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File No: NWB2KIM

March 22, 2006

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut
X0B 1J0

Dear Phyllis:

Subject: True North Gems Comments in Response to the Review of Application NWB2KIM

True North Gems acknowledges the receipt of concerns for the Type "B" water licence application NWB2KIM, for water use and waste disposal associated with exploration activities for the Kimmirut Beluga Sapphire Project in the Qikiqtani region of Nunavut.

True North Gems has prepared responses to the comments made in the October 13, 2005 email. These responses are provided in detail within the attached document.

For further clarification, the Beluga Sapphire Project is now under the direction of Greg Davison, VP Exploration for True North Gems with permitting being handled by Twila Skinner, Senior Geologist. If there are any questions you can contact us as follows:

Greg Davison

True North Gems Inc
VP Exploration and Project Manager
Suite 500-602 West Hastings Street
Vancouver, BC
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or

Twila Skinner

True North Gems Inc
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We look forward to working with you over the upcoming exploration season and thank you for your cooperation in these matters in advance.

Please contact us at your convenience for any further discussion.

Sincerely,

Twila Skinner

Twila Skinner
Senior Geologist
True North Gems Inc.

Greg Davison
VP Exploration
True North Gems Inc.

cc: David Hohnstein Technical Advisor Mining, Nunavut Water Board

Original sent by Canada Post
Copy by email

True North Gems Inc.
Kimmirut Beluga Sapphire Project
Type B Water License
File No: NWB2KIM

Background
On June 24, 2005, True North Gems Inc ("True North") submitted an application to the Nunavut Water Board (NWB) for a Type B Water License. On August 16, 2005, True North received a letter stating that the NWB acknowledged receipt of the application and that a preliminary review of the application had met the requirements of section 48(1) of the Nunavut Water and *Nunavut Surface Rights Tribunal Act*. A Notice of Application was distributed for public review on August 16, 2005. Following the 30 day review period, comments were submitted to True North in an email correspondence from the NWB on October 13, 2005.

The comments that need to be addressed are summarized as follows: using a small lake for water supply that may potentially be fish-bearing; deposit of waste and potential erosion and sediment deposition within fish-bearing waters; culvert installations; concerns of drill water being discharged overland eventually making its way back to the water supply lake; the use of calcium chloride during the drilling process and concerns with respect to erosion and transfer of deleterious substances to a freshwater body. Each concern will be identified and discussed in detail below.

Comments in response to the public review period:

CLEY:

Concern: Activities on site might come in contact with known archaeological sites listed in Appendix One cited on letter dated August 30, 2005.

The Terms and Conditions set out by CLEY are listed below.

Archaeological and Palaeontological Resources Terms and Conditions for Land Use Holders

1. True North will not operate any vehicle over a known or suspected archaeological or palaeontological site.
2. True North will not remove, disturb, or displace any archaeological artifacts or site, or any fossil or palaeontological site.
3. True North will immediately contact the Department of Culture, Language, Elders and Youth (867-934-2033 or 867-975-5500) should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.

4. True North will 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. True North will follow the direction of the Department of Culture, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
6. True North Gems will provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological or palaeontological sites and fossils encountered in the course of any land use activity.
7. True North will make best efforts to ensure that all persons working under the authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
8. True North will avoid the known archaeological and or palaeontological sites listed in Appendix One of the letter dated August 30, 2005.
9. True North shall have an archaeologist or paleontologist 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 the archaeological or palaeontological sites
    D. mitigation
    E. marking boundaries of archaeological or palaeontological sites
    F. site restoration

Response to concern: True North will avoid the known archaeological sites listed in Attachment 1 in the letter to NWB on August 30, 2005. True North will adhere strictly to the terms and conditions, stated above, set out by CLEY.

NTI
No Comments

Environment Canada, Environmental Protection Branch (File No: 4703 001)

Environment Canada has three concerns, listed below, with the application as described in the letter to the NWB on September 19, 2005.

Concerns
1. Firstly, Environment Canada understands that when the proponent conducts diamond drilling activities, the waste water will not enter a sump after passing through a series of settling tanks. Rather, it will be discharged overland and

make its way back to a small lake which serves as the source of the fresh water for the drilling units. Without the use of sumps, this waste water will erode the earth and transfer deleterious substances from the selected drilling locations into a fresh water body. Environment Canada requests that the proponent provide an explanation to the Nunavut Water Board as to why it will not use drill water sumps. Furthermore, Environment Canada would like to know if any measures will be taken to mitigate drill additive pollution (i.e., calcium chloride) in the receiving environment.

2. Secondly, Environment Canada understands that FSC has stated that the diameter of all culvert /stream crossings must have a diameter of at least 1.8393m. It is requested that the proponent notify both the Nunavut Water Board and Environment Canada if it will implement the culvert design which allocated two 1 m diameter culverts at each stream crossing and provide and explanation for its decision (i.e., reasoning for culvert diameter lengths).

3. Thirdly, the spill contingency plan does not provide detailed response procedures for fuel/hazardous material spills on land, water, snow or ice. In addition, the number of spill kits or their contents was not provided in the water license application. Environment Canada requests that the proponent revise its spill contingency plan in such a manner that these issues are addressed.

Response to concerns

1. True North will not be using drill sumps for the current proposed drilling locations. Proposed drilling occurs on bedrock or areas with little to no overburden. These areas are not suitable for making drill sumps. To prevent waste water from eroding the earth and transferring deleterious substances from the selected drilling locations into a fresh water body, waste water and drill cuttings will be captured, using a suction pump and tank system including settling tanks to remove the solids, and properly disposed. Waste water can be reused as much as possible; any clean drill water discharge will be routed via a point to be determined in coordination with the requisite authorities. The drill cuttings will be collected in pails or in super sacs (large U.V. treated polyethylene LOLIFT bags). The waste will be transported to the landfill in the Hamlet of Kimmirut. Prior to transportation, buckets or sacs will be stored in a designated area well away from the normal high water mark of the surrounding area. The storage area will bermed with impermeable spill mats or plastic sheets to prevent deleterious materials from eroding the earth and entering water bodies.

   If an area exists in which a sump can be used, a pit will be dug in low impermeable material or permeable material made impermeable by other means. Upon the completion of the drill program, the sump, whether natural occurring or man-made, will be backfilled and contoured to resemble the surrounding environment. The sump will be large enough to hold all of the

drill water and will have a freeboard which will accommodate precipitation or heavy winds that could cause the water spill over onto the surrounding environment. The sump will be placed in an area that is well away from the normal high water mark of the surrounding area. All necessary agencies will be contacted if a sump will be used to ensure that all the proper guidelines are met.

Permafrost is a concern in the project area, with respect to drilling. If the temperature down hole is not maintained at or above a specified temperature, freezing will occur. Freezing could potentially lead to the loss of drill rods in the hole or even loss of the entire hole. There are a few options that can be used to prevent freezing down hole. These options include using CaCl and monitoring the temperature as circulation is broken.

CaCl is often used when during drilling under permafrost conditions to lower the freezing point of the water. One disadvantage to using CaCl is it has been deemed a toxic substance by the Canadian Environmental Protection Act. Discussions between the drill contractor and True North have concluded that alternatives to using CaCl can be used.

Another alternative to prevent freezing down hole is to closely monitor the temperature as circulation is broken and the response time to freezing. As long as water supply is properly maintained and circulated, permafrost issues can be prevented. The water can be heated before entering the hole by the use of a coil heater. Thermometers will be then used to monitor the temperature of the water entering and exiting the hole. The time it takes before the hole begins to freeze can also be monitored. A few other factors such as using drillers with experience drilling under permafrost conditions and using the Porta-88 Man Portable Drill that is designed such that it will not freeze externally, compared to other drills, will also help in dealing with permafrost issues.

True North has since made it a policy on the Beluga Project not to use Calcium chloride (CaCl) as part of the drilling program. Currently there is no CaCl on site and True North does not intend to bring any on site.

2. Access to True North's Beluga Sapphire project is via air or an existing network of roads and ATV (All Terrain Vehicle) trails in the area. There is an existing road from the Hamlet of Kimmirut that runs approximately 1.8 km southwest towards True North's claim boundary (NAIPI claim). The road then turns into a heavily used ATV trail. In spring 2005, True North made plans to upgrade a 2 km section of the ATV from the end of the road south towards the Beluga project site. These upgrades would make transportation between Kimmirut and the project site more efficient, allow the use of heavy equipment to remove assay samples from the site and reduce safety concerns in the event of a medical emergency.

In May 2005, True North retained FSC Architects and Engineers to design culverts for two water crossings along an ATV trail between the end of the road and the beginning of the NAIPI claim boundary. In June 2005, FSC completed its assessment and design of the culvert crossing and submitted final recommendations. FSC's recommendations included a culvert length of 13m based on a road width of 5m, a side slope of 3:1, a culvert top cover of 500mm, an allowance of 500mm for rip rap on either end of the culvert and a culvert diameter of 1.893m. Discussions between FSC and True North concluded that the use of two 1000mm diameter culverts would be appropriate to meet the flood requirements on the watershed and the 'Fisheries' requirements.

At the present time, an aggregate quarry, which has not been in use for several years, exists outside of the Hamlet of Kimmirut and within True North claims boundaries. The Hamlet of Kimmirut would like to continue to use the quarry for use of aggregate resources for the Hamlet. As part of the development of the quarry is the proposed construction of a road to the quarry. This would be beneficial to the Hamlet of Kimmirut as well as True North. True North is currently discussing this matter with Manager of Community Development for the Baffin Region as well as other government officials. In light of this as well as the recent management changes for the Beluga Sapphire Project, True North would like to reserve judgment until more field inspections have been carried out and discussions with the Hamlet of Kimmirut and other officials have be completed in the upcoming months. The 2006 field season is anticipated to include a smaller assay sample than in the 2005 field season. The smaller assay sample means that there will not be a need for the use of any heavy equipment such as Excavators to carry out any work. The ATV trail in its current status is sufficient to carry out the current exploration program. If larger samples are needed, True North will consider its options, such as the use of a helicopter, to remove samples from the site rather than the heavy use of the ATV trail.

Once a decision has been made to go forward with road construction, all appropriate agencies will be contacted and supplied with sufficient information such as the engineering designs, timelines and any other supporting documentation. The existing permits will be amended and any new permitting will be obtained.

3. The Spill Contingency Plan (Plan) (see attached) has been revised to include detailed response procedures for fuel or hazardous material spills on land, ice, water and snow; the number and contents of the spill kits located on-site; removal of the CaCl MSDS sheet and updated contact information.

Terms and Conditions set out by Environment Canada for this specific project:

1. True North will not deposit, nor permit the deposit of any fuel, drill cuttings, chemicals, wastes, or sediment into any water body. According to the Fisheries Act, Section 36 (30, the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance that result from the deposit of the deleterious substances may enter any such water is prohibited.
2. True North will have all permits and approvals are required prior to the commencement of any work.
3. The *Canadian Environmental Assessment Agency* lists CaCl as a toxic substance. True North will not be using CaCl as a drill additive.
4. Drilling additives or muds will not be used in connection with holes drilled through lake ice unless they are recirculating or contained such that they do not enter the water, or have been demonstrated to be non-toxic.
5. For 'on-ice' drilling, return water released must be non-toxic, and not result in a increase in total suspended solids in the immediate receiving water above the Canadian Council of Minister fro the Environment Guidelines for the Protection of Freshwater Aquatic Live (i.e. 10mg/L for lakes with the background level under 100mg/L or 10% for those above 100mg/L)
6. Land based drilling should not occur within 30m of the high water mark of any water body. Drilling waste from the land based drilling shall be disposed in a sump such that the contents do not enter any water body.
7. If an artesian flow is encountered, the drill hole will be immediately plugged and permanently sealed.
8. True North shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved facility.
9. Drip pans, or other similar preventative measures, shall be used when refueling equipment in site.

True North will adhere strictly to the terms and conditions stated above.

Fisheries and Oceans Canada, Eastern Arctic Area (File No: NU-05-0027)

Fisheries and Oceans Canada has concerns, as listed below, with the application as described in the letter to the NWB on September 21, 2005. Fisheries and Oceans Canada reviewed the proposal and determined that the measures described in the application were not adequate to protect fish and fish habitat and that additional measures should be incorporated into plans.

Operations in or near water may result in the harmful alteration, disruption or destruction (HADD) of fish habitat, which is prohibited under Section 35 of the *Fisheries Act*.

The following mitigation measures, listed below, will be followed to prevent any potential harmful impacts to fish and fish habitat.

1. If artesian flow is encountered, drill holes will be plugged and permanently sealed upon completion of the project.
2. All disturbed areas will be stabilized and re-vegetated as required, upon completion of work, and restored to a pre-disturbed state.
3. No material will be left on the ice when there is potential for that material to enter the water (i.e., spring break-up).

Extraction of water via intake from any water body is prohibited under Section 30 of the *Fisheries Act* unless the entrance of the intake is properly screened to prevent the entrapment of fish. True North does not have documentation, at this time, to verify that the source water lake is non-fish bearing and therefore will assume that it is and take the following mitigation measures when withdrawing water:

1. If operations require water in sufficient volume that a fish-bearing water body source may be drawn down, detail (size of water body, fish species, etc.) will be provided to DFO for review.
2. Holes in the screen will be small enough that no fish of any size can pass through the screen and into the intake. The intake screen size was determined using Appendix B (Page 23) of the *Freshwater Intake End-of-Pipe Fish Screen Guidelines (DFO, 1995).*

   From Appendix B, the following calculations were used to determine the size of the intake screen that meets the guideline requirements.

   Fish Swimming Mode:
   Through discussions with a Habitat Management Biologist from Fisheries and Oceans Canada, Eastern Arctic Area, it has been determined that the most probable fish swimming mode for the area is subcarangiform, specifically Arctic Char and Stickleback.

   The open screen area:
   Based on a 10 gpm pump rate on the pump intake in the water body, the open screen area required for End-Of Pipe Water Intakes for Subcarangiform swimmers is 0.1 ft^2.

   The Effective Screen Area:

$$\text{Effective Screen Area} = \frac{\text{open Screen area}}{(\%\ \text{open area}/\ 100)}$$

$$= \frac{0.1\ ft^2}{(50/100)}$$

$$= 0.2\ ft^2$$

The dimensions of the Intake Screen:
For a cylindrical screen the area is

Area = πDL

Using a 3" diameter (0.25ft)

0.2 ft^2 = π (.25ft) L

$$L = \frac{0.2\ ft^2}{0.785\ ft}$$

L= 0.25 ft or 3.05"

Based on the above calculations, a 3" diameter cylindrical screen with a 3" length will meet the design requirements. The pump suction intake used by the drill contractor has an 8" cylinder with stainless steel window screen that is 3" in diameter. This unit also has a foot valve on the end of the intake that has a 5mm forced opening with plastic window screen. This setup is designed to prevent foreign objects such as fish and sediment from entering the pump. The intake will be floated just below the surface of the water.

Installation procedures for the screen will also include: locating the screens in areas and depths of water with low concentrations of fish throughout the year; facing the screen in the same direction as water flow; ensuring openings in the guides and seals are less than the opening criteria to make it "fish tight"; ensuring that screens are located a minimum of 300mm (30cm) above the bottom of the watercourse and ensuring that that intake is located a sufficient distance offshore.

3. The rate of water withdrawal will be such that fish do not become impinged on the screen.
4. The fish screen will be properly maintained, in good state of repair, and will not be removable except for renewal or repair.
5. During the time in which a renewal or repair is being conducted, the entrance of the water intake should be closed in order to prevent the passage of fish into the intake.

Depositing deleterious substances into fish-bearing waters is prohibited as stated under Subsection 36(1) of the *Fisheries Act*. The following are additional measures to mitigate habitat disturbance or loss as well as the deposition of deleterious substances.

1. Sediment and erosion control measures will be implemented prior to commencement of, and maintained during the work to prevent sediment entry into any water body.
2. The drill cuttings will be collected in pails or in Super Sacs (large U.V. treated polyethylene LOLIFT bags). The waste will be transported to the landfill in the Hamlet of Kimmirut. Prior to transportation, buckets or sacs will be stored in a designated area well away from the normal high water mark of the surrounding area. The storage area will bermed with impermeable spill mats or plastic sheets to prevent deleterious materials from eroding the earth and entering water bodies. The use of biodegradable, salt-free drill additives will be encouraged over non-biodegradable types.
3. For any drilling activities True North will ensure that the contractor undertaking the drilling is prepared with a contingency plan covering the detection, control and handling of any inadvertent drilling fluid migration that may enter a water body.
4. Sediments from water used in the drilling process will be filtered out before the water is discharged onto the surrounding landscape.
5. All wastes, drill cuttings, sewage containments and fuel caches will be located well away from the normal high water mark of any water body. Impermeable spill mats or plastic sheets as well as efficient containment berms will be incorporated into the caches to ensure that contaminants do not enter water bodies.
6. All activities, including maintenance procedures and vehicular refueling, will be controlled to prevent the entry of petroleum products, sediment, debris, rubble, or other deleterious substances into the water. Impermeable spill mats, drip pans or other measures to prevent ground or ice contamination will be used when refueling equipment on site. Refueling activities will be conducted well away from the normal high water mark of any water body.
7. True North will have available extra fuel storage containers equal to or bigger than the size of the largest fuel container. This container will be used to replace any existing container showing signs of leakage. Containers will be checked for leaks in a daily basis and visible leaks will be repaired immediately. Spill kits will be readily available at all times.
8. All spills of oil, fuel, or other deleterious material will be reported immediately to the 24 Hour Spill Line (867) 920-8130.

True North has previously indicated to DFO that culvert watercourse crossings were not to be installed in 2005. As of the date of this letter, March 22, 2006, True North has decided not to proceed with the ATV trail upgrades, including culvert installations, until more field inspections have been carried out and discussions with the Hamlet of Kimmirut and other officials have be completed in the upcoming months. For more information, see the discussion on Page 6 and 7 of this document. However, in the event that True North decides to proceed with this work in the future, DFO will be contacted with additional information in order to finalize the review.

True North will notify DFO at least 10 working days before starting work on site and ensure that a copy of the letter from September 21, 2005 will be kept on site while work is in progress.