

NIRB File No. 07EN005 INAC File No.: N2006C0041

August 29, 2007

Douglas R. Bowden Ruby Hill Project Manager Sand Lake, NU

Via email: Ruby.Hill@drbowden.net

Re: Application Acknowledgement for Western Uranium Corporation's Amendment Request with Indian and Northern Affairs Canada for the Thelon Basin Project Proposal

Dear Mr. Bowden:

On August 27, 2006 the Nunavut Impact Review Board (NIRB or Board) received an application from Indian and Northern Affairs Canada (INAC) for an amendment to Western Uranium Corporation's (WUC) Thelon Basin project.

The original application for the above project was received by the NIRB on February 1, 2007 from INAC. The project proposal was screened in accordance with Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA). On March 26, 2007 the NIRB issued a 12.4.4(a) screening decision to INAC allowing the proposed project to proceed subject to specific recommended terms and conditions. Project components/activities included the following:

- On-land drilling
- On-lake drilling
- Temporary camp construction and use
- Fuel storage
- Chemical storage
- Consumption of water and generation of waste
- Clearing of temporary airstrip on lake to accommodate aircraft landings

WUC is proposing to amend their INAC Land Use Permit to include the following additional components/activities:

 Reassign five or six drill hole targets (a total of 10 drill hole targets have been permitted under the current Land Use Permit) from G7SW area to Area 6 left

The NIRB has determined that this request results in a change to the original scope of the project.

The INAC application and the original NIRB screening file (07EN005) are available from NIRB's ftp site at the following link:

ftp://ftp.nunavut.ca/nirb/NIRB\_SCREENINGS/ACTIVE\_SCREENINGS/2007\_AMENDMENTS\_RENEWALS/

The NIRB is of the opinion that the request for the amendment request does not *significantly* change the general scope of the original project activities. Therefore the NIRB is *proposing* to re-issue the same terms and conditions as those in the attached March 26, 2007 Screening Decision, along with any new terms and conditions the NIRB feels are appropriate. The NIRB is copying interested Parties and municipalities most affected by this project and we invite interested persons to comment directly to the NIRB by **September 5, 2007.** 

The NIRB would like Parties to provide comments regarding:

- whether the proposed component or activity was a part of the original proposal;
- whether its inclusion would significantly modify the project;
- any additional mitigation measures that are appropriate; and
- any other matter of importance to the Party related to the project proposal.

Please send your comments to the attention of the NIRB's Manager of Environmental Administration Leslie Payette at <a href="mailto:lpayette@nirb.nunavut.ca">lpayette@nirb.nunavut.ca</a> or via fax to (867) 983-2594.

If you have any questions or concerns, please do not hesitate to contact me at <u>cinglis@nirb.nunavut.ca</u> or 867-983-4607.

Sincerely,

(Original Signed by:)

Carolanne Inglis-McQuay Nunavut Impact Review Board

Cc: WUC Distribution List

Jeff Holwell: Indian and Northern Affairs Canada

Attach: March 26, 2007 Screening Decision



### SCREENING DECISION REPORT NIRB FILE NO.: 07EN005

NIRB File No.: 07EN005 INAC File No.: N2006C0041

March 26, 2007

Honourable Jim Prentice. PC., MP. Minister of Indian Affairs and Northern Development 10 Wellington, 21st Floor Gatineau, Quebec K1A 0H4

Via email: <a href="mailto:prentice.j@parl.gc.ca">prentice.j@parl.gc.ca</a>

Re: Screening Decision for Western Uranium Corporation's Thelon Basin Project Proposal

Dear Honourable Mr. Prentice:

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 Appendix E), 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

### NIRB Recommendations and Recommended Conditions

The Nunavut Impact Review Board is making this recommendation with broader terms and conditions because of the sensitivities and importance of the proximity of the project proposal to the border of the Thelon Game Sanctuary and the fact that it will be operating within the range of the Beverly and Ahiak caribou herds, and adjacent to a proposed Special Management Area (SMA) protecting known calving grounds. The Board suggests, due to the importance of such a Special Management Area, that all Responsible Parties (as described in the Thelon Game Sanctuary Management Plan) move the review of this proposal (the creation of Special Management Areas) forward in a timely fashion. This may be an especially important initiative in the long-term maintenance of healthy caribou herds in the Kivalliq Region.

With respect for NIRB's primary objectives, the Thelon Game Sanctuary and the proposed Special Management Area, NIRB is recommending the following:

- 1. As an overriding consideration, Indian and Northern Affairs Canada (INAC) impose as strict as possible mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require Western Uranium Corporation (the Proponent) to respect the sensitivities and importance of the area given the proximity of the Thelon Basin project (project) to the Thelon Game Sanctuary. These mitigation measures, conditions and monitoring requirements should be in regard to:
  - a. Location and Area
  - b. Time
  - c. Equipment
  - d. Methods and Techniques
  - e. Control or Prevention of Flooding, Erosion and Subsidence of Land
  - f. Use, Storage, Handling and Disposal of Chemical or Toxic Material
  - g. Wildlife and Fisheries Habitat
  - h. Objects and Places of Recreational, Scenic and Ecological Value
  - i. Petroleum Fuel Storage
  - j. Matters Not Consistent with the Regulations
- 2. INAC recognize that the project is located in an area which has been proposed as a Special Management Area (SMA) by the Thelon Game Sanctuary Management Plan (Plan), and ensure that the project is required to operate in a manner consistent with the intent of the Plan.
- 3. INAC 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 DIAND Caribou Protection Measures.
- 4. INAC recognize that any activity related to this application (INAC Land Use Permit application N2006C0041) outside the original scope of the **will** be considered a new project and must be submitted to NIRB for screening. In addition, NIRB would like to recommend to INAC that any renewal requests for the project proposal should be forwarded to NIRB for re-screening.

- 5. The Government of Nunavut Department of Environment (GN-DOE) Conservation Officers should conduct random inspections of the project location during the months of April, May, June and August to ensure the Proponent is in compliance with the DIAND Caribou Protection Measures.
- 6. The GN-DOE should assist the Proponent, as best possible, with the identification of an appropriate individual to conduct caribou monitoring. Furthermore, the GN-DOE should assist the Proponent with the revisions necessary regarding the Proponent's Wildlife Monitoring and Response Plan, including:
  - a. The development of criteria by which the cessation of all activities is required due to the sustained presence of the caribou
  - b. Recommended mitigation measures the Proponent should follow when large groups (> than 25) of caribou or significant numbers (>5) of Species at Risk are present within the project site
  - c. Survey and recording protocols
- 7. The GN-DOE should conduct on-going review of wildlife monitoring results submitted from the Proponent as required by the Wildlife Monitoring and Response Plan. Following submission of the required annual report by January 31, 2008 to NIRB, INAC and the GN-DOE, the GN-DOE should report to NIRB and INAC its findings regarding the possible impact of the project on the Beverly and Ahiak caribou herds. As noted in correspondence provided to NIRB, the GN recommended a one-year Land Use Permit to be issued, subject to the findings of the 2007 GN/GNWT Population Surveys of the Beverly and Ahiak Caribou Herds.

In addition, the Board is recommending the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation pursuant to 12.4.4(a) of the NLCA:

- 1. The term of the permitted activities associated with Land Use Permit N2006C0041 is subject to any findings, direction or advice received by INAC from the GN-DOE as a result of the 2007 GN/GNWT Population Surveys of the Beverly and Ahiak Caribou Herds.
- 2. Western Uranium Corporation (the Proponent) shall maintain a copy of this Screening Decision at the site of operation at all times.
- 3. The Proponent shall forward copies to NIRB of all permits obtained and required for this project prior to the commencement of the project.
- 4. The Proponent shall operate in accordance with commitments stated in Appendix C and all documentation provided to NIRB, INAC, and the NWB. Where information in the documentation conflicts with Appendix C, Appendix C shall prevail.
- 5. The Proponent shall submit an annual report with copies provided to the NIRB, INAC, and the GN-DOE by January 31 each year that the project is in operation commencing January 31, 2008. The report must contain, but not be limited to, the following information:
  - a. A summary of activities undertaken for the year;
  - b. A work plan for the following year;
  - c. The results of environmental studies undertaken and plans for future studies;
  - d. All monitoring results based on actions contained within the revised Wildlife Monitoring and Response Plan;
  - e. Description of any wildlife encounters and actions/mitigation taken;

- f. A discussion regarding the effects to human health from uranium exploration activities;
- g. Evidence regarding the Proponent commitment to require on-site personnel read and understand the comments provided to NIRB by the GN-DOE and Environment Canada (EC) (Appendix A and B);
- h. An analysis of the effectiveness of mitigation measures for wildlife;
- i. A summary of local hires and initiatives;
- j. A summary of community consultations undertaken as detailed in the Communications Plan:
- k. A summary of site-visits by Land Use Inspectors with results and follow-up actions;
- 1. Any approvals given by Land Use Inspectors regarding Caribou Protection Measures;
- m. The number of take-offs & landings from an airstrip with approved flight path with date and location:
- n. The number of helicopter touch-downs on the land with date and location (provide unless confidential);
- o. Site photos;
- p. Progressive reclamation work undertaken;
- q. Efforts made to achieve compliance with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*; and
- r. 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.
- 6. The Proponent shall abide by all DIAND Caribou Protection Measures (CPM), except where NIRB has recommended a condition distinctive from the CPM. In the case where the CPM and NIRB's recommended conditions conflict, the NIRB condition shall prevail. If the Proponent is given any approvals to stay within the project area by a Land Use Inspector during the presence of caribou, the Proponent shall provide NIRB with written proof of this approval within ten (10) days of receipt of approval.
- 7. The Proponent shall not conduct **any** activity between May 15 and July 15 of the calendar year. Furthermore, if the Proponent's Wildlife Monitoring Program indicate that caribou are in the area or are approaching the project area prior to May 15 or following July 15, the Proponent must immediately stop all activities (i.e. the use of ATV's and snowmobiles, and the movement of equipment) and must not commence operations again until wildlife monitoring indicates the caribou are at least 10km from the project area.
- 8. The Proponent shall be prohibited to allow aircraft take-offs and landings when groups of caribou are within 1km of the airstrip or helipad.
- 9. The Proponent shall recognize that the Hamlet of Baker Lake has had concerns in the past regarding low-level flying over herds of caribou, and shall be expressly prohibited from conducting any low-level flights over any herds of caribou. Furthermore, the Proponent shall ensure all flight personnel associated with the project are aware of this condition.
- 10. The Proponent shall ensure that all personnel associated with the project are aware of the importance of the long-term protection of Beverly and Ahiak caribou herds.
- 11. On or before April 15, 2007, the Proponent shall revise the Caribou Monitoring and Response Plan to include all wildlife, and this new Wildlife Monitoring and Response Plan shall be submitted to NIRB, the GN-DOE, and INAC, and must include:
  - a. The following requirements:

- i. Any NIRB conditions contained within this Screening Decision;
- ii. All commitments made by the Proponent in Appendix A;
- iii. Aircraft must maintain a flight altitude of at least 610 m at all times, particularly when there are observed groups of caribou, [and] maintain a vertical distance of 1000 m and minimum horizontal of 1500 m from any observed concentrations of birds:
- iv. The employment of an independent caribou monitor while the project is in operation;
- v. The requirement to record, on a daily basis, results from caribou monitoring activities. At the end of each month of project operations, the Proponent must submit this information to GN-DOE, and include the information in the annual report required by NIRB;
- vi. The requirement to record all wildlife observations and map, using GPS coordinates, any sensitive wildlife sites, such as denning areas or nesting areas;
- vii. If the Proponent conducts any project activities following July 15, the Proponent is required to undertake daily high altitude aerial reconnaissance to determine whether caribou cows and calves are present within a 20km radius of the site or if caribou are migrating through the site. If caribou are observed, the Proponent must suspend any operations within 10km of the sightings;
- b. Predicted impacts to wildlife from project activities, including any Species at Risk;
- c. Proposed site-specific measures to reduce anticipated adverse impacts to wildlife;
- d. Proposed monitoring procedures for the Wildlife Monitoring and Response Plan, including frequency, monitoring period, locations where monitoring will occur, and discussion regarding how the data collected in the Wildlife Monitoring and Response Plan will be used to determine if adaptive mitigation and management strategies for wildlife are required;
- e. Clear description of thresholds that will be used to determine the necessity for adaptive mitigation and management strategies; and
- f. Procedures for monitoring the effectiveness of mitigation measures;

Any subsequent direction provided by the Government of Nunavut Department of Environment (Mitch Campbell) regarding the Wildlife Mitigation and Monitoring Plan must be forwarded to NIRB.

- 12. The Proponent shall ensure that there is no hunting or fishing by employees of the company or any contractors hired unless proper Nunavut authorizations have been obtained.
- 13. The Proponent shall submit its updated Abandonment and Restoration Plan to NIRB, INAC and the NWB immediately, and no later than April 15, 2007 (*Proponent Commitment*).
- 14. The Proponent shall be aware that the use of water or deposition of wastes requires a water license issued by the Nunavut Water Board.
- 15. The Proponent shall ensure that the disposal of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*. Efforts made to achieve compliance shall be reported to the NIRB as part of the annual report.
- 16. On or before April 15, 2007, the Proponent must submit to NIRB a comprehensive Communications Plan, which must include:
  - a. The Proponent's consultation strategy with affected communities

- b. The procedures the Proponent will follow to ensure that all contractors associated with the project proposal are aware of all conditions associated with any authorization required for the project. This includes the conditions contained within this Screening Decision, and the revised Wildlife Monitoring and Response Plan.
- 17. The Proponent shall adhere to conditions stated in attached Appendix D *Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders*.
- 18. The Proponent shall incinerate all combustible and food wastes daily and shall store the ash in such a way that it is inaccessible to wildlife at all times.
- 19. 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 the project area is clean and tidy, and 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.

### **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 \_\_\_March 26, 2007\_\_\_\_\_ at Cambridge Bay, NU.

Lucassie Arragutainaq, A/Chairperson

Phone: (867) 983-4600 Fax: (867) 983-2594

## Appendix A – Comments Provided to NIRB by Environment Canada: March 2, 2007

Environmental Protection Operations Qimugjuk Building 969 P.O. Box 1870 Iqaluit, NU XOA 0H0 Tel: (867) 975-4639

Fax: (867) 975-4645

March 2, 2007 Our file: 4703 001

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

Tel: (867) 983-4607 Fax: (867) 983-2594

via e-mail

### RE: NIRB 07EN005 - Western Uranium Corporation - Thelon Basin Project

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the Canadian Environmental Protection Act, Section 36(3) of the Fisheries Act, the Migratory Birds Convention Act, and the Species at Risk Act.

Western Uranium Corporation is proposing to conduct geotechnical drilling on existing mineral prospecting permits in the Thelon Basin. The proposed uranium exploration program will consist of ground geophysics to collect magnetic data from rocks below the surface and surface core drilling of 2000 meters in approximately 10 holes. The site is approximately 200 km west of Baker Lake. The project will be supported by a remote camp located on the northern end of Sand Lake. It will be designed to house 20 persons in wall tents and Weather Havens. Access to the site is via fixed wing aircraft to an ice strip on Sand Lake.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

### General

- The proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes or sediment into any water body. According to the *Fisheries Act*, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- Any sumps created for the disposal of sewage and grey water, shall be located above the high
  water mark of any water body and in such a manner as to prevent the contents from entering any
  water body frequented by fish. Further, all sumps shall be backfilled upon completion of the field
  season and contoured to match the surrounding landscape.

### **Fuel Storage/Spill Contingency**

 EC recommends the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on location rather than relying on natural depressions. All fuel caches will be stored above the high water mark of any water body. Secondary containment or a surface liner (drip pans, fold-a-tanks, etc) should be placed under all container or vehicle fuel tank inlet and



outlet points, hose connections and hose ends during fuel or hazardous substance transfers. Secondary containment should be of adequate size and volume to contain and hold fluids for the purpose of preventing spills (the worst-case scenario). Appropriate spill response equipment and clean-up materials (absorbents, containment devices, etc) must be on hand during any transfer of fuel or hazardous substances and at vehicle-maintenance areas

- EC recommends that any hazardous material left on-site for seasonal shut down be stored in such a manner as to prevent the release of any hazardous materials into any water bodies. Secondary containment should be used if hazardous materials will be left unattended.
- Transfer operations should be attended by trained personnel at all times.
- Decanting of snow or water from the berm area should proceed only if the appropriate chemical analysis has determined the contents meet the requirements of Section 36(3) of the *Fisheries Act*.
- Fuel containers, including barrels, should be marked with the responsible party's name, product type, and year purchased or filled.
- Waste tracking, or "manifesting," should be implement to ensure proper use, storage, and management of materials. Manifests provide detailed information to first responders in the event of an accident and serve as a tool for confirming that shipments of dangerous or hazardous waste are properly handled, transported, and disposed of.
- The contact information for EC in the Spill Contingency Plan is incorrect and should be up-dated to include Jim Noble, EC's Environmental enforcement Officer. Mr. Noble can be contacted at (867- 975-4644) or the 24 hour Emergencies Pager (867-920-5131). The contact sheet should be kept on-site and accessible to employees at all times.
- The proponent has indicated in the Spill Contingency Plan section 5.0 Procedure for spills on Rocks that depending on the nature and volume of the spill, the 24-Hour Spill Line may be contacted. EC recommends that <u>all</u> releases of harmful substances, regardless of quantity, are immediately reportable where the release:
  - is near or into a water body;
  - is near or into a designated sensitive environment or sensitive wildlife habitat;
  - poses an imminent threat to human health or safety; or
  - poses an imminent threat to a listed species at risk or its critical habitat.

### Drilling

- Land based drilling should not occur within 30 m of the high water mark of any water body.
- Biodegradable mud and non-toxic additives should be used whenever possible. EC would like to
  inform the proponent that the *Canadian Environmental Protection Act* lists CaCl as a toxic
  substance. The proponent shall therefore ensure that if CaCl is used as a drill additive, all sumps
  containing CaCl are properly constructed and located in such a manner as to ensure that the
  contents will not enter any water body.
- If an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.

The proponent has indicated that for drilling 'on ice' all drill cuttings and water will be collected in a slop tank capable of holding the material from a 12 hour shift and the slop tank will be emptied into an on shore depression with no flow to the surrounding environment. EC recommends:

- •
- For 'on-ice' drilling, return water released must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment Guidelines for the Protection of Freshwater Aquatic Life (i.e., 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
- Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless
  they are re-circulated or contained such that they do not enter the water, or demonstrated to be
  non-toxic. The drill area is to be kept orderly and any garbage is to be removed daily from the
  area to an approved disposal site. The proponent shall not store materials on the surface ice of
  lakes or streams, except that which is for immediate use.



• The proponent should create a properly constructed sump for the disposal of any drill cuttings instead of relying on natural depressions. Any sumps created for the disposal of wastes and drill cuttings, shall be located above the high water mark of any water body and in such a manner as to prevent the contents from entering any water body frequented by fish. The sump shall be backfilled upon completion of the field season and contoured to match the surrounding landscape.

### Waste treatment and disposal

The proponent proposes to use an 'oil-fired incinerator' for the incineration of camp waste, however the make, model and capacity of the proposed incinerator was not provided for review. Environment Canada recognizes that timely disposal of camp waste - specifically food waste - is of critical importance to minimize safety risks associated with wildlife attraction. Timely disposal is usually achieved through burning. However, burning of waste products releases numerous contaminants to the air, many of them persistent, bioaccummulative and toxic (e.g. polycyclic aromatic hydrocarbons - PAH's - heavy metals, chlorinated organics – dioxins and furans). These contaminants can result in serious impacts to human and wildlife health through direct inhalation and they can also be deposited to land and water, where they bioaccumulate through food chains affecting wildlife and country foods. Therefore, burning should only be considered after all other alternatives for waste disposal have been explored.

A variety of incineration devices are available and selection of the most appropriate will depend on considerations of technical and economical feasibility for each situation. Installation of an incineration device capable of meeting the emission limits established under the Canada-wide Standards (CWS) for Dioxins and Furans and the CWS for Mercury Emissions is required (both the Government of Canada and the Government of the Nunavut are signatories to these Standards and are required to implement them according to their respective jurisdictional responsibility). The proponent should review the incineration options available and provide justification for the selected device to the regulatory authority. EC recommends that the following conditions regarding waste management be applied through all stages of the project:

- If burning is the only alternative available, the proponent should ensure that the waste is burned in a device that promotes efficient combustion and reduction of emissions, and that the amount of waste burned is reduced as much as possible.
- The proponent should ensure that the capacity of the incinerator is capable of handling all combustible waste generated by camp personnel.
- Used absorbent materials, oily or greasy rags, and equipment servicing wastes (such as used engine oil, antifreeze, hydraulic oil, lead acid batteries, brake fluid and other lubricants) should be safely stored and transported in sealed containers and safely transported to a facility that is authorized for the treatment and disposal of industrial hazardous wastes.
- The use of appropriate waste incineration technology should be combined with 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 Plan Waste 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 ensure appropriate training is provided to the personnel operating and maintaining the incinerator.

The objective should be to ensure that only food waste and food-contaminated waste is burned (the use of paper, cardboard and clean wood as supplementary fuel is acceptable).

The Canadian Wildlife Service (CWS) of Environment Canada has reviewed the above-mentioned submission and makes the following comments and recommendations pursuant to the *Migratory Birds Convention Act* (the *Act*) and *Migratory Birds Regulations* (the *Regulations*), and the *Species at Risk Act* (SARA).



- Section 6 (a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. Therefore, Environment Canada recommends that all activities in which there is a risk of disturbing or destroying nests or eggs be conducted outside the migratory bird breeding season, which extends from approximately May 15 to July 31. These dates are approximate, and if active nests (i.e. nests containing eggs or young) are encountered outside of these dates the proponent should avoid the area until nesting is complete (i.e. the young have left the vicinity of the nest).
- If activities are permitted to occur during the breeding season, Environment Canada recommends that the proponent confirm there are no active nests (i.e. nests containing eggs or young) in the vicinity of their operations before activities commence. If active nests of migratory birds are discovered, the proponent should halt all activities in the nesting area until nesting is completed (i.e. the young have left the vicinity of the nest).
- In order to reduce disturbance to nesting birds, Environment Canada recommends that aircraft used in conducting project activities maintain a flight altitude of at least 610 m during horizontal (point to point) flight unless safety or cloud ceiling do not permit.
- In order to reduce disturbance to resting, feeding, or moulting birds, Environment Canada recommends that aircraft used in conducting project activities maintain a vertical distance of 1000 m and minimum horizontal distance of 1500 m from any observed concentrations (flocks / groups) of birds.
- Environment Canada recommends that camp waste be made inaccessible to wildlife at all times.
   Camp waste can attract predators of migratory birds (e.g., foxes and ravens) to an area if not disposed of properly.
- Section 35 of the Migratory Birds Regulations states 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.
- All mitigation measures identified by the proponent, and the additional measures suggested herein, should be strictly adhered to in conducting project activities. This will require awareness on the part of the proponents' representatives (including contractors) conducting operations in the field. Environment Canada recommends that all field operations staff be made aware of the proponents' commitments to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
- Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds, but will not necessarily ensure that the proponent remains in compliance with the *Migratory Birds Convention Act* (the *Act*) and *Migratory Birds Regulations* (the *Regulations*). The proponent must ensure they remain in compliance with the *Act* and *Regulations* during all phases and in all undertakings related to the project.

The following comments are pursuant to the Species at Risk Act (SARA), which came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that species on other Schedules of SARA and under consideration for listing on SARA, including those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), be considered during an environmental assessment in a similar manner.

Species at Risk that may be encountered	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility 1
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Peregrine Falcon (subspecies tundrius)	Special Concern	Schedule 3	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut



<sup>1</sup> 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. Thus, for species within their responsibility, the Territorial Government is best suited to provide detailed advice and information on potential adverse effects, mitigation measures, and monitoring.

Impacts could be disturbance and attraction to operations.

### **Environment Canada recommends:**

- Species at Risk that could be encountered or affected by the project should be identified and any
  potential adverse effects of the project to the species, its habitat, and/or its residence noted.
   Refer to the Species at Risk registry at www.sararegistry.gc.ca for information on specific species.
- If Species at Risk are encountered or affected, the primary mitigation measure should be avoidance. The proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.
- The proponent should record the locations and frequency of any observations of Species at Risk and note any actions taken to avoid contact or disturbance to the species.
- For species under the responsibility of the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.
- Mitigation and monitoring measures must be taken in a way that is consistent with applicable recovery strategies, action plans, and management plans.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at <a href="mailto:cindy.parker@ec.gc.ca">cindy.parker@ec.gc.ca</a>.

Yours truly.

### Original signed by

Cindy Parker Environmental Assessment Technician

cc: (Colette Spagnuolo, Environmental Assessment & Contaminated Sites Specialist, Environment Canada, Iqaluit)



# Appendix B -**Comments Provided to NIRB by the Government of Nunavut – Department of Environment:** March 12, 2007



March 7, 07

Leslie Payette Manager Environmental Administration Nunavut Impact Review Board

via Email to: lpayette@nirb.nunavut.ca

### RE: NIRB FILE # 07EN005 - WESTERN URANIUM CORP. - THELON BASIN URANIUM EXPLORATION PROJECT

Dear Ms. Payette:

The Government of Nunavut (GN) has reviewed the Thelon Basin project proposal from Western Uranium Corp. (referred to as Western from here on) for conducting uranium exploration 200 km west of Baker Lake, and has the following comments and recommendations to make.

### Wildlife

### 1. Caribou Protection

### A) Time limited Project Approval

This Thelon Basin project proposed by Western Corp occupies land used by Beverly and Ahiak herds for calving post-calving, and fall and spring migration corridors for both herds. Additionally, the project is located in an area agreed to by Parties to the Thelon Game Sanctuary Management Plan (TGSMP) as a possible Special Management Area (SMAs) because of its importance to wildlife particularly caribou.

There is significant concern about the health of caribou herds across the north and information on the status of the Beverly and Ahiak herds is out of date.

In June 2007 the GN in partnership with the Government of Northwest Territories will be undertaking population surveys of the Beverly and Ahiak caribou herds. Following this survey our knowledge on current trends within the herds and our understanding of the impacts of such projects on the herds will be increased.

Igaluit, Nu X0A 1H0

Based on our lack of knowledge on the population status of caribou herds in the area; the GN requests that NIRB provide any recommendation for approval of this project to be time limited for a period of **one year only**. This will allow us to review the project in subsequent years with improved knowledge of caribou herd population trends and potential impact of exploration activities.

### B) Recommendations for current operations

Barren-ground caribou have their calves in June; they then must intensively feed from the times the calves are born until the end of the growing season which would fall between 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 for the coming winter. Bulls must put on enough fat to get through the rut as well as the winter. If this feeding/fattening cycle is broken in any way calf mortality will increase and female and male condition will drop effecting future breeding cycles. Any air or ground disturbance that may disrupt caribou behaviour even if it's only a few hours a week could negatively impact caribou condition. Caribou require a continuous feeding cycle that includes feeding, ruminating (chewing their cud), resting, feeding and so on during the growing season in order to maximize their condition before the winter.

Based on these considerations and the sensitivity of the area, the GN recommends that if NIRB approves operations in 2007 that the following conditions apply:

### During the months of May and August:

- The proponent must employ fully independent wildlife monitors to determine when caribou cows and calves are in the areas of operation.
- When caribou are present, the proponent shall suspend all blasting, over-flights of aircraft with an altitude of less that 300 metres above ground level and operation of ATV's and snowmobiles and any other ground based or water based mobile equipment.
- During migration of caribou the proponent shall not block or cause any diversion to migration.
- 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 within 10km of a 'designated caribou crossing'; or conduct drilling within 5km.

### During the months of June and July,

- The proponent, with the independent wildlife monitor, shall undertake daily high altitude (>300m) aerial reconnaissance to determine whether caribou cows and calves are present within a 20km radius of the site, or if caribou are migrating through the site. If caribou are observed the monitor will instruct the proponent to suspend any activities within 10 km of the sightings.
- At the end of each month, the proponent will submit a daily logbook of caribou reconnaissance to GN Department of Environment (GN DOE), also detailing when and how, these measures have been implemented. The time when caribou are present in the project area can corroborated with GN caribou satellite collar data.
- During these months GN Conservation Officers will be inspecting this site
  and others within, or close to caribou calving and post -calving grounds
  randomly twice a month to ensure compliance with these measures.

### 2. Human-carnivores conflicts

It is likely that during operations the proponent will encounter grizzly bear, wolverines, wolves and foxes. The proponent is advised to minimize odors that potentially attract carnivores through timely camp housekeeping. Should the proponent experience any interaction with carnivores, they are advised they should contact the local wildlife officer. All camp members should be fully aware and trained in the human-wolf/fox/wolverine encounter avoidance plans especially in avoidance of any feeding 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. However, the GN requests that wildlife monitors working for the proponent carry shot guns and have cracker shells and rubber bullets available to use as deterrents. The applicant should follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional/Area 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.



### **DOE Contacts**

Manager, Wildlife
-Dan Shewchuck, (867) 857-2828, <a href="mailto:dshewchuk@gov.nu.ca">dshewchuk@gov.nu.ca</a>

Biologist, Kivalliq Region
- Mitch Campbell, (867) 857-2828, mcampbell@gov.nu.ca

### 3. Recording wildlife observations and den sites

It is probable that within, or close to, the project area there are a number of carnivore den sites. The GN asks the proponent to record all wildlife observations in a 'wildlife log' and map the location of any sensitive wildlife sites such as denning sites. The proponent should 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. Additionally, the GN requests that wildlife data collected by the proponent be submitted to GN DOE annually as this will provide an important source of wildlife data for the department.

### 4. Raptor Nesting Areas

Raptor nests occur throughout Nunavut, and most of the prospecting areas likely contain at least a few nest sites. Take care 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 to avoid 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, <u>treat all nest sites</u> <u>with equal precaution, regardless of the response of the bird.</u> <u>Do not</u> <u>disturb raptor nests during conditions of poor weather (rain, snow, high</u> 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.

Further details on raptor nests and disturbance mitigation can be obtained from the Wildlife Officer in communities closest to the area of interest, or from regional biologists

### Spill Contingency Plan

Based on GN's Spill Contingency Planning and Reporting Regulations, and the Contingency Planning and Spill Reporting in Nunavut: a Guide to the New Regulations, the GN recommends the following be implemented:

- Page 8 of the spill plan indicates "base or camp will contact 24 Hour Spill Line, and receive direction and instruction Administer the appropriate procedure for Spills on Land, Water, Snow, or Ice." The Spill Line does not provide disposal instructions for spilled and/or contaminated materials. It is the proponent's responsibility to develop a complete plan which addresses the steps to be taken from the start of the spill, up to and including the final clean up and disposal. Regulatory agencies such as DOE, INAC and Environment Canada can review the final plan to assess its adequacy and provide advice at that time. Regulatory bodies can, and have, provided information and advice in emergency situations, however, these agencies should not be included in a spill plan as routine advisors.
- To prevent spreading in the event of a spill, fuel stored in drums and chemicals should be located, whenever practical, in a natural depression a minimum distance of 90 feet from all streams, preferably in an area of low permeability.
- All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills.
   Large fuel caches in excess of 20 drums should be inspected daily.
- An inventory and the location of response and clean up equipment available to implement the plan should be included. This includes your equipment as well as any to be used by another person responding to the spill on your behalf.



 The GN recommends the new spill form be utilized in the case of spills, and spill information be entered electronically so the information is legible to authority investigation the spill. The new spill form with instructions can be obtained from the Spill Line at (867) 920-8130.

### **Abandonment & Restoration Plan**

The GN has the following comments and recommendations to make:

- Land-based drilling should be at least 30 meters away from the high-water line of any water bodies.
- Drill cuttings should be collected through a filter system and disposed of in a landfill approved by appropriate regulators, or alternatively can be disposed of in a land-based sump at least 30 meters from the high water line of any water bodies.
- Drill cuttings with a uranium concentration greater than 0.05% should be disposed of down the drill holes and sealed.
- 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.
- Drill holes should be sealed by cementing the upper 30 meters of the bedrock or the entire depth of the holes; whichever is less.
- 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 μSv, and should never exceed 2.5 μSv. Instruments that measure radiation in counts per second should be converted to μs.
- Sumps for sewage and grey water should be backfilled and be contoured to match the surrounding landscape to encourage re-vegetation of the site.

### Air Quality

The Government of Nunavut is a signatory to *Canada-wide Standard* (CWS) for dioxins and furans and the CWS for mercury. The GN therefore recommends the following be implemented to ensure CWS compliance.

For camps of 10 to 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 CWS. 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.

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. Hazardous wastes managed through burning or incineration is not recommended, and should comply with CWS if this were to be carried out.

### **Land Use Planning**

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 GN 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 GN thanks NIRB for the opportunity to provide comments on the Thelon Basin project proposal. Please contact us if you have further questions.

Yours sincerely,

### Original signed by

Mike Atkinson
Manager Environmental Assessment and Land Use
Environmental Protection Service
Department of Environment



### **Appendix C – Proponent Commitments**

- 1. At least one practice drill [related to the Contingency Plan] will be held per season to provide personnel with a chance to practice emergency response skills.
- 2. If caribou are observed within 5 kilometers near either the drilling or geophysical operations, if possible, the number of caribou and the gender of the caribou will be noted and recorded. If there is any indication that the caribou in question appear to be ready to calve or have a calf with them, all operations will cease and personnel will leave the area in which the caribou have been observed until the caribou have left the area of operations.
- 3. Should caribou move to within 10 km of camp or the work areas, even if prior to the anticipated date of May 15, Western will monitor them closely, so that if they approach to within 5 km of any area all activities in that immediate area will cease until caribou leave that area.
- 4. Western will consult with Nunavut DOE for the selection of an independent caribou monitor to be based in the Sand Lake camp to help with planning of subsequent activities, including cessation of all activities if required by sustained presence of the caribou. Should the caribou appear to be migrating earlier than usual into the project area, an independent caribou monitor will be hired and if one is available, hired out of Baker Lake.
- 5. If caribou are observed from the air in the distance while a crew is in transport to a work site, the flight path will be altered so as not to fly over the caribou and disturb their activities.
- 6. If caribou should be observed all crews will be instructed to move to another location and not to approach the caribou or disturb any of their activities.
- 7. Should large numbers (> than 25) of caribou be observed, or if significant numbers (> 5) of any Species at Risk are observed, the company will contact the Regional/Area Biologist, Mitch Campbell or the Wildlife Manager, Dan Shewchuck for the DOE and notify them of the situation. On- site contractors or Western personnel will follow recommendations set forth by the above individuals for any particular situation.
- 8. Western Uranium Corporation will have all personnel on site read and acknowledge by signature that they have read the section of SARA which was submitted in comments to NIRB by Environment Canada (Appendix A).
- 9. All personnel will also be required to read and acknowledge by signature that they have read the comments provided by the Government of Nunavut Manager of Environmental Assessment and Land Use Environmental Protection Service (Mike Atkinson) (Appendix B). This will involve all camp personnel and contractors on site.
- 10. In addition, there will be specific instructions posted in the camp, in the sleeping and mess hall areas that regarding encounters with a species at risk that includes: the short-eared owl, peregrine falcon, grizzly bear, and wolverine.
- 11. Should the [Territorial initiative to conduct population counts of the Beverly caribou herd] survey commence prior to completion of the proposed activities, the company will work with and try to accommodate or assist any requests the survey personnel may make of the company.
- 12. Feeding of any wildlife will be strictly forbidden and enforced by removal of any party who violates the rule from the camp.
- 13. The camp support contractor provides bear deterrent shotguns and should it become necessary due to numerous bear visits to the camp, the contractor will set up an alarmed trip wire around the site perimeter.
- 14. Should the bears come into the camp, the ranger in Baker Lake will be contacted and brought to camp to advise how to deal with the situation.
- 15. The camp will have bear bangers/cracker shells that will be issued to everyone that leaves the perimeter of the camp.
- 16. Den sites or nests will be avoided and noted and recorded and submitted to the DOE.
- 17. Western has acknowledged the comments made concerning the abandonment and restoration plan made by the DOE and will incorporate and comply with all recommendations made.

- 18. Future [consultation] meetings are planned and all Western personnel have been instructed to stop by the [Baker Lake] Mayors office and introduce themselves.
- 19. Western recognizes that the close proximity of its drilling and geophysical survey areas to the Thelon Wildlife Sanctuary and associated Special Management Areas requires special mitigation factors to prevent any disturbance to caribou migration, feeding and calving activities.
- 20. Western is in full agreement that movement of fixed wing aircraft below and altitude of 300m should be restricted at all times to the immediate area of the main camp at Sand Lake and that flights into and out of the camp area should be used to monitor and record all caribou activity in the areas surrounding the camp and work areas.
- 21. Helicopter flights between camp and the work areas will be at altitudes above 300m except for take offs and landings at the actual works sites. These flights will generally be in the mornings and evenings at shift change.
- 22. Western intends to complete all of the exploration activities proposed in its permit application by May 15, with camp hibernation to follow immediately.

# Appendix D – 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, 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*, 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 E – File History**

On February 1, 2007 the Nunavut Impact Review Board (NIRB or Board) received the Western Uranium Corporation (WUC) Thelon Basin project proposal from Indian and Northern Affairs Canada (INAC).

On February 2, 2007 NIRB notified WUC that they needed to provide additional information to NIRB before the project proposal would be sent for out for a comment period.

On February 6, 2007 NIRB received the additional information requested from WUC, and commenced with the Part 4 Screening, requesting comments by Parties on March 2, 2007.

The project is located 200km west of Baker Lake.

The project activities included in the project proposal are the following:

- On-land drilling
- On-lake drilling
- Temporary camp construction and use
- Fuel storage
- Chemical storage
- Consumption of water and generation of waste
- Clearing of temporary airstrip on lake to accommodate aircraft landings

This application was distributed to Baker Lake and to interested Federal and Territorial Agencies.

On February 19, 2007 the Government of Nunavut – Department of Environment (GN-DOE) requested additional time to review the project proposal. Subsequently, NIRB granted Parties until March 12, 2007 to provide comments to NIRB.

On or before March 12, 2007, NIRB received comments from the following interested Parties:

- Mr. Orin Durey of Baker Lake
- The Government of Nunavut Department of Environment
- The Government of Nunavut Department of Culture, Language, Elders and Youth
- The Beverly and Qamanirjuaq Caribou Management Board
- Environment Canada

Concerns regarding the project proposal were expressed by all interested Parties except for the Department of Culture, Language, Elders and Youth.

The main concerns related to:

- Project activities occurring in lands used by Beverly and Ahiak caribou herds for calving and post-calving
- Potential impacts to caribou from diamond drilling, geophysical mapping, unavoidable lowlevel flights, and aircraft activity in general
- Potential impacts to Schedule 3 and Pending Species at Risk as designated under the Species at Risk Act
- Discrepancies regarding proposed timeline for project activities
- Timing of project activities in relation to Territorial initiatives to conduct population surveys of the Beverly caribou herd
- Clarification regarding the WUC Caribou Monitoring and Response Plan, and the necessity of a rigorous wildlife monitoring plan with particular emphasis on caribou

- Potential impacts to humans and wildlife, including grizzly bears, wolverines, wolves foxes, and raptor nesting areas from noise, human-carnivore interactions and general disruption
- Clarification regarding the Spill Contingency Plan
- Insufficient information contained within the Abandonment and Restoration Plan
- Potential for cumulative effects with other projects in the area
- Potential for impacts to air quality related to incineration of wastes
- Proximity of the project proposal to the Thelon Wildlife Sanctuary, and recognition of the Thelon Game Sanctuary Management Plan and the associated Special Management Areas
- Consultation requirements with the community of Baker Lake

The GN-DOE, who regulates wildlife in Nunavut, provided NIRB with the following concerns and recommendations related to the Beverly and Ahiak caribou herds:

### A. Time limited Project Approval:

This Thelon Basin project proposed by Western Corp occupies land used by Beverly and Ahiak herds for calving post-calving, and fall and spring migration corridors for both herds. Additionally, the project is located in an area agreed to by Parties to the Thelon Game Sanctuary Management Plan (TGSMP) as a possible Special Management Area (SMAs) because of its importance to wildlife particularly caribou. There is significant concern about the health of caribou herds across the north and information on the status of the Beverly and Ahiak herds is out of date. In June 2007 the GN in partnership with the Government of Northwest Territories will be undertaking population surveys of the Beverly and Ahiak caribou herds. Following this survey knowledge on current trends within the herds and an understanding of the impacts of such projects on the herds will be increased. \*Based on the lack of knowledge on the population status of caribou herds in the area the GN requests that NIRB provide any recommendation for approval of this project to be time limited for a period of one year only.

### B. Other Recommendations:

- During the months of May and August:
  - o The proponent must employ fully independent wildlife monitors to determine when caribou cows and calves are in the areas of operation.
  - O When caribou are present, the proponent shall suspend all blasting, over-flights of aircraft with an altitude of less that 300 metres above ground level and operation of ATV's and snowmobiles and any other ground based or water based mobile equipment.
  - O During migration of caribou the proponent shall not block or cause any diversion to migration.
  - O 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 within 10km of a 'designated caribou crossing'; or conduct drilling within 5km.
- During the months of June and July:
  - The proponent, with the independent wildlife monitor, shall undertake daily high altitude (>300m) aerial reconnaissance to determine whether caribou cows and calves are present within a 20km radius of the site, or if caribou are migrating through the site. If caribou are observed the monitor will instruct the proponent to suspend any activities within 10 km of the sightings.

- O At the end of each month, the proponent will submit a daily logbook of caribou reconnaissance to GN Department of Environment (GN DOE), also detailing when and how, these measures have been implemented. The time when caribou are present in the project area can corroborated with GN caribou satellite collar data.
- O During these months GN Conservation Officers will be inspecting this site and others within, or close to caribou calving and post -calving grounds randomly twice a month to ensure compliance with these measures.

On March 13, 2007 NIRB offered the Proponent the opportunity to respond to the concerns raised by the interested Parties, and on March 15, 2007 the Proponent submitted a letter discussing some of the concerns raised by the interested Parties. Further to this, on March 16, 2007 the Proponent submitted to NIRB a table summarizing the concerns as NIRB had summarized in its March 13, 2007 letter.

Further to this, on March 21, 2007 the Proponent re-submitted information to NIRB required for the Board recommendation.