWB File No.: 2BE-GOO0510

March 16, 2012

Charlie Evalik, President Kitikmeot Inuit Association Box 18, Cambridge Bay, NU X0B 0C0

Via email: kiapresident@qiniq.com

Re: Screening Decision for Sabina Gold and Silver Corp.'s Amendment request with the Kitikmeot Inuit Association for its "Beechy Lake Area", Additional Application Terms and Conditions, 08EA084

Dear Mr. Evalik:

The primary objectives of the Nunavut Impact Review Board (NIRB) are set out in section 12.2.5 of the Nunavut Land Claims Agreement (NLCA) as follows:

"In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area."

Section 12.4.3 of the NLCA states that:

"Any application for a component or activity of a project proposal that has been permitted to proceed in accordance with these provisions shall be exempt from the requirement for screening by NIRB unless:

- (a) such component or activity was not part of the original project proposal; or
- (b) its inclusion would significantly modify the project."

NIRB ASSESSMENT AND DECISION

The NIRB has completed a review of Sabina Gold & Silver's (Sabina; the Proponent) request to the Kitikmeot Inuit Association (KIA) for an amendment to their Land Use License KTL304C017 for their "Beechy Lake Area" project.

After a thorough assessment of the project proposal, the amendment 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 March 3, 2009 Screening Decision, NIRB file No.: 08EA084 in addition to new terms and conditions which are designed 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 **08EA084** in a Screening Decision Report dated March 3, 2009 and is available from NIRB's ftp site using the following link tp://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS:

General

- 1. Dundee Precious Metals 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 Proponent shall operate in accordance with all commitments stated in correspondence provided to Indian and Northern Affairs Canada (INAC Land Use Amendment and Extension Application, December 9, 2008) and the NIRB as follows:
 - a. NIRB Part 1 form (January 22, 2009), and non-technical summary (January 26, 2009)
 - b. NIRB Part 2 form, (January 22, 2009)
 - c. Abandonment and Restoration Plan (January 22, 2009)
 - d. Spill Contingency Plan (January 22, 2009)
 - e. Correspondence with additional information and maps (January 29, 2009)
- 4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

- 5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams shall not be used for water withdrawal.
- 6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste

- 7. 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.
- 8. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of. All wastes shall be kept inaccessible to wildlife at all times.
- 9. The Proponent shall ensure that the disposal of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.

Fuel and Chemical Storage

- 10. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
- 11. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
- 12. The Proponent shall inspect and document the condition of all large fuel caches (in excess of 20 drums) on a weekly basis.
- 13. The Proponent shall ensure that appropriate spill kits are located at every fuel cache.
- 14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site.
- 15. The Proponent shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130

Wildlife

- 16. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
- 17. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
- 18. The Proponent shall 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.
- 19. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
- 20. 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.
- 21. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

- 22. 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.
- 23. 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.
- 24. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as airborne geophysics surveys, drilling or movement of equipment or personnel until such time as the caribou have passed.
- 25. The Proponent shall not construct, or operate any camp, or cache any fuel, near paths or crossings frequented by caribou.
- 26. The Proponent shall take all possible measures to avoid wildlife encounters. Any problem wildlife should be reported immediately to the Government of Nunavut, Department of Environment.
- 27. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques. It is recommended the Proponent review the safety precautions contained within "Safety in Grizzly and Black Bear Country" which can be downloaded from the following link: http://www.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm

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.

Drilling on Land

- 30. The Proponent shall not conduct any land based drilling or mechanized clearing within thirty-one (31) metres of the normal high water mark of a water body.
- 31. The Proponent shall not allow any drilling wastes to spread to the surrounding lands or water bodies.
- 32. If an artesian flow is encountered, the Proponent shall ensure the drill hole is immediately plugged and permanently sealed.
- 33. The Proponent shall ensure that all drill areas are constructed to facilitate minimizing the environmental footprint of the project area. Drill areas should be kept orderly with garbage removed daily to an approved disposal site.
- 34. The Proponent shall ensure that all sump/depression capacities are sufficient to accommodate the volume of waste water and any fines that are produced. The sumps shall only be used for inert drilling fluids, and not any other materials or substances.
- 35. The Proponent shall not locate any sump within thirty-one (31) metres of the normal high water mark of any water body. Sumps and areas designated for waste disposal shall be sufficiently bermed or otherwise contained to ensure that substances to do not enter a waterway unless otherwise authorized.

36. The Proponent shall ensure all drill holes are backfilled or capped at the end of the project. The Proponent shall backfill and restore all sumps to match the natural environment prior to the end of project.

Drilling on Ice

- 37. If drilling on lake ice, the Proponent shall ensure that any return water is non-toxic, and will not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment (CCME) 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 above 100 mg/L).
- 38. The Proponent shall ensure that drill muds and additives 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, or demonstrated to be non-toxic.
- 39. The Proponent shall ensure that all drill cuttings are removed from ice surfaces at the end of each day.

Camp

40. The Proponent shall not erect camps or store material on the surface ice of lakes or streams.

Restoration

- 41. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
- 42. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season.

Other

- 43. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
- 44. Any activity related to this application, and outside the original scope of the project as described in the application, will be considered a new project and should be submitted to the NIRB for Screening.

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:

Establishment of New Quarries

- 45. The Proponent shall clearly stake and flag pit and quarry boundaries so they remain visible to other land users.
- 46. The Proponent shall locate quarry/pit facilities so as to avoid all recreational sites and public use areas, and to protect unique geographical features and natural aesthetics.
- 47. The Proponent shall ensure there is no obstruction of natural drainage, flooding or channel diversion from quarry/pit access, stockpiles, or other structures or facilities.

- 48. The Proponent shall not deposit, nor permit the deposit of sediment into any water body. The Proponent shall ensure that silt fences/curtains and other appropriate erosion control measures are installed down gradient of any quarry activities.
- 49. The Proponent shall maintain an undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body that is of an adequate distance to ensure erosion control.
- 50. No disturbance of the stream bed or banks of any definable watercourse is permitted; clearing adjacent to streams or lakes shall be done without disturbing the organic layer.
- 51. The Proponent shall locate screening and crushing equipment on stable ground, at a location with ready access to stockpiles.

All-Weather Road and Ground Disturbance

- 52. 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. Overland travel of equipment or vehicles must be suspended if rutting occurs.
- 53. The Proponent shall implement suitable erosion and sediment suppression measures on disturbed areas before, during and after construction in order to prevent sediment from entering any water body.
- 54. All construction and road vehicles must be fitted with standard and well-maintained noise suppression devices and engine idling is to be minimized.
- 55. All construction materials including but not limited to gravel fill, equipment, and tools, as well as debris or sediment should be located a minimum of 30 metres from the high water mark, and in a manner that ensures that they do not enter any water body.
- 56. The Proponent shall use water or other non-toxic and biodegradable additives for dust suppression as necessary to maintain ambient air quality without causing water to pool or run off.

MONITORING AND REPORTING REQUIREMENTS

The Board has previously recommended the following:

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 (Department of Environment) contacts:

- a. Dustin Fredlund, Wildlife Manager, (867) 982-7441 or dfredlund@gov.nu.ca
- b. Allen Niptanatiak, Conservation Officer, (867) 982-7451 or kugwildlife2@qiniq.com
- c. Mathieu Dumond, Regional Biologist, (867) 982-7444 or mdumond@gov.nu.ca
- 2. The Proponent shall update its Spill Contingency Plan to include the up to date emergency contact numbers for the Government of Nunavut-Department of Environment (867-975-7700) and the Manager of Pollution Control and Air Quality (867-975-7748). In addition, remove Cindy Parker as the Environment Canada contact in Section 7.1.

In addition, the Board is recommending the following:

- 3. The Proponent shall update the Spill Contingency Plan for the project to reflect the proposed changes to on-site facilities. A spill kit, including shovels, barrels, absorbents, etc. should be readily available at all locations where fuel is being stored or transferred in order to provide immediate response in the event of a spill and should accommodate 1110% of the capacity of the largest fuel storage container.
- 4. The Proponent shall prepare an Abandonment and Restoration Plan for the road and airstrip as well as the proposed quarry sites. This Plan shall communicate the Proponent's reclamation objectives and procedures for the area affected by the excavation activities.
- 5. The Proponent shall provide confirmation that sampling and visual examinations of quarried material will be taken during excavation to confirm quarry/borrow materials remain suitable for road construction and there are no issues with acid-rock drainage. A report of these samples and examinations is to be sent to the NIRB at info@nirb.ca, and to Environment Canada, attention Paula Smith, Environmental Assessment Coordinator at Paula.C.Smith@ec.gc.ca.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board has previously recommended the following:

Please note that some components/activities associated with the current project proposal may have been screened previously by the NIRB under the following file numbers: 02EN013, 02EN021, 06QN027, 06QN028 and 06EN033. While information from these files were considered in the current screening, the NIRB noted that certain activities previously screened under these file numbers were not included in the current project proposal. These previous activities include quarry activities (06QN027, 06QN028) and winter haul roads (06QN027, 06QN028). If the proponent wishes to conduct any of these other activities in the future, the NIRB recommends that new applications be completed and forwarded to the appropriate authorizing agencies for review and to the NIRB for screening.

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

Indian and Northern Affairs Canada (INAC) impose mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require the Proponent to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to the location and area; type, location, capacity and operation of facilities; use, storage, handling and disposal of chemical or toxic material; wildlife and fisheries habitat; and petroleum fuel storage.

INAC should also 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.

The Board is currently also recommending the following:

Bear and Carnivore Safety

- 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.enr.gov.nt.ca/ live/documents/content/Bear Safety.pdf. 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/eng/pn-np/nu/auyuittuq/visit/visit6/d/i.aspx.
- 2. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of the Kitikmeot Region, Allen Niptanatiak, (867) 982 7451, ANiptanatiak@gov.nu.ca).

Incineration of Wastes

3. The Proponent review Environment Canada's "Technical Document for Batch Waste Incineration", available at the following link: http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1. The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

Species at Risk

4. The Proponent review Environment Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=5407909E-10F6-4AFE-ACDF-75B9E820B4A1. 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.

REGULATORY REQUIREMENTS

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

- 1. The Proponent is advised that the *Canadian Environmental Protection Act* (http://laws.justice.gc.ca/en/C-15.31/) lists calcium chloride (CaCl) as a toxic substance. The Proponent should assess alternatives (including biodegradable and non-toxic) to drill additives prior to the use of CaCl and try to avoid the use of CaCl.
- 2. The Fisheries Act (http://laws.justice.gc.ca/en/showtdm/cs/F-14//en).
- 3. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (http://www.canlii.org/ca/sta/n-28.8/whole.html).
- 4. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (http://laws.justice.gc.ca/en/showtdm/cs/M-7.01).
- 5. 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.
- 6. 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.
- 7. The *Nunavut Act* (http://laws.justice.gc.ca/en/showtdm/cs/N-28.6). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C.**
- 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.

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

9. The Proponent shall follow the Fisheries and Oceans Canada's (DFO) *Guidelines for the use of Explosives in or near Canadian Fisheries Waters* (http://publications.gc.ca/site/eng/82558/publication.html) and shall not conduct blasting if wildlife is within sight or hearing distance of the project area.

guidelines o	outlined in In	dian and Nor	thern Affairs	tion in accord Canada's <i>Nort</i> regu/crc-c-152	hern Land Use	e Guideline

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 March 16, 2012 at Arviat, NU.

Elizabeth Copland, Acting Chairperson

Enclosures: 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

Procedural History

On February 1, 2012 the Nunavut Impact Review Board (NIRB) received Sabina Gold and Silver Corp.'s (Sabina; "the Proponent") "Beechy Lake Area" project proposal from the Kitikmeot Inuit Association. No conformity determination was required from NPC because the project is located in an area with no approved land use plan in place.

Past File History

The original application for the project (NIRB File No.: 08EA084) was received from Indian and Northern Affairs Canada (INAC; now Aboriginal Affairs and Northern Development Canada or AANDC) on December 9, 2008. This application was associated with Dundee Precious Metals Inc.'s holdings in the Beechy Lake area, specifically, the Back River area and Wishbone Trend. The project proposal was screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA) and on March 3, 2009 the NIRB issued a 12.4.4 (a) screening decision to the Minister of INAC allowing the proposed exploration activities to proceed subject to project-specific recommended terms and conditions.

On October 28, 2009 the NIRB received official notice of the company's name change to Sabina Gold and Silver Corporation and distributed a letter acknowledging the name change and noting the NIRB file numbers that were affected by this change which included 08EN084.

On May 26, 2010 the NIRB received an application from INAC for a new Land Use Permit (N2010C0015) to replace a previously issued permit which was no longer eligible for renewal (N2004C0005) for the above mentioned project. After a thorough assessment of the application, the NIRB determined that the proposal was exempt from the requirement for screening pursuant to Section 12.4.3 of the NLCA, and reissued the enclosed March 3, 2009 screening decision report on June 17, 2010.

On July 5, 2010 the NIRB received an application from INAC for a new Land Use Permit (N2010C0016) to replace the previously issued Land Use Permit (N2006C0008) for the project. After a thorough assessment of the request for the new land use permit, the NIRB determined that the application was exempt from the requirement for screening pursuant to Section 12.4.3 of the NLCA, and reissued the enclosed March 3, 2009 screening decision report on August 5, 2010.

On December 7, 2010 the NIRB received an application from the NWB for an amendment to the Type B water license (2BE-GOO0510) 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 screening pursuant to Section 12.4.3 of the NLCA, and reissued the enclosed March 3, 2009 screening decision report on December 9, 2010.

On January 3, 2012 the NIRB received applications from AANDC for a new Class A Land Use Permit (N2012C0003), and from the Nunavut Water Board (NWB) for a Type B Water License (2BE-MLL----) for Sabina Gold and Silver Corp.'s (Sabina) "Beechy Lake Area" project proposal.

Current File History

The current project proposal by Sabina is for an amendment to its existing Land Use License (KIA File No. KTL304C017).

The NIRB determined that this request may result in a change to the original scope of the project and distributed the project proposal was distributed to community organizations in Bathurst Inlet, Kugluktuk, Cambridge Bay, Gjoa Haven, Taloyoak, and Kugaaruk, 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 March 5, 2012 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 March 5, 2012 the NIRB received comments from the following interested parties:

- Environment Canada (EC)
- Government of Nunavut Department of Executive & Intergovernmental Affairs (GN-EIA)

On March 8, 2012 the Kitikmeot Inuit Association submitted correspondence to the NIRB noting that in their opinion, the proposed amendments do not significantly alter the project.

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

ftp://ftp.nirb.ca/01-SCREENINGS/COMPLETED%20SCREENINGS

Project Activities

This project is located within the Kitikmeot region, approximately 160 kilometre (km) south-south east of the community of Bathurst Inlet, and 400 km south of Cambridge Bay. The Proponent indicated that it intended to conduct mineral exploration activities on claims within the "Wishbone" area (Wishbone, Del Lake, Lovechild, Mahna Mahna, and Malley claims) as well as the "Core Properties" area (Goose Lake, George Lake, Boot Lake and Boulder Pond claims). Exploration activities were proposed to occur from March 1, 2009 to September 30,

2009 and were expected to continue into 2010. The Proponent also proposed to conduct prospecting activities on the areas to the north and south of the "Wishbone" area during 2009, with potential drilling to follow in these areas during 2010 and 2011.

The original application, that was screened in accordance with Part 4, Article 12 of the NLCA, included the following project components/activities:

- Base metal mineral exploration; including prospecting, sampling, soil sampling, exploration trenching, diamond drilling (on land and on ice), and air and ground geophysics.
- Use of existing Goose Lake Camp site as the base of operations, with maximum capacity of 80 personnel.
- Helicopter assisted drill program, including daily transportation of field crew to drill sites.
- Potential use of snow machines around the Goose Lake area.
- Temporary storage of small fuel caches (up to 19 drums each) throughout the area to support exploring activities.
- Fuel storage at Goose Lake (6 bulk tanks) and George Lake (2 bulk tanks). Drummed fuel stored at George Lake.
- Storage of chemicals and hazardous materials at site.
- Water use for drilling purposes and camp use.
- Sewage, grey water and waste production related to camp operation.
- Incineration of sewage and combustible waste.
- Use of Goose Lake for site access via charter aircrafts; winter use of an ice-strip at Goose Lake.
- Potential use of esker strip at George Lake camp or gravel strip northwest of Goose Lake during breakup period in spring.

Additional project activities associated with the July 5, 2012 INAC application included:

- New LUP to authorize operations at the George Lake and Goose Lake camps, in addition to outlying areas of operation including claim groups at Boot Lake, Boulder Pond and Del Lake for a period of two years (commencing November 1, 2010).
- Establish small temporary camps and ice airstrips proximal to exploration areas on an "as-needed" basis; and,
- Store fuel and chemicals used for exploration activities at locations other than Goose Lake Camp, with established fuel and material storage at the George Lake Camp site.

The activities and components associated with the previous December 7, 2010 amendment application with the Nunavut Water Board included:

- Surface mapping, sampling and diamond drilling activities;
- Exploration program supported by Caterpillar and loader equipment, helicopter, snowmobile, and all-terrain vehicle;
- Transportation and storage of fuel, chemical, and hazardous materials;
- Establishment and use of winter roads and trails;
- Reclamation of drill sites and camp upon project completion;
- Increase water volume use to 297 cubic metres per day (m3/day);

- Include water use for purposes of water diversion, collection, dust management, and water crossings; and,
- Include open burning of untreated wood products such as paper, cardboard and lumber when this material is either too large for existing incinerators at Goose camps or is of a significant volume that it exceeds the capacity of the existing incinerator.

The Proponent is **currently** applying for an amendment to their Land Use License (KIA File No. KTL304C017) which includes the following **additional components or activities**:

- Increase camp size to a maximum of 120 personnel;
- Construction of an all-weather airstrip (previously an ice airstrip, screened under NIRB File No. 06EN033);
- Conversion of a previously permitted winter road/trail (screened under NIRB File No.06EN033) to an approximately one (1) kilometre all-weather road connecting the new all-weather airstrip to the Goose Camp;
- Conduct quarrying activities to supply construction materials for the all-weather airstrip and road connecting the airstrip to the Goose Camp, including:
- Establishment of three new quarry sources;
- Estimated total of up to 27,000 cubic metres of material required for construction of both the airstrip and road; and,
- Transportation between quarry sites and either the airstrip or road during snow/ice conditions only, via previously permitted winter corridors.

The proposed activities are to occur as soon as licensing is in place, and ongoing through 2013.

Appendix BSpecies 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 (http://www.sararegistry.gc.ca/default_e.cfm) to get the current status of a species.

Updated: January 2012

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
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	GN
Felt-leaf Willow	Special Concern	Schedule 1	GN
Peregrine Falcon	Special Concern (anatum- tundrius complex ³)	Schedule 1 - Threatened (anatum) Schedule 3 - Special Concern (tundrius)	GN
Short-eared Owl	Special Concern	Schedule 3	GN
Peary Caribou	Endangered	Schedule 1	GN
			Government

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Organization with Primary Management Responsibility ²
Barren-ground Caribou	Special	Schedule 1	GN
(Dolphin and Union	Concern		
population)			
Polar Bear	Special	Schedule 1	GN
	Concern		
Red Knot (<i>rufa</i> subspecies)	Endangered	Pending	EC
Red Knot (islandica	Special	Pending	EC
subspecies)	Concern		
Porsild's Bryum	Threatened	Pending	GN
Horned Grebe (Western	Special	Pending	EC
population)	Concern		
Grizzly Bear	Special	Pending	GN
	Concern		
Wolverine (Western	Special	Pending	GN
population)	Concern		
Atlantic Cod, Arctic Lakes	Special	No schedule	DFO
,	Concern		
Atlantic Walrus	Special	Pending	DFO
	Concern		
Beluga Whale	Threatened	Pending	DFO
(Cumberland Sound			
population)			
Beluga Whale	Endangered	Pending	DFO
(Eastern Hudson Bay			
population)			
Beluga Whale	Special	Pending	DFO
(Western Hudson Bay	Concern		
population)			
Beluga Whale	Special	Pending	DFO
(Eastern High Arctic –	Concern		
Baffin Bay population)			
Bowhead Whale	Special	Pending	DFO
(Eastern Canada – West	Concern		
Greenland population)			
Killer Whale (Northwest	Special	Pending	DFO
Atlantic / Eastern Arctic	Concern		
populations)			
Narwhal	Special	Pending	DFO
	Concern		

¹The 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.

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

Appendix C

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



INTRODUCTION

The Department of Culture, Language, Elders and Youth (CLEY) routinely reviews land use applications sent to the Nunavut Water Board, Nunavut Impact Review Board and the Department of Indian 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	Function	
	(See Guidelines below)	(See Guidelines below)	
۵)	Large seels prospecting	Archaeological/Palaeontological	
a)	Large scale prospecting	Overview Assessment	
	Diamond drilling for exploration or		
b)	geotechnical purpose or planning of	Archaeological/ Palaeontological	
	linear disturbances	Inventory	
	Construction of linear disturbances,	Archaeological/ Palaeontological Inventory or Assessment or Mitigation	
(2)	Extractive disturbances, Impounding		
c)	disturbances and other land		
	disturbance activities		

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

¹ P.C. 2001-1111 14 June, 2001

- 2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 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 CLEY 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 CLEY.
- 6) The permittee/proponent shall follow the direction of CLEY 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 INAC's directions will also be followed.
- 7) The permittee/proponent shall provide all information requested by CLEY 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 CLEY as part of the review of the land use application the permittee/proponent shall avoid the archaeological and/or palaeontological sites listed.
- 10) Should a list of recorded sites be provided to the permittee/proponent, the information is provided solely for the purpose of the proponent's land use activities as described in the land use application, and must otherwise be treated confidentially by the proponent.

LEGAL FRAMEWORK

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

Where an application is made for a land use permit in the Nunavut Settlement Area, and there are reasonable grounds to believe that there could be sites of archaeological importance on the lands affected, no land use permit shall be issued without written consent of the Designated Agency. Such consent shall not be unreasonably withheld. [33.5.12]

Each land use permit referred to in Section 33.5.12 shall specify the plans and methods of archeological site protection and restoration to be followed by the permit holder, and any other conditions the Designated Agency may deem fit. [33.5.13]

Palaeontology and Archaeology

Under the *Nunavut Act*², the federal government can make regulations for the protection, care and preservation of palaeontological and archaeological sites and specimens in Nunavut. Under 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 Nunavut Land Claims Agreement.

"palaeontological site" means a site where a fossil is found.

"fossil" includes:

Fossil means the hardened or preserved remains or impression of previously living organisms or vegetation and includes:

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

² s. 51(1)

³ P.C. 2001-1111 14 June, 2001

GUIDELINES FOR DEVELOPERS FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES IN THE NUNAVUT TERRITORY

(**NOTE:** Partial document only, complete document at: http://gov.nu.ca/cley/english/arch.html)

Introduction

The following guidelines have been formulated to ensure that the impacts of proposed developments upon heritage resources are assessed and mitigated before ground surface altering activities occur. Heritage resources are defined as, but not limited to, archaeological and historical sites, burial grounds, palaeontological sites, historic buildings and cairns Effective collaboration between the developer, the Department of Culture, Language, Elders and Youth (CLEY), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

CLEY is the Nunavut Government agency which oversees the protection and management of heritage resources in Nunavut, in partnership with land claim authorities, regulatory agencies, and the federal government. Its role in mitigating impacts of developments on heritage resources is as follows: to identify the need for an impact assessment and make recommendations to the appropriate regulatory agency; set the terms of reference for the study depending upon the scope of the development; suggest the names of qualified individuals prepared to undertake the study to the developer; issue an archaeologist or palaeontologist permit authorizing field work; assess the completeness of the study and its recommendations; and ensure that the developer complies with the recommendations.

The primary regulatory agencies that CLEY provides information and assistance to are the Nunavut Impact Review Board, for development activities proposed for Inuit Owned Lands (as defined in Section 1.1.1 of the Nunavut Land Claims Agreement), and the Department of Indian and Northern Affairs, 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, Language, Elders and Youth. 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.