



Environment Environnement
Canada Canada

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NWB file: 3BC-PRO

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Re: NWB 3BC-PRO Provenance of Clastic Sediments in the Sverdrup Basin, Canadian Arctic Islands 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 the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Dr Robert Scott of the Cambridge Arctic Shelf Program (CASP) is proposing to conduct scientific research on Central Ellesmere Island to investigate the geology of the Canadian Arctic Archipelago. The work will involve obtaining small rock samples and taking photographs and measurements of each rock unit. The project area will be accessed by twin otter, helicopter and by foot. The research will involve six people and will occur from June 20th to August 20th, 2009 - 2011. Personnel will have two small base camps at Canon Fiord and Notch Lake.

Comments and Recommendations

- The proponent shall not deposit, nor permit the deposit of any fuel, 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.
- Sediment should be disposed of in a sump located a sufficient distance from the high water mark of any water body and constructed such that the contents do not migrate out from the sump, in order to prevent the contents from entering any water body frequented by fish. All sumps should be backfilled upon completion of each field season.
- Environment Canada recommends that spill basins and fuel caches be located above the high water mark of any waterbody and in such a manner that the contents do not enter any waterbodies.
- Drip pans should be used while refuelling any equipment.
- Ensure an appropriate spill kit with absorbent material should be consistently maintained and readily available at all locations where fuel is being stored or transferred.

- **All spills** are to be documented and reported to the NWT/NU Spill Line at (867) 920-8130.
- 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.
- In order to reduce aircraft disturbance to migratory birds, Environment Canada recommends the following:
 - Fly at times when few birds are present (e.g., early spring, late fall, winter)
 - If flights cannot be scheduled when few birds are present, plan flight paths that minimize flights over habitat likely to have birds and maintain a minimum flight altitude of 650 m (2100 feet).
 - Minimize flights during periods when birds are particularly sensitive to disturbance such as migration, nesting, and moulting.
 - Plan flight paths to avoid known concentrations of birds (e.g., bird colonies, moulting areas) by a lateral distance of at least 1.5 km. If avoidance is not possible, maintain a minimum flight altitude of 1100 m (3500 feet) over areas where birds are known to concentrate.
 - Avoid the seaward side of seabird colonies and areas used by flocks of migrating waterfowl by 3 km.
 - Avoid excessive hovering or circling over areas likely to have birds.
 - Inform pilots of these recommendations and areas known to have 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) 975-4631 or by email at Carrie.Spavor@ec.gc.ca.

Yours truly,

Original signed by

Carrie Spavor
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Environmental Assessment-North, EC, Yellowknife, NT)
Ron Bujold (Environmental Assessment Technician, EC, Yellowknife, NT)