BEVERLY AND QAMANIRJUAQ CARIBOU MANAGEMENT BOARD

1 May 2006

James Eetoolook First Vice-President Nunavut Tunngavik Inc. P.O. Box 1269 Cambridge Bay NU X0B 0C0

Dear Mr. Eetoolook:

Comments on the Draft Uranium Policy and Draft Consultation Document

This letter provides comments from the Beverly and Qamanirjuaq Caribou Management Board (BQCMB) on the above-named documents. The BQCMB is a multi-jurisdictional co-management board that was established in 1982 to help ensure the long-term conservation of the Beverly and Qamanirjuaq caribou herds. Our Board has a long history of tracking developments on the Beverly and Qamanirjuaq caribou ranges, including participation in environmental assessments of proposed uranium mines in Nunavut and Saskatchewan, and reporting on the impacts of Saskatchewan uranium mining.

The Kivalliq region of Nunavut supplies essential habitat, including calving grounds and post-calving areas, for both of these barren-ground caribou herds each year. The herds provide an important renewable resource for five governments and about 20 communities across the caribou ranges, including the southern Kivalliq communities. The minimum gross economic value of Beverly and Qamanirjuaq caribou harvested in a single year is about \$17 million. More background information on the BQCMB and Beverly and Qamanirjuaq caribou herds and their ranges is provided in an attachment to this submission, and on the Board's website: www.arctic-caribou.com.

In our recent (13 April) letter to you, we outlined some reasons why we believe NTI's consultation process for development of this policy is inadequate and needs to be expanded. We would like to reiterate that message now, and ask that you address this issue as soon as possible.

The primary intent of this letter is to provide comments and questions about the content of NTI's draft policy and consultation documents. Some general comments are provided, followed by more detailed comments specifically related to environmental issues and to caribou and communities on the caribou ranges. We would welcome clarification on any of these points.

Secretariat Address: P.O. Box 629 Stonewall MB ROC 2Z0 Tel: (204) 467-2438 e-mail: rossthompson@mts.net website: www.arctic-caribou.com

BEVERLY AND QAMANIRJUAQ CARIBOU MANAGEMENT BOARD

In summary, the BQCMB finds that the draft policy and consultation documents provide insufficient evidence to support NTI's claims that "the use of nuclear energy to produce electricity is safe, environmentally-friendly and necessary. . ." (p.5), or that exploration and mining of uranium in Nunavut will result in positive net benefits for Nunavummiut. Furthermore, if uranium development proceeds in Nunavut, the Board is very concerned about the potential environmental costs, including impacts on Beverly and Qamanirjuaq caribou, caribou range, and the ability of caribou range communities (such as Arviat, Baker Lake, Chesterfield Inlet, Rankin Inlet, and Whale Cove) to maintain traditional lifestyles based on caribou and other wildlife resources.

If NTI continues to pursue this uranium policy, we hope that these comments will assist with revising the policy and expanding the background materials, and that the points we raise will be addressed prior to presenting these documents to stakeholders and to the NTI Board of Directors. Please ensure that the BQCMB is included in any subsequent consultations during development of your policy on uranium mining.

This issue will be discussed as an agenda item for our 25-27 May 2006 board meeting in Prince Albert, Saskatchewan. We would welcome an opportunity to discuss our concerns with you in person at that meeting. It also would be helpful if we could receive an indication before May 23rd of a timeline for consultations.

Sincerely,

[original signed by Ross Thompson for Jerome Denechezhe]

Jerome Denechezhe Chairperson

Attachment

Cc: Carson Gillis, Director, Dept. Lands and Resources, Nunavut Tunngavik Inc. Darryl Hedman, Vice-Chair, BQCMB

Comments by the Beverly and Qamanirjuaq Caribou Management Board on NTI's Draft Uranium Policy and Draft Consultation Document

Mandate of NTI

- Subject to the authority of the relevant regulators, NTI has jurisdiction for Inuit-owned Lands (IOL), but not for Crown lands. Your policy should make it clear that NTI does not have the mandate to dictate policy that applies to all lands and waters of Nunavut.
- The by-laws of NTI include the statement that NTI will seek "to encourage and support the development of policies for Nunavut that will contribute to Inuit economic self-sufficiency while nurturing environmental values. . .". Accordingly, NTI has a responsibility to develop its policies based on a comprehensive analysis of their implications for both the economy and environment of Nunavut. This has not been the case for development of the uranium policy thus far, and is of great concern to the BQCMB.

Relationship to Land Use Planning

- The Keewatin Regional Land Use Plan (the Plan) includes a prohibition against uranium development in the Kivalliq region "until the NPC, NIRB, the NWB and the NWMB have reviewed all of the issues relevant to uranium exploration and mining" (Term 3.5). Therefore, even if NTI approves a uranium policy for Nunavut, we believe that it will not apply to the Kivalliq region under the terms of the land use plan which is currently in place.
- Our interpretation of the Plan indicates that any proposal for removing the current prohibition against uranium development in the Kivalliq region can only be formed through an open discussion by all stakeholders, including communities and comanagement bodies (such as the BQCMB). Since the Plan requires this action, we believe that the Nunavut Planning Commission (NPC), not NTI, has the responsibility for directing consultation on uranium mining in the Kivalliq region.
- Term 3.6 of the Plan specifies that "Any future proposal to mine uranium must be approved by the people of the region." Therefore, even if NTI approves a uranium policy for Nunavut, the communities would have the final say about whether specific proposals for uranium mines would go ahead in their respective regions, regardless of what position the NTI policy takes.

Need for Balanced Analysis of Issues

 The covering letter distributed with these documents states that the NTI and RIA boards will make the final decision concerning NTI's uranium policy. However, rather than providing an analysis of the issues so that the boards can weigh the pros and cons and make a knowledgeable decision, the documents merely provide a one-sided explanation of the reasons why the Lands Policy Advisory Committee believes NTI should support uranium mining. In fact, the information provided in these documents is not adequate to allow anyone to knowledgeably assess the implications of the proposed position on uranium mining to the people or environment of Nunavut.

• The NTI Board of Directors has the responsibility to make policy decisions based on a thorough analysis of this important issue, and should not be expected to make this decision based on the information provided to date. If NTI continues to pursue development of this policy, NTI staff should be asked to provide a thorough analysis of all issues relevant to uranium exploration and mining. This analysis should include all the potential benefits, costs, and risks to provide sufficient information for weighing the pros and cons of NTI's proposal. The results of this analysis should be reported in a manner suitable for consultation with all stakeholders, including the BQCMB and the communities of Baker Lake and Kugluktuk.

Specific Comments

Comments Specifically on Environmental Impacts:

- Consideration of potential impacts of uranium exploration and development on wildlife is inadequate. Although the draft policy acknowledges that concerns exist about the potential impacts of uranium mining on wildlife, especially caribou (p.10), there is no description of what these impacts might be, what affect they might have on caribou and other wildlife populations, or how they could be avoided. The conclusion reached, without any supporting evidence, is that uranium mining has the same potential impacts as any other type of mining on wildlife, and that existing environmental assessment processes are sufficient, as they will "minimize the impact of uranium exploration and mining on wildlife" (p.10).
- Because there are no regulatory requirements for uranium exploration in Nunavut, the policy calls for "development of land use guidelines, terms and conditions relating to potential environmental impacts of uranium exploration and mining" (p. 10) following the model of operating procedures established in Saskatchewan. However, no information is provided about the regulatory requirements used in Saskatchewan or the success of these regulations at minimizing environmental impacts. It is unclear what regulatory requirements may be under consideration for Nunavut, what potential impacts they will address, or how they will address them. These regulatory requirements should be developed by the NPC and the Nunavut Impact Review Board (NIRB) before NTI allows uranium exploration on IOL.
- The issue of the potential impacts of radioactivity released into the environment is not addressed adequately. Although the draft policy acknowledges that "there is a concern for the effects of radiation on the health of wildlife, plants, and the

ecosystem" (p.8), and a particular concern regarding ingestion of radioactive vegetation by caribou (p. 10), there is no description of what the detrimental effects might be, how serious they would be for the health of wildlife or people consuming contaminated animals, or how these problems could be avoided.

- An analysis of environmental impacts must include the complete process of uranium development, from initial exploration to transportation, abandonment and reclamation, and including nuclear waste disposal. This should include an estimate of the energy consumption and associated greenhouse gas emissions required to produce and transport Nunavut uranium to southern and international markets.
- The policy states that "...NTI requires that studies of the potential impacts on communities be carried out and that steps be taken to mitigate any potential impacts." (p.11), and that these continue during the mining operation. There should be a similar requirement for studies of the potential impacts of exploration and mining on wildlife and other ecosystem components, such as fish and water quality. Longterm monitoring should also include monitoring of effects on wildlife and wildlife habitat.

Comments Specific to Caribou Conservation Issues:

The main issues concerning the proposed uranium policy for Nunavut that directly relate to caribou conservation are outlined briefly below. These issues also apply to many other wildlife species. None of these issues is addressed adequately by the draft policy or consultation document.

- 1. Potential impacts of exploration for uranium on Beverly and Qamanirjuaq caribou and caribou habitat. Potential impacts include the direct effects of exploration on caribou, such as disturbance from aircraft and the effects of radioactive dust, and significant habitat loss that may result from avoidance of exploration activities near important water crossings or damage to vegetation and water sources from contamination or physical alteration.
- 2. Potential impacts of uranium mining and other development activities on the Beverly and Qamanirjuaq caribou herds and caribou ranges, including effects on water quality and the ecological integrity of watersheds. This concern reflects experience gained by the BQCMB in the review of uranium mine proposals near Baker Lake and in northern Saskatchewan, and concerns about abandoned and operating uranium mines in northern Saskatchewan.
- 3. Cumulative impacts of development on caribou and caribou range. There is an urgent need for (a) assessing the cumulative effects of increasing levels of exploration and development across the annual range of Beverly and Qamanirjuaq caribou, and (b) identifying an upper threshold of activity that will allow healthy and productive Beverly and Qamanirjuaq caribou herds to exist over the long-term. This assessment must take into account accumulating effects

of activities encountered by caribou within and between years across their annual ranges, including effects from the mines and roads on the winter range in Saskatchewan and increasing levels of mineral exploration across the other seasonal ranges, including the calving and post-calving areas in the NWT and Nunavut.

- 4. The likelihood of increased exploration and development across the Beverly and Qamanirjuaq ranges within Nunavut, should this draft policy be approved by the NTI Board of Directors. This would be of great concern to the BQCMB. An additional concern would be subsequent pressure to open up the Thelon Wildlife Sanctuary to development that would potentially result from successful exploration in areas surrounding the Sanctuary. This would be contrary to recommendations made by the Inuit of Baker Lake and the Akaitcho Dene regarding the Thelon Sanctuary Management Plan and establishment of Special Management Areas.
- 5. The detrimental effect that increasing exploration and development across the Nunavut portions of the Beverly and Qamanirjuaq ranges may have on the ability of about 20 communities in Nunavut, Northwest Territories, Saskatchewan, and Manitoba to maintain a lifestyle that includes the use of caribou. This issue is fundamental to the mandate of the BQCMB, results from all issues outlined above and is of increasing concern to the Board.

Comments regarding Unsupported Conclusions:

The documents make many sweeping statements without any analysis or supporting evidence. The background information provided in the consultation document is so biased toward support for uranium mining in Nunavut that it only touches on potentially negative parts of the issue. After reference to these negative aspects, in each instance NTI concludes that either:

- i) that particular aspect of the issue is outside the terms of the policy under development (e.g., use of nuclear reactors in Nunavut to produce electricity and disposal of nuclear fuel waste), or
- ii) the negative impacts can be minimized (e.g., impacts of uranium exploration and mining on wildlife), presumably to such an extent that they are not significant.

The consultation document provides only information that supports NTI's conclusion that there is no "down-side" to uranium development in Nunavut.

Some examples of the numerous broad, unsupported statements include claims that uranium mined in Nunavut will:

 result in reduced greenhouse gas emissions and help "avoid" climate change – although emissions of greenhouse gases involved in uranium exploration, mining, and transportation will be significant; however, this issue is not acknowledged

- not contribute to the use of nuclear weapons despite proposing to do nothing to ensure this will be the case, except to rely on existing international agreements – and providing no information about the success of these agreements
- bring significant economic benefits (locally, regionally, territorially, and nationally) – with no market study or cost-benefit analysis
- protect mine workers and people in local communities with no
 information about how communities and the environment on which they
 depend will be protected from the effects of radiation on the health of
 wildlife (including caribou), vegetation (including caribou habitat), and
 water (including drinking water)
- have limited health and safety risks as a result of guidelines and operating procedures that will be identified through the environmental assessment process – although no model is described in which guidelines and procedures have been proven to maintain the risks at an acceptable level, and the level of risk that is acceptable to Nunavummiut has not been assessed
- have limited environmental impacts as a result of terms and conditions
 placed on permits and leases, which requires NIRB to develop new terms
 and conditions, because federal regulations place no specific requirements
 on land use practices although no model is described in which terms and
 conditions have been proven to limit environmental impacts to an
 acceptable level, and the level of impact that is acceptable has not been
 assessed
- likely result in radioactivity being transferred from mines to vegetation and caribou and other wildlife – but despite providing no information on how this will be addressed, we are asked to believe that the impact of uranium exploration and mining on wildlife will be "minimized"

cc by e-mail:

Paul Kaludjak, President, Nunavut Tunngavik Inc., Iqaluit	president@tunngavik.com
Raymond Ningeocheak, 2 nd Vice President, NTI	RNingeocheak@nti-fw.arctic.ca
Tongola Sandy, President, Kivalliq Inuit Assoc., Rankin Inlet	tsandy@kivalliqinuit.ca
Donald Havioyak, President, Kitikmeot Inuit Assoc., Cambridge	donald@qiniq.com
Bay	
Thomasie Alikatuktuk, President, Qikiqtani Inuit Assoc., Iqaluit	pres@qia.ca
Sheila Watt-Cloutier, Chair, Inuit Circumpolar Conf., Iqaluit	chair@inuitcc.ca
Jose Kusugak, President, Inuit Tapiriit Kanatami, Ottawa	kusugak@itk.ca
Stephanie Briscoe, Exec. Dir., Nunavut Impact Review Board,	sbriscoe@nirb.nunavut.ca
Cambridge Bay	
Sharon Ehaloak, Exec. Dir., Nunavut Planning Commission,	sehaloak@npc.nunavut.ca
Cambridge Bay	
Philippe di Pizzo, Exec. Dir., Nunavut Water Board, Yellowknife	exec@nwb.nunavut.ca
Joe Tigullaraq, Chair and CEO, Nunavut Wildlife Management	jtiqullaraq@nwmb.com
Board, Iqaluit	
Mayor and Hamlet Council, Baker Lake	blsao@qiniq.com
Mayor and Hamlet Council, Kugluktuk	saokugluktuk@qiniq.com
Baker Lake Hunters and Trappers Organization, Baker Lake	bakerhto@qiniq.com
Kugluktuk Hunters and Trappers Organization, Kugluktuk	ptaptuna@qiniq.com
Hon. Paul Okalik, Premier, Government of Nunavut, Iqaluit	Linutiq@gov.nu.ca
Hon. Patterk Netser, Minister of Environment, Government of	pbest@gov.nu.ca
Nunavut	
Hon. Olayuk Akesuk, Minister of Economic Development &	oakesuk@gov.nu.ca
Transportation and Mines, Government of Nunavut	
Simon Awa, DM, Dept of Environment, Government of	sawa@gov.nu.ca
Nunavut, Iqaluit	
Michael Nadler, Regional Director, Indian Affairs and Northern	nadlerm@inac-ainc.gc.ca
Development, Iqaluit	
Canadian Nuclear Safety Commission	info@cnsc-ccsn.gc.ca
Monte Hummel, World Wildlife Fund Canada, Toronto	mhummel@wwfcanada.org

Attachment 1:

Background Information

- The Beverly and Qamanirjuaq Caribou Management Board and Beverly Caribou

What is the Beverly and Qamanirjuaq Caribou Management Board (BQCMB)?

The BQCMB was established in 1982 to co-ordinate the management of the Beverly and Qamanirjuaq caribou herds. The BQCMB operates under an agreement between the governments of the Northwest Territories (NWT), Nunavut, Saskatchewan, Manitoba, and Canada. Up to ten members represent communities across the Beverly and Qamanirjuaq caribou ranges, and five members represent governments. Membership includes representatives from the South Slave region of the NWT, the Kivalliq region of Nunavut, northern Saskatchewan, and northern Manitoba.

BQCMB Mission: To ensure the long-term conservation of the Beverly and Qamanirjuaq caribou herds for Aboriginal communities who wish to maintain a lifestyle that includes the use of caribou, as well as for all Canadians and people of other nations.

BQCMB Mandate: To advise governments and caribou range communities on ways to protect the Beverly and Qamanirjuaq caribou herds and their ranges. This includes development of a Caribou Management Plan which outlines principles, goals and priorities for caribou conservation, as well as ways in which the BQCMB will work cooperatively with governments, communities and other organizations to incorporate the scientific work of biologists and the traditional knowledge of Aboriginal peoples during development of recommendations.

The BQCMB has more than 20 years of experience tracking developments on the Beverly and Qamanirjuaq caribou ranges, including participation in environmental assessments of proposed uranium mines, and reporting on the impacts of uranium mining. The BQCMB has produced various tools for assessing the potential impacts of developments on the caribou ranges, and has developed a clear position on action needed to protect the caribou herds in this era of increasing northern development.

A BQCMB position paper, which is available on the Board's website (www.arctic-caribou.com), describes action needed to protect Beverly and Qamanirjuaq caribou and caribou range. This paper provides five key recommendations, and describes various issues and principles used to develop these recommendations.

The Beverly Caribou Herd

Herd Size and Status

The number of caribou in the Beverly herd has been estimated by government biologists numerous times over the past 50 years. However, caribou counts on the spring and winter ranges from the late 1940s to the 1960s did not provide adequate information for determining whether the herd was increasing or decreasing.

Calving ground surveys from 1971 to 1980 suggested that the herd was declining. Total herd size was estimated to be about 105,000 in 1980. Biologists believed that the herd would soon be in trouble if the number of animals harvested was not reduced. However, many Inuit hunters believed that the herd was actually increasing, or that it was using different parts of the range, and did not agree that hunting was a problem.

Surveys of Beverly caribou conducted in the 1980s indicated increasing herd size. Population estimates were 125,000 in 1982 and 190,000 in 1988. The 1994 population survey of the Beverly herd indicated that the trend had continued, resulting in a herd size of 276,000 caribou.

However, recent surveys of four other NWT barren-ground caribou herds have shown that these herds are declining, so the Beverly herd may also been decreasing. The next population survey of the Beverly herd is planned for 2007.

Range Location and Use

A series of maps showing seasonal ranges of Beverly caribou are available on the BQCMB website (www.arctic-caribou.com/parttwo/mapatlas.html). These maps were produced by the BQCMB based on information obtained during government surveys from 1940 to 1995, and can be used to identify the geographic relationship of the upper Thelon watershed to seasonal range use by Beverly caribou.

Beverly caribou have migrated across the northern Canadian landscape for thousands of years, traveling as far as 2000 kilometres each year. The range used by this herd over the past 60 years extends across a huge and diverse area, from the boreal forests of Saskatchewan, across the subarctic taiga of the NWT, to the arctic tundra of west-central Nunavut (www.arctic-caribou.com/parttwo/pdf/bqtotca.pdf).

The total range used by the herd during this period extends almost 1000 kilometres from south to north. In some years, however, the caribou have remained north of the historic forested winter range in northern Saskatchewan and Manitoba. Because the herd overlaps with Bathurst caribou on the west and the Qamanirjuaq herd on the east, it is difficult to determine the western and eastern limits of the Beverly range. However, Beverly caribou range is at least 600 kilometres from west to east.

The Beverly herd migrates northward each spring to the calving grounds, and then travels back toward the more southerly winter range in July, and again each fall. Every

year Beverly caribou return to the same general area for calving, although not to the same specific location. Consequently, the Beverly herd's traditional calving grounds (the total area known to be used for calving over many years) are much larger than the area used in any particular year. The Beverly herd's calving grounds (approximately 38,400 sq. km.) extend from the area around the lower Thelon River and Beverly and Aberdeen lakes, north towards the Back River and Pelly and Garry lakes, and have been described by surveys in 23 years between 1957 and 1994. Calving ground surveys found that most Beverly caribou calved in the southeastern half of the traditional calving grounds between 1957 and 1974, but that calving occurred primarily in the northern portion of the calving ground since 1980. This is why the entire traditional calving grounds, not just the area used for calving in one year, are important to the herd over the long-term.

Unlike all other mainland barren-ground caribou herds, which spend part of their annual cycle in coastal areas, Beverly caribou remain inland year-round. The landscape through which the Beverly herd travels can be characterized as primarily wilderness, including hundreds of wild rivers and lakes, and one of the largest protected natural areas in North America, the Thelon Wildlife Sanctuary. Human habitation on the range is limited to 10 small communities around the fringes of the range, and five others nearby.

The Value of the Caribou Herds

Beverly and Qamanirjuaq caribou herds are an extremely valuable resource for four territorial and provincial governments and the federal government, and for about 20 communities. The Beverly herd is harvested by Dene, Metis, Cree, Inuit and non-aboriginal people from about a dozen communities in NWT, Nunavut, Saskatchewan and Manitoba.

The minimum gross economic value of Beverly and Qamanirjuaq caribou harvested in a single year is about \$17 million. The cultural and spiritual value of the herds is immense.