

SCREENING DECISION REPORT Dundee Precious Metals Inc. Boulder Property

NIRB File No.: 06EN033

May 15, 2006

Hon. Jim Prentice Minister of Indian affairs and Northern Development Ottawa, ON

Vía email: minister@inac.gc.ca

Dear Hon. Prentice:

Authority:

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- 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;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned

Primary Objectives:

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

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.

The decision of the Board in this case 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;

Reasons for Decision:

NIRB's decision is based on specific considerations that reflect the primary objectives of the Land Claims Agreement. Our considerations in making this decision included:

- the impact of drilling activities on the ecosystem;
- disposal of drill cuttings and waste water;
- impact to water quality, aquatic habitat and wildlife and fish populations from chemicals, drill waste, drill fluids and potential fuel spills;
- storage and disposal of chemicals, fuel, garbage, sewage, and gray water, and impact of these on the ecosystem;
- the impact of noise from drilling activities and their disturbance to wildlife and traditional users of area;
- the potential impact of aircraft/helicopter on wildlife;
- the impact of campsite and equipment on terrain;
- the impact of exploration activities on archaeological sites or cultural landmarks in the area; and
- clean up/restoration of the camp site and drilling locations upon abandonment.

Terms and Conditions:

That the terms and conditions attached to this screening report will apply.

General

- 1. The Permittee shall maintain a copy of the Project Terms and Conditions at the sites of operation at all times.
- 2. The NIRB shall be notified prior to any changes in operating plans or conditions associated with this project.
- 3. Prior to commencing on-site activities, the Proponent shall submit to NIRB copies of all permits, licenses and authorizations required to undertake the project.
- 4. The Permittee shall submit to Board, at the end of the field season, a map showing the approximate location of drill sites.
- 5. The Permittee shall ensure that all on-site personnel, including any contractors, are familiar with these Terms and Conditions and any license or permit requirements.
- 6. This Permittee shall be aware they are required to register with the Government of Nunavut, Department of Environment Environmental Protection Service regarding the movement of any hazardous wastes through a Waste Manifest.

- 7. The Permittee shall file a report with the Board no later than March 31 of the year following the calendar year reported, which shall contain the following information:
 - a. A summary of activities undertaken for the year, including but not limited to the amount of drilling;
 - b. A work plan for the following year;
 - c. The results of environmental studies undertaken and plans for future studies;
 - d. Wildlife encounters and actions/mitigation taken and any results from a Wildlife Monitoring/Reporting Plan;
 - e. A summary of local hires and initiatives;
 - f. A summary of community consultations undertaken and the results;
 - g. A summary of site-visits by inspectors with results and follow-up actions;
 - h. A summary of site-visits with community members;
 - i. Site photos;
 - j. The number of take-offs & landings from an airstrip with approved flight path with date and location;
 - k. The number of helicopter touch-downs on the land with date, location and reason (provide reason unless confidential);
 - 1. Results of a Wildlife Monitoring/Reporting Plan;
 - m. Progressive reclamation work undertaken; and
 - n. A summary of how it has complied with all project Terms and Conditions.

Drill Sites

- 1. The Permittee shall not conduct any land based drilling within thirty (30) metres of the normal high water mark of a water body.
- 2. The Permittee shall ensure that all drill cuttings are removed from ice surfaces.
- 3. The Permittee shall ensure that drilling wastes do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.
- 4. The Permittee shall not use drilling muds or additives in connection with drill holes unless they are recirculated or contained such that they do not enter the water, or are certified to be non-toxic. Further, the Permittee is hereby informed that the Canadian Environmental Protection Act has recently listed CaCl as a toxic substance. If CaCl is to be used as a drill additive, the proponent shall ensure that all sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any waterbody.
- 5. The Permittee shall ensure that when "on-ice drilling", the return water released must be non-toxic, and 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 (ie. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).

- 6. The Permittee shall ensure that any drill cuttings and waste water that cannot be recirculated be disposed of in a properly constructed sump.
- 7. The Permittee shall ensure that the sump/depression capacity is sufficient to accommodate the volume of waste water and any fines produced to reduce additional impacts.
- 8. The Permittee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.
- 9. The Permittee shall ensure that disturbance of vegetation from deposit of drill fluids/cuttings is restricted to the area of the sump, and the ground prepared for revegetation upon abandonment.
- 10. The Permittee shall not use mechanized clearing within 30 meters of the normal high water mark of a watercourse, in order to maintain a vegetative mat for bank stabilization.
- 11. The Permittee shall, where flowing water from bore holes is encountered, plug the bore hole in such a manner as to permanently prevent any further outflow of water. The occurrence shall be reported to the Nunavut Water Board and Land Use Inspector within 48 hours.

Water

- 1. The Permittee 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.
- 2. The Permittee shall only use water from sources approved by the Nunavut Water Board.

Fuel and Chemical Storage

- 1. The Permittee shall update its Spill Contingency Plan on an annual basis. Once revised in the 2007 year, this plan must include the Government of Nunavut Department of Environment Waste Manifest for tracking hazardous wastes, as well as updated contacts reflecting, but not limited to, the current ownership/optioning rights, and relevant Environment Canada officers.
- 2. The Permittee shall locate fuel caches and other hazardous materials in such a manner as to prevent their release into the environment.
- 3. The Permittee shall ensure that fuel storage containers are not located within thirty (30) metres of the ordinary high water mark of any body of water. Further, secondary containment such as self supporting insta-berms shall be used when storing barrel fuel on location, rather than relying on natural depressions.
- 4. Fuel storage containers in excess of 4,000 litres capacity shall either be double-walled, self bermed construction, or diked with adequate storage capacity. An impermeable liner shall be used to ensure that no fuel escapes. The Permittee shall take all reasonable precautions to

prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface

- 5. All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills.
- 6. The Permittee shall examine all fuel and chemical storage containers daily for leaks. All leaks should be reported immediately.
- 7. The Permittee shall seal all container outlets except the outlet currently in use.
- 8. The Permittee shall mark all fuel containers with the Permittee's name.
- 9. The Permittee shall dispose of all combustible waste petroleum products by incineration and all ashes shall be removed from the site.
- 10. The Permittee shall ensure that all activities, including maintenance procedures and refueling, are controlled to prevent the entry of petroleum products or other deleterious substances into the water or onto the land.
- 11. The Permittee shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures as well as spill response procedures.
- 12. The Permittee shall immediately report **all** spills of petroleum and hazardous chemicals to the twenty-four (24) hour spill report line at (867) 920-8130. Spills shall also be reported to Environment Canada at (867) 920-5131.
- 13. The Permittee shall maintain a supply of spill kits, shovels, barrels, sorbents, and pumps on-site.
- 14. The Permittee shall use drip pans when refueling equipment and should consider having portable spill kits located at each drill site location.
- 15. Chemicals containing salts, which may attract wildlife to the site, should be stored so that they are inaccessible to wildlife.

Waste Disposal

- 1. The Permittee shall not discharge or deposit any refuse substances or other waste materials in any body of water, or on the banks thereof, which will impair the quality of the waters of the natural environment.
- 2. The Permittee shall not locate any sumps or areas designated for waste disposal within thirty (30) metres of the ordinary high water mark of any body of water. 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.

- 3. The Permittee shall use an approved incinerator for the disposal of combustible camp wastes. The Permittee shall incinerate all combustible and food wastes daily.
- 4. The Permittee shall keep all ash in a covered metal container until it is disposed of at an approved facility. The Permittee shall keep all non-combustible garbage and debris in a covered metal container until disposed of at an approved facility.
- 5. The Permittee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.
- 6. The Permittee shall ensure that any hazardous materials, including waste fuel and oil, receive proper treatment and are backhauled for disposal at an approved facility.

Structure & Storage Facilities

- 1. The Permittee shall not erect structures or store material on the surface ice of lakes or streams.
- 2. The Permittee shall locate all structures and storage facilities on gravel, sand or other durable land.

Camps

- 1. The Permittee shall locate all camps on gravel, sand, or other durable land.
- 2. The Permittee shall not erect camps or store material on the surface ice of lakes or streams.
- 3. The Permittee shall keep the camp clean and tidy at all times so as not to attract carnivores.

Physical Environmental

- 1. The Permittee shall ensure that the land use area is kept clean and tidy at all times.
- 2. The Permittee shall prepare the site in such a manner as to prevent rutting of the ground surface.
- 3. The Permittee shall not do anything that will cause erosion of the banks of any body of water on or adjacent to the land and shall provide necessary controls to prevent such erosion. The Permittee shall adopt such measures as required to control erosion by surface disturbance. Sediment and erosion control measures should be implemented prior to, and maintained during the work to prevent sediment entry into the water during a spring thaw.
- 4. The Permittee shall be required to undertake corrective measures in the event of any damage to the land or water as a result of the Permittee's operation.

- 5. The Permittee shall not remove any material from below the ordinary high water mark of any waterbody.
- 6. The Permittee 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.
- 7. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.

Wildlife

- 1. The Permittee shall ensure that there is no damage to wildlife habitat in conducting this operation.
- 2. The Permittee shall ensure that there is minimal disturbance to any nesting birds and wildlife in the area. Harassment of wildlife is prohibited. This includes persistently worrying or chasing animals, or disturbing large groups of animals.
- 3. Pursuant to the Migratory Bird Convention Act Regulations the Permittee shall not disturb or destroy the nests or eggs of migratory birds. The period from May 15 to July 31 is the general migratory bird breeding season. If nests containing eggs or young are encountered, the Permittee shall avoid these areas until nesting is complete and the young have left the nest.
- 4. The Permittee must be in compliance with the *Migratory Birds Convention Act* and *Migratory Birds Regulations* during all phases and in all undertakings related to the project.
- 5. The Permittee shall be aware that the Species at Risk Act (SARA), came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA, but as a matter of best practice, species listed on other Schedules of SARA and under consideration for listing should also be included in this type of assessment.

Species at Risk	Category of Concern	Schedule of SARA
Grizzly Bear	Special Concern	Pending
Wolverine (Western Population)	Special Concern	Pending
Peregrine Falcon (subspecies	Special Concern	Schedule 3
tundris)		
Short-eared Owl	Special Concern	Schedule 3

The Permittee should consult with the Government of Nunavut and Environment Canada to develop appropriate status reports, action plans, and management plans to minimize effects to these species from the project. The Permittee should also consider the development of appropriate monitoring for these species.

6. The Permittee shall follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional/Area Biologist or the Wildlife manager for information and

- advice on measures which should be taken to minimize the possibility of conflicts/interactions with bears or carnivores. Should the Permittee encounter carnivores, they are advised to contact the local or regional wildlife officers.
- 7. The Permittee shall ensure that aircraft pilots adhere to flight altitudes of greater than 610 m above ground level, unless there is a specific need for low-level-flying which does not to disturb wildlife. Concentrations of caribou and calves should be avoided by low-level aircraft at all times.
- 8. The Permittee shall ensure that aircraft maintain a vertical distance of 1000m and a horizontal distance of 1500m from groups/flocks of birds.
- 9. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.
- 10. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
- 11. The Permittee shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any drilling operation within 5 km, of any "designated caribou crossing". The regional biologist should be contacted for known crossings.
- 12. From May 15 to July 15, the Permittee shall cease activities that interfere with caribou migration or calving, such as the movement of equipment, drilling activities and ATV or snowmobile use until the caribou and their calves have vacated the area.
- 13. The Permittee shall ensure that during the presence of caribou and muskox within sight and sound of a camp that all personnel will remain quietly in camp.
- 14. The Permittee shall not conduct any activity associated with the land use operation if critical periods of wildlife cycles are observed (eg. caribou migration, calving, fish spawning or raptor nesting).
- 15. That the Permittee shall ensure that there is no hunting by employees of the company or any contractors hired unless proper Nunavut authorizations have been obtained.
- 16. The Permittee shall ensure that there is no fishing by employees of the company or any contractors hired unless proper permits are obtained.
- 17. The Permittee shall not feed wildlife.
- 18. The Permittee shall contact the Kitikmeot Regional Biologist to identify areas which should be avoided. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft at all times.

- 19. The Permittee shall ensure compliance with Section 36 of the Fisheries Act which requires that no person shall deposit or permit the deposit of a deleterious substance on any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
- 20. The harmful alteration, disruption or destruction of fish habitat is prohibited under Section 35 of the Fisheries Act. No construction or disturbance of any stream/lake bed or banks of any definable watercourse, is permitted unless authorized by DFO.
- 21. The Permittee shall not detonate explosives within fifteen (15) metres of any body of water which is not completely frozen to the bottom.

Archaeological Sites

- 1. The Permittee/ Licensee shall keep a distance of 30 meters away from the known archaeological sit within the project area (See attached letter from GN-CLEY). An archaeological site is defined as a site or work within the Nunavut Settlement Area of archaeological, ethnographical or historical importance, interest or significance or a place where an archaeological specimen is found, and includes explorers' cairns.
- 2. The Permittee/ Licensee shall follow all terms and conditions for the protection and restoration of archaeological and palaeontological resources as outlined by GN-CLEY in the attached letter.

Reclamation

- 1. The Permittee shall advise NIRB and the Land Use Inspector in writing at least 15 days prior to the completion of activities.
- 2. The Permittee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
- 3. The Permittee shall remove all empty barrels from its exploration sites as soon as possible in a progressive manner and shall ensure that all barrels are removed from the land by the end of each field season. Empty barrels shall be disposed of at an approved facility.
- 4. The Permittee shall complete all clean-up and restoration of the lands used prior to the expiry date of the permit.
- 5. The Permittee shall undertake ongoing restoration for any land which is no longer required for the Permittee's operation on the land.
- 6. The Permittee shall plug or cap all bore holes and cut off any drill casings that remain above ground to ground level upon abandonment of the operation.

Other Recommendations

- 1. NIRB would like to encourage the proponent to hire local people and services, to the extent possible.
- 2. NIRB strongly advises proponents to consult with local residents regarding their activities in the region, and to do community consultation on the project to keep the communities informed.
- 3. NIRB would like to encourage the proponent to continue baseline monitoring.
- 4. Any amendment requests deemed by NIRB to be outside the original scope of the project will be considered a new project.

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 ___May 15, 2006____ at Cambridge Bay, NU

Elizabeth Copland, A/Chairperson

Eppland.



SCREENING DECISION REPORT NIRB FILE NO.: 08EA084

<u>INAC File No.</u>: N2006C0008 <u>KIA File No.'s</u>: KTL304C017, KTL304C018, KTL204C012, KTL204C020 & KTL107C018 **NWB File No.'s**: 2BE-GOO0510 & 2BE-GEO0210

March 3, 2009

Honourable Chuck Strahl Minister of Indian and Northern Affairs Canada Indian and Northern Affairs Canada Gatineau, QC

Via email: strahl.c@parl.gc.ca

Re: <u>Screening Decision for Dundee Precious Metals Inc.'s "Beechey Lake Area Mineral Exploration"</u> project proposal, NIRB File No. 08EA084

Dear Honourable Minister:

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

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 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- 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;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

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. 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), including 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.

Monitoring and Reporting Requirements

In addition, the Board is recommending 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.

Other NIRB Concerns and Recommendations

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.

Regulatory Requirements

The Proponent is also 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.

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 3rd, 2009 at Sanikiluaq, NU.

Lucassie Arragutainaq, A/Chair

Appendix A Procedural History and Project Activities

Procedural History

On December 9, 2008 the Nunavut Impact Review Board (NIRB or Board) received an application for a Land Use Permit extension and amendment for Dundee Precious Metals Inc.'s (Dundee) "Beechey Lake Area Mineral Exploration" project from Indian and Northern Affairs Canada (INAC). The NIRB assigned this project proposal file number 08EA084. The project is located in the Kitikmeot region and does not require a conformity determination from the Nunavut Planning Commission.

After undertaking a preliminary completeness check, the NIRB determined that Dundee's project proposal did not contain sufficient information for the NIRB to conduct an environmental screening. On December 17, 2008 the NIRB sent formal correspondence to Dundee, requesting submission of the required information by January 6, 2009. In email correspondence to NIRB dated January 5, 2009, Dundee requested an extension to the deadline for providing the requested information, to January 21, 2009. The NIRB deemed this request reasonable and subsequently granted the extension.

On January 16, 2009, the NIRB requested additional time from the Minister of INAC to complete the screening of this project proposal. By January 26, 2009, Dundee provided all the required information for the NIRB to conduct the environmental screening.

This application was distributed to the communities of Bathurst Inlet, Cambridge Bay, Gjoa Haven and Taloyoak, to interested Federal and Territorial Agencies, and Inuit Organizations. NIRB requested that interested Parties review the application and provide NIRB with comments by February 23, 2009 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 socioeconomic 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 February 24, 2009, NIRB received comments from the following interested Parties (see Comments and Concerns):

- Government of Nunavut, Department of Culture, Language, Elders and Youth (GN-CLEY)
- Environment Canada (EC)
- Kitikmeot Inuit Association (KIA)
- 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/

Project Activities

The project is located in the Kitikmeot region approximately 160 kilometre (km) south-south east of the community of Bathurst Inlet and approximately 400 km south of Cambridge Bay. The proposed project activities include mining exploration on claims within the Back River Area on both Crown Land and Inuit Owned Land (IOL). The claims will include the "Wishbone" area, (Wishbone, Del Lake, Lovechild,

Mahna Mahna, and Malley claims) and the "Core Properties" area (Goose Lake, George Lake, Boot Lake and Boulder Pond claims).

Exploration activities are proposed to occur March 1, 2009 to September 30, 2009 and continue in 2010. Dundee proposes to prospect areas to the north and south of the "Wishbone" area in 2009, once the areas have been awarded and appropriately defined by the Mining Recorder. These claim areas will be considered as part of the "Wishbone" area. Potential drilling may follow in 2010 or 2011 in these areas.

The project activities include:

- 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 snowmachines 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, greywater and waste production related to camp operation.
- Incineration of sewage and combustible waste.
- Use of Goose Lake for site access via charter aircrafts. In winter, an ice-strip will be used on Goose Lake.
- Potential use of esker strip at George Lake camp or gravel strip northwest of Goose Lake during breakup period in spring.

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: January 3, 2007

			Government Organization
	COSEWIC		with Lead Management
Species at Risk	Designation	Schedule of SARA	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 (Eastern High Arctic –	Special Concern	Pending	DFO
Baffin Bay population)			
Bowhead Whale	Threatened 4	Pending	DFO
(Hudson Bay-Foxe Basin population)			
Bowhead Whale	Threatened 4	Pending	DFO
(Davis Strait-Baffin Bay			
population)			
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.

⁴The "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 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.

1 s. 51(1)

2 P.C. 2001-1111 14 June, 2001

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:

- (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.