NIRB File No. 07EN047
INAC File No. N2007C0024

August 4, 2009

Honourable Chuck Strahl
Minister of Indian and Northern Affairs Canada
c/o Spencer Dewar
Manager Land Administrator
Iqaluit, NU

Via email: Spencer.Dewar@inac-ainc.gc.ca

Re: Application Exempt from Screening under NLCA Section 12.4.3: Uranium North Resources Corporation's "Mining Exploration and Campsite at Amer Lake" Project

Dear Spencer Dewar:

On July 15, 2009 the Nunavut Impact Review Board (NIRB) received an application from Indian and Northern Affairs Canada (INAC) for an extension to Land Use Permit N2007C0024 held by Uranium North Resources Corporation (Uranium North) for its "Amer Lake Mining Exploration and Campsite" project. Uranium North is currently proposing to extend its Land Use Permit for this project for a period of one (1) year, until September 5, 2010.

Please be advised that the original project proposal (NIRB File No. 07EN047) was received by the NIRB from INAC on May 31, 2007. The proposal was screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA), and on August 22, 2007 the NIRB issued a 12.4.4(a) screening decision to INAC, recommending the proposed project be allowed to proceed subject to project-specific terms and conditions.

The INAC application, the original NIRB screening file and the Screening Decision for 07EN047 are available from the NIRB's ftp site at the following link:
ftp://ftp.nirb.ca/SCREENINGS/ACTIVE%20SCREENINGS/07EN047-Uranium%20North%20Corporation/1-SCREENING/

Please note that Section 12.4.3 of the NLCA states that:

> *"Any application for a component or activity of a project proposal that has been permitted to proceed in accordance with these provisions shall be exempt from the requirement for screening by NIRB unless:*
>
> *(a) such component or activity was not part of the original project proposal; or*
>
> *(b) its inclusion would significantly modify the project."*

NIRB distributed the current extension request to a regional distribution list, requesting submission of any comments or concerns related to the application by July 27, 2009.

The following comments were received regarding the proposed extension:

Beverly and Qamanirjuaq Caribou Management Board (BQCMB):

- More details about the status and decline of the Beverly herd are provided in a press release and backgrounder issued by the BQCMB earlier this month - please ensure this information is made available to Uranium North (*see attached*). We generally support the proposal by NIRB to re-issue the same terms and conditions for protection of caribou as those in the August 2007 Screening Decision.

Environment Canada (EC):

- Environment Canada has no issues with the proposed renewal, provided the proponent submits outstanding reports and is in compliance with the terms and condition of the existing Land Use Permit.

Government of Canada – Department of Environment (GN-DOE):

- The DOE believes the extension will not result in significant adverse changes.

After completing a review of the information provided and the comments received, the NIRB is of the understanding that the application received from INAC does not change the general scope of the original project activities, and the exceptions noted in NLCA 12.4.3(a) and (b) do not apply. Therefore, this application is exempted from screening as per Section 12.4.3 of the NLCA and the activities therein remain subject to the terms and conditions recommended in the original August 22, 2007 Screening Decision Report (attached).

If you have any questions or concerns, feel free to contact NIRB's Technical Advisor, Tara Arko, at (867) 983-4609 or tarko@nirb.ca.

Best regards,

Stephanie Autut
Executive Director

cc: Phyllis Beaulieu, NWB
Carrie Spavor, EC
Leslie Wakelyn, BQCMB
Graham Gill, Uranium North

Attachments: NIRB Screening Report Decision, File No. 07EN047 (August 22, 2007)
Draft Technical Document for Batch Waste Incinerators
The Beverly and Qamanirjuaq Caribou Management Board Press Release
The Beverly and Qamanirjuaq Caribou Management Board Backgrounder

SCREENING DECISION REPORT
NIRB FILE NO.: 07EN047

August 22, 2007

Honourable Charles Strahl
Minister of Indian and Northern Affairs Canada
Ottawa, ON

E-Mail: Strahl.C@parl.gc.ca

Re: Screening Decision for Uranium North Resources Corporation's Mining Exploration and Campsite at Amer Lake Project Proposal

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Dear Honorable Minister:

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

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.

NIRB Assessment and Decision

After a thorough assessment of all material provided to the Board (please see Procedural History and Project Activities in **Appendix A**), in accordance with the principles identified within section 12.4.2 of the NLCA, the decision of the Board as per section 12.4.4 of the NLCA is:

12.4.4 (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.

Recommended Terms and Conditions, pursuant to 12.4.4(a) of the NLCA

The Board is recommending the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

General

1. Uranium North Resources Corporation (the Proponent) shall maintain a copy of this Screening Decision at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to NIRB prior to the commencement of the project.
3. The Proponent is required to submit a revised Spill Contingency Plan to NIRB, INAC, GN-DOE and EC, in which will be included a 24 hour telephone number clearly identified, names and quantity (in volumes or weights) of both fuel and chemicals (such as drill additives) to be used on site within 30 days of issuance of the Screening Decision Report...
4. The Proponent is required to submit to NIRB, INAC, KIA and GN-DOE a revised waste management plan, in which will be included a provision to use a dual chamber and forced-air incinerator, rather than a burn barrel for combustible camp wastes prior to commencing any field work in 2007.
5. The Proponent shall conduct project activities in accordance with all commitments stated in all documentation provided to NIRB, INAC, NPC and NWB.
6. The Proponent shall submit an annual report with copies provided to NIRB, INAC, GN-DOE and NWB commencing January 31, 2008. The report must contain, but not be limited to, the following information:
    - A summary of activities undertaken for the year of 2007;
    - A work plan for the following year;
    - Recording of wildlife observation and critical habitats including:
        - Location (i.e., latitude and longitude).
        - Species.
        - Number of animals.
        - Description of the animal activity.
        - Description of the gender and age of animals if possible.
    - Description of any wildlife encounters and any actions/mitigation measures taken;
    - Evidence regarding the Proponent's commitment to require on-site personnel read and understand the comments provided to NIRB by the GN-DOE and EC;
    - A summary of local hires and initiatives;
    - A summary of community consultations undertaken as detailed in NIRB application documents (PSIR);
    - A summary of site-visits by Land Use Inspectors with results and follow-up actions;
    - The number of take-offs and landings from an airstrip with proposed flight path with date and location;
    - The number of helicopter touch-downs on the land with date and location (provide unless confidential);
    - Site photos;
    - Progressive reclamation work undertaken;

- Efforts made (including the use of recommended incinerator) to achieve compliance with the *Canada-Wide Standards for Dioxins and Furans* and the *Canada-Wide Standards for Mercury*;
- A summary of the number and location of spills and failures which activated the Spill Contingency Plan; and
- A summary of how the Proponent has complied with NIRB conditions contained within this Screening Decision, and the conditions associated with all authorizations for the project proposal.

Wildlife

7. The proponent is required to suspend all project activities during the period of May 15 to July 15 when caribou are observed calving in the area.
8. The proponent is required to suspend all low-altitude flights by aircraft, diamond drilling activities and equipment movement if caribou are observed during pre-calving or post-calving periods.
9. The proponent is also required to suspend all activities during caribou migration in the spring and in the fall when or if caribou herds are passing the project area until the migrating caribou has passed.
10. The proponent is also required not to conduct low-altitude flights over concentrations of caribou and musk ox.
11. The Proponent shall ensure that there will be no disturbance of nesting raptors from 15 April to 1 September by staying at least 1.5 km away from them when in transit by aircraft, and avoiding approaching nests closely while on foot.
12. The Proponent shall ensure that all disturbances to nests during the early part of the nesting cycle will be avoided (avoid nest sites from late May through to mid-July).
13. The Proponent shall avoid activity within 100m of a nest site during the latter part of the nesting stage (August 10-20 for peregrine falcons in this region).
14. The Proponent is advised that the operation is in an area where polar bears may be encountered. Therefore, the Proponent and all employees should follow procedures outlined in the "Safety in Bear Country Manual". In addition, proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation.
15. The Proponent is advised that furbearers may be observed at camps and drill sites. There is a concern with potential human-wolf, wolverine, and fox encounters. These encounters can result in injury or death to either the animal or humans. Therefore all possible efforts to avoid human-wildlife encounters must be made.
16. The proponent is required to report all wildlife observations near the project area at the end of the operational season to GN-DOE (Wildlife Division): Manager of Wildlife: Dan Shewchuck, (867) 857-2828, dshewchuk@gov.nu.ca and Biologist, Kivalliq Region: Mitch Campbell, (867) 857-2828, mcampbell@gov.nu.ca

Waste management

17. The Proponent shall incinerate, with a dual chamber, all combustible and food wastes daily and shall store the ash in such a way that it is inaccessible to wildlife at all times.
18. The Proponent shall ensure that the disposal of combustible camp wastes comply with the *Canada-Wide Standards for Dioxins and Furans*, and the *Canada-Wide Standards for Mercury*. Efforts made to achieve compliance shall be reported to the NIRB as part of the annual report.
19. The Proponent shall ensure that no waste oil will be incinerated on site. All waste oil will be transported off site and disposed of at an approved facility. A waste manifest must accompany the shipment of all waste oil and the proponent must register with the DOE. Contact Robert Eno at

reno@gov.nu.ca or (867) 975-7748 to obtain a manifest if hazardous waste is generated during project activities.

Spill Contingency Plan

20. The proponent is required to locate all fuel and other hazardous materials a minimum of thirty (30) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
21. The proponent is required to ensure the main fuel cache at camp is placed within an Insta-berm.
22. The proponent is required to ensure drip trays be used at refueling stations.
23. The Proponent is required to utilize the revised spill reporting form in case of spills, and any spill reporting is to be recorded electronically. This revised spill form, with instructions, can be obtained from the Spill Line at (867) 920-8130.

Drilling / drilling holes disposal of relating radiation substances

24. The Proponent is required to use biodegradable and non-toxic additives. The Canadian Environmental Protection Act lists CaCl as a toxic substance.
25. Drill holes that encounter uranium mineralization with a content greater than 1.0% over a length of more than 1 meter with a meter-percent concentration greater than 5% should be sealed by cementing over the entire mineralization zone; this should be at least 10 meters above and below each mineralization zone.
26. Drill cuttings with a uranium concentration of greater than 0.05% should be disposed of down the drill hole and sealed.
27. All land based artesian holes shall be documented, plugged and sealed with grout.
28. Core storage areas should be located at least 100 meters from the high waterline of all water bodies.
29. Gamma radiation levels at a long-term core storage area should not be greater than 1.0 µSv, and should never exceed 2.5 µSv. Instruments that measure radiation in counts per second should be converted to µs.
30. 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.

Others

31. The Proponent shall adhere to conditions stated in attached **Appendix B** Archaeological and Palaeontological Resources – Terms and Conditions for Land Use Permit Holders.
32. The Proponent is required to ensure the camp-site is clean and tidy. Furthermore, upon abandonment of the project activities the Proponent shall ensure that no remnants of past exploration activities are left within the project area. The area should left in a state as near as possible to pre-exploration conditions.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

With respect to NIRB's primary objectives, it is recommended that:

Indian and Northern Affairs Canada (INAC)

- INAC impose strict mitigation measures, conditions and monitoring requirements, pursuant to the Federal Land Use Permit, which require Uranium North Resources Corporation to respect the

ecosystem in the project area. These mitigation measures, conditions and monitoring requirements should be in regard to:

- Wildlife and habitats protection.
- Routings, timing and locations of airborne geophysics.
- Use, Storage, Handling and Disposal of Chemical or Toxic Material.
- Petroleum Fuel Storage.
- Matters Not Consistent with the Regulations.

- INAC should also consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.

The Government of Nunavut Department of Environment (GN-DOE)

- The GN-DOE should conduct on-going collection of wildlife data in project areas.

Regulatory Requirements

The Proponent will be advised, should the project proceed, that the following legislation may apply to the project:

1. Section 36(3) of the *Fisheries Act* (http://laws.justice.gc.ca/en/showtdm/cs/F-14///en) which states that no person shall deposit or permit the deposit of a deleterious substance in any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
2. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* which state that no person disturb or destroy the nests or eggs of migratory birds, and that no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds (http://laws.justice.gc.ca/en/showtdm/cs/M-7.01)
3. *The Species at Risk Act* (http://laws.justice.gc.ca/en/showtdm/cs/S-15.3). Attached in **Appendix C** is a list of Species at Risk in Nunavut. The Proponent should consult the Species at Risk Public Registry (http://www.sararegistry.gc.ca/) to identify any Species at Risk within the project location. Further, the Proponent shall develop monitoring plans for each relevant Species at Risk in accordance with any applicable status reports, recovery strategies, action plans, and management plans posted on the Species at Risk Public Registry and in consultation with the Government Organization with Primary Management Responsibility. Monitoring plans should record the locations and frequency of observing species of special concern and note any actions taken to avoid contact or cause disturbance to the species, its residence, or its critical habitat.
4. The *Nunavut Act* (http://laws.justice.gc.ca/en/showtdm/cs/N-28.6) which requires that no person alter or disturb any archaeological or palaeontological sites in Nunavut unless permission is first granted through the permitting process. If any archaeological or palaeontological sites are found they should remain undisturbed and their location should be reported to the Government of Nunavut Department of Culture, Language, Elders and Youth. The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix B.**
5. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (http://www.tc.gc.ca/tdg/menu.htm), and the *Environmental Protection Act* (http://laws.justice.gc.ca/en/C-15.31/text.html) which presents the requirements for the handling, storing, managing and transportation of dangerous goods, including hazardous wastes, fuel and contaminated material. The Proponent must ensure that proper shipping documents accompany all

movements of dangerous goods. The Proponent must register with GN-DOE by contacting Robert Eno at 867-975-7748 or reno@gov.nu.ca.

6. Article 13.7.1 of the NLCA and Section 173(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, state that no person shall use water or dispose of waste into water without the approval of the Nunavut Water Board (NWB). The Proponent is encouraged to contact the NWB prior to engaging in any activities to determine if a license is required (http://www.nunavutwaterboard.org/en/home).

Validity of Land Claims Agreement

Section 2.12.2
Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated August 22, 2007_ at Sanikiluaq, NU.

_____
Lucassie Arragutainaq
A/Chairperson

APPENDIX A

Procedural History and Project Activities

Procedural History

On May 31, 2007 the Nunavut Impact Review Board (NIRB or Board) received Uranium North Resources Corporation (Uranium North)'s *Amer Lake Mining Exploration and Campsite* project proposal from Indian and Northern Affairs Canada (INAC). In addition NIRB received a positive conformity determination from the Nunavut Planning Commission (NPC) for this project proposal (May 30, 2007). NIRB assigned this project proposal file number, 07EN047.

On June 11, 2007 NIRB notified Uranium North that the information provided was not sufficient to conduct an environmental screening. Additional information was requested. On July 24, 2007 NIRB received the requested information and commenced the Part 4 Screening process.

The proposed project is located in the Kivalliq Region, and the nearest community is Baker Lake. The purpose of the project is for uranium exploration in the Amer Lake area.

On June 11, 2007 NIRB distributed the application for comment to interested Federal and Territorial Agencies as well as municipalities most affected by Amer Lake project.

On or before August 10, 2007, the NIRB received comments from the following interested Parties:

- Environment Canada (EC); and
- The Government of Nunavut Department of Environment (GN-DOE).

Project Activities

The proposed project activities include:

- On-land drilling of approximately 2500m per year (for two years).
- Ground-based mapping, prospecting, sampling and geophysics.
- Aircraft use for access to the site and airborne geophysics activity within project area.
- Use of eskers or lakes for landing aircraft.
- The establishment of a 10-12 man temporary camp on southern shore of Amer Lake.
- Fuel and chemical transportation and storage.
- Use of water and generation of wastes.

APPENDIX B

Government of Nunavut – Department of Culture, Language, Elders and Youth
Standard Terms and Conditions

BACKGROUND

Archaeology

As stated in Article 33 of the Nunavut Land Claims Agreement:

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

Palaeontology

Under the Nunavut Act[1], the federal government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*[2], it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

"archaeological artifact" means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

"palaeontological site" means a site where a fossil is found.

"fossil" includes:

(a) natural casts
(b) preserved tracks, coprolites and plant remains; and
(c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

Terms and Conditions

1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.

2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.

3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.

4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.

5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.

6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.

7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.

8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.

9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:

- a) survey
- b) inventory and documentation of the archaeological or palaeontological resources of the land use area
- c) assessment of potential for damage to archaeological or palaeontological sites
- d) mitigation
- e) marking boundaries of archaeological or palaeontological sites
- f) site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.

APPENDIX C

Species at Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term "listed" species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are "pending" addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: January 3, 2007

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility [1]
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered [2]	Schedule 1	EC
Peregrine Falcon (subspecies anatum)	Threatened	Schedule 1	Government of Nunavut
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (subspecies tundrius)	Special Concern	Schedule 3	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Peary Caribou	Endangered [3]	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale	Special Concern	Pending	DFO

(Western Hudson Bay population)			
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Hudson Bay-Foxe Basin population)	Threatened [4]	Pending	DFO
Bowhead Whale (Davis Strait-Baffin Bay population)	Threatened [4]	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Rusty Blackbird	Special Concern	Pending	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern [3]	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

[1] Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. EC = Environment Canada, DFO = Department of Fisheries and Oceans

[2] Designated as Endangered by COSEWIC in April 2006 and it is expected that the category of concern in SARA will also be changed from Special Concern to Endangered.

[3] Peary Caribou was split into three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. The Low Arctic population also included the Barren-ground Caribou - Dolphin and Union population. In May 2004 all three population designations were de-activated, and the Peary Caribou, Rangifer tarandus pearyi, was assessed separately from the Barren-ground Caribou (Dolphin and Union population), Rangifer tarandus groenlandicus. The subspecies pearyi is composed of a portion of the former "Low Arctic population" and all of the former "High Arctic" and "Banks Island" populations, and it was designated Endangered in May 2004. Although SARA lists Peary Caribou on Schedule 2 as three separate populations, the most current designation is the COSEWIC designation of the subspecies pearyi as Endangered.

[4] The "Eastern and Western Arctic populations" of Bowhead Whale were given a single designation of Endangered in April 1980 by COSEWIC. These were split into two populations to allow separate designations in April 1986. The Eastern population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and both these populations were designated as Threatened. Both these populations are under consideration for addition to Schedule 1. Although SARA lists the Eastern Arctic population as Endangered (Schedule 2), the most current designation is the COSEWIC designations of the Hudson Bay-Foxe Basin and Davis Strait-Baffin Bay populations as Threatened.

Technical Document for Batch Waste Incinerators

Executive Summary

This section of the report summarizes the six steps that should be adopted when employing batch incineration as a means of waste disposal. The emphasis is on practices that will minimize the emissions of toxic contaminants, in particular dioxins and furans [PCDD/F]. Dioxins and furans can be generated when inadequate technology is used and/or the incinerator is not properly operated. Mercury is another toxic contaminant of concern. Mercury is not created in the incinerator; therefore limiting the amount of mercury in the waste fed to the incinerator is the best method to control mercury emissions.

STEP 1: KNOW YOUR WASTE

The first step in managing waste is to understand the quantity and composition of the waste that is generated.

CONDUCT A WASTE AUDIT

Determine how much waste is being generated in the various parts of your operation. Characterise the waste from each type of operation. Examine the waste characteristics to determine what opportunities there are for:

- reducing the amount of waste generated;
- reusing materials; and,
- recycling as much as possible before considering disposal.

CHOOSE THE MOST APPROPRIATE DISPOSAL OPTION

Where possible, find disposal alternatives other than incineration for the residual waste after the 3Rs (Reduce, Reuse and Recycle) have been implemented. Remember:

- Open burning of un-segregated waste is discouraged. Open burning does not achieve appropriate temperatures for a clean burn and may result in excessive emissions of toxic contaminants. In some jurisdictions, limited open burning of specified materials (e.g. paper products, paperboard packaging and untreated wood waste) is allowed.
- Barrel burning is discouraged for the same reasons as open burning. Testing of barrel burning emissions has shown that PCDD/F emissions are higher from barrel burning than those from some of the worst incinerators tested.
- Inert materials (e.g. rock, stone, bricks, concrete, and glass) can be landfilled. Where costs of metal recycling greatly exceed the value of the recovered materials, metals can be landfilled.

STEP 2: SELECT YOUR INCINERATOR

The characteristics of the waste residuals that require incineration should be incorporated into a call for proposals from incinerator manufacturers. As noted in § 5, there are incinerators designed for particular types of wastes. By specifying the quantity and composition of the waste that requires incineration, you will ensure that suitable incinerators will be proposed.

If it is estimated that more than 26 tonnes per year (tpy) will be incinerated, dual chamber, controlled air, incinerators are the preferred configuration. These systems will burn the range of wastes typically encountered on federal lands and at federal installations, and are capable of meeting the Canada-wide Standards (CWS) for PCDD/F emissions. These systems should have large secondary chambers capable of providing a residence time of 1 second or more at a temperature in excess of 850^{O}C.

If it is estimated that less than 26 tpy will be incinerated, "determined efforts" as defined in the Canada Wide Standard for Dioxins and Furans[1] must be made to meet the CWS for PCDD/F. Should circumstances restrict the ability to utilize a dual chamber incinerator with a large secondary chamber, an incinerator with an afterburner should be employed. It is recognized that such systems are more susceptible to upsets and less likely to be able to meet the CWS emission standards than dual chamber incinerators.

STEP 3: INSTALL AND PROPERLY EQUIP YOUR INCINERATOR

BUILDING CONSIDERATIONS

Where practical, incinerators should be installed inside a building to protect the equipment and the operators from weather conditions. In designing the installation site, care should be taken to maximise the clearances between incinerator components, including the stack, and combustible construction materials. If necessary, insulation should be used to protect combustible materials.

The building should be equipped with sufficient fresh air inlet capacity for the incinerator. Both combustion air and dilution air for the barometric damper are required. Care should be taken to introduce air in a manner that does not lead to low temperature operating problems.

EQUIPMENT CONSIDERATIONS

If it is necessary to introduce additional waste to the furnace during the burn cycle, the incinerator should be equipped with a ram charge system to limit the disruption of combustion in the primary chamber when a fresh charge is introduced into the furnace.

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[1] Available at: http://www.ccme.ca/assets/pdf/d_and_f_standard_e.pdf

Batch incinerators should NOT be equipped with heat recovery devices. Stack gases in the heat recovery systems will be in a temperature range that can lead to formation of PCDD/F in the system.

Any incinerators equipped with a heat recovery system should have an air pollution control system to treat the stack gases and remove PCDD/F from the exhaust stream.

The incinerator system should come complete with the following equipment to monitor and record performance parameters:

- A weigh scale to measure the weight of all materials charged to the incinerator;
- A computerised process control and data acquisition system to store operating data from the incinerator such as:
    - The weight of all material charged to the incinerator for a specific run;
    - Temperatures in the primary, secondary and stack during the operation;
    - Differential pressure in the primary;
    - Auxiliary burner status, energized or not energized status for the burner;
    - Operating data from any fans installed on the system including amperage the fans are drawing at any time; and,
    - Status data for all system set points and interlocks such as the charging door closed switch.
- For systems with heat recovery equipment or air pollution control systems additional operating data is required including:
    - Temperature measurements at:
        - Boiler inlet;
        - Boiler outlet;
        - Air Pollution Control (APC) quench inlet;
        - APC quench outlet;
        - Venturi scrubber or fabric filter inlet/outlet temperatures as appropriate;
    - Differential pressure measurements at:
        - Boiler outlet;
        - APC quench system;
        - Venturi scrubber system;
    - Water flow rates to quench and scrubber; and,
    - Reagent addition rate as appropriate.

Operational data should be collected and stored at a minimum every minute that the system is operating. The intent is to be able to summarize operating parameters during start-up, operation and cool-down for every cycle. Should required operating conditions not be achieved these data will allow the operators, manufacturers and the regulator to identify the contributing factors for this failure. From this information, operating procedures can be adjusted to improve performance. Provisions should be

made for the manufacturers to be able to access and review the operating data remotely for trouble shooting purposes.

STEP 4: OPERATE YOUR INCINERATOR FOR OPTIMUM COMBUSTION

OPERATION

Wastes received at the incinerator building should be segregated by their characteristics. Typically, this segregation would be on the basis of the heating value of the wastes: wet or low energy wastes (e.g. food waste) in one area; mixed wastes with average energy values in a second area; and, plastics and oily materials with high energy values in a third area. To facilitate this separation, all waste should be collected in translucent bags to improve identification of the waste in the bag. To assist with separation, wastes could be collected in different colour bags.

The operator should select waste from each category and mix it in the appropriate proportions during incinerator loading. Each bag should be weighed, its source noted, and the total weight of each category tallied before completing the loading. Ideally this information should be recorded by the computerized data acquisition equipment installed with the incinerator.

Small batch type incinerator systems have limited charging capacity. To assist the operator with the charging task, particularly for smaller incinerators, several batches could be pre-weighed and placed in their own containers prior to loading the incinerator. The same weighing and logging procedures should be used for each batch and once recorded, the batch can be charged when appropriate.

When the incinerator is charged with the appropriate mix and amount of waste, the operator should close the door, ensure all interlocks are satisfied and initiate the burn cycle. The operator should observe the burn for at least 15 minutes after ignition of the primary chamber burner to ensure the volatility of the waste charged is not creating too much gas for the secondary chamber to handle. The rate of combustion can be slowed by reducing the underfired air. The primary chamber should operate in the appropriate temperature range specified by the manufacturer during this time.

After the operator is satisfied that the burn is proceeding in a controlled manner, he can leave the incinerator area and allow the equipment to complete the burn cycle.

Under NO circumstances should an incinerator burn be interrupted by opening the charging door until after the burn is complete and the unit has cooled down, unless the incinerator is equipped with an appropriate ram feed device.

Once the burn is complete and the unit has cooled, the operator should only open the door after putting on personal protective equipment such as gloves, dust masks, face

shield or goggles.

The operator should remove the ash from the previous burn cycle before reloading the incinerator. Any unburnt materials found in the ash being removed should be recharged to the primary chamber after the operator has cleaned the air ports, and before putting a fresh charge into the incinerator.

TRAINING

Operators should be properly trained. Training should be provided by the manufacturer. The training course should include at least the following information:

- System safety including identification of hazards that the operator should recognize;
- Waste characterisation and how waste character can affect operation;
- Loading limitations, including materials that should NOT be charged to the incinerator, and the allowable quantities of different types of wastes that can be charged;
- Start-up procedures for the incinerator and the normal operation cycle;
- Operation and adjustment of the incinerator to maximise performance;
- Clean out procedures at the end of the cycle;
- Troubleshooting procedures;
- Maintenance schedule;
- Record keeping and reporting.

Management staff should be involved in the training session wherever possible so continuity can be maintained with different operators.

The Do's and Don'ts of Incinerator Operation

DO:

- Use waste oil and waste fuel for other heating purposes where practical;
- Limit the amount of waste oil or waste fuel in any specific charge to the incinerator;
- Develop a waste collection and handling program that will allow the operators to mix the waste to provide a uniform heat input to your incinerator;
- Use specially designed incinerators to dispose of animal carcasses, liquid wastes, or hazardous waste materials.

DO NOT:

- Overload the incinerator.
- Incinerate raw sewage wastes. High moisture content will increase operating costs dramatically and lead to poor performance. These liquids and solids can present health hazards to workers. High moisture materials can leak from the hearth and lead to equipment damage.

- Dispose of dead animals in MSW incinerators. In addition to moisture concerns, MSW incinerators are unlikely to be able provide sufficient heat to fully combust large bones.
- Put mercury containing materials (e.g. thermometers, thermostats, dental amalgam, batteries) into the incinerator.
- Introduce metal and glass into the incinerator when alternative disposal options exist. These materials absorb energy from the furnace and increase wear and tear on incinerator components.
- Incinerate wood treated with Chromated Copper Arsenate (CCA) and/or lead paint.
- Incinerate asbestos waste.
- Introduce large quantities of plastics or high calorific wastes into incinerators designed for low calorific value wastes such as animals and food waste. Incinerators capable of disposing of low calorific value waste are not suited to burning large quantities of high calorific wastes. If introduced into the incinerator, high calorific material will release increased quantities of PCDD/F.

STEP 5: HANDLE AND DISPOSE OF INCINERATOR RESIDUES SAFELY

Ash from the primary chamber of the incinerator can contain materials deleterious to the operator's health and the environment. Operators should use personal protective equipment to minimise their risks in handling this material. The material should be carefully removed from the hearth and placed in covered metal containers suitable for transporting the ash to the disposal site. The operator should weigh the quantity of ash and keep records of these quantities.

The disposal site should be away from areas prone to flooding to minimise the potential for dispersing the ash into the aquatic environment. Ash should be carefully placed into a disposal site and covered to minimise wind erosion of the material. A slight moistening of the ash can minimise dusting prior to covering.

If the incinerator is equipped with an Air Pollution Control [APC] system, the residues from the APC will contain materials deleterious to health and the environment. Typically the concentration of these elements will be higher than found in the incinerator ash. Dry APC residues are predominantly powdered lime. The particle size of dry residues requires that it be handled in a manner that minimises the release of dust to the atmosphere. Typically this material is pneumatically transferred to bulk carriers and hauled to disposal sites. In remote areas it should be loaded into a "Super Sack" for transport and disposal. The sack can be placed directly into the disposal site where the APC residues will solidify when exposed to moisture.

When waste water is created by the APC system, the owner should discuss management

requirements for the release of APC waste water with the local regulatory agency.

If regulatory agencies require testing of incinerator ash and/or APC residuals, the samples should be collected on an appropriate frequency and sent to the appropriate laboratory for chemical analysis.

STEP 6: REPORT ON INCINERATOR OPERATION

To demonstrate appropriate operation and maintenance of the incinerator, the facility should produce annual reports providing the following information:

- All staff that have been trained for the operation of the incinerator; type of training conducted and by whom; dates of the training; dates of any refresher courses.
- All preventive maintenance undertaken on the equipment:
    - Routine maintenance activities, date completed, by whom, any problems encountered.
    - Special maintenance activities, date completed, by whom, any problems encountered.
- Records of operation of the incinerator. Records should be kept in the computer and suitable arrangements should be made to backup these data so they are not inadvertently lost. Data to be recorded in the computer should include:
    - Record of each time the incinerator was used: date, time, operator, length of cycle;
    - Record of the weight and origin of the waste in the incinerator for the cycle;
    - The one minute operating data for the incinerator for that cycle:
        - Interlock status: OPEN/CLOSED for all locations so equipped such as primary and secondary doors;
        - Temperatures: primary, secondary, stack, and across boiler or APC systems;
        - Differential pressure readings from primary, secondary, boiler and APC system;
        - Auxiliary burner status ON/OFF
    - Any problems experienced during the cycle, and steps taken to rectify problems;
- Summarized annual auxiliary fuel usage, calculated by logging and summing all auxiliary fuel deliveries;
- All shipments of incinerator residues, including the weight transported and disposed by type if necessary, and the location of the disposal site.
- Any emissions measurements, any ash sampling or any water sampling data collected during the period.

All raw data records from the operation of the incinerator should be retained for inspection by the appropriate authorities for the period designated by the authorities or at least 2 years. The owner should work with the supplier and the regulators to determine the appropriate level of summary data that should be created and forwarded to the regulatory agency. The submitted reports should be signed off by the facility senior management.

Safeguarding Caribou
since 1982

The Beverly and Qamanirjuaq Caribou Management Board

PRESS RELEASE

Continuing drop in caribou numbers makes a "Recipe for Recovery" to help the ailing Beverly herd more important than ever

STONEWALL, Manitoba (July 6, 2009)—Alarmed by the fact that observers on the June 2009 reconnaissance survey of Beverly caribou counted even fewer breeding adult female caribou (cows) and calves on the calving ground than in 2008, the Beverly and Qamanirjuaq Caribou Management Board (BQCMB) is calling on everyone to work together for the benefit of the Beverly herd – and to make sure that the neighbouring Qamanirjuaq and Ahiak barren-ground caribou herds don't suffer the same fate.

"We have to get everybody together on one side," urges BQCMB chairman Albert Thorassie, who says he wants to see action, not just talk. "We have to *do* something about it."

As in previous years, the 2009 reconnaissance survey of caribou on the Beverly calving ground was conducted by the Government of the Northwest Territories (GNWT). Reconnaissance surveys don't estimate population sizes. They map the location of annual calving grounds and provide information about the number of caribou on calving grounds during the calving period.

During the 2009 survey, fewer than half the number of breeding cows were counted on the calving ground as were counted during the 2008 survey, says BQCMB biologist Leslie Wakelyn, who participated in the survey crew's nine lengthy days of flying over and around the traditional Beverly calving ground. (The "traditional calving ground" includes all areas known to be used for calving since the 1950s.)

BQCMB member Dennis Larocque of Camsell Portage, Saskatchewan and alternate member Pierre Robillard of Black Lake, Saskatchewan also participated as part of a second survey crew, flying transects for five long days over a vast area along the migratory route of Beverly caribou between the Saskatchewan-Northwest Territories (NWT) border and the traditional Beverly calving ground.

"Caribou-wise, it was very depressing," says Larocque. Outside the calving ground, he saw only one caribou – a bull – and almost no caribou tracks.

The total size of the Beverly herd was last estimated at about 276,000, based on surveys conducted in 1994. The current size of the herd is unknown, but the dramatic continuing drop in numbers of cows and calves counted on the calving ground during comparable June surveys means that the major decline of the Beverly herd documented in 2007 and 2008 has continued. The GNWT will finalize its 2009 Beverly calving distribution survey results later this summer. Five other barren-ground caribou herds west of the Beverly herd (the Porcupine, Cape Bathurst, Bluenose West, Bluenose East and Bathurst herds) have all suffered population declines recently.

Given the survey's gloomy indicators, the BQCMB will continue to create a plan of action as directed by members at the Board's May 2009 meeting (see backgrounder for details). This "Recipe for Recovery" will not only focus on improving the status of the Beverly herd, it will also strengthen efforts to conserve and manage the Qamanirjuaq and Ahiak caribou herds. The draft action plan will be developed during the summer and early fall for presentation to Beverly caribou stakeholders in November 2009.

The BQCMB is seeking funding to host a stakeholders workshop in either Yellowknife or Saskatoon along with its regular fall board meeting. The workshop would allow representatives from communities that traditionally hunted Beverly caribou to join BQCMB Board members and representatives of other key organizations in assessing the BQCMB's draft action plan.

To provide meaningful recommendations to governments, Aboriginal organizations and communities, the BQCMB needs to determine what monitoring and management actions are required to help the Beverly herd recover and increase in size, and how these measures can be implemented. Once input is received from stakeholders, the action plan will be finalized and sent to governments and other organizations as recommendations for further action. An action plan would be carried out by governments, the BQCMB and other stakeholders.

Chief among the ingredients for helping the Beverly caribou herd recover are protecting the calving ground, obtaining accurate harvest statistics, reducing wastage, encouraging hunters to select bulls over cows, and ensuring that the Beverly herd, as well as the neighbouring Qamanirjuaq and Ahiak herds, continue to be monitored.

This last point is key because with few Beverly caribou around now, hunters have been harvesting more caribou from the Ahiak and Qamanirjuaq herds in recent years. The BQCMB also urges governments to implement the caribou management strategy for declining herds with low numbers, as prescribed in the *Beverly and Qamanirjuaq Caribou Management Plan (2005-2012).*

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Backgrounder

The BQCMB's draft action plan to help the Beverly barren-ground caribou herd recover

About the Qamanirjuaq and Ahiak barren-ground caribou herds

About the BQCMB

The BQCMB's draft action plan to help the Beverly barren-ground caribou herd recover

The Beverly herd's range has historically extended from northern Saskatchewan through the Northwest Territories (NWT) to Nunavut. The estimated annual economic value of the Beverly caribou harvest was about **$4.9 million** for 2005-2006. The greatest proportion of the Beverly harvest has been by five communities in northern Saskatchewan, where most animals are taken for Aboriginal domestic use.

The total size of the Beverly herd was last estimated at about 276,000, based on surveys conducted in 1994. The herd has since suffered a major population decline. A current estimate of the population isn't known. However, according to the Government of the Northwest Territories (NWT), results of 2007 and 2008 reconnaissance surveys of Beverly caribou indicated that:

a) the numbers of breeding adult female caribou (cows) seen during June surveys on the calving ground were significantly lower than in past years

Year of Survey	# of Caribou (# seen on survey transect)
1994	5,737
2002	2,629
2007	189
2008	93

b) the number of calves seen during the survey in 2008 was very low (15 calves for every 100 cows), which is much lower than what is normally observed on calving grounds of healthy barren-ground caribou herds near the peak of calving (often around 80 calves per 100 cows).

A mix of natural factors may have spurred the Beverly herd decline, including the natural caribou population cycle, parasites, diseases, predation, climate change, and changes in habitat (including winter range lost to forest fires). Limited satellite-collar data indicate that some cows that had previously calved on the Beverly calving ground shifted to the Ahiak calving ground in recent years. The herd may also have been affected by human-caused activities, including mineral exploration and development, and hunter harvest. Since human-caused factors *can* be managed, the BQCMB is targeting these in its action plan.

The BQCMB's draft action plan will call for:

- providing conservation education on good hunting practices that include the harvest of bulls rather than cows, and reduced wastage of caribou
- reporting and analyzing harvest
- enforcing regulations regarding hunting, and mineral exploration and development
- investigating various options for ways to conduct a population survey of the Beverly herd in 2010
- researching and monitoring caribou health and condition
- tracking caribou using satellite collars, and assessing alternative methods used for collaring
- protecting caribou herds and their habitats, including long-term protection of calving and post-calving areas
- planning related to land use across the caribou range
- protecting caribou winter ranges from wildfires
- commenting to regulatory agencies on the potential effects of proposed projects on caribou and habitat
- compiling information about road impacts on caribou
- incorporating traditional knowledge along with scientific knowledge in management
- adopting consistent and complementary territorial and provincial caribou management strategies that are co-ordinated among governments across the herd's range
- collaborating on funding, research and management among jurisdictions
- publicizing the decline of the Beverly herd and actions needed to promote its recovery, including promoting dialogue between governments, communities, industry and the public
- lobbying politicians responsible for the caribou herd and communities that depend on it
- working with the Prince Albert Grand Council, the Nunavut Wildlife Management Board, Nunavut Tunngavik Inc. and other groups concerned about the future of Beverly caribou, and
- reporting results of BQCMB meetings and decisions to Beverly range communities.

These actions complement the GNWT's existing monitoring plans and will be informed by the results of the GNWT's 2009 Beverly and Ahiak calving distribution surveys. It's hoped that monitoring plans to come from the governments of Nunavut and Saskatchewan in 2010 will also be a good fit with the necessary actions identified by the BQCMB.

About the Qamanirjuaq and Ahiak barren-ground caribou herds

Portions of the Beverly caribou herd's historic year-round range overlap with ranges of several other barren-ground caribou herds. Lack of separation of winter ranges used by Beverly caribou and other herds has been documented for many years. Information from a small number of Beverly caribou tracked using satellite collars in recent years suggests that the Beverly herd's range has overlapped to a large extent during most seasons with Ahiak caribou range. Beverly range also overlaps to a lesser extent with Qamanirjuaq caribou range in the east, and Bathurst caribou range in the west, particularly during winter. Use of separate calving grounds remains the North American standard for defining barren-ground caribou herds. Typically each herd uses distinct areas for calving which are separated geographically, known as "traditional calving grounds." (Each traditional calving ground includes all areas known to be used for calving by a given herd.)

The Qamanirjuaq herd's range has historically extended from northern Manitoba into the Kivalliq Region of Nunavut, with portions in southeastern NWT and northeastern Saskatchewan. The Qamanirjuaq traditional calving ground lies inland from Hudson Bay between Baker Lake and Arviat. The estimated annual economic value of the Qamanirjuaq caribou harvest was about **$15 million** for 2005-2006. The greatest proportion of the Qamanirjuaq harvest has been by Nunavut communities, with some harvest by communities in northern Manitoba and Saskatchewan.

When the Qamanirjuaq herd was censused in 1994, its population was estimated at 496,000. Surveys of the Qamanirjuaq herd conducted in 2008 are being used to produce a new estimate of the size of the herd. Official results have not yet been announced. The Government of Nunavut, which spearheaded the surveys, has indicated that the preliminary draft 2008 population estimate for the Qamanirjuaq herd is 345,000.

Information about the Ahiak herd has been limited in the past, in part due to the remoteness of its range and also because caribou programs by the governments of NWT and Nunavut focused more on herds of greater concern to communities. The Ahiak caribou herd calves along the Queen Maud Gulf coast in Nunavut and spends the summers mostly in the Queen Maud Gulf Migratory Bird Sanctuary. Satellite collar studies from 2008 and 2009 suggest that the caribou calving near Chantrey Inlet at the eastern end of Queen Maud Gulf have a different seasonal movement pattern than those calving in the western portion of the Queen Maud Gulf area. Caribou calving near Chantrey Inlet are primarily tundra-wintering while those calving further west have a much more extensive north-south movement. The herd's migration leads them in spring of some years through the Beverly calving ground on their way north to the Ahiak calving ground, and in fall to the south of the Thelon Game Sanctuary, extending their winter range into the southern NWT. The herd is seasonally hunted by people from Gjoa Haven, Umingmaktok, Cambridge Bay and Lutselk'e, and in some winters Ahiak caribou may be taken in northern Saskatchewan.

A calving distribution survey of Ahiak caribou in June 1996 produced a ballpark estimate of about 200,000 caribou in the herd, although the survey had limited spatial coverage.

About the BQCMB

Established in 1982, the BQCMB is a co-management board of Aboriginal hunters, and government biologists and wildlife managers. As an advisory board, it works with governments, communities, industry and other organizations to develop recommendations for the conservation and management of the Beverly and Qamanirjuaq caribou herds and their ranges.

The BQCMB's mission is 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. The Board works primarily in the interest of traditional caribou users and their descendents, based on a co-operative partnership that has developed between governments and communities over more than 25 years. Current BQCMB priorities, which are outlined in the *Beverly and Qamanirjuaq Caribou Management Plan (2005-2012),* include monitoring of populations, habitats, harvest levels and land use activities across the ranges; environmental assessment of development activities; community-based monitoring and education; and incorporating local and traditional knowledge into management programs.

The Board's chairman is Albert Thorassie of the Sayisi Dene First Nation at Tadoule Lake, Manitoba, and the vice-chairman is Daryll Hedman, regional wildlife manager with Manitoba Conservation in Thompson, Manitoba. The Board's secretary-treasurer is Ross Thompson of Stonewall, Manitoba. The BQCMB's core funding comes from the governments of Manitoba, Nunavut, the NWT, Saskatchewan and Canada, the five governments that signed the management agreement for the BQCMB.

The 13-member BQCMB consists of eight members representing communities on the caribou ranges in Saskatchewan, Manitoba, NWT and Nunavut; one government member from each of these four jurisdictions; and one member from the federal government.

To learn more about the BQCMB, the caribou herds, human activities on the caribou ranges and other issues, explore the BQCMB's website for maps, reports, the newsletter *Caribou News in Brief* and much more: www.arctic-caribou.com. Or contact Ross Thompson, BQCMB Secretary-Treasurer. Phone: (204) 467-2438. E-mail: rossthompson@mts.net.