Environmental Protection Operations 5204-50th Avenue, Suite 301 Yellowknife, NT X1A 1E2

May 8, 2007

Nunavut Water Board P.O. Box 119 Gloa Haven, NU X0B 1J0

Attention: Phyllis Beaulieu

Nunavut Water Board MAY 1 1 2007 Public Registry

Our File: 4703 001 068

Via Fax: (867) 360-6369

RE: NWB 2007N-3BC-SII – Southampton Island Integrated Geoscience Project – Canada-Nunavut Geoscience Office (CNGO) and the Geological Survey of Canada (GSC)

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.

It is the understanding of Environment Canada that the joint proponent CNGO\GSC, is applying for a new license from the Nunavut Water Board to use water or the deposit of waste into water for the Southampton Island Integrated Geoscience Project (SIIG). The project involves mapping of bedrock geology across the Northwest of Southampton Island. Transport with helicopter drop-offs and pick-ups will be completed, based out of a camp roughly 100m from the Mathiessan River accommodating twenty-two (22) people.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

GENERAL

The proponent shall not deposit, nor permit the deposit of any fuel, 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.

CAMPS

- Any sumps created for the disposal of camp sewage or grey water shall be located at least 30m 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 proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
- The proponent has indicated that they intend to incinerate organic wastes. Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes. A variety of incineration devices are available and selection of the most appropriate will depend on considerations of technical and economical feasibility for each situation. For small, temporary camps the use of a modified burn barrel may be acceptable.

The objective should be to ensure that only food waste and food-contaminated waste is burned (the use of paper, cardboard and clean wood as supplementary fuel is acceptable).

FUELS

- All fuel caches shall be located above the high water mark of any water body. Further, EC recommends
 the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on
 location rather than relying on natural depressions.
- The proponent has indicated their intent to store gasoline onsite; in the even that the fuel is intended for
 use in all-terrain vehicles (ATVs), EC recommends that a designated trail should be used in order to avoid
 the unnecessary destruction of vegetation. Stream crossings shall be located to minimize approach grades.
 Bank disturbance is to be avoided, and mechanized clearing should not be done immediately adjacent to
 any watercourse.
- Drip pans, or other similar preventative measures, should be used when refueling equipment on site.

AIR TRAFFIC

- Section 6 (a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. If activities are permitted to occur during the breeding season, which extends from approximately May 15 to July 31, CWS recommends that the proponent confirm there are no active nests (i.e. nests containing eggs or young) in the vicinity of their operations before activities commence. If active nests of migratory birds are discovered, the proponent should halt all activities until nesting is completed (i.e. the young have left the vicinity of the nest).
- In order to reduce disturbance to nesting birds, CWS recommends that aircraft used in conducting project
 activities maintain a flight altitude of at least 610 m during horizontal (point to point) flight and a vertical
 distance of 1000 m and minimum horizontal distance of 1500 m from any observed concentrations (flocks /
 groups) of 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 (780) 951-8942 or by email at jody.klassen@ec.gc.ca.

Yours truly

Jody Klasseń

cc: Carey Ogilvie (Head, Assessment and Monitoring, EPO)

Mike Fournier (Northern Environmental Assessment Coordinator, A&M, EPO)