4 March 2008

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

Dear Ms. Payette:

### NIRB File No. 08FN009 – Matrix Aviation Winter Fuel Haul Project Proposal

On behalf of the Beverly and Qamanirjuaq Caribou Management Board (BQCMB), I am submitting comments on the proposal from Matrix Aviation for hauling fuel and supplies from Baker Lake and Rankin Inlet to mineral exploration camps within the Kivalliq Region, Nunavut.

The BQCMB is concerned about this proposal because some of these activities will occur on important habitats used by Beverly and Qamanirjuaq caribou herds, and there is potential for these activities to impact caribou and caribou range.

We are also concerned that the proposal documents do not describe specific actions that will be taken to ensure that caribou will not be negatively impacted by the proposed activities, or what action will be taken if habitat damage occurs.

The information provided below 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. 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 Qamanirjuag caribou herds and their ranges.

# Importance of the Area to Beverly and Qamanirjuaq Caribou

The proposed haul routes pass through important Beverly and Qamanirjuaq caribou habitats as follows:

- The Baker Lake West route passes directly over the heart of the traditional calving ground for Beverly caribou.
- The Baker Lake West2 route passes through the Beverly post-calving area immediately to the east of the traditional calving ground.

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- The Rankin Inlet South route passes through an area that is used in various seasons by Qamanirjuaq caribou including: spring migration (late March – early May), post-calving (late June – late July), and early winter (Nov.-Dec.). It also extends near the eastern edge of the area in which a GNWT survey delineated the 2007 Qamanirjuag caribou calving area.

In addition, caribou from other herds, such as Wager Bay and Lorillard caribou, may also use the area proposed for the two Baker Lake West routes and the Baker Lake North route through the winter (Nov. – Mar.) and during early spring (April– early May).

## **Timing of Proposed Activities**

In their December 2007 Project Description, the proponent states (Sec. 2.4, p. 15): "All trips over the applied for routes will be conducted between March 1, 2008 and May 1, 2008 and November1 2008 and May 1, 2009." The proponent further states that this schedule may be extended past May 1<sup>st</sup> 2008 if permits are not issued before March 1<sup>st</sup>, which will clearly be the case. Later in the document they state that "Matrix commits to attempting to complete all hauling on the designated routes by May 1, of each year assuming that weather conditions permit." (Sec. 5.2, p. 20; italics added.)

## **Primary Concerns**

The proponent claims in Table 1 of their Screening Part 2 Form that their fuel haul activities will have a "Positive" impact on wildlife, including habitat and migration patterns. They do not provide any explanation in their Project Description to support this claim.

## a) Potential disturbance to caribou during winter and spring migration

As outlined above, caribou from several herds will likely use the areas around the winter haul routes during the proposed periods of operation, which will be primarily during spring migration 2008 and winter-spring 2009. Therefore caribou may be encountered during the winter haul.

The greatest potential negative impact on caribou would occur if the Snow Cats intersect with groups of pregnant cow caribou as they move toward their calving grounds, because:

- Cows are sensitive to disturbance at this time Pregnant cows have minimal fat reserves and are moving long distances towards their calving grounds; they need all their reserves for travel and development of their young.
- Impacts on cows and their unborn young can occur if they use more energy to avoid human activities.
- Added stress to the cows may harm the health of the cow and could decrease calf production or survival.

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Despite these potential impacts, the proponent appears not to have a plan for avoiding or reducing impacts on caribou should the Snow Cats and snowmobiles encounter caribou along the proposed routes. Their Project Description states only that (Sec. 5.2, p. 20): "Caribou have the "right-of-way", and will not be blocked or deterred from moving over the designated travel routes.", but no details regarding further mitigative actions are provided.

## b) Potential damage to wildlife habitat

The proposed haul routes occur on important caribou habitats with fragile tundra vegetation that could be damaged by the proposed activities and subsequently no longer be available for caribou or other wildlife to feed upon. The potential loss of feeding habitat would be 120 ha (240 km x 5 m wide). This could be significant when combined with other losses resulting from vegetation removal or disturbance from other exploration and development activities on key habitats in the area. Access to high quality vegetation on the calving and post-calving areas is critical to survival of caribou calves.

The proponent states in their project description (Sec. 5.2, p. 20) that: "Travel on snow covered routes in the region is not anticipated to create significant impacts on vegetation. Travel will be limited to periods when snow cover is a minimum of 20 cm and the both the Snow Cats and Sleds have very low ground pressure. If it is shown that the operation of this project causes disturbance to vegetation, re-vegetation will be conducted on sites that are proven to be disturbed. A detailed GPS log of all travel routes will be maintained and will be used to assess damage from the activity."

The proponent has provided no reclamation plan, and states (Sec. 2.7, p. 15-16) "If surface disturbance is noted by the land use inspector and it can be attributed to this operation it will be reclaimed as directed by the inspector." They apparently have no plan regarding methods or species they would use to revegetate the landscape, and may not know how difficult or costly this might be.

#### Recommendations:

- 1. No activities in support of exploration or development should be allowed on the traditional calving and post-calving areas of the Beverly and Qamanirjuaq caribou herds. The three Baker Lake routes should not be permitted, as they will cross the traditional calving and post-calving areas of the Beverly herd.
- 2. If proposed activities are permitted:
  - a) Permit conditions should address potential disturbance effects of these activities on caribou, and should include:

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- A monitoring system that should ensure that advance notification is received for stopping haul activities when caribou approach the haul routes, to ensure that potential disturbance is discontinued before caribou reach the Snow Cats.
- A local hunter on snowmobile should scout ahead of the Snow Cats to determine when caribou are approaching the haul route.
- The Snow Cats and snowmobiles should be required to stop immediately when approaching migrating caribou are detected.
- b) Permit conditions should address potential damage from these activities on caribou habitat and ensure that all feasible efforts are made to prevent damage to the vegetation along the route, including:
  - Winter haul activities should not be started on a given route if there is not adequate snow cover to protect the vegetation along the entire route.
  - Haul activities should be stopped if there is not sufficient snow cover to protect the vegetation from travel by the Snow Cats with loaded sleds.
  - The proponent should be required to file a reclamation plan with NIRB before their winter haul begins. This plan should specify how the vegetation will be reclaimed to its natural condition.
  - The authorized period of operation should not extend past May 1<sup>st</sup> under any circumstances, and operations should be suspended prior to that time if snow cover is reduced below the minimum specified snow cover depth.
- c) NIRB should ensure that regular inspection of project operations is conducted, and that NIRB's permit terms and conditions and NPC's conformity requirements 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

Baker Lake HTO Rankin Inlet HTO

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