Response from BQCMB to Evidence Transfer and Scoping Questions for Upper Thelon EAs: EA0708-002, 003, 004, and 005 (7 Apr/08)

Evidence Transfer Questions

1a) Written Submissions

- Documents from the EA0607-003 public registry not on the draft evidence list that should be on the evidence list for transfer to the Upper Thelon EAs currently in process:
 - #15, 31, 66, 95 Submissions from individuals. Why are these not included when other submissions from individuals (e.g., 16, 17, 88) are included? All submissions that provide information about public concern regarding developments in the region should be transferred.
 - #49 EC response to IR regarding noise impacts This is important background information that is relevant to the Upper Thelon EAs currently in process.
 - #52-55 GNWT response to IRs regarding tourism, harvesting, noise impacts, protection of heritage resources. This is important background information that is relevant to the Upper Thelon EAs currently in process.
 - #59, 102 INAC responses to IRs on cumulative effects in the Thelon area These submissions should be transferred because they provide information about the information available (or not) concerning historic and ongoing exploration in the area, as well as commitments and plans INAC made to initiate cumulative effects studies. This is important background information that is relevant to the Upper Thelon EAs currently in process.
 - #68-70, 72, 73, 92 Presentations at the public hearing These items provide important information about the value of the area to various individuals and groups and about the level of public concern, so are all relevant to the Upper Thelon EAs currently in process. Note that other hearing presentations posted on the public registry (e.g., by Arctic Ecoventures, Athabasca Denesuline) are not included in Appendix A. These documents should be transferred also.
 - #89 Map of Thaydene Nene This is important information that shows areas important to the LKDFN, which is relevant to the Upper Thelon EAs currently in process.
 - #107-118 You indicate in Table 1 that you have included 12 letters submitted to the INAC Minister; however, there are more than 12 such letters posted on the public registry. Since you haven not itemized the letters in Table 1, we cannot tell which letters you propose to transfer.
 - All these letters should be transferred, as all are relevant to the Upper Thelon EAs currently in process.
 - The letters transferred should include the 5 September 2007 letter from the BQCMB to the INAC Minister.
- > **Documents on the draft list that should not be included:** No such documents have been identified by the BQCMB.

1b) Oral Submissions

➤ The Review Board is considering placing the entire *Hearing Transcript* and *Report* of *Reasons for Decision* from EA0607-003 on the public records for consideration as evidence for the current EAs.

The BQCMB agrees with this.

> Testimony from the Hearing Transcript that should not be transferred: None

Scoping Questions

- 2a) Identify specific issues (if any) related to the following for any or all of the four current EAs:
 - a. Impacts on the Beverly and Ahiak Caribou herds;

> Background:

- The area proposed for further exploration by Uravan and Bayswater in the upper Thelon region is used by caribou cows during spring migration (April-May), the fall rut (October) and the months of August, September, October, November, January, February and March; this includes the fall migration.
- The proposed periods of operation, including drilling and geophysical work, for these four exploration programs are from the spring migration period through the summer and early fall months:
 - o Bayswater: March- April (camp construction and mobilization), April-May (ground geophysics), and June-August (drilling)
 - Uravan: 25 April-30 September (overall period of operations), 10 June-30 September (drilling)

We did not find a description of airborne geophysical work or proposed timing in the project descriptions for any of the projects.

- Specific issues related to impacts on Beverly and Ahiak caribou herds:
 - **Disturbance during spring migration**, at a time when pregnant female caribou are extremely vulnerable. This is a major issue for both the Beverly and Ahiak herds, for all four proposed projects. Disturbance is most likely to result from flights for re-supply and transport as follows:
 - Bayswater during camp construction and mobilization proposed for Mar-Apr and transport of personnel during geophysical work proposed for Apr-May.
 - Uravan during camp mobilization, drill moves and transport of personnel proposed for Apr-Jun.
 - Disturbance during 15 August 15 September when cows and calves are relatively stationary (movement rates are low because insect harassment period has ended) and they need to feed continuously to build up reserves for the breeding period (fall rut), survival during the winter and fetal development during winter months.

- Disturbance during this period will most likely occur from flights to transport the drill and personnel.
- Data from collared cows indicate that cows with calves could be present in all four proposed geophysical program areas during August and September.
- **Disturbance from airborne geophysical surveys** (that may not be listed in the project descriptions).
 - o From 2005-2007, both Uravan and Bayswater conducted extensive airborne geophysical surveys using both rotary wing and fixed wing aircraft at low elevation and small transect spacing (250-400m). Low elevation surveys disrupt the feeding of caribou cows and calves during July-September, which can affect the growth/survival rates of calves and the conditions of cows and whether they will be in good enough shape to breed in the fall.
 - This is an issue that should be considered in the EAs, if airborne geophysical surveys are to be conducted in future years.
- Cumulative effects of disturbance from multiple exploration projects occurring
 within the same small area in the Upper Thelon region. This is a major issue for
 both the Beverly and Ahiak herds, for all four proposed projects.
- Cumulative effects of disturbance from Upper Thelon exploration in combination with the effects of disturbance from ongoing exploration and development on the Beverly calving and post-calving areas in Nunavut and on winter range in Saskatchewan. This is a major issue for the Beverly and Ahiak herds, for all four proposed projects.
- Habitat loss If exploration projects continue to be approved in the upper Thelon area, loss of important migration habitat will likely occur as caribou avoid areas of activity. Key water crossings may be abandoned if industrial activity is encountered near them.
- Contamination If there is any contamination from individual exploration sites, there will be potential for caribou to accumulate this contamination through each year as they migrate through their seasonal ranges, and from year to year as the number of such sites increases. This would be a significant issue in terms of the health of individual caribou, herd health and productivity, potential transfer of contaminants up the food chain (e.g., to predators and scavengers that feed on caribou) and food availability for traditional caribou harvesters (i.e., whether the meat is safe for human consumption).

For further details about some of the issues of concern to the BQCMB, please see our previous submissions to the MVLWB and MVEIRB concerning land use applications for mineral exploration work in the upper Thelon region by Ur-Energy, Uravan and Bayswater. The most recent submission is our 10 August 2007 letter to the MVLWB concerning the applications by Bayswater currently undergoing assessment; the most comprehensive response is our presentation to the Ur-Energy public hearing in January 2007.

b. Impacts on aboriginal cultural values associated with the Upper Thelon river basin.

• Potential loss of caribou harvesting opportunities – It is likely that the Beverly and Ahiak herds are decreasing, as are 5 herds to the west in the NWT and Yukon. Additional exploration and development across the caribou ranges may worsen the decline and/or increase the time it takes for the herd to recover. This could result in genuine hardship for people who rely on caribou harvests both for food and as a vital part of their cultures, including the Akaitcho, the Athabasca Denesuline and the Northwest Territory Metis Nation.

According to a recent socio-economic study of the value of Beverly and Qamanirjuaq caribou contracted by the BQCMB, the total annual net economic value of the harvest from the Beverly herd is almost \$5 million, including more than \$4 million for the domestic harvest and more than \$620,000 for the outfitted harvest.

- 2b) Identify any other important issues, other than those listed in Question #2a, that you feel need to be considered for any or all of the four current EAs. Describe the reasons why you think these are important issues (if any).
- 3) Identify any changes in the regional context or setting that have occurred since the federal minister's decision on EA0607-003, UR Energy Screech Lake that alter the potential for impacts and public concerns from these four proposed developments.
 - Increased uncertainty about the population status of the Beverly herd A June 2007 Beverly calving ground survey found low numbers and density of caribou and calves on the Beverly calving ground during the calving period. Until further information is obtained on the status of the Beverly herd, the precautionary principle should be applied and development should not occur if there are any potential impacts to caribou cows and calves.
 - Additional information available about the importance to migrating caribou of the area in which projects are proposed by Bayswater and Uravan in the Upper Thelon

 New data on seasonal movements of Beverly and Ahiak caribou collected from collared caribou since 2006 show that more information is required to differentiate between the seasonal ranges of these two herds. Location of collared cows indicate that caribou cows from these two herds use the Thelon River corridor associated with the 4 proposed exploration programs as wells as areas west and east of the Thelon River. Use of this area by caribou cows occurs during spring migration (April-May), the fall rut (October) and the months of August, September, October, November, January, February and March; this includes the fall migration.
 - Increasing potential for detrimental cumulative effects of exploration and development on Beverly and Ahiak caribou from activities occurring across their year-round ranges.
 - O Beverly calving and post-calving areas The Nunavut Impact Review Board has continued to approve land use permits on these important caribou habitats. This includes a permit recommended by NIRB in February 2008 for Bayswater and a permit application currently under review by NIRB for Uravan, both for exploration activities on the Beverly calving ground. This means that:

- pregnant female Beverly caribou could be subject to disturbance when they arrive on the calving ground and also after calving while cows and calves are most vulnerable
- pregnant female Ahiak caribou could be subject to disturbance as they
 migrate through the Beverly calving ground to their own calving ground
 farther north, as well as during the post-calving period when cows and
 calves are highly mobile due to insect harassment and travel through the
 Beverly calving ground and post-calving areas.
- Beverly and Ahiak winter range Mineral exploration on the winter range in Saskatchewan has also continued to increase.

Caribou will be subject to increasing levels of disturbance from year to year, as long as regulators in Nunavut and Saskatchewan continue to issue permits and licenses for exploration and development on the caribou ranges.

4) Is there anything about the specific locations or development components of any of the new applications that is different enough so that additional issues need to be scoped in, or additional focus placed on a particular issue during that EA?

The proposed periods specified for drilling and geophysical work for these four exploration programs are from the spring migration period through the summer and early fall months:

- Bayswater (from project descriptions):
 - April-May (ground geophysics)
 - June-August (drilling)
- Uravan (from permit application)
 - 10 June-30 September (drilling)

Description and timing of airborne geophysical work was not found in the project descriptions.

Movement rate data from collared cows from the Ahiak & Beverly herds show that caribou cows are relatively stationary from 15 August – 15 September, which corresponds to the end of the insect harassment period. This is an important feeding period for cows and calves to improve their body condition/reserves prior to winters. Increased body condition of calves in the fall is associated with higher winter survival rates and cows with greater fall reserves will more likely be able to breed during the first estrus cycle during the fall rut, will have greater winter survival and have more protein reserves to allocate towards fetal growth during winter months. Increased fetus size is correlated with increased calf survival on the calving ground.

We recommend that this issue be included in the scope of the EAs for these four proposed projects because:

- Repeated disturbance of cows and calves during the August-September period could have significant negative effects on individual and herd health, and on productivity of these caribou herds.
- The significance of these effects need to be considered in the context of cumulative impacts, whereby the effects of disturbance experienced in the upper Thelon operate on caribou in combination with effects experienced at other times, such as during calving and post-calving (in Nunavut) and winter (in NWT and Saskatchewan).

Application of the precautionary principle is necessary, especially given the uncertain status of the Beverly caribou herd; development should not occur if there are any potential impacts to caribou cows and calves.