

**APPENDIX B**  
**Comments and Concerns**

# BEVERLY AND QAMANIRJUAQ CARIBOU MANAGEMENT BOARD

23 April 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. 08EN057 – Uravan Minerals Inc. Garry Lake Project Proposal**

On behalf of the Beverly and Qamanirjuaq Caribou Management Board (BQCMB), I am submitting comments on the proposal from Uravan Minerals Inc. (Uravan) for mineral exploration on their Garry Lake project, which lies on the traditional calving ground of Beverly caribou, north-east of the Thelon Wildlife Sanctuary.

The BQCMB is generally concerned about these proposed activities because they will occur on important habitats used by Beverly and Ahiak caribou during sensitive periods. Of particular concern is that Uravan is proposing to conduct exploration activities on the traditional calving ground of Beverly caribou, in the heart of the area used by this herd for calving in recent years. In addition, these activities are planned in the area proposed by parties to the Thelon Game Sanctuary Management Plan for designation as a special management area to help protect the Beverly caribou herd. There is clear potential for Uravan's proposed activities to impact caribou and important caribou habitat.

This issue should be given serious consideration at any time, given the importance of caribou to Aboriginal and other people across the caribou ranges - communities in Nunavut, the Northwest Territories (NWT) and northern Saskatchewan rely on the Beverly and Ahiak herds. However, the current context means that a proper assessment of projects of this nature must recognize that caribou protection is critical. This situation includes documented declines in five NWT caribou herds, limited information about Beverly and Ahiak herds, and the uncertain but likely declining population status of these herds.

### **Issues and Concerns:**

Following is a description of the BQCMB's major 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.

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## 1) Importance of the area to Beverly and Ahiak caribou

Uravan acknowledges in their project application that their properties lie within the Beverly Caribou Protection Area, which is designated under the *Keewatin Regional Land Use Plan* and regulated by Indian and Northern Affairs Canada (INAC). However, they do not acknowledge that they are proposing exploration activities on the **traditional calving ground<sup>1</sup>** of the Beverly caribou herd. They also apparently fail to recognize that their proposed project also lies in a special management area (SMA) proposed in the Thelon Game Sanctuary Management Plan, which was intended to protect the Beverly calving area. This SMA was seen to be critical for protecting the caribou herds for both the Inuit and Dene people of the Thelon region.

The Beverly traditional calving ground was identified based on government surveys that delineated annual calving areas up to 1994. The most recent data from calving ground surveys (2007, 2002, 1994, 1993) and from tracking satellite-collared Beverly and Ahiak caribou over the past few years has shown that Uravan's project area is in the **core calving area** for Beverly caribou, may be used by Beverly caribou during the post-calving period and is also used by Ahiak caribou during spring migration to their calving ground farther north.

**Concern:** Uravan is proposing to operate on sensitive and very important calving and post-calving habitat for Beverly and Ahiak caribou. The BQCMB has recommended that long-term legislated protected areas that exclude industrial development be established for calving and post-calving areas<sup>2</sup>, and is very concerned that mineral exploration is being permitted in this area.

## 2) Timing issues

Uravan's land use permit application states that their period of operation will run from July 1<sup>st</sup> 2008 to October 31<sup>st</sup> 2013, and they have asked for a permit to begin June 1<sup>st</sup> 2008. According to the attachment to their project application, they are proposing to conduct drilling activities between August 15<sup>th</sup> and October 31<sup>st</sup> 2008 and March to May 2009, and to operate their Garry Lake camp during the "summer-fall" and "late winter (mid-March to mid-June)" seasons. They also state that they will request approval to operate beyond May 15<sup>th</sup> and to resume operations before July 15<sup>th</sup> in the Caribou Protection Area.

Recent data collected by the Government of the Northwest Territories from satellite-collared female Beverly and Ahiak caribou show that Uravan's project area has been used in recent years by Beverly and Ahiak caribou during the spring migration and calving periods (May-early June) and during the post-calving and late summer periods (July-September). These data indicate that caribou from these herds may use Uravan's project area during much of their project period, that pregnant female caribou may be in the project area prior to May 15<sup>th</sup>, and that caribou cows with calves will likely use the project area between July and September, during which time Uravan plans to operate in 2008. In addition, breeding caribou

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<sup>1</sup> Maps showing the traditional calving ground of Beverly caribou, documented by government surveys up until 1994, are provided on the BQCMB website at [www.arctic-caribou.com/parttwo/mapatlas.html](http://www.arctic-caribou.com/parttwo/mapatlas.html).

<sup>2</sup> Protecting Calving Grounds, Post-Calving Areas and Other Important Habitats for Beverly and Qamanirjuaq Caribou: A Position Paper (BQCMB 2004)

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from other herds (e.g., Lorillard, Wager Bay, Melville) may use the Beverly calving ground and proposed project area in April/May and August/September.

It should be noted that the satellite-collar data provide only a partial indication of use of the area by a small number of caribou cows, and provide no information about use of the area by other caribou (such as bulls).

**Concern:** Uravan proposes to operate when caribou that are particularly vulnerable, including pregnant caribou, caribou with newborn calves, and post-calving caribou, will likely be using the area (May-June and July to mid-September).

### 3) Project activities

Airborne geophysical surveys were conducted between May and August 2007. It is not clear if and when these types of surveys will be conducted on Uravan's Garry Lake properties in 2008 or 2009.

**Concern:** Airborne geophysical surveys can potentially cause substantial disturbance impacts on caribou.

### 4) Results of 2007 Beverly calving ground survey

A survey of the Beverly herd by the Government of the NWT Dept. of Environment and Natural Resources (ENR) found low numbers and densities of calving caribou on the calving grounds in June 2007. This raises further concerns about the health and status of the herd. The BQCMB and the GNWT believe the herd is likely declining.

**Concern:** Based on June 2007 survey results, extra caution should be exercised during any activities conducted near breeding cows for the entire calving, post-calving and late summer periods (mid-May to mid-September).

### 5) Effects of disturbance on caribou

Disturbance to caribou can result in obvious behavioural changes, such as running away from aircraft or vehicles. However, disturbance can also cause stress to caribou when behavioural changes are less obvious (e.g., walking), or when they are not apparent to an observer (e.g., when feeding stops but the animal's head remains lowered). It is generally difficult for people to recognize that caribou are undergoing stress if observations are made primarily from aircraft (at elevations above 300m in altitude), unless the animals are running away.

Disturbance during the most vulnerable parts of the caribou life cycle are of greatest concern. This includes disturbance during spring migration, calving and post-calving periods, and while caribou are attempting to cross water bodies.

Frequent interruption of caribou feeding during spring migration and late 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

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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.

**Concern:** Any project activities between May and September will likely cause disturbance to caribou using the area, with potential impacts as described above.

### 6) Proposed mitigation measures – *The Wildlife Mitigation and Monitoring Plan*

The Plan submitted by Uravan, which is additional information requested by NIRB to support their application, is not adequate. The actions they have proposed are not sufficient to protect calving and post-calving caribou, and they are not explained in sufficient detail. Some of the main deficiencies of this Plan are outlined below.

- a) The Plan would be more appropriately titled “Caribou Mitigation Plan”. No monitoring plan is described, and no mitigation measures are proposed for wildlife species other than caribou.
- b) The conformity determination from NPC indicates that Uravan has committed to comply with conditions of the Caribou Protection Measures (CPM), as required by the *Keewatin Regional Land Use Plan*. Their mitigation plan does little more than restate this commitment and then describe how they intend to apply for a release from some of these conditions.
- c) Much of the Plan pertains to work Uravan hopes to conduct between May 15<sup>th</sup> and July 15<sup>th</sup>. No activities should be permitted during this period on the traditional calving ground.
- d) Both the permit application and mitigation plan (under “Risk Management Task Description”) indicate that Uravan intends to obtain a release from restrictions imposed by the CPM to allow them to operate past May 15<sup>th</sup> and/or to resume work before July 15<sup>th</sup> in the Caribou Protection Area:
  - They state that with approval, they will work past May 15<sup>th</sup> and only cease operations “if monitoring information suggests approaching caribou”. However, they provide no monitoring plan.
  - They state that they will resume work before July 15 “if the area in question is not expected to be utilized by caribou cows”. However, they provide no explanation of what information or criteria will be used to develop these expectations, or who will make that determination.
- e) Uravan only addresses the issue of flight heights in terms of cows calving outside the CPA, and it is not clear if they mean only between May 15 and July 15<sup>th</sup>. However, flights between Baker Lake and the camp throughout the project period will cross over the traditional calving ground, including the portion in the CPA, as well as post-calving areas. Helicopters travelling between the camp and work sites (including drilling, prospecting, mapping and sampling sites) will likely pass over groups of caribou and will land on the sensitive calving and post-calving areas.

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Fixed wing and helicopter flights will produce disturbance to caribou in the area throughout the project when aircraft take off and land, and whenever they fly at heights below 610 m agl. This disturbance could be particularly stressful if the flight path of aircraft flying at lower altitudes crosses over large groups of pregnant female caribou during spring migration, cows with newborn calves, or post-calving groups, both within and outside the CPA.

- f) Under “Risk Management Plan” for work between May 15 and July 15, both inside and outside the CPA:
- Uravan states that they will conduct “constant monitoring of the Uravan Minerals camp and surrounding drilling area”, but they provide no details about how this monitoring will be conducted.
  - They state that if caribou move into the camp and/or drilling area, they will stop activities in that area “that may hinder the migration or calving activities of the caribou”. There are several important limitations with this proposal: a) caribou that move into other areas on Uravan’s properties may also be subject to disturbance (e.g., from aircraft transporting personnel from camp to prospecting, sampling or drilling sites, or supply flights), so monitoring should be conducted over a wider area than the camp and/or drilling area; b) activities to be stopped are not described; and c) activities that may hinder caribou feeding, as well as migration and calving, should also be stopped.
- g) Under “Risk Management Plan” in relation to caribou migration, Uravan states that it “has done it’s best to place the exploration camp out of the way of the natural migration path of the caribou”.
- It is not known what information they used to make this determination. Several herds may use the area at different times.
  - In the attachment to their application, Uravan says that their knowledge of wildlife in the area was obtained from geophysical crews who conducted surveys May-June 2007, and that these crews did not report any observations of caribou. However, they were observed flying surveys over groups of caribou on several occasions in June 2007. Thus it does not appear that this is a reliable source of information.
- h) Under “Operations near Designated Crossings”, Uravan states that it will follow the CPM requirements between May 15 and September 1. It does not, however, acknowledge that it is operating in an area where caribou from both the Beverly and Ahlak herds will likely cross numerous waterbodies where they will be vulnerable to disturbance. Even though these crossings may not be officially designated, it is still very important to avoid disturbance there, including that induced by low level flights. Several notable caribou crossings on rivers near the north edge of Uravan’s properties (at the south end of upper and lower Garry Lake) have been documented by the GNWT.



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### 7) Potential exploration impacts on caribou

Uravan's mitigation plan only addresses requirements of the Caribou Protection Measures, and does not address broader issues about potential impacts of their operations on caribou, or the importance of minimizing these impacts. They should be fully aware that they are operating in an important area for caribou, and that they will need to take measures to avoid or minimize impacts, ***including and beyond the requirements of the CPM.***

**Concern:** Uravan does not appear to recognize the need to minimize the potential impacts of their operations on caribou on the calving grounds. They have inadequately addressed this issue in both their application and mitigation plan (see above). It is not clear that the company is prepared to seriously address these issues.

### 8) Regional cumulative effects

The BQCMB is concerned with the amount of mineral exploration underway and proposed across the range of the Beverly and Qamanirjuaq caribou herds, and particularly on the calving and post-calving areas of Beverly caribou. Potential cumulative effects are an issue at several scales, including within calving grounds and across caribou ranges, since caribou accumulate impacts as they move from one seasonal range to another. ***There is a need for 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. Furthermore, because so little is known about the status and vulnerability of the Beverly, Ahik, Qamanirjuaq, and other barren-ground caribou herds that use seasonal ranges in the Kivalliq region, the potential adverse effects and their accumulating impacts on caribou are not highly predictable.

### Recommendations:

1. No exploration or development activities should be permitted on the traditional calving ground of the Beverly caribou herd. The BQCMB does not agree with permitting exploration activities on calving and post-calving areas, and recommends that Uravan's application not be approved.
2. 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., larger than individual project areas), and should include all activities occurring on calving and post-calving areas.
3. If NIRB recommends to INAC that a land use permit be issued, permit conditions should address the following requirements.

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- a) No activities should be permitted, or subsequently approved by a Land Use Inspector, between May 15<sup>th</sup> and July 15<sup>th</sup>. If caribou move into the area before May 15<sup>th</sup> or after July 15<sup>th</sup>, activities (including flights for transporting personnel or supplies, diamond drilling and geophysical surveys) must be suspended immediately. Specifically:
- Project activities must be prohibited between May 15<sup>th</sup> and July 15<sup>th</sup>, as per NPC's conformity requirements regarding the Caribou Protection Measures. No releases should be issued.
  - All activities must be suspended if caribou approach the area during spring migration prior to May 15<sup>th</sup>.
  - Activities should be allowed to resume after July 15<sup>th</sup> **only** if it is demonstrated by a monitoring program approved by GN-DOE and NIRB that post-calving caribou are not in the area. Diamond drilling should not be initiated unless caribou are at least 5 km away from the drill sites.
- b) A detailed caribou mitigation and monitoring program and shut-down plan approved by NIRB and GN-DOE should be in place before Uravan is allowed to begin operating. The current Plan is not adequate.
- The Plan should include a rigorous caribou monitoring program that includes regular flights at altitudes above 610m agl.
  - An independent caribou monitor should be hired (preferably from Baker Lake) to conduct ground-based surveys to help assess when caribou are moving toward the project area.
  - The monitoring system should ensure that advance notification is received for shutting down project activities (including drilling and airborne surveys) if caribou are approaching. This will be necessary to ensure that potential disturbance is discontinued before caribou reach the project area.
- c) If airborne geophysical surveys are to be conducted as part of this proposed project, they should be described in the application and dealt with adequately in the mitigation and monitoring plan.
- d) It is crucial that project aircraft fly at low levels (below 300 m agl) **only** when necessary for safety reasons, and that the amount of time aircraft spend at low levels over the traditional calving ground is minimized and carefully monitored. When caribou are in sight, anywhere in the project area or during transit elsewhere, project aircraft should fly at altitudes above 610m agl whenever possible.
- e) 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.



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These comments are provided 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. While the BQCMB's mandate provides a focus on caribou and caribou range, board members are also concerned about the broader ecological effects of human land use activities and the long-term impacts these activities will have on the sustainability of traditional lifestyles and livelihoods for northern communities.

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

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## Avatiligiyyit

Department of Environment

Ministère de l'Environnement

April 23, 2008

Leslie Payette  
Manager Environmental Administration  
Nunavut Impact Review Board

**via Email to:** [lpayette@nirb.ca](mailto:lpayette@nirb.ca)

**RE: NIRB FILE #08EN037 – Uruvan Minerals Inc. – Garry Lake Uranium Exploration Project**

Dear Ms. Payette:

The Government of Nunavut, Department of Environment (DOE) has reviewed the Garry Lake project proposal from the Uruvan Minerals Incorporated for conducting uranium exploration and camp operation within the Beverly Caribou Protected Area. Based on DOE's mandate under the *Wildlife Act* and the *Environmental Protection Act*, we have the following comments and recommendations to make regarding wildlife, spill contingency planning, abandonment & restoration, and land use planning.

## 1. Wildlife

The project is located in an area where caribou, carnivores (i.e., grizzly bears) and raptors may be encountered. To prevent and minimize project related impacts on wildlife, it is important that the proponent is aware of the types of wildlife species, their distribution and their abundance in the project area, prior to the start of the project. 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.

### 1.1. Caribou

The project is located within the calving grounds of the Beverly barren-ground caribou herd. Recent research has strengthened the information basis for concerns about how caribou responses to human activities on calving and post-calving areas can accumulate to the level to affect caribou. Barren-ground

caribou require a relatively uninterrupted feeding cycle that includes feeding, ruminating (chewing their cud), resting, feeding and so on during the plant growing season to regain sufficient body reserves to become pregnant and to maximize their condition before the winter. Caribou cows must intensively feed in early June when the calves are born until the end of the plant growing season (mid and late August). It is during these post-calving and late summer periods that the caribou have to nurse calves as well as put on fat to become pregnant and to survive the coming winter. Bulls must put on enough fat to get through the rut as well as the winter. When the caribou feeding/fattening cycle is significantly interrupted, calf production may decrease, calf mortality may increase and female and male condition may drop affecting future breeding cycles. DOE cautions that cumulative disturbances between May and August will likely have a negative impact. Air or ground disturbances disrupt caribou behaviour. Road construction and use also is a conservation risk because it increases access to and disturbance of sensitive calving and post-calving areas. Nunavut's caribou herds are currently cycling down. During declines and times of low number, caribou are especially vulnerable to disturbance caused by exploration activities. For these reasons, protecting caribou calving and post-calving areas is important to caribou persistence.

Based on these considerations and the sensitivity of the area, the DOE recommends that if NIRB decides to approve operations in 2008 that the following conditions apply:

- Between **May 15** and **July 15**, DOE recommends that **no** activities occur within the Beverly Caribou Protected Area for the Beverly caribou herd.
- During these months GN Conservation Officers will be inspecting this site and others within, or close to caribou calving and post-calving grounds.

At all other times within the calving areas:

- When caribou are in sight of the operation, the proponent shall suspend all blasting, over-flights of aircraft, geophysics surveys with an altitude of less than 610 metres above ground level and operation of ATV's and snowmobiles and any other ground based or water based mobile equipment.
- During caribou migration, the proponent shall cease activities likely to interfere with migration such as airborne geophysics surveys or movement of equipment or personnel until the caribou have passed.
- The proponent must not construct a camp, cache fuel, conduct blasting or drilling operations, operate ground, air or water based mobile equipment, including geophysics surveys within 10km of a 'designated and/or recognized caribou crossing'.

## **1.2. Human-carnivores conflicts**

It is likely that during operations the proponent will encounter grizzly bears, polar bears, wolves, foxes and wolverines. The proponent is advised to minimize odors that potentially attract carnivores through timely camp housekeeping and bearproof storage of food and food waste. Should the proponent experiences any interaction with carnivores, they are advised to contact the local Conservation Officer. All camp members should be fully aware and trained in the human - bear/ wolf/fox/wolverine encounter avoidance plans especially in avoidance of any feeding (advertently or inadvertently by leaving food out) of these species. The proponent must discourage food conditioning of all wildlife species, negative reinforcement is encouraged.

The proponent should take all possible measures to avoid wildlife encounters, specifically bears. These measures include use of an alarmed trip wire around the site perimeter and wildlife monitors. DOE requests that wildlife monitors working for the proponent carry shot guns and have cracker shells, rubber bullets, and bean bag rounds available to use as deterrents. The proponent 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.

## **1.3. Raptor Nesting Areas**

Raptor nests occur throughout Nunavut, and most of the prospecting areas likely contain at least a few nest sites. The proponent should 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 by avoiding 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):

- 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 through to mid-July).
- 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).

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.

#### ***1.4. 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, DOE recommends 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. As a good practice, it is recommended to avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.

#### ***1.5. Recording Wildlife Observations and Critical Habitat***

DOE requests the proponent records and reports wildlife observations near the project area annually to a Regional Wildlife Biologist at the end of the operational season. This information will inform workers the kinds of wildlife present on site, prepare them for wildlife encounter, and allow them to modify activities accordingly to avoid wildlife. Additionally, this will assist the government and the applicant with collection of wildlife data. The reports should include location (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible. It is important to record the presence and number of animals as well as any young observed. For example, observations of wolves and their young during the summer will be an indicator of denning in the proximity.

#### ***1.6. DOE Contact (Wildlife Division)***

Manager, Wildlife

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

Biologist, Kivalliq Region

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

## **2. Spill Contingency Plan**

Based on DOE's *Spill Contingency Planning and Reporting Regulations*, and *Contingency Planning and Spill Reporting in Nunavut: a Guide to the New Regulations*, we recommend the following:

- The name, job title and **24 hour telephone number** for the persons responsible for activating the contingency plan. This ensures the employee discovering the spill can activate a response and provides a 24 hour point of contact for the authority investigating the spill.
- A **site map** that is intended to illustrate the facilities relationship to other areas that may be affected by the spill. The map should be to scale and be large enough to include the location of your facility, nearby buildings or facilities, roads, culverts, drainage patters, and any nearby bodies of water.
- A description of the **type and amount of chemicals** normally stored on site.
- Chemicals should be stored in a safe and chemically-compatible manner a minimum of 90 feet from all bodies of water. Material safety data sheets (MSDS) should be provided for each chemical and be posted in a central location; accessible by all camp personnel. Camp personnel should be conversant in the handling of these chemicals as well as able to deal with any accidents or spills.
- Hazardous materials stored on-site should be marked so they will be visible under all conditions, in all seasons. This recommendation is intended to help prevent possible injuries to camp personnel and/or damage to the containers. Additinally, all hazardous materials should be removed from the site upon completion of the activity. The proponent is referred to DoE's *Environmental Guideline for the General Management of Hazardous Waste*.
- A more detailed description of the training provided to employees to respond to a spill. A sound training program is necessary when dealing with an emergency situation.



- Please be advised that the telephone numbers for the DOE is (867) 975-7700 for general inquiry and (867) 975-7748 for the Manager Pollution Control and Air Quality.
- An inventory and the location of response and clean up equipment available to implement the plan, should be discussed. This includes your equipment as well as any to be used by another person responding to the spill on your behalf. Although there is mentioning of spill kits (large and small), there is no mention of what the spill kits contain; the spill kits should contain as a minimum booms, absorbent pads/sheets, disposable gloves, and sorbent.

### **3. Abandonment and Restoration**

#### ***Uranium Drilling***

- Drill cuttings with a uranium concentration greater than 0.05% should be disposed of down the drill holes and sealed. Additionally, the drill holes should be sealed by cementing at least the upper 15 meters of bedrocks or the entire depth of the holes; whichever is less. If groundwater (e.g. artesian well) is encountered the entire length of the hole should be cemented (grouted).
- Core storage areas should be located at least 100 meters from the high waterline of all water bodies.
- Gamma radiation levels of a long-term core storage area should not be greater than 1.0  $\mu\text{Sv}$ , and should never exceed 2.5  $\mu\text{Sv}$ .

#### ***Contaminated Soils***

Soil contaminated by fuel (e.g., soils under an old storage tank) should be treated on site or removed to an approved disposal site and replaced with new soil. Soils in the vicinity of fuel and/or chemical storage should be tested and disposed off if necessary. The proponent is referred to DOE's *Environmental Guideline for Site Remediation*.

#### ***Incineration***

The Government of Nunavut is a signatory to the *Canada-Wide Standards for Dioxins and Furans*, and *Canada-Wide Standards for Mercury Emissions*. For incineration of wastes, DOE therefore has the following comments to make regarding emissions from incineration.

For a camp of greater than 10 but less than 50 people, the proponent shall apply appropriate technologies to ensure complete combustion of wastes, and the use of a dual chamber, forced-air incinerator is recommended. The proponent shall

make determined efforts to achieve compliance with the Canada-wide Standards for dioxins and furans and the Canada-wide Standard for Mercury. Efforts should include the implementation of a comprehensive waste management strategy (especially waste segregation) that is designed to reduce and control the volumes of wastes produced, transported, and disposed of. The Waste Management Strategy should consider and include:

- Purchasing policies that focus on reduced packaging,
- On-site diversion and segregation programs (i.e. the separation of non-food waste items suitable for storage and subsequent transport and disposal or recycling).
- If incineration is required, ensure diligent operation and maintenance of the incineration device and provide appropriate training to the personnel operating and maintaining the incinerator.

Waste wood treated with preservatives such as creosote, pentachlorophenol or heavy metal solutions should not be burned. Additionally, plastics, electrical wire, asbestos and building demolition wastes (except clean wood) are wastes likely to produce dioxins and furans when burned and should be excluded from incineration. Under no circumstance should hazardous wastes be managed through burning or incineration. The efforts made to achieve compliance shall be reported as part of the annual report.

### ***Final Inspections***

Final inspections of the entire site should be conducted by the proponent and lead agency to make sure that all areas of the site have been reclaimed as much as possible to its previous condition. Soil samples and pictures before and after the project would make this process easy on the proponent and leading agencies involved in determining areas of concern.

## **4. Land Use/Uranium**

There is a concern that the issuing of permits relating to exploration for uranium may lead to an expectation that further development of these projects will be permitted. The DOE is aware that Nunavut Planning Commission has determined low level exploration for Uranium to be in conformity with the Keewatin Regional Land Use Plan but believes the proponent should be aware of the following provisions in the plan:

*3.5 - Uranium development shall not take place until NPC, NIRB, NWB and the NWMB have reviewed all of the issues relevant to uranium exploration and mining. Any review of uranium exploration and mining shall pay particular attention to questions concerning health and environmental protection. (A) (CR)*

*3.6 – Any future proposal to mine uranium must be approved by the people of the region.*

The DOE thanks NIRB for the opportunity to provide comments on the Garry Lake project proposal from Uruvan Minerals Inc. Please contact us if you have further questions.

Yours sincerely,

***Original signed by***

Froeydis Reinhart  
Coordinator/Scientist, Environmental Assessment  
Department of Environment  
Government of Nunavut  
P.O. Box 1000, Stn. 1360  
Iqaluit, Nu X0A 0H0  
PH: (867) 975-7735  
FX: (867) 975-7739  
EM: freinhart@gov.nu.ca

June 6, 2008

## VIA ELECTRONIC MAIL

Nunavut Impact Review Board  
PO Box 1360  
Cambridge Bay, NU  
X0B 0C0

NIRB No.: 08EN037  
KIA No: KVL106B208  
INAC No.: N2008C0009  
NWB No.: 2BE-GAR0710

Attention: Leslie Payette  
Manager of Environmental Administration

**RE: Comments on the Nunavut Impact Review Board letter dated May 23, 2008 with respect to the Garry Lake project proposal**

Dear Parties:

The following is in response to a letter from the Nunavut Impact Review Board (NIRB) dated May 23, 2008 (Appendix A) in connection with Uravan Minerals Inc. ("Uravan") Land Use Permit (LUP) application on its Garry Lake project proposal.

Uravan submitted an LUP application dated January 25, 2008 pertaining to its Garry Lake project proposal to Indian and Northern Affairs Canada (INAC), Nunavut Territory (NU), which was also distributed to other Nunavut government land use regulators, such as the Nunavut Impact Review Board (NIRB), Kivalliq Inuit Association (KIA), Nunavut Planning Commission (NPC), Nunavut Water Board (NWB) and the Nunavut Planning Commission (NPC). Subsequently, the NPC completed its review of the Garry Lake LUP application, as required by the Keewatin Regional Land Use Plan (KRLUP) and the Nunavut Land Claims Agreement (NLCA), and on April 1, 2008 provided the NIRB with a positive conformity determination for the Garry Lake project proposal. Uravan's record indicates that on April 3, 2008 the NIRB commenced Screening of the Garry Lake project proposal, requiring all comments from Interested Parties by April 23, 2008. To Uravan's knowledge no further review or information on this project proposal was requested of Uravan by any party other than the normal clarifications. However, on May 15, 2008 (one day prior to the issuance of Uravan's LUP) the NIRB requested additional time from the INAC Minister's office for further review of the Garry Lake project proposal. Subsequently, on May 23, 2008 the NIRB requested, ".....input on a couple issues that, in the Board's mind, are prominently called into question with this current application". Based on the NIRB letter dated May 23, 2008, Uravan understands that the potential issues the NIRB requested further comment on are:

1. The proposed *Aberdeen Lake Special Management Area* as it may relate to the NIRB's propriety of making decisions in the proposed SMA without first having the proposed *Thelon Game Sanctuary Management plan* finalized and;
2. Potential cumulative impacts of these types of project proposals.

With respect to item one above, Uravan appreciates and supports the need for appropriate management of exploration activities in the caribou migration and caribou calving areas as outlined in NIRB's May 23<sup>rd</sup> letter. However, until such time as the proposed *Thelon Game Sanctuary Management Plan* or *Aberdeen Lake SMA* can be implemented (which can only be accomplished between governments and not Uravan) and in lieu of such a plan, Uravan supports the propriety of the NIRB, plus other land use administrators in the region and

operators, like Uravan, in making sound land use decisions and developing best management practices in support of preserving caribou environments and the integrity of the Beverly Caribou Herd. Uravan believes that all interested parties should keep in mind that the caribou migration and caribou calving areas, which covers a vast landscape within the subarctic 'barren lands', have experienced many, many years of exploration activities, similar to Uravan's Garry Lake project proposal, without any impact on the caribou herds, caribou calving and caribou habitats. Uravan believes the reason this excellent record has been accomplished is that there always has been in place: (1) strong government regulatory land management, (2) a set of well developed and implemented best management practices and (3) operators, like Uravan, that appreciate and support good land management practices with the intent on protecting the environment. Uravan wonders, if a land management plan for this region were in place, whether it would add any substantive value to what is currently known and practiced.

With respect to item two above, i.e. potential for cumulative impacts in this region, Uravan believes that the record speaks to this potential issue very clearly. As stated previously, exploration activity in this remote region has taken place for many, many years resulting in no 'foot-print' left behind and for the most part no cumulative impacts. The idea expressed by the NIRB, ".....impacts can arise from individually small but collectively significant actions that takes place over a period of time", Uravan believes is a well-meaning statement but is simple not true. It's not that this possibility of 'collective impacts' can't happen but is more about what has happened and importantly, the effort that has gone into not letting it happen. Protection of the 'barren lands' has clearly been one of the highest priorities for the Inuit people, Federal Government land use administrators and all other stakeholders throughout the exploration history in this region. All one has to do is read Uravan's LUP application on its Garry Lake project proposal to understand the care and detail that has evolved into these applications with the goal to maintain the pristine integrity of this environment and how much government regulators and organizations have involved all stakeholders and specialist in developing the rules and guidelines for operating on the 'barren lands' with the highest regard for the environment. Uravan believes the exploration and mining industry is one of the most diligent environmental group's operating in these remote areas not only because this is the philosophy that has evolved through experience and out of consciousness over time but also because we want to be invited back.

Further to the discussion above, Uravan would ask all interested parties to step back and view Uravan's Garry Lake project proposal for what it really is. Uravan believes there is minimal to no cumulative impact to the environment or the caribou herds with regard to the Garry Lake project proposal as evidence by:

- The short duration and low impact nature of the proposed exploration operations as outlined in Uravan's Garry Lake LUP application and;
- The exploration and environmental safeguards currently in place, to include, company operating standards, government requirements and established government and industry best management practices, which are also detailed in Uravan's Garry Lake LUP application.

However, if more monitoring or safety measures are required to protect the water, flora and fauna, to include caribou habitat, then I am certain Environment Canada, the Nunavut government land use administrators, other knowledgeable organizations and specialist and foremost the Inuit people can suggest further guidelines and recommendations to mitigate potential concerns. Uravan believes all stakeholders need to be proactive to solve land use issues and potential conflicts versus creating new ones, such as the question around the implementation of the *Thelon Game Sanctuary Management Plan* and the *Aberdeen SMA*, which Uravan has no part to play and believes its implementation is not germane to the Garry Lake project proposal.

Please give these comments your highest consideration with respect the Garry Lake project proposal.



Respectfully Submitted  
Uravan Minerals Inc

**Signed: "Larry Lahusen"**

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Larry Lahusen, CEO

CC: Honorable Minister Chuck Strahl, Indian and Northern Affairs Canada  
Honorable Minister John Baird, Environment Canada  
Mr. Ric Stryde, Policy Advisor, Honorable INAC Minister's Office

---

*Larry Lahusen, CEO  
Uravan Minerals Inc.  
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E-mail: [llahusen@uravanminerals.com](mailto:llahusen@uravanminerals.com)*

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## **APPENDIX A**

### **Comments on the Uravan Minerals Inc. Garry Lake Project Proposal and the Thelon Game Sanctuary Management Plan**

***NIRB Letter dated May 23, 21008***

NIRB File No.: 08EN037  
KIA No.: KVL106B208  
INAC No.: N2008C0009  
NWB No.: 2BE-GAR0710

May 23, 2008

To: Uravan 08EN037 Distribution List

and: *Thelon Game Sanctuary Management Plan Parties*

*and:* Ian Fraser, Senior Geologist  
Uravan Minerals Inc.

Via email

**Re: Comments on the Uravan Minerals Inc. Garry Lake Project Proposal and the Thelon Game Sanctuary Management Plan**

Dear Parties:

Last week the Nunavut Impact Review Board (NIRB or Board) requested additional time from the Minister under section 12.4.5(b) of the Nunavut Land Claims Agreement (NLCA) to make a screening decision on UraVan Minerals Inc.'s Garry Lake Project Proposal. In making that decision, and the reason for the additional time requested, the Board would like your input on a couple of issues that, in the Board's mind, are prominently called into question with this current application.

First, the Board views the Thelon Game Sanctuary Management Plan (Thelon Plan) as a fundamental document that obviously guides activities in the region, and appears to have significance in NIRB determinations in this area. The updated Thelon Plan has not yet been finalized to date and the Special Management Areas (SMAs) identified in Appendix #2 have not yet been established. The specific SMA related to this particular file, referred to as the Aberdeen Lake SMA, is defined on page 42 of the Thelon Plan as follows:

The second Special Management Area proposed lies along the existing northeastern boundary of the Sanctuary and extends over the area between the Garry Lakes and the Aberdeen Lake area. This area, referred to as the Aberdeen Lake SMA, is locally recognized as a calving area for the Beverly Caribou Herd. The area extends southward to Marjorie Lake and the Dubwant River to encompass important crossing areas along the Thelon River. Like the Tyrrell Lake SMA in the southeast, this area is critical to protect a natural resource at the heart of the Sanctuary and its conservation mandate. The caribou herds of this region are a critical resource to both the Inuit and Dene people of the Thelon region and the success of maintaining those herds in healthy numbers is essential. Special considerations for the management of the area to the northeast of the existing Sanctuary must be consistent with the intent of the Management Plan for the Sanctuary while land use is administered locally through the appropriately designated regulatory body. (*Thelon Game Sanctuary Management Plan*)

The Board wonders about the propriety of making continued decisions in those areas without first having the Thelon Plan, and its SMAs, finalized with the input of parties like our sister Board, the Nunavut Wildlife Management Board (NWMB), and others identified in the Thelon Plan, such that the proper impact assessment considerations are before the Board and impact assessment decisions can be made. There is no doubt in the Board's mind that this plan gives relevant guidance to NIRB in that area.

Second, and related to the first concern, is the potential for cumulative impacts in that region. These impacts can arise from individually small but collectively significant actions that take place over a period of time. The Board is attaching a map illustrating current projects present in the area.

NIRB is also mindful of its decision options under the NLCA; these options are restricted to the language found in section 12.4.4 (a) through 12.4.4 (d), and one of these four decisions must be made by the NIRB for Uravan as follows:

- a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

The Board requests your views on which of the four decision options as listed above best lends itself to the significant issues raised above (the need to finalize the Thelon Plan, and cumulative effects) as these are prominent issues facing NIRB in this project proposal.

The project proposal itself, which we would like you to review again, can be obtained from NIRB's ftp site at:

<http://ftp.nirb.ca/SCREENINGS/ACTIVE%20SCREENINGS/08EN037-Uravan%20Minerals%20Inc/1-SCREENING/01-APPLICATION/>


The Board is copying interested Parties most affected by Uravan's project proposal with this letter, including the Parties identified within the Thelon Plan, as the importance of that Plan has been raised before the NIRB by the Beverly and Qamanirjuaq Caribou Management Board (BQCMB).

Please send your comments to the NIRB on or before **Monday, June 9, 2008** to the attention of NIRB's Manager of Environmental Administration Leslie Payette by email at [lpayette@nirb.ca](mailto:lpayette@nirb.ca) or via fax at **(867) 983-2594**.

Following the review of those comments, the Board will finalize its decision and communicate it to parties as soon as possible.

If you have any questions or concerns, feel free to contact NIRB's Director of Technical Services, Jeff Rusk at 867-983-4611 or [jrusk@nirb.ca](mailto:jrusk@nirb.ca).

Yours truly,

A handwritten signature in dark ink, appearing to read 'Stephanie Autut', is positioned above the printed name.

Stephanie Autut  
Executive Director  
Nunavut Impact Review Board

cc: Honourable Minister Chuck Strahl, Indian and Northern Affairs Canada  
Honourable Minister John Baird, Environment Canada

Attachment: Appendix A - Kivalliq Exploration Projects



## **Athabasca Denesuliné Negotiation Team**

June 9, 2008

Leslie Payette  
Manager of Environmental Administration  
Nunavut Impact Review Board  
Box 1360  
Cambridge Bay, NU X0B 0C0

fax: (867) 983-2594

### **RE: NIRB: 08EN037 Part 4 Screening of Uravan Minerals Inc.'s Garry Lake Project**

Dear Ms. Payette,

We appreciate the opportunity to comment on Uravan's proposed exploration activities. These would take place in an important caribou calving area of the Beverly herd. Since the yearly migration of the Beverly-Qamanirjuaq caribou herd is integral to Athabasca Denesuline economic, social and cultural identity, any potential disturbance to the caribou is potential risk to the Athabasca Denesuline identity.

These activities would also take place in an area that is proposed in the Thelon Game Sanctuary Management Plan to be designated a Special Management Area- to protect the Beverly caribou herd. There are so many exploration projects occurring in the region that we are also concerned that screenings on a case-by-case basis cannot address cumulative impacts of such development on caribou, as well as on the well-being of the people who depend on the caribou, including the Athabasca Denesuline. We have repeatedly voiced our concerns about developments in the Upper Thelon Basin to both proponent and the regulatory authorities in the NWT.

We feel that exploration and development should not take place on caribou calving grounds such as these, and that no permits should be issued for this project, at the very least until:

1. The Thelon Plan and its Special Management Areas are finalized and approved by affected parties including the Athabasca Denesuline;
2. The Athabasca Denesuline are full participants in the proposed Thelon Sanctuary Management Committee;
3. Regional assessments of cumulative impacts of mineral exploration on caribou are conducted; and

### ***c/o Prince Albert Grand Council***

Suite 206, 1004 - 1st Avenue West, Prince Albert, Sask. S6V 4Y4

Email: [rrobillard@pagc.sk.ca](mailto:rrobillard@pagc.sk.ca) or [rgood@pagc.sk.ca](mailto:rgood@pagc.sk.ca)

Mailing Address: P.O. Box 2350, Prince Albert, Sask. S6V 6Z1

Phone: 306-922-7612 or 306-922-7613 Fax: 306-763-2973

4. The Treaty and aboriginal rights of the Athabasca Denesuline have been recognized and confirmed through a constitutionally protected settlement agreement.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Ron Robillard', with a large, stylized initial 'R'.

Ron Robillard  
Chief Negotiator  
Athabasca Denesuline

Cc ADNT Members  
Athabasca Dene Chiefs





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Avatiligiyiit

Department of Environment

Ministère de l'Environnement

June 9, 2008

Leslie Payette  
Manager of Environmental Administration  
Nunavut Impact Review Board

**Via e-mail to:** [lpayette@nirb.ca](mailto:lpayette@nirb.ca)

**RE:NIRB 08EN037 - Uravan Minerals Inc - Invitation for Further Comments**

I am writing you today with regard to your request on May 23, 2008 for further comments concerning the Uravan Minerals Inc. Garry Lake uranium exploration project within the Beverly Caribou Protected Area and the Thelon Game Sanctuary Special Management Area. In your letter you were seeking more information and input regarding the following three issues:

1. Views on the four screening decision options as outlined in the NLCA 12.4.4;
2. The propriety of making continued decisions in those areas without first having the Thelon Plan, and its SMAs implemented; and
3. The potential for cumulative effects.

The Government of Nunavut (GN) is equally concerned about these issues, and for this reason on April 23, 2008 we recommended that if the project was approved, specific terms and conditions should be placed on the project.

It is GN's view that land use plans should inform regional land use decisions by providing the structure and certainty needed for project proponents and other stakeholders in order that they would have confidence that the activities taking place in the region conform to regional values and goals. As outlined in the recently approved 11.4.1 (a) document titled *Nunavut Planning Commission Broad Planning Policies, Objectives and Goals*, land use plans should also address the cumulative effects of a broad range of land use activities. In the absence of up-to-date land use plans, and without key areas of the Thelon Game Sanctuary Management Plan implemented, important pieces of the territory's resource management system are missing. Until these pieces are finalized, environmental assessment will be forced to continue addressing broad land use issues in the context of specific projects. Nevertheless, GN feels that it is indeed within NIRB's scope of practice to gauge and define the extent of the regional

ecosystemic and socioeconomic impacts of this project on the Beverly caribou herd.

The Thelon Game Sanctuary Management Plan (TGSMP) has been approved, but it has not been implemented due to the lack of funding; as well, a necessary management committee has yet to be established to steer implementation of the Plan. Additionally, the Special Management Areas (SMAs) as proposed in the TGSMP, and their official designation has yet to be finalized by relevant parties. It is Indian and Northern Affairs Canada (INAC) obligation, both under the terms of the Plan, and the Nunavut Land Claims Agreement (NLCA), to provide the necessary funding to implement the Management Plan for this Federal Conservation Area. GN has previously communicated funding concerns to INAC, and is awaiting a response.

With regard to cumulative effects, GN is working to gain a better understanding of project related impacts on caribou through several related projects outlined below. This in turn will contribute to the understanding of cumulative impacts on caribou.

In the summer of 2007, GN, Department of Environment (DOE) in partnership with the Government of Northwest Territories (GNWT), undertook population surveys of the Beverly caribou herd. Numbers of caribou observed were extremely low and two possible scenarios now require further investigation. Firstly, caribou were not on the calving grounds as expected; or secondly, the numbers encountered represent real population levels. A summary report of the 2007 study entitled *Summary: 2007 Barren-ground Caribou Calving Distribution Surveys, Northwest Territories & Nunavut* can be obtained at DOE's office. Please note that the summary is an unpublished report provided by Environment & Natural Resources, GNWT, and a comprehensive report will be finalized in the near future. Finally, GN will continue population surveys in 2008 and in the future years, which will inform future impact assessment on caribou.

Additionally, GN with substantial stakeholder involvement, is also developing a Caribou Management Strategy for Nunavut. This strategy, once developed and implemented, will provide more complete information on the health of the caribou herds, and could potentially demonstrate the need for more stringent recommendations for caribou management in the future. It is hoped that the strategy will be completed by early 2009.

Furthermore, we believe that the land and resource management parties, including NWMB (Nunavut Wildlife Management Board), NPC (Nunavut Planning Commission), DOE, INAC and the Regional Inuit Organizations (i.e., Kivalliq Inuit Association or KIA), as well as the environmental assessment board (i.e., NIRB), should work together to address the cumulative impact concern. A regional cumulative effects study should be conducted on the status and sustainability of the Beverly caribou herd, taking into account projects across the Beverly caribou

range. As such, NIRB should ensure that the proponent works with the parties to address potential cumulative impacts and provides parties with the necessary information and assistance to assess cumulative effects on caribou.

In conclusion, while GN is very concerned about the potential for cumulative effects on caribou in this area, we feel our recommendations, if fully implemented, will mitigate some of the effects. We further recommend that all relevant parties (i.e., GN, NIRB, NWMB, NPC, KIA, INAC and proponents) work together to determine how best to address cumulative impacts on a regional scale. Moreover, it is important that efforts to understand cumulative effects on caribou be initiated among all the relevant parties who issue land use authorizations. Finally, we believe that once the TGSMP is implemented, land use plans are updated, and the caribou management strategy is completed and implemented, environmental assessment decisions of this nature will be more straightforward.

GN thanks NIRB for the further opportunity to comment on the Garry Lake project proposal. If you have any further questions, please do not hesitate to contact Helen Yeh, Acting Manager, Land Use & Environmental Assessment, at [hyeh@gov.nu.ca](mailto:hyeh@gov.nu.ca) or (867) 975-7733.

Yours sincerely,

***Original signed by***

John Lamb  
Assistant Deputy Minister  
Department of Environment  
Government of Nunavut

CC:

Jim Noble, Executive Director, NWMB  
Ron Roach, Chair, NPC  
Luis Manzo, Director of Lands, KIA  
Carl McLean, Director, INAC  
Larry Lahusen, CEO, Uravan Minerals Inc.



Indian and Northern  
Affairs Canada

Affaires indiennes  
et du Nord Canada

Nunavut Regional Office  
P.O. Box 100  
Iqaluit, NU, X0A 0H0

Your file - Votre référence  
08EN037  
Our file - Notre référence  
N2008C0009

June 9, 2008

Leslie Payette  
Manager of Environment  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU, X0B 0C0

*Via electronic mail to: [lpayette@nirb.ca](mailto:lpayette@nirb.ca)*

**Re: Comments on the Uravan Minerals Inc. Garry Lake Project Proposal  
and the Thelon Game Sanctuary Management Plan**

Dear Ms. Payette,

INAC has considered the issues raised by NIRB, in their letter of May 23, 2008, requesting views on which of the four decision options available as per section 12.4.4 of the NLCA best lends itself to the screening of the Uravan Mineral's Inc. Garry Lake Project Proposal, and offers the following comments for the consideration of the Board.

As noted by NIRB, section 12.4.4 of the NLCA outlines the choices available to the Board in dealing with the screening of a project proposal. We note that NIRB has not suggested that the proposal is insufficiently developed to permit a proper screening. Furthermore, the nature of the issues raised in NIRB's letter do not seem to indicate that the Board is considering whether the potential adverse impacts are so unacceptable that the proposal should be modified or abandoned without further review.

Therefore, INAC has focused its comments on the question of whether the proposal may be processed without a review, or whether further review under Article 12, Part 5 or 6 of the NLCA is required

NIRB has brought forth two issues it feels warrant consideration in screening the proposal: 1) The current status of the Thelon Game Sanctuary Management Plan and the option of establishing special management areas; and 2) the issue of

cumulative impacts in the region.

With respect to the first consideration, INAC agrees that the Management Authority to be established under this plan could be a valuable source of guidance to the NIRB on various matters relating to the Thelon Game Sanctuary and its proposed special management areas. INAC does not believe that there is any impropriety in NIRB making continued determinations on project proposals within the areas proposed as special management areas. In discharging its functions, NIRB is mandated to carry out its functions according to the Board's best assessment of 'significant impact potential', and the principles stated in section 12.4.2 of the NLCA.

With respect to cumulative effects, INAC is not in possession of special expertise on the specific topic of caribou and may therefore not advise NIRB in its judgement of whether the impacts of this proposal, when added to other past, present and reasonably foreseeable future developments, has significant impact potential, and therefore whether it requires review under Part 5 or 6.

However, INAC is able to provide NIRB with information on land use activities the Department has permitted in the area, and hopes this may be of use to the board in making its determination. Please find attached a map illustrating land use activities on Crown land in the calving ground of the Beverly Caribou Herd. INAC would be pleased to provide more extensive information on these permits upon request.

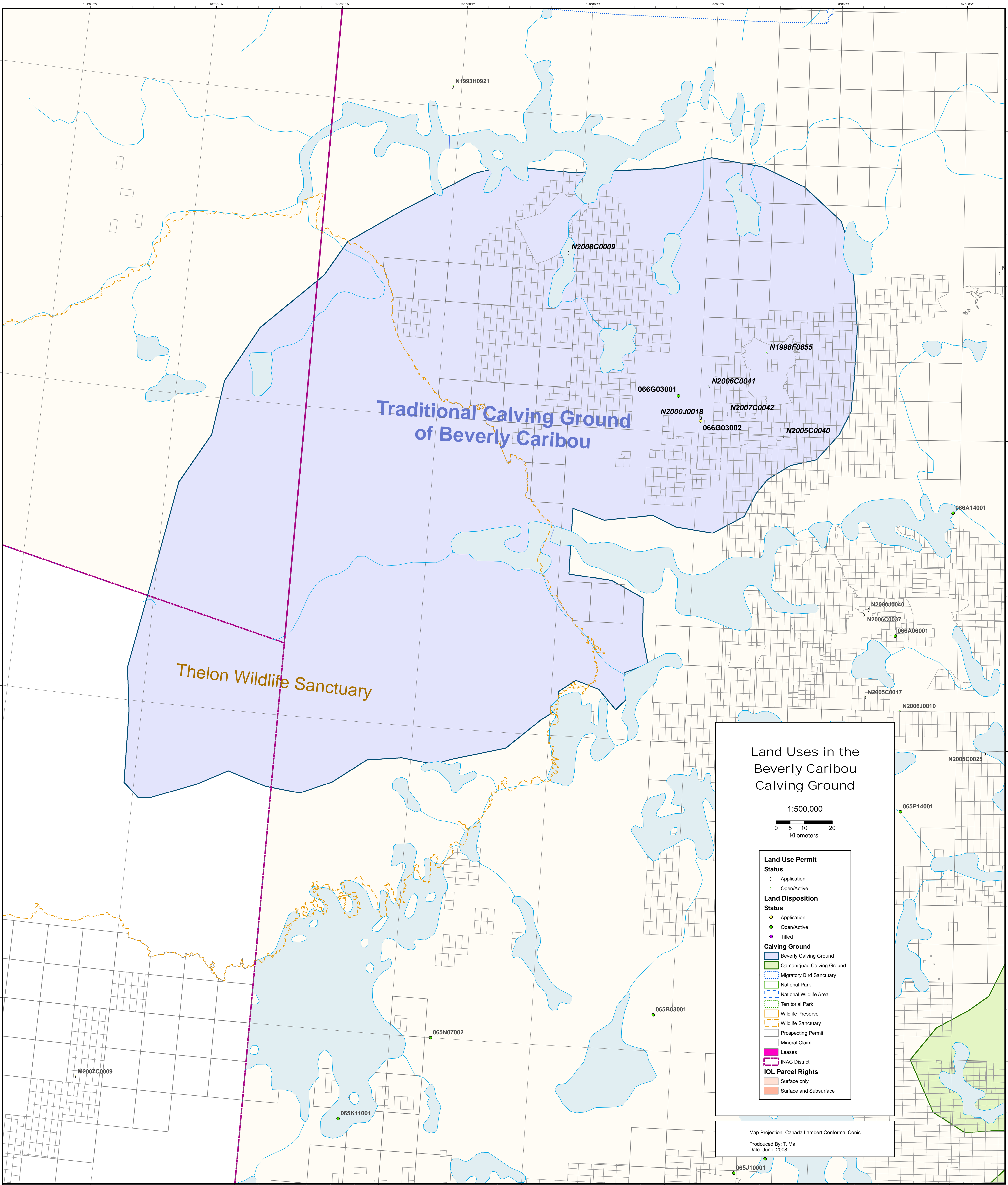
Should you have any questions, please do not hesitate to contact Margaux Brisco at (867) 975-4567 by phone or at [brisco@inac-ainc.gc.ca](mailto:brisco@inac-ainc.gc.ca) by email.

Sincerely,

[original signed by]

Robyn Abernethy-Gillis  
Manager of Environment Division







# BEVERLY AND QAMANIRJUAQ CARIBOU MANAGEMENT BOARD

9 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. 08EN037 – Uravan Minerals Inc. Garry Lake Project Proposal**

On behalf of the Beverly and Qamanirjuaq Caribou Management Board (BQCMB), I am submitting additional input on this proposal from Uravan Minerals Inc. (Uravan) in response to NIRB's request of 23 May 2008. These comments are provided 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.

### ***Background***

As we described in our 23 April 2008 letter to NIRB, the BQCMB is very concerned about Uravan's proposal to conduct exploration activities on the traditional calving ground of Beverly caribou in an area that has been proposed by parties to the Thelon Game Sanctuary Management Plan for designation as a special management area, specifically to help protect the Beverly caribou herd and its habitat.

The BQCMB has provided consistent input to the NIRB on proposals for mineral exploration and associated activities in this area for several years, recommending repeatedly that these applications not be approved. We have also outlined our concerns about the potential cumulative effects of these and other ongoing exploration and development activities in this area and across the Beverly and Ahiak caribou ranges, and have recommended to both the NIRB and the NWT's Mackenzie Valley Environmental Impact Review Board that regional cumulative effects assessment work be conducted.

Please refer to the BQCMB's 23 April submission for background information on the importance of the proposed project area to Beverly and Ahiak caribou, the BQCMB's concerns with the exploration activities proposed by Uravan, and concerns about the cumulative effects of this and other ongoing activities in this area and across the Beverly and Ahiak caribou ranges. Please also review Attachment A, which provides additional information that we hope will be helpful to NIRB for making its decision.

### ***Recommendations***

First, we reiterate the first two recommendations in the BQCMB's 23 April submission to NIRB:

1. No exploration or development activities should be permitted on the traditional calving ground of the Beverly caribou herd. The BQCMB does not agree with permitting exploration activities on calving and post-calving areas, and recommends that Uravan's application not be approved.

## BEVERLY AND QAMANIRJUAQ CARIBOU MANAGEMENT BOARD

2. 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., larger than individual project areas), and should include all activities occurring on calving and post-calving areas.

Further to the first recommendation, the BQCMB's position is that long-term legislated protected areas that exclude industrial development must be established for calving and post-calving areas. In absence of this protection, proposals for exploration and development on these areas must be rejected. For more details please refer to the attached paper "Protecting Calving Grounds, Post-Calving Areas and Other Important Habitats for Beverly and Qamanirjuaq Caribou: A Position Paper". This document was distributed by the BQCMB in 2004 to governments and land use planning and regulatory agencies (including NIRB) across the caribou ranges.

The BQCMB's views about which decision option is most appropriate of the four choices available to NIRB under the NLCA are as follows:

- The correct choice is option d, meaning that the project proposal should be rejected or "abandoned" (see our recommendation #1 above). No land use permit should be issued to UraVan, as the potential adverse impacts of the proposal are unacceptable.
- Should NIRB not be convinced that option d is warranted, then at a minimum option b should be selected. A full review of the proposal should be conducted which ensures that a full and transparent public discussion takes place, in which all interested parties have the opportunity to present their views. The parties should include those identified in the Thelon Game Sanctuary Management Plan, such as the communities of Baker Lake and Lutsel K'e, as well as the Athabasca Denesuline and the BQCMB.

The parties to the Thelon Game Sanctuary Management Plan clearly recognized the critical importance of the caribou herds to both the Inuit and Dene people of the Thelon region, and the need for ensuring protection of the Beverly calving area. We hope that the NIRB will do so as well.

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

Attachment

cc: Jerome Denechezhe, BQCMB Chairperson  
Chair, Baker Lake HTO Board  
Iris Catholique, Manager, LKDFN Wildlife, Lands and Environment Department  
Ron Robillard, Chief Negotiator, Athabasca Denesuline

**Attachment A.** Further information supporting the 9 June 2008 submission by the BQCMB on Uravan Minerals Inc. Garry Lake Project Proposal (08EN037).

- BQCMB board members from across the caribou ranges are concerned about the ecological effects of human land use activities on caribou and the long-term impacts these activities will have on the sustainability of traditional lifestyles and livelihoods for northern communities. Anxiety has increased in recent years given the documented declines in five NWT caribou herds, limited information about Beverly and Ahiak herds, and the uncertain but likely declining population status of these herds.
- The BQCMB believes that action must be initiated immediately by governments and regulatory boards to protect the caribou herds, and that this action must include providing long-term legislated protection for calving and post-calving areas, finalizing and implementing the Thelon Game Sanctuary Management Plan, and assessing and minimizing the cumulative effects of exploration and development on the caribou herds.
- Although the map provided by NIRB is helpful in showing the number and location of permits for mineral exploration, it provides a limited amount of information.
  - The map only provides a partial indication of the land use activities ongoing on the Beverly calving ground and across the Kivalliq portion of the caribou range. Mineral exploration often occurs for years before activities are planned that require application for a land use permit (such as camps and drilling). These early exploration activities that fall below the permit threshold (such as low-level flights by aircraft) are of concern to the BQCMB because they may cause significant disturbance to caribou.
  - The map shows site-specific activities such as camps or drilling locations, but does not indicate the areas in which companies are actively conducting exploration activities. A similar map that shows project areas would be more informative.
- The attached BQCMB map is intended to provide a regional view of the potential cumulative effects of mineral exploration and other land use activities on the Beverly and Qamanirjuaq caribou herds. For several years the BQCMB has been compiling and mapping information on companies with mineral tenure (prospecting permits, mineral claims, mineral leases), roads and land use permits on the calving grounds and across the caribou ranges in an attempt to monitor the land use activities occurring across the Beverly and Qamanirjuaq caribou ranges.

We recognize that mineral tenure does not necessarily indicate where mineral exploration activities are occurring. However, it does show areas in which companies are interested and in which they have invested, and where mineral

exploration may be conducted. The Board reviews this information twice each year at board meetings.

- Information compiled by the BQCMB shows that in April 2008, 10 different companies and individuals had mineral tenure on parts of the traditional calving ground of Beverly caribou, which had been issued by INAC between 1988 and 2008. (These tenures, including 278 mineral claims owned by Uravan, are shown on the map described above.) According to the map provided by NIRB, current land use permits have been issued by INAC to three companies operating on the calving ground, with a fourth proposed by Uravan. So it appears likely that other companies are conducting mineral exploration under the land use permit threshold or may do so in the near future.
- Please note that there are a number of errors on the map you provided with your request for additional input:
  - 05EN027 is mapped in the wrong location; the project is in the West Kitikmeot, not the Kivalliq region.
  - 07EN032 is mislabelled; it is actually one of multiple locations (camps?) for 07EN046.
  - Land use permits issued to Cameco are missing from the map.
  - 05EN025 is mapped as 2 sites: 1 diamond, 1 uranium