SCREENING DECISION

<u>Date:</u> February 26,1998

Thomas Kudloo Chairperson Nunavut Water Board

Dear Mr. Kudloo:

RE: Screening Decision of the Nunavut Impact Review Board (NIRB) on Application:
NIRB 97W03N058 NWB2GOO KIA #I97C117
Kit Resources - Goose Lake Mineral Exploration and Bulk Sample

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 is referenced in the screening section 12.4.4 (a) 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 helicopter and drilling activities and their disturbance to wildlife
- the movement of vehicles and equipment and the impact on wildlife;
- the movement of vehicles and equipment on terrain;
- the impact of exploration activities on archaeological sites or cultural landmarks in the area;
- clean up/restoration of the camp site and drilling locations upon abandonment;
- the cumulative effects from all the human usage activities that are occurring in the Goose Lake and George Lake Areas.

Terms and Conditions:

- That the terms and conditions attached to this screening report will apply.
- That the terms and conditions any previous water licences or land use permits apply.

Drill Sites

- 1. The Permittee shall not conduct drilling within thirty (30) metres of the normal high water mark of a water body.
- 2. The Permittee shall conduct any the lake-based winter drilling, in accordance with the Interim Guidelines for On-Ice drilling. A copy of these Guidelines can be obtained from Mr. Steve Harbicht, Head of Assessment and Monitoring, Environment Canada in Yellowknife at (867) 669-4733.
- 3. The Permittee shall not use drilling muds or additives in connection with holes drilled through the lake ice unless they are recirculated or contained such that they do not enter the water, or are certified to be non-toxic.
- 4. The Permittee shall remove all drill cuttings from the ice. All drill cuttings and waste water should be deposited into an approved sump site.
- 5. The Permittee shall ensure that any return water and sludge that cannot be re-circulated be disposed of in a properly constructed sump or an appropriate natural depression that does not drain into a waterbody.
- 6. The Permittee shall ensure that any return water released to the lake must be non-toxic and will not result in an increase in total suspended solids in the immediate receiving waters of the lake above Canadian Council of Ministers for the Environment Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10mg/L for lakes with background level under 100mg/L, or 10% for those above 100mg/L).

- 7. The Permittee shall ensure that the sump/depression capacity be sufficient to accommodate the volume of waste water and any fines that are produced so that there will be no 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.

Water

- 10. The Permittee shall ensure that fresh water for domestic purposes is obtained from Goose Lake and that the volume does not exceed 100 cubic metres per day.
- 11. 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.
- 12. The Permittee shall conduct water quality sampling and analysis in accordance with methods standards as specified by the Nunavut Water Board (NWB).
- 13. The Permittee shall construct all retention/settling pond structures as approved by the NWB.
- 14. The Permittee shall direct all water generated from the bulk sample program towards a sump and shall monitor the discharge to meet specific parameters as set by the NWB.

Fuel and Chemical Storage

- 15. 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.
- 16. The Permittee shall ensure that any chemicals, fuels or wastes associated with the project do not spread to the surrounding lands or enter into any water body.
- 17. The Permittee shall take all reasonable precautions to prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface.
- 18. The Permittee shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container.
- 19. The Permittee shall examine all fuel and chemical storage containers for leaks. All leaks should be prepared immediately.
- 20. The Permittee have a spill prevention and contingency place prior to the commencement of the proposed project. In developing these plans the Permittee should follow the *NWT Spill Contingency Planning and Reporting Regulations* and the Guidelines for the Management of Hazardous Wastes. These documents are available from the Department of Resources Wildlife and Economic Development (RWED), GNWT ad (867) 920-8069.
- 21. The Permittee shall immediately report all spills of petroleum and hazardous chemicals in accordance the Government of the NWT Spill Report to the twenty four (24) hour spill report line at (867) 920-8130 and to the KIA Land Manager at (867) 882-3310.

- 22. 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.
- 23. Any areas designated for waste disposal shall not be located within thirty (30) metres of the ordinary high water mark of any body of water, unless otherwise authorized.
- 24. The Permittee shall construct a sump to contain all greywater discharged and shall ensure drainage is away from any waterbody.
- 25. The Permittee shall incinerate all combustible and food wastes as approved the land use inspector to eliminate potential for wildlife problems created by the attraction of wildlife to garbage.
- 26. The Permittee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.
- 27. The Permittee shall not bury any metal wastes.
- 28. The Permittee shall dispose of all toxic or persistent substance in a manner approved by the land use inspector.

Wildlife

- 29. The Permittee shall ensure that there is no damage to wildlife habitat in conducting this land use operation.
- 30. The Permittee use the latest bear detection and deterrent techniques (i.e. electric fencing) to minimize man-bear interactions and shall report any Man-Bear Interactions to the nearest GNWT Renewable Resource Officer or contact (867) 873-7181.
- 31. The Permittee shall ensure that aircraft pilots adhere to recommended flight altitudes of greater than 300 m above ground level as to not disturb wildlife. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by helicopters, fixed-winged aircraft and motorized ground-transportation vehicles at all times.
- 32. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
- 33. The Permittee shall cease activities that may interfere with migration or calving, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.
- 34. The harmful alteration, disruption or destruction of fish habitat is prohibited under the *Fisheries Act*. No construction or disturbance of any stream/lake bed or banks of any definable watercourse is permitted unless authorized by DFO.
- 35. That the Permittee shall ensure that there is no hunting by employees of the company or any contractors hired.
- 36. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.

Environmental

- 37. The Permittee shall ensure that the land use area is kept clean and tidy at all times.
- 38. The Permittee shall prepare the site in such a manner as to prevent damage to the ground surface.

- 39. The Permittee shall be required to undertake any corrective measures in the event of any damage to the land as a result of the permittee's operation.
- 40. The Permittee shall not use any equipment except of the type, size and number that is listed in the accepted application.
- 41. 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.
- 42. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.
- 43. With respect to access and tote road construction, pad construction or other earthworks, the deposition of debris or sediment into any water body is prohibited. These materials shall be disposed of above the high water mark in such a fashion that they do not enter the water.

Camp

- 44. The Permittee shall not erect camps or store material on the surface ice of lakes or streams.
- 45. The Permittee shall locate all camps on gravel, sand or other durable land.

Archaeological Sites

- 46. The Permittee shall not conduct any land use operation within thirty (30) metres of a known or suspected archaeological site or burial ground. An archeological 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.
- 47. The Permittee shall not operate any vehicle over a known or suspected archaeological site
- 48. The Permittee shall not remove or displace any object or artifact of archaeological or historical significance.
- 49. The Permittee shall contact the land use inspector and the Arctic Archaeologist at the Prince of Wales Northern Heritage Centre (867-873-7551) should an archaeological or historical site be disturbed by any land use activity or support activity. The Permittee shall proceed on the stipulation/advice of the Archaeology Programme.
- 50. The Permittee shall immediately cease any activity which disturbs an archaeological or historical site, encountered during the course of a land use operation, until permitted to proceed with the authorization of the Archaeology Programme, PWNHC.
- 51. The Permittee shall follow the advisement of the Archaeology Programme, PWNHC in restoring disturbed archaeological sites to an acceptable condition. The permittee shall assume the costs for this procedure.
- 52. The Permittee shall provide information to the PWNHC about each archaeological or historical site encountered by any land use activity or support activity, by completing the attached form.
- 53. The Permittee shall ensure that all members of the land use operation are aware of these concerns concerning archaeological and historical resources.
- 54. The Permittee shall avoid the known archaeological sites in the areas as listed in Attachment

Reclamation

- 55. The Permittee shall submit a restoration/abandonment plan to KIA and to the NWB for approval by their boards.
- 56. The Permittee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
- 57. The Permittee shall backfill and restore all sumps back to the natural surrounding contours of the land prior to the expiry date of this permit.
- 58. The Permittee shall undertake ongoing restoration for any land or improvements which are no longer required for the Permittee's operation on the land.
- 59. The Permittee shall commence and foster revegetation of all parts of the land used, within one year of the completion of the operation. Methods should include scarification and transplanting of native species from other areas.

Monitoring

- 60. The Permittee shall monitor the impacts to wildlife by maintaining a log of wildlife observed and their behavior (i.e. avoidance, segregation, disturbance/stress, alteration of migration patterns or movements by wildlife) and shall present these reports to RWED and KIA and NIRB annually.
- 61. That the Permittee continue conducting baseline studies in the Goose Lake Area including:
 - a) continuing with the ABA and other metallurgical analysis and implementing an acid rock generation potential monitoring plan for the ore and waste rock generated by the extraction of the bulk sample
 - b) water quality monitoring should include and analysis for blasting residue in the form of ammonia, baseline values for total cyanide should be determined to support any proposed future development, and a greater emphasis should be placed on water quality variable already exceeding Canadian Council Ministers of the Environment Water Quality Guidelines for freshwater aquatic life and drinking water (e.g. pH, as well as total Al, Cd, Cr, Cu, Pb, Hg). The federal Department of Environment (DOE) and Indian and Northern Affairs Canada have water quality and quantity monitoring sites that would be of benefit in compiling baseline data in support of future proposed developments. For further information contact Mr. Dough Halliwell, Regional Aquatic Quality Officer, Atmospheric Environment Branch at (867) 669-4741 in Yellowknife.
 - c) sediment quality sampling in stream bottoms and (age-dated) lake sediment coring of lake bottoms at a low spatial density and temporal frequency. The analysis should include particle size distribution, nutrients, total trace metal and organics at Goose Lake, George Lake, downstream water bodies and a reference lake.
- 62. That the Permittee conduct a cumulative effects assessment of the Goose and George Lakes area identifying the potential effects of all past, present and proposed future activities in the area.

Other Recommendations

- 1. NIRB would like to encourage the proponent to hire local people and services, to the extent possible, and to continue consult with local residents regarding their activities in the region.
- 2. Kit Resources is encouraged to adopt the NWT Bird Checklist Survey at their camps as a means of collecting information on local bird species in addition to bird surveys for collecting baseline data. For further information contact Ms. Vicki Johnston, Eastern Arctic Habitat Biologist, at Environment Canada (867) 669-4767.
- 3. 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 _	at Cambridge Bay, NT
	Larry Pokok Aknavigak, Chairperson

Attachment: NIRB Screening Form