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Via Facsimile

## **RE**: NIRB 05EN060 – True North Gems Inc. – Beluga Sapphire Project

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

True North Gems Inc. is proposing to conduct a mineral exploration program at the Beluga Sapphire occurrence, located approximately 3 km from the Hamlet of Kimmirut. Proposed work includes the removal of a 500 tonne sample, via a 10 m x 5m x 2m trench. Additional work will include diamond drilling and upgrading an existing ATV trail to a road by installing culverts in two locations. Due to the proximity to Kimmirut, no camp will be constructed and workers will travel back and forth to the community for accommodations.

Environment Canada recommends that the following conditions be implemented at all stages of the project:

- The proponent shall 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(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- Land based drilling should not occur within 30 m of the high water mark of any water body.
- Environment Canada would like to inform the proponent that the Canadian Environmental Protection Act has recently listed CaCl as a toxic substance. Therefore, for those drill holes where calcium chloride is used as a drill additive, the proponent shall ensure that the drill water is directed to a properly constructed sump, which is located in such a manner as to ensure that the contents will not enter any water body. Drill water containing CaCl should not be discharged in an uncontrolled manner and allowed to flow over land to the drill water supply lake.
- If an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.
- The proponent shall ensure that all wastes (combustible and non-combustible) are disposed
  of appropriately at the solid waste disposal facility in Kimmirut.
- All sumps shall be located above the high water mark of any water body and in such a manner as to prevent the contents from entering any water body frequented by fish.



Further, all sumps shall be backfilled upon completion of the field season and contoured to match the surrounding landscape.

- The application does not include a Spill Contingency Plan. A Spill Contingency Plan should be developed which outlines a clear path of response in the even to of a spill. The Plan should clearly indicate that <u>all spills</u> are to be documented and reported to the 24 hour Spill Line at (867) 920-8130.
- Drip pans, or other similar preventative measures, should be employed when refueling equipment on site.
- Measures should be implemented at the location of the culvert installations to prevent the release of sediment into any waterbodies.
- Environment Canada recommends that all activities be conducted outside the migratory bird breeding season, which extends from approximately June 1-July 15. These dates are approximate, and if active nests (i.e., nests containing eggs or young) are encountered outside of these dates, the proponent should avoid the area until nesting is complete (i.e., the young have left the nest). Paragraph 6(a) of the Migratory Birds Regulations state that no one shall disturb or destroy the nests or eggs of migratory birds.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at colette.spagnuolo@ec.gc.ca.

Yours truly,

## Original signed by

Colette Spagnuolo Environmental Assessment / Contaminated Sites Specialist

cc: (Stephen Harbicht, Head, Assessment and Monitoring, Environment Canada, Yellowknife)

