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Department of Environment

Ministère de l'Environnement

May 1, 06

Richard Dwyer  
Licensing Trainee  
Nunavut Water Board

**via Email to:** [licensingtrainee@nwb.nunavut.ca](mailto:licensingtrainee@nwb.nunavut.ca)

**RE: NWB2BE-KAZ/GA – KAZANS FALLS EXPLORATORY PROJECT  
WATER LICENSE APPLICATION**

Dear Richard:

The Department of Environment (DOE) has reviewed the water license application from Pacific Ridge Exploration Ltd. for conducting uranium exploration near Kazan River, and has the following comments and recommendations.

**1. SPILL CONTINGENCY PLAN:**

Based on the Government of Nunavut *Spill Contingency Planning and Reporting Regulations* and *A Guide to the Spill Contingency Planning and Reporting Regulations*, the DOE has one comment to make:

- All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills. Large fuel caches in excess of 20 drums should be inspected daily.

**2. ABANDONMENT & RESTORATION PLAN**

Based on the *Mineral Exploration Guidelines for Saskatchewan (2005)*, DOE has the following recommendations to make:

- Drill mud solids or cuttings with a uranium concentration greater than 0.05% are to be disposed of down the drill hole and sealed.
- Any drill hole that encounters uranium mineralization with a content greater than 1.0% over a length of more than 1 meter with a meter-percent concentration greater than 5.0 will be sealed by cementing (grouting) over then entire length of the mineralization zone and not less than 10 meters above or below each mineralization zone.

- Drill holes are to be sealed by cementing the upper 30 meters of bedrock or the entire depth of the hole, whichever is less.
- Gamma radiation levels of a uranium core storage area is advised to follow the standards below. Gamma levels measured at 1 meter from surface for a storage area should be reduced to 1.0  $\mu\text{Sv}$  and in no instance will the level be allowed to exceed 2.5  $\mu\text{Sv}$ . If the radiation level of the cores are greater than 1.0  $\mu\text{Sv}$ , cores should be placed at a fenced-in area.

### **3. WILDLIFE**

#### **Barren-Ground Caribou**

The permit area situates within the Qamanirjuak Calving Area, DOE advises the proponent to follow the instructions below when caribou is calving at the area.

1. The permittee shall not, without approval, conduct any activity between May 15 and July 15 within the Kivalliq region.
2. A permittee may, upon approval by the Land Use Inspector (DIAND) or Land Manager (KIA), operate within the Kivalliq region beyond the May 15 deadline, provided that when caribou cows are approaching the area of operation, the permittee will implement point 3 below.
3. During the period of May 15 to July 15, the permittee will suspend all operations, particularly blasting, overflights by aircraft at any altitude of less than 300 metres above ground level, 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. Upon advice from the Land Use Inspector (DIAND) or Land Manager (KIA), the permittee will remove all personnel from the site who are not required for the maintenance and protection of the camp facilities and equipment.
4. The permittee may resume activities prior to July 15 if the caribou cows have ceased to use the area for calving or post-calving.

#### **Raptor Nesting Areas**

The raptor nests occur throughout the permit area. DOE recommends the proponent 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.

The following is a list of general precautions that must be considered when conducting prospecting activities near Peregrine Falcon, Gyrfalcon, and other raptor nests (most of these precautions will also apply to all nesting bird species):

1. Disturbance is most harmful early in the nesting period (May and June for Peregrine Falcon and Gyrfalcon, similar for Rough-legged Hawk):  
Raptors will attempt to maximize their chances of successfully raising young. If they decide early in the breeding period that their nest is at risk, they may abandon it. If nests are disturbed at this stage of nesting, there may not be sufficient time to renest. All disturbances to nests during the early part of the nesting cycle must be avoided (avoid nest sites from late May to mid-July).
2. Individuals show variability in their response to disturbance:  
Different birds will show different responses to varying levels of disturbance. This may result from the general health of the bird, weather conditions, previous life experiences, and adaptability. Therefore, treat all nest sites with equal precaution, regardless of the response of the bird. Do not disturb raptor nests during conditions of poor weather (rain, snow, high winds).
3. Approaching the nest site near the time of fledgling (where chicks fly away from the nest) often leads to premature nest departure:  
During the last few weeks of nesting, severe disturbance at the nest often causes young raptors to jump out of the nest. This can cause death from exposure, predation, starvation, or trauma from the fall itself. All activity within 100m of a nest site during the latter part of the nest stage (10-20 August for peregrine falcons in this region) must be avoided.

Further details on wildlife issues can be obtained from the contact information below:

#### **DOE Contacts**

Manager, Wildlife

-Dan Shewchuck, (867) 857-2828, [dshewchuk@gov.nu.ca](mailto:dshewchuk@gov.nu.ca)

Wildlife Officer,

-Joe Niego, (867) 793-2944, [jniego2@gov.nu.ca](mailto:jniego2@gov.nu.ca)

Biologist, Kivalliq Region, Arviat

- Mitch Campbell, (867) 857-2828, [mcampbell@gov.nu.ca](mailto:mcampbell@gov.nu.ca)

#### **4. THE CANADIAN HERITAGE RIVERS SYSTEM**

We also are concerned regarding permit areas requested along a Canadian Heritage River, Kazan River. Please note that The Canadian Heritage Rivers System (CHRS) is Canada's national program for freshwater conservation. The objectives of the program are to give national recognition to Canada's outstanding rivers and to ensure long-term management that will conserve their natural, cultural and recreational values for the benefit and enjoyment of Canadians, now and in the future.

We ask the prospectors to respect the values of the Heritage Rivers (refer to the management plans provided by CHR Board) and not to engage in any activity



that would interfere or other wise detract from the experience of tourists and Nunavummiut using the Heritage Rivers now and in the future.

We thank NWB for giving us the opportunity to review and provide comments on the Pacific Ridge's water license application near Kazan River. Please contact us if you have any further questions or comments.

Yours sincerely,

***Original signed by***

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