

△ ∇ ΠC \cup λ^bd^c

Avatiligiyyit

Department of Environment

Ministère de l'Environnement

May 17, 2007

Richard Dwyer
Licensing Trainee
Nunavut Water Board

via Email to: licensingtrainee@nunavutwaterboard.org

**RE: NWB FILE # 1BR-BYR – DEFENCE CONSTRUCTION CANADA LTD. –
BYRON BAY PROJECT**

Dear Mr. Dwyer:

The Government of Nunavut, Department of Environment (DOE) has reviewed the water license application from Defense Construction Canada Ltd. for the Byron Bay project for DEW Line site remediation approximately 150 km west of Cambridge Bay. The DOE believes the project will not result in significant adverse effects although the potential for negative environmental impacts exists. Based on the *Wildlife Act*, the DOE has the following comments to make.

WIDLIFE

The project is located in the area where caribou, grizzly bears, wolves, foxes and raptors may be encountered. DOE therefore asks the proponent records all wildlife observations in a 'wildlife log', and maps the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests. The timing of critical life history events (i.e., calving, mating, denning and nesting) should also be identified. Additionally, the proponent should indicate potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites; the log and maps will be a useful tool to achieve this. Below are wildlife specific recommendations that DOE advises the proponent to implement.

Caribou

1. During the period of May 15 to July 15 when caribou is observed calving in the area, the proponent should suspend all operations, particularly blasting, low-altitude overflights by aircraft, and the use of snowmobiles and ATV's (all-terrain vehicles) outside the immediate vicinity of the camp. All personnel should remain quietly in camp or should be removed from the site who are not

required for the maintenance and protection of the camp facilities and equipment. The proponent may resume activities prior to July 15 if the caribou cows have ceased to use the area for calving or post-calving.

2. During migration of caribou, the proponent shall not locate and operate so as to block or cause substantial diversion to migrating caribou. The proponent shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.
3. The proponent shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any diamond drilling operation within 5 km, of important caribou crossings.
4. Low-level overflights should be avoided, and should maintain an altitude of at least 610 m above ground level when one encounters concentrations of caribou.

Human-Bear Conflicts

The project is in an area where grizzly bears may be encountered. Proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation. Careful planning and attention to details of camp design and maintenance will decrease the attraction of bears to a camp. The use of an electric fence around the camp site is advised and the proponent should also consider the use of the on site helicopter as a means of deterring bears.

The applicant should follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional Biologist or the Wildlife Manager indicated below for information and advice on measures which should be taken to minimize the possibility of bear-people conflicts. The proponent is advised to insure that all staff on site receives the appropriate training in minimizing human-bear conflicts. Any bear sighting or interaction should be reported as soon as possible to the nearest Conservation Officer or the Regional Wildlife Biologist.

Raptor Nesting Areas

The project area includes known raptor nesting sites and other areas where it is likely that raptors nest. To minimize negative impacts of this operation on raptors, the applicant should be advised to:

- (a) take care not to disturb nesting raptors from 15 April to 1 September by staying at least 1.5 km away from them when in transit by aircraft, and to avoid approaching them closely while on foot, and

(b) Contact the Regional Biologist to identify areas which should be avoided.

Aircraft Disturbance

Aircraft activities have been shown to affect wildlife such as caribou, muskoxen and birds in behaviour, development and reproductive success as well as subject the wildlife to adverse weather conditions and accidental damage or injury. However, by raising flight altitudes, studies have shown that it will alleviate some of the negative effects. Therefore, we recommend that the following protection measures are taken to reduce aircraft disturbance on wildlife.

Unless there is a specific requirement for low level flights, aircraft activities should maintain a minimum altitude of 610 meters above ground level in places where there are occurrences of wildlife. In areas where there are observed large concentrations of birds, flight level is restricted to 1,000 meters vertical distance and 1,500 meters horizontal distance from the birds. These guidelines are provided as a general standard, and exceptions may arise on a case-by-case basis. As a good practice, it is recommended to avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.

DOE Contacts (Wildlife Division)

Manager, Wildlife

- Dustin Fredlund, (867) 982-7441, talwildlife3@qiniq.com

Conservation Officer, Kitikmeot Region

- Allen Niptanatiak (867) 982-7451, kugwildlife2@qiniq.com

Regional Biologist

- Mathieu Dumond, (867) 982-7444, mdumond@gov.nu.ca

The DOE thanks the NWB for giving us the opportunity to review and provide comments on the Byron Bay project water license application. Please contact us if you have any further questions or comments.

Yours sincerely,

Original signed by

Helen Yeh

Environmental Assessment Coordinator

Department of Environment

Government of Nunavut

P.O. Box 1000, Stn. 1360

Iqaluit, Nu X0A 0H0

PH: (867) 975-7733

FX: (867) 975-7747



EM: hyeh@gov.nu.ca

