

NIRB File No. 11YN054

January 10, 2012

David Mate Chief Geologist Canada-Nunavut Geoscience Office 626, Tumiit Plaza Suite 202, Box 2319 Iqaluit, NU X0A 0H0

Via email: dmate@nrcan.gc.ca

Re: Notice of Part 4 Screening for Canada—Nunavut Geoscience Office – David Mate's "Hall Peninsula Integrated Geoscience Project" project proposal

Dear David Mate:

On December 13, 2011 the Nunavut Impact Review Board (NIRB or Board) received the Canada—Nunavut Geoscience Office's "Hall Peninsula Integrated Geoscience Project" proposal from the Nunavut Research Institute (NRI). The NIRB has assigned this project proposal file number 11YN054 - please reference this file number in related future correspondence.

The proposed project is located in the South Baffin Region approximately 100 kilometres north of Iqaluit, with some activities to potentially occur within the city limits of Iqaluit. The Canada-Nunavut Geoscience Office is proposing to conduct a series of programs relating to areas covered by six NTS map sheets in order to improve mapping and better understand the potential for gold, precious metals, base metals and rare earth elements in the region. The proposed project Intends to upgrade the existing geologic map coverage by conducting regional bedrock mapping, conduct an assessment of mineral potential and the tectonic environment, map and sample surficial materials to determine ice flow history and geochemistry, and conduct permafrost and terrain stability research.

The program is proposed to take place from June 1 to August 31 for both the 2012 and 2013 seasons with the potential for a 2014 field season.

The proposed project activities and components include:

- Establish a temporary camp for up to 25 persons in different locations for the 2012 and 2013 seasons. Camps to be made up of tents for personnel as well as approximately 9 tents to serve as a base camp;
- Fly in camp equipment and fuel each year and fly out at the end of each season;
- Supplies and personnel to be transported to and from site via Twin Otter aircraft approximately every two weeks, utilizing a temporary airstrip;
- Approximately 25-50 cubic metres of water to be pumped from a local water source for use during operations;
- Grey water and sewage to be disposed of in pits dug approximately 35 metres from any water body and covered with fill on a regular basis;
- Sewage will be disposed of in pits to be dug approximately 50 metres from any water source and downstream/downslope from the potable water source;
- Non-combustible waste will be shipped out of the camp and disposed of at the City of Iqaluit municipal waste facility;
- Combustible waste will be incinerated in empty fuel drums equipped with a portable industry standard incinerator and the ashes will be cooled and buried;
- A fuel cache will be established in a self-supporting insta-berm and contain no more than 220 drums of aviation fuel, 3 drums of diesel, 1 drum of gasoline and 10 100 pound propane tanks with spill kits;
- One Honda ATV will be located on site for local transportation;
- Two helicopters will be stationed at the camp to drop personnel to transect locations/study sites where they will walk and return personnel to camp daily;
- Fist-sized rocks will be collected with a hammer, soil samples by shovel, and permafrost
 cores using a hand drill. These collected samples will be sent to a laboratory for further
 analysis; and,
- Ground temperature stations may be installed in order to monitor permafrost temperatures.

All documents received and pertaining to this project proposal can be obtained from the NIRB's ftp site at http://ftp.nirb.ca/01-SCREENINGS/ACTIVE%20SCREENINGS/11YN054-NrCan-Hall%20Peninsula%20Integrated%20Geoscience%20Project/ including:

- *NRI application form*
- Maps
- Non technical Project Proposal summary in English
- Non technical Project Proposal summary in Inuktitut
- Appendix A

Pursuant to Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA), the NIRB shall proceed to screen this project proposal. The NIRB may request additional information at any time during the process. The NIRB will copy the Canada-Nunavut Geoscience Office on screening process related correspondence and upload related documents to the above ftp site for public access.

Be advised that the NIRB is copying parties and municipalities potentially affected by this project proposal. Interested parties are encouraged to comment directly to the NIRB by January 20, 2012.

The NIRB would like parties to provide comments regarding:

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

Please note that *proposed* project-specific terms and conditions, should the project proceed, have been attached for consideration and comment (Appendix A).

The Board requests that interested parties submit comments to the NIRB via email at info@nirb.ca or via fax at (867) 983-2594.

If you have any questions regarding the NIRB's Screening of this proposed project, please feel free to contact me directly at (867) 983-4619 or kgillard@nirb.ca.

Sincerely,

Kelli Gillard B.Sc., P.Ag.

Technical Advisor

Nunavut Impact Review Board

cc: Distribution List

Mosha Cote, Nunavut Research Institute

Jeff Mercer, Aboriginal Affairs and Northern Development Canada

Robert St. Eloi, Qikiqtani Inuit Association Phyllis Beaulieu, Nunavut Water Board

Attachments: Appendix A – *Proposed* Project Specific Terms and Conditions

Enclosures (2): Comment Forms (English and Inuktitut)

Appendix A

Proposed Project Specific Terms and Conditions

The following is a list of project-specific terms and conditions which, should the project proceed, may be recommended to be attached to any approval.

General

- 1. Canada-Nunavut Geoscience Office David Mate (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 the NRI (NRI application December 17, 2011; Application Appendix A).
- 4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water Use

- 5. The Proponent shall not extract water from any fish-bearing water body 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 should not be used for water withdrawal unless approved by the Nunavut Water Board.
- 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 Disposal/Incineration

- 7. The Proponent shall incinerate all combustible wastes daily and dispose of ash by burial beneath no less than one (1) metre of compacted soil. Non-combustible wastes shall be removed 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 at an approved facility. All such wastes shall be kept inaccessible to wildlife at all times.
- 9. The Proponent shall ensure that the incineration of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.

Fuel Storage

- 10. The Proponent shall ensure that storage of fuel and re-fuelling of project equipment is conducted at 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 in such a manner that they are inaccessible to wildlife.
- 12. The Proponent shall use adequate secondary containment or a surface liner (e.g. self-supporting insta-berms and fold-a-tanks) when storing barrelled fuel at cache. Appropriate

- spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) must be readily available during any transfer of fuel, as well as at fuel cache.
- 13. The Proponent shall inspect and document the condition of the fuel cache on a weekly basis. All fuel containers must be clearly marked with the Proponent's name and examined for leaks immediately upon delivery.
- 14. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
- 15. The Proponent shall ensure that all 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 - General

- 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 ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.

Migratory Birds and Raptors Disturbance

19. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metre buffer around the nests). If active nests of any birds are discovered (i.e. with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.

Aircraft Flight Restrictions

- 20. 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.
- 21. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
- 22. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.
- 23. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.

Caribou Disturbance

- 24. The Proponent shall cease activities that may interfere with the migration or calving of caribou, until the caribou have passed or left the area.
- 25. 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 or movement of equipment or personnel until such time as the caribou have passed.
- 26. During the period of May 15 to July 15, when caribou are observed within 1 km of project operations, the Proponent shall suspend all operations, including low-level over flights, and all-terrain vehicles outside the immediate vicinity of the camps. Following July 15, if caribou cows or calves are observed within 1 km of project operations, the Proponent shall also suspend all operations in the vicinity, including low-level over flights and all-terrain vehicles, until caribou are no longer in the immediate area.

Ground Disturbance

27. 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.

Temporary Camps

28. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.

Restoration of Disturbed Areas

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

Other

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