

NIRB File No.: 07EN048, 05EN046, EX61

KIA File No.: KVL308C03

February 26, 2008

Jose Kusugak, President Kivalliq Inuit Association Rankin Inlet, NU

Via email: jkusugak@kivalliqinuit.ca

Re: Application Exempt from Screening: Terrane Metals Corporation Maze Lake Project

Dear Mr. Kusugak;

On February 18, 2008 the Nunavut Impact Review Board (NIRB) received an application from the Kivalliq Inuit Association (KVL308C03) for Laurentian Goldfields Ltd. to conduct exploration work on Terrane Metals Corporation's Maze Lake property. Be advised that this project proposal was previously screened (NIRB File # 07EN048 and 05EN046) and the NIRB's screening decision was to allow the project proposal to proceed for **two years** subject to specific terms and conditions (attached).

Please note that Section 12.4.3 of the Nunavut Land Claims Agreement (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.

The NIRB is of the understanding that based on the Kivalliq Inuit Association application KVL308C03 received on February 18, 2008 that the project components have not changed, only the operator has changed to Laurentian Goldfields Ltd. and that the exceptions in 12.4.3 (a) and (b) do not apply. Therefore this application is **exempted from screening until 2009**, since the activities therein are subject to the terms and conditions recommended in the July 03, 2007 and May 30, 2005 Screening Decision Reports (attached).

If you have any questions or concerns, feel free to contact NIRB's Manager of Environmental Administration, Leslie Payette at lpayette@nirb.ca or (867) 983-4611.

Best regards,

Stephanie Autut Executive Director

Cc: Phyllis Beaulieu, NWB (<u>licensing@nunavutwaterboard.org</u>)

 $Geoff\ Newton,\ Laurentian\ Goldfields\ Ltd.\ (\underline{gnewton@laurentiangoldfields.com})$

Attachments: NIRB File #07EN048 Terms and Conditions

May 30, 2005 NIRB Screening Decision Report (05EN046)



NIRB File No.: 07EN048 KIA No. KVL307C04

July 10, 2007

Mr. Tongola Sandy President, Kivalliq Inuit Association

c/o Luis Manzo Director of Lands, Kivalliq Inuit Association Rankin Inlet, Nunavut

Via email: lmanzo@kivalliqinuit.ca

Re: <u>Terms and Conditions for Terrane Metals Corp.'s Renewal Request with Kivalliq Inuit Association for the Maze Lake Project</u>

Dear Mr. Tongola Sandy:

On June 18, 2007 the NIRB wrote to Terrane Metals Corporation proposing to re-issue the terms and conditions contained in the May 30, 2005 Screening Decision Report (attached) for this renewal application. The NIRB also copied interested Parties and municipalities most affected by this project and invited them to provide comments on this proposed renewal directly to the NIRB. Comments were received from Government of Nunavut – Department of Environment (GN-DOE) and the Beverly Qamanirjuaq Caribou Management Board (BQCMB), and can be viewed online at http://ftp.nunavut.ca/nirb/NIRB_SCREENING/02-DISTRIBUTION/COMMENTS/.

As an agency responsible for the protection of terrestrial wildlife in Nunavut, GN-DOE has expressed concern with the potential for adverse effects to caribou related to this project and has recommended that the Access to Inuit Owned Lands permit be limited to a period of two years only. This would allow GN-DOE to review the project in subsequent years with an improved knowledge of caribou herd population trends and the potential impact of exploration activities.

In addition to the DIAND Caribou Protection Measures (Keewatin Regional Land Use Plan, Appendix H, download at http://npc.nunavut.ca/eng/regions/Keewatin/getplan.html), GN-DOE recommended that further restrictions during the months of April to August be applied to adequately mitigate adverse impacts to the Qamanirjuaq caribou herd. Also, during these months, DOE Conservation Officers will be inspecting this site and others within, or close to, caribou calving and post-calving grounds randomly twice a month to ensure compliance with these measures.

Please be advised that the NIRB is re-issuing the terms and conditions contained in the attached May 30, 2005 Screening Decision Report to this project proposal. NIRB is also recommending that the following Additional Terms and Conditions, based on GN-DOE concerns, be incorporated into the Access to Inuit Owned Lands permit for this project:

Recommended Additional Terms and Conditions

- 1. Terrane Metals Corp (the Permittee or Proponent) shall ensure that all on-site personnel are aware of, and abide by all terms and conditions stated in the May 30, 2005 Screening Decision Report for this project. In the event that these Additional Terms and Conditions are in conflict with those stated in the May 30, 2005 Screening Decision Report, the Additional Terms and Conditions shall prevail.
- 2. During the period of May 15 to July 15, the Proponent shall abide by the DIAND Caribou Protection Measures (Keewatin Regional Land Use Plan, Appendix H, download at http://npc.nunavut.ca/eng/regions/Keewatin/getplan.html).
- 3. Outside of the May 15 July 15 time period, the Proponent must employ fully independent wildlife monitors to determine when caribou cows and calves are in the project area.
- 4. In August and April, and other months deemed necessary based on the results of monitoring, the Proponent shall undertake high altitude (300 m) aerial reconnaissance to determine whether caribou cows and calves are present within a 20 km radius of the project area, or if caribou are migrating through the project area. The reconnaissance shall be conducted 3 times a month (one at the start, one in the middle and one at the end of April and August). If caribou are observed the Proponent will suspend all project activities within 10 km of the sightings.
- 5. At the end of each month from April to August, the Proponent shall submit a daily logbook of caribou reconnaissance to the Government of Nunavut Department of Environment (GN–DOE).
- 6. The Proponent shall ensure that unless there is a specific requirement for low-level flights, aircraft activities should maintain a minimum altitude of 610 metres above ground level in places where there occurrences of wildlife.
- 7. The Proponent shall not operate ground, air or water based mobile equipment within 10 km of a 'designated caribou crossing'.
- 8. The Proponent shall submit a Wildlife Monitoring/ Reporting Plan to the GN–DOE no later than January 31, 2008. This plan will include location (i.e. latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of the animals if possible. This plan will also include a detailed account of how the Proponent has ensured avoidance of human— wildlife conflicts, and implemented wildlife deterrent, human safety and waste management strategies.
- 9. If a defense kill of wildlife does occur, the Proponent must record the location of the carcass and notify the local conservation officer.
- 10. The Proponent shall submit an updated Spill Contingency Plan to GN-DOE and the NIRB prior to commencement of project activities.
- 11. The Proponent shall ensure the use of critical grade mufflers for all drilling activities.

If you have any questions or concerns, feel free to contact NIRB's Assistant Technical Advisor, Ryan Barry at (867) 983-4625 or rbarry@nirb.nunavut.ca.

Sincerely,

(original signed by:)

Stephanie Briscoe

Executive Director



SCREENING DECISION

May 30, 2005

Mr. Tangola Sandy President, Kivalliq Inuit Association Rankin Inlet, NU

Dear Mr. President:

RE: Screening Decision of the Nunavut Impact Review Board (NIRB) on Application:

NIRB: #05EN046 KivIA

Maze Lake Project – Placer Dome (CLA) Ltd.

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 of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change. That Permittee shall carbon copy local communities on this correspondence.
- 3. The Permittee shall submit to the Board, prior to the commencement of activities, a Wildlife Monitoring/Reporting Plan for exploration activities.
- 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 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;
 - 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 (if conducted);
 - 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;

- 1. Results of the Wildlife Monitoring/Reporting Plan;
- m. Revisions to the Abandonment and Restoration Plan;
- n. Progressive reclamation work undertaken; and
- o. A summary of how it has complied with all Terms and Conditions contained in NIRB's screening decision.

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 conduct lake-based winter drilling, in accordance with the Interim Guidelines for On-Ice drilling.
- 3. The Permittee shall ensure that all drill cuttings are removed from ice surfaces.
- 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 or an appropriate natural depression that does not drain into a waterbody.
- 7. 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.
- 8. The Permittee shall ensure that the sump/depression capacity is sufficient to accommodate the volume of waste water and any fines that are produced so that there will be no additional impacts.
- 9. The Permittee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.
- 10. 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.
- 11. 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.

12. 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 have an Emergency Response & Spill Contingency Plan approved by the Nunavut Water Board prior to commencing on-site activities. The approved plan shall be submitted to NIRB.
- 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 dyked 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. The Permittee shall examine all fuel and chemical storage containers daily for leaks. All leaks should be prepared immediately.
- 6. The Permittee shall seal all container outlets except the outlet currently in use.
- 7. The Permittee shall mark all fuel containers with the Permittee's name.
- 8. The Permittee shall dispose of all combustible waste petroleum products by incineration and removal from the site.
- 9. 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.
- 10. 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.
- 11. 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.

- 12. The Permittee shall maintain a supply of spill kits, shovels, barrels, sorbents, and pumps on-site.
- 13. The Permittee shall use drip pans when refueling equipment.
- 14. Chemicals containing salts, which may attract wildlife to the site, should be stored so that they are inaccessible to wildlife.

Wildlife

- 1. The Permittee shall ensure that there is no damage to wildlife habitat in conducting this operation.
- 2. The Permittee shall not feed wildlife.
- 3. The Permittee shall not cause disturbance to the following species of Special Concern under Schedule 3 of the Species at Risk Act: Peregrine falcon (subspecies tundrius), Grizzly bear, Wolverine, and the Short-eared owl.
- 4. 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.
- 5. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.
- 6. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
- 7. The Permittee shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any diamond drilling operation within 5 km, of any "designated caribou crossing". The regional biologist should be contacted for known crossings.
- 8. From May 15 to July 15, the Permittee shall cease activities that interfere with migration or calving, such as flights below 300m and airborne geophysics surveys, movement of equipment, drilling activities and ATV or snowmobile use until the caribou and their calves have vacated the area.
- 9. 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.
- 10. 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).
- 11. That the Permittee shall ensure that there is no hunting by employees of the company or any contractors hired.
- 12. The Permittee shall ensure that there is no fishing by employees of the company or any contractors hired unless proper permits are obtained.

- 13. The Permittee shall contact the Kivalliq Regional Biologist (Mitch Campbell 867-857-2828) 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.
- 14. 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.
- 15. Pursuant to the Migratory Bird Convention Act Regulations the Permittee shall not disturb or destroy the nests or eggs of migratory birds. 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.
- 16. The Permittee shall ensure that aircraft pilots adhere to flight altitudes of greater than 300 m above ground level so not to disturb wildlife.
- 17. The Permittee shall ensure that aircraft maintain a vertical distance of 1000m and a horizontal distance of 1500m from groups/flocks of birds.
- 18. 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.
- 19. 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.
- 20. The Permittee shall not detonate explosives within fifteen (15) metres of any body of water which is not completely frozen to the bottom.

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 backfill and recontour all sumps to match the natural environment prior to the expiry date of the license.
- 4. The Permittee shall use an approved incinerator for the disposal of combustible camp wastes. Non-combustible wastes shall be disposed of properly at an approved facility.
- 5. The Permittee shall incinerate all combustible and food wastes daily.

- 6. The Permittee shall keep all ash in a covered metal container until it is disposed of at an approved facility.
- 7. The Permittee shall keep all non-combustible garbage and debris in a covered metal container until disposed of at an approved facility.
- 8. The Permittee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.
- 9. 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.

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.
- 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 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.
- 7. 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.
- 8. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.

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.

Archaeological Sites

- 1. The Permittee shall not disturb any archaeological or palaeontological site.
- 2. The Permittee shall immediately contact the Government of Nunavut Department of Culture, Language, Elders and Youths (CLEY) if any archaeological or palaeontological site is encountered or disturbed.

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 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.

D-4-1	-4 C1 1 D NIII	
Dated	at Cambridge Bay, NU.	

Albert Ehaloak, A/Chairperson