



**Environment Environnement
Canada Canada**

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Environmental Protection Operations (EPO)
Prairie and Northern Region
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20th May 2011

Our File: 4704 001 032

Environmental Administrator
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

info@nirb.ca

Attention: Aliza Weller

Re: NIRB 11YN025 – Screening for Laval University – Warwick Vincent’s “Northern Ellesmere Island in the Global Environment (NEIGE)” project proposal.

Environment Canada’s (EC) contribution to your request for specialist advice is based on the mandated responsibilities for the enforcement of **Section 36(3)** of the *Fisheries Act*, the *Canadian Environmental Protection Act* (CEPA), the *Migratory Birds Convention Act* (MBCA) *Regulations* and the *Species at Risk Act* (SARA).

Based on the information provided by the proponent in the above noted screening, Environment Canada (EC) offers the following comments and recommendations to the Nunavut Impact Review Board for consideration.

Comments and Recommendations

The proponent shall ensure that any chemicals, fuel or wastes associated with the proposed project do not enter waters frequented by fish. It is a requirement of **Section 36(3)** of the *Fisheries Act* that all effluent discharged into water frequented by fish, be non-deleterious.

Spill Contingency Planning

EC recommends that a Spill Contingency Plan be in place for any fuel storage or transfer location, outlining a clear path of response in the event of a spill and address the key areas of prevention, preparedness, response and recovery.

Refuelling shall be done in such a manner as to prevent any hydrocarbons from entering any water body frequented by fish. EC recommends that drip pans, or other similar preventative measures, should be used when refuelling equipment.

An appropriate spill kit, including shovels, barrels, absorbents, etc. should be readily available at all locations where fuel is being stored or transferred in order to provide immediate response in the event of a spill.

Spills are to be documented and reported to the NWT/NU 24 hour Spill Line at (867)920-8130. EC recommends that all releases of harmful substances, regardless of quantity, are immediately reported where the release:

- is near or into a water body;
- is near or into a designated sensitive environment or sensitive wildlife habitat;
- poses an imminent threat to human health or safety; or;
- poses an imminent threat to a listed species at risk or its critical habitat.

Waste Disposal

EC does not encourage the open burning of combustible waste as a means of disposal. However, considering the constraints of the field work, EC recommends that the proponent heed the following guidance:

- Solid wastes that are conditionally suitable for open burning are paper products, paperboard packaging and untreated wood. Plywood, painted wood or other treated wood should not be disposed of in this manner. For reference, below is a link to the Nunavut Municipal Open Burning Policy:
- http://www.ec.gc.ca/gdd-mw/684B44DD-5780-4F73-BC58-A97E31A19EDC/COM1170_Open_Burning_Brochure_e_v6_for%20web.pdf
<http://www.gov.nu.ca/env/Open%20burning.pdf>
and below is a link to information from EC regarding open burning:
- http://www.ec.gc.ca/gdd-mw/684B44DD-5780-4F73-BC58-A97E31A19EDC/COM1170_Open_Burning_Brochure_e_v6_for%20web.pdf

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 nest).

EC recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, and 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.

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.

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. The Table below lists species that may be encountered in the project area that have been assessed by COSEWIC as well as their current listing on Schedules 1-3 of SARA (and designation if different from that of COSEWIC). Project impacts could include species disturbance and attraction to operations.

Terrestrial Species at Risk potentially within project area ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Red Knot (<i>islandica</i> subspecies)	Special Concern	Pending	EC
Peary Caribou	Endangered	Pending	Government of Nunavut
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.

² Environment Canada (EC) 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 Nunavut Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.

- For any Species at Risk that could be encountered or affected by the project, the proponent should note any potential adverse effects of the project to the species, its habitat, and/or its residence. 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.
- 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.
- For species primarily managed by the Nunavut Government, the Nunavut Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.
- Mitigation and monitoring measures must be taken in a way that is consistent with applicable recovery strategies and action/management plans.

EC notes that the Red Knot (*islandica* subspecies) (a shorebird) was designated as a species of Special Concern by COSEWIC in April 2007. The Red Knot (*islandica* subspecies) breeding range overlaps with the location of the proposed project area. Although the major threats to Red Knot relate to habitat degradation in the wintering areas and decreases in food resources during spring migration, the proponent should ensure that extra precautions are taken to avoid any disturbance to the Red Knot or its habitat during the breeding season. Red Knots nest on barren habitats (often less than 5% vegetation) such as windswept ridges, slopes or plateaus. Nest sites are usually in dry, south-facing locations, and may be located near wetlands or lake edges, where the young are led after hatching. Nests are simple scrapes on the ground in small patches of vegetation. Nesting will occur in June with hatching in early July. If an active Red Knot nest is encountered during project activities, or observations of Red Knot in the area suggest that a nest could be nearby, the proponent should avoid all activities in the area until nesting is complete (i.e., likely only resume activities in the area until after mid-July).

The Canadian Wildlife Service of Environment Canada is interested in observations of birds, especially observations of birds identified as Species at Risk (e.g. Ivory Gull or Red Knot). Observations can be reported through the NWT/NU Bird Checklist program.

NWT/NU Bird Checklist Survey
Canadian Wildlife Service, Environment Canada
5019 - 52 Street, 4th Floor
P.O. Box 2310
Yellowknife NT, X1A 2P7
Phone: 867.669.4773
Email: NWTChecklist@ec.gc.ca

All mitigation 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 proponent's 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.

EPO should be notified of changes in the proposed or permitted activities associated with this application.

Please do not hesitate to contact me at (867) 669-4744 or ron.bujold@ec.gc.ca with any questions or comments.

Yours truly,

Ron Bujold

Ron Bujold
Environmental Assessment Technician

cc: Carey Ogilvie (Head, EA-North, EPO)
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