

BEVERLY AND QAMANIRJUAQ CARIBOU MANAGEMENT BOARD

17 June 2008

Leslie Payette
Manager Environmental Administration
Nunavut Impact Review Board
P.O.Box 1360
Cambridge Bay NU X0B 0C0

Dear Ms. Payette:

NIRB File No. 08EN059 – Uranium North South Baker-Dubawnt Lake Project Proposal

On behalf of the Beverly and Qamanirjuaq Caribou Management Board (BQCMB), I am submitting comments on the proposal from Uranium North for uranium exploration on their property in the Dubawnt Lake area, approximately 320 km southwest of Baker Lake, NU. This is in accordance with the mandate of the BQCMB, which is to advise governments and caribou range communities on ways to protect the Beverly and Qamanirjuaq caribou herds and their ranges.

Following is a description of the BQCMB's concerns with this project, and recommendations to address them. This information is intended to help NIRB to identify the potential impact of the proposed project activities on caribou as well as actions that should be taken to avoid or minimize these impacts.

Issues and Concerns:

The BQCMB is concerned about these proposed activities because they will occur when Beverly and Qamanirjuaq caribou may be using this area, which means there is potential for Uranium North's proposed activities to impact caribou. The BQCMB's main concerns about activities proposed for the Dubawnt Lake area are described below.

1)Timing and location – In the additional information supplied with the application to INAC, Uranium North says the period of work will be July 2008 and possibly July 2009. However, in the NIRB Part 1 form, the period of operation for year 1 (2008) is described to be from mid-June to end of August. We therefore use the broadest period stated by the applicant (mid-June to end of August) as the proposed period of operation for 2009, and because they will clearly not get a permit until early July 2008 at the soonest, we assume that their 2008 program will extend through August.

As stated by Uranium North, the proposed project area is not known to be used as a caribou calving ground. However, caribou may be encountered in the Dubawnt Lake area throughout the project's proposed period of operation. Caribou in this area are expected to be primarily from the Qamanirjuaq herd, although Beverly and Ahiaq caribou may also use the area as well.

Past survey data (collected between 1948 and 1990) show that caribou have used the project area during the spring migration, post-calving, late summer, and fall migration/rut periods (mid-March to late

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May and July to late October)¹. Available data from radio-collared caribou indicate that caribou cows have used the area in recent years during May (spring migration) and August (late summer)².

It is interesting that in their Wildlife Mitigation Measures document, Uranium North has provided maps from the BQCMB website of the Beverly and Qamanirjuaq calving grounds, but they do not include other BQCMB maps available on the website that document use of the Uranium North project area by caribou during other periods as specified above³. They claim in their PSIR application form that: "A comprehensive review of the migratory paths and calving grounds of both the Beverly and Qamanirjuaq Caribou herds has been undertaken and the project area does not fall within any of these important regions." They do not appear to have conducted a comprehensive review of the BQCMB's on-line map atlas, and it is not clear whether they have had any discussions with the regional biologists with GN-Department of Environment or the GNWT- Department of Environment and Natural Resources about range use by caribou as indicated by their radio-collaring programs.

In summary, it is possible that cows with young calves may use the area while Uranium North is conducting their exploration activities, specifically during the post-calving period through late summer (July to August/September). Bull caribou may also occupy the project area at anytime throughout this operating period.

2) Aircraft flights

Uranium North is proposing to transport personnel and materials between their camp on Dubawnt Lake and Baker Lake, and also between their camp and Kasba Lake Lodge, NT. They therefore have the potential to fly repeatedly over groups of caribou from various herds (Beverly, Ahiak, Qamanirjuaq). They will also be using helicopters for moving diamond drills, fuel and personnel throughout their operating period.

Fixed wing and helicopter flights will produce disturbance to caribou in the area throughout the project, particularly when aircraft take off and land and when they fly at low levels. Airborne surveys, especially those conducted at low elevation and with tight transect spacing, can affect the movements and feeding patterns of caribou. This disturbance could have significant negative impacts if the flight path of aircraft crosses over large groups of cows with newborn calves or post-calving groups.

3) Effects of disturbance on caribou - Frequent interruption of caribou feeding during the summer can have a significant negative effect on the condition of individual animals. Caribou need to feed continuously through the summer (to end of August) to ensure that they are in good condition during the fall migration and rutting period and have reserves for winter. Insufficient feeding can lead to increased calf mortality rates, reduced pregnancy rates, and lower calf production the following year, and may result in a decrease in herd size.

¹ BQCMB. 1999. Protecting Beverly and Qamanirjuaq Caribou and Caribou Range. Part I: Background Information. 40 pp. Beverly and Qamanirjuaq Caribou Management Board, Ottawa ON. Available on-line at: www.arctic-caribou.com/bevreport.html

² GN-DOE. 2006. Journey of the Caribou. CD-ROM. Gov. NU – Dep. of Environment, Arviat NU.

³ Spring migration range: www.arctic-caribou.com/parttwo/pdf/sp.pdf

Post-calving range: www.arctic-caribou.com/parttwo/pdf/pc.pdf

Late summer range: www.arctic-caribou.com/parttwo/pdf/lr.pdf

Fall migration/rutting range: www.arctic-caribou.com/parttwo/pdf/fr.pdf

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4) Wildlife monitoring and mitigation – It is good that Uranium North has committed to adhere to INAC’s Caribou Protection Measures, and that they outline additional mitigation measures for caribou in their Wildlife Mitigation Measures document, including use of a buffer of 1 km between their activities and caribou. However, they do not explain how monitoring will be conducted to ensure that they do not conduct activities within 1 km of caribou. Because caribou are likely to be encountered by Uranium North in their project area, they should have a monitoring plan and clear directions for staff on what actions to take when caribou are encountered.

5) Potential for cumulative effects

Uranium North states in the appendix to their application to INAC (under item 6) that “No other mineral exploration activities or other industrial development projects are currently known or planned for the area” and they then claim that this “eliminates the potential for cumulative environmental effects”. Unfortunately this is wrong on both counts.

- First, there are a number of approved and proposed uranium exploration projects in the region. This includes the UR-Energy’s BUGS project, for which NIRB recommended approval to INAC on 30 April 2008. UR-Energy’s Nowleye Lake camp is only about 70 km south of Uranium North’s proposed camp, and is contained within the project area described by Uranium North on their NIRB Part 1 form. In addition, there are four uranium exploration proposals by Uravan and Bayswater in the NWT within a few hundred kilometres of Uranium North’s project area. Bayswater’s Crab Lake camp is in the Dubawnt watershed only about 90 km west of Uranium North’s proposed camp on Dubawnt Lake.
- Second, for migratory species such as caribou (among others), the effects of exploration activities can accumulate during their travels across their range, both throughout each year and between years. This means that caribou that use Uranium North’s project area may be subject to disturbance and other effects of exploration and development activities across their ranges and over the years that may have cumulative impacts on individual animals and the herds.

It is for this reason that the BQCMB has recommended a regional assessment of the cumulative impacts of mineral exploration and other land use activities, including activities in the Kivalliq region of Nunavut. From the BQCMB’s perspective it is clear that continued assessment of individual projects on a case-by-case basis will not be adequate to ensure that significant adverse eco-systemic and socio-economic effects will be prevented.

Recommendations:

- 1) Regulatory and other territorial and federal government agencies (i.e., in Nunavut NIRB, GN, INAC) should be taking action to identify and mitigate potential cumulative effects of human land use activities, including mineral exploration, on barren-ground caribou. This assessment of cumulative effects should occur at a regional scale (i.e., much larger than individual project areas).
- 2) If the proposed activities are permitted:
 - a) Permit conditions should address potential disturbance effects of proposed activities on caribou. In addition to the Caribou Protection Measures, permit conditions should include the following.

All project activities

- All project activities must be stopped between May 15th and July 15th if caribou cows and/or calves are in the project area, as per NPC’s conformity requirements regarding

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INAC's Caribou Protection Measures. This includes suspending drilling, blasting, flights below 610m agl, and operation of snowmobiles and all-terrain vehicles outside of camp.

- Drilling, survey activities and flights below 610m agl should not be resumed unless caribou are at least 5 km away from the areas where these activities are conducted.
- No exploration activities should be conducted within 5 km of designated water crossings or block or cause diversion to migrating caribou

Airborne surveys, low-level flights

- Low-level (below 300m agl) surveys, including airborne geophysical surveys, should not be conducted from May to August if caribou cows or cow/calf groups are in the area.
- Minimum flight altitudes of 610m should be maintained at all times except when taking off and landing and when required for safety reasons; the amount of time aircraft spend at lower levels should be minimized.

Monitoring and mitigation

- A monitoring and mitigation plan (not just mitigation measures) that is approved by NIRB and GN-DOE should be in place before Uranium North is allowed to begin operating.
 - The caribou monitoring program should be established with the intent of determining *in advance* when caribou are moving toward drill rigs and survey areas, to ensure that adequate notification is received for shutting down drilling or airborne survey operations if caribou are approaching. This will be necessary to ensure that potential disturbance is discontinued before caribou reach the project area.
 - An independent caribou monitor should be hired (preferably from a Nunavut community) specifically to conduct the monitoring work.
- b) NIRB should ensure that regular inspection of project operations is conducted, and that NIRB's permit terms and conditions, NPC's conformity requirements and INAC's caribou protection measures are enforced.

Please let me know if you require further information or have any questions about these comments from the BQCMB.

Sincerely,

[original signed by]

Leslie Wakelyn
BQCMB Biologist

cc: Jerome Denechezhe, BQCMB Chairperson
Lutsel K'e Wildlife Lands and Environment Department
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