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April 1, 2010 Our file: 4703 003 052 NIRB file: 3BC-IQA--

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

via email: licensing@nunavutwaterboard.org

RE: University of Toronto. – Iqaluktuuq Project – New – Type "B"

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 the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Max Friesen, of the University of Toronto, has applied for a Water License from the Nunavut Water Board to conduct archaeological surveys and excavation of sites near the Ekalluk River, about 50 km northwest of Cambridge Bay, NU. Project activities will occur for approximately four weeks from June 28 – July 22, 2010. Approximately six to seven people will reside in a tent camp for the duration of the project. Eight Elders from Cambridge Bay will attend the camp for one day to share traditional knowledge. Camps will be located at 69 ° 24.400' N, 106 ° 18.200' W and 69 ° 24.100' N, 106 ° 14.800' W. All garbage will be flown out of the project area and disposed of in the Cambridge Bay landfill area. Sewage and greywater will be disposed of using sumps, which will be backfilled at the end of the project.

Environment Canada provides the following comments and recommendations for the NWB's consideration:

Camp

 All sumps used for the disposal of camp sewage and greywater 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.

Spill Contingency Plan

- Drip pans, or other similar preventative measures, should be used when refueling equipment on site.
- EC recommends that spill kits be made available on site in case of a fuel spill; spill kits should contain shovels and absorbents.

Wildlife and Species at Risk

- Section 6 (a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. If active nests are encountered during project activities, the nesting area should be avoided until nesting is complete (i.e., the young have left the vicinity of the nest).
- Environment Canada recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.
- Section 5.1 of the Migratory Birds Convention Act prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- The following comments are pursuant to the *Species at Risk Act* (SARA), which came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that species on other Schedules of SARA and under consideration for listing on SARA, including those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), be considered during an environmental assessment in a similar manner.

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
Peregrine Falcon (anatum- tundrius complex ³	Special Concern	Schedule 1 (anatum) Schedule 3 (tundrius)	Government of Nunavut
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Pending	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Red Knot (rufa subspecies)	Endangered	Pending	EC
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

¹ The Department of Fisheries and Oceans has responsibility for aquatic species.

³ The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundruis* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was listed by COSEWIC as Special Concern.



² Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the *Migratory Birds Convention Act* (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Thus, for species within their responsibility, the Territorial Government is best suited to provide detailed advice and information on potential adverse effects, mitigation measures, and monitoring.

Impacts could be disturbance and attraction to operations.

Environment Canada recommends:

- O Species at Risk that could be encountered or affected by the project should be identified and any potential adverse effects of the project to the species, its habitat, and/or its residence noted. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the Species at Risk registry at www.sararegistry.gc.ca for information on specific species.
- o If Species at Risk are encountered or affected, the primary mitigation measure should be avoidance. The proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.
- Monitoring should be undertaken by the proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.
- o For species primarily managed by the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.
- O Mitigation and monitoring measures must be taken in a way that is consistent with applicable recovery strategies and action/management plans.
- All mitigation measures identified by the proponent, and the additional measures suggested herein, should be strictly adhered to in conducting project activities. This will require awareness on the part of the proponents' representatives (including contractors) conducting operations in the field. Environment Canada recommends that all field operations staff be made aware of the proponents' commitments to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
- Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds and Species at Risk, but will not necessarily ensure that the proponent remains in compliance with the *Migratory Birds Convention Act, Migratory Birds Regulations*, and the *Species at Risk Act*. The proponent must ensure they remain in compliance during all phases and in all undertakings related to the project.

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 by email at Paula.C.Smith@ec.gc.ca.

Yours truly,

Original signed by

Paula C. Smith Environmental Assessment Coordinator

Cc: Carey Ogilvie (Head, EA-North, EPO, Yellowknife, NT)
Ron Bujold (Environmental Assessment Technician, EPO, Yellowknife, NT)

