SCREENING PART 2 FORM
PROJECT SPECIFIC INFORMATION REQUIREMENTS (PSIR)

MINERAL EXPLORATION

Definition: A project proposal with the objective of exploring an area to find geological anomalies. It involves site reconnaissance to locate broad and fiscal mineral deposits.

1. SUBMISSIONS

The Proponent must submit all information pertaining to the Project as a whole. The information requirements below are designed for the purpose of environmental assessment and are not limited to the scope of a single permit or license application.

NIRB does not accept references to an ftp site as a submission.

Provide NIRB with 1 (one) electronic copy and 1 (one) hardcopy of the following information in English.

All maps should be legible, electronic, include grids, be of appropriate scale, indicate the scale, include latitude and longitude references, title, legend and a north arrow. To the extent possible, avoid hand-drawn demarcations.

Please respond to all requests below, indicated by the number. If the request is not applicable to the project proposal, please indicate this in the response. If the request has been answered in a different section or report, please note the section or report where the response can be found.

All information and submissions must be accurate and signed and dated by the Proponent.

PROJECT PROPOSAL COORDINATES

The NIRB requires coordinates for the project proposal which reflect the entire project area as defined by:

- the boundaries of the mineral claim block(s) where proposed activities will be undertaken;
- the boundaries of the foreseen land use permit area to be applied for; and
- the location of any proposed infrastructure or activity(s).

See Part 1 Form Project Proposal Information Requirements (section 7, Coordinates) and map attached

The preferred method for submitting this information is through the use of a Geographic Information System (GIS) compatible digital file. Although an ESRI ArcView 3.x shape file (in

decimal degrees) is the preferred interchange format, the NIRB has the capacity to receive over 100 GIS and CAD related formats, including MapInfo and AutoCAD, provided proper format and projection metadata is also submitted.

2. PROJECT DESCRIPTION

General

1. Name and location of proposed project.

   See Part 1 Form Project Proposal Information Requirements

2. Contact information for proponent(s) and other project contacts.

   See Part 1 Form Project Proposal Information Requirements

3. List of acts, regulations and guidelines that apply to project activities

   - ✓ ARTICLE 13 – NCLA -Nunavut Land Claims Agreement
   - ✓ NWNSRTA – The Nunavut Waters and Nunavut Surface Rights Tribunal Act, 2002
   - ✓ Northwest Territories Waters Regulations, 1993
   - ✓ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
   - ✓ NWB - Interim Rules of Practice and Procedure for Public Hearings
   - ✓ RWED – Environmental Protection Act, R-068-93- Spill Contingency Planning and Reporting Regulations, 1993
   - ✓ RWED A Guide to the Spill Contingency Planning and Reporting Regulations, 2002
   - ✓ NWTWB - Guidelines for Contingency Planning
   - ✓ Canadian Environmental Protection Act, 1999 (CEPA)
   - ✓ Fisheries Act, RS 1985 - s.34, 35, 36 and 37
   - ✓ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
   - ✓ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
   - ✓ Canadian Council for Ministers of the Environment (CCME); Canadian Drinking Water Quality Guidelines, 1987
   - ✓ Public Health Act - Camp Sanitation Regulations
   - ✓ Public Health Act - Water Supply Regulations
   - ✓ Territorial Lands Act and Territorial Land Use Regulations; Updated 2000

4. List of approvals, permits and licenses required including the authorizing agency, activity to which the authorization applies, and dates.

   Uranium North holds the mineral rights to 18 exploration permits, which make up the South Baker Project area. The permits on which exploration activities are planned are: 5735, 5741, 5748, 5766, 5768 and 7303. An application for a Water License and a Land Use permit for the South Baker Project has been submitted to the Nunavut Water Board and DIAND respectively.

Project Information

5. History of the site if it has been used in the past.

   The proposed campsite and general working area of the project has been explored in the past by such companies as Noranda Ltd. and Acquitaine Resources who explored the site in the late 1970's. Exploration at the time consisted of airborne and ground geophysics, mapping, prospecting, boulder and outcrop sampling and diamond drilling. Due to the drop in the price of uranium in the early 1980's the property has seen no work since this time.

   Map of the project site within a regional context indicating the distance to the closest communities.

   Attached: Area is 300 km southwest of Baker Lake, NU

6. Map of any camp site including locations of camp facilities.

   Map of camp location already submitted in DIAND Land Use Application. Camp facilities are provided by Dubawnt Camps Ltd. And consist of 12 tents.

   The camp will be located in NTS 65K11, at 101° 20.84' W / 62° 44.87' N.

7. Map of the project site indicating existing and/or proposed infrastructure, proximity to water bodies and proximity to wildlife.

   Attached map shows proposed work areas and camp site.

8. Describe the type of mineral resource under exploration. Indicate if the mineral of interest is any of the following:
   - Base metals No
   - Diamonds No
   - Uranium **Yes**
   - Other None

9. Discuss the project need and purpose.

   The purpose of Uranium North's program is to explore for the presence of uranium in the rocks found in the South Baker Project area which is located about 300 kms southwest of Baker Lake. The need to explore for uranium these days lies solely on the fact that greenhouse gas emissions and global warming are a reality these days especially in more fragile environments such as the Arctic. Nuclear powered energy is a cheaper and more efficient alternative to the consumption and burning of hydrocarbons. The grassroots nature of the project described in this submission may not result in the discovery of an economic deposit but will at the very least provide some economic stimulus to the nearby communities (Baker Lake) at least in the short term.

10. Discuss alternatives to the project and alternatives to project components.

    As these activities are seasonal in nature and require the least harsh climatic conditions for their execution. The drilling will be performed during the safest, snowfree and times of most light in the Arctic which is from June through September of each year of the permit life.

11. Indicate the type of exploration activity:

    Geophysical work (indicate ground and/or air) **N/A**

    - Exploration drilling

      It is expected that 10-15 diamond drill holes will be cored for each year of the projects life.

    - Exploration stripping and or trenching (mining shallow bedded mineral deposits in which the overlying material is stripped off, the mineral removed and the overburden replaced) (if stripping/ trenching applies, please see NIRB's Advanced Exploration PSIR)
      N.A.
    - Deposit drilling/ Preliminary Delineation drilling
      N.A.
    - Bulk Extraction/ Detailed Delineation drilling (if bulk extraction applies, please see NIRB's Advanced Exploration PSIR)
      N.A.
    - Other
      N.A.

12. Describe **all** activities included in this project.
    - Satellite remote sensing **None**
    - Aircraft remote sensing **None**
    - Soil sampling **Approximately 1,500 samples on 5 grids, see attached map for general location**
    - Sediment sampling **None**
    - On land drilling (indicate drill type**)**

    - **JKs Boyles 300 capable of drilling to 200 metres maximum with a core diameter of 2 inches**.

    - On ice drilling (indicate drill type) **None**
    - Overburden removal **None**
    - Road use and/or construction (please see NIRB's Winter Road PSIR or All-weather Road PSIR) **None**
    - Airstrip use and/or construction
    -
    - **Eskers or lakes will serve as landing areas**

-
- Camp use and/or construction

  A 10 -12 man temporary camp supplied by Dubawnt Camps Ltd. will be located on the southern shore of Dubawnt Lake at the approximate coordinates of 101° 20” 48”W / 62° 44’ 53"N on map sheet 66K/11. This campsite has been previously used by exploration companies in the 1970’s. It will consist of twelve tents (14'x16'),one outhouse, one generator shack, one burning barrel and one helicopter pad and temporary fuel cache.

- Fuel transportation and storage

  Heating fuel as well as Jet fuel for helicopter use, propane, minor gasoline and diesel to run the diamond drill will be flown by fixed wing aircraft from Baker Lake. Site specific need for fuel (drill sites) will be conducted with the use of helicopter. All fuel caches will be located a minimum of 30 meters from the normal high water mark. Spill kits will be present at all fuel caches, re-fueling and drilling operations. Uranium North possesses and maintains a current Emergency Response Plan including a Fuel Spill Contingency Plan that all employees and contractors are required to adhere to. Fuel caches will be monitored daily and at least one empty container equal to or greater than the capacity of the largest full container will be present in case fuel transfer is necessary.

- Explosives transportation and storage **N.A**.

- Chemical transportation and storage

  As per fuel transportation and storage described previously.

- Pit and/or quarry (see NIRB’s Pits and Quarries PSIR)
  N.A.
- Work within navigable waters
  N.A.
- Other
  N.A.

13. Indicate whether any of the following Department of Fisheries and Oceans (DFO) Operational Statement (OS) activities apply to the project proposal:
    - Bridge Maintenance
      N.A
    - Clear Span Bridge
      N.A
    - Culvert Maintenance
      N.A
    - Ice Bridge
      N.A
    - Routine Maintenance Dredging

N.A

- Installation of Moorings

N.A

Please see DFO's Operational Statements for specific definitions of these activities available from either NIRB's ftp site at http://ftp.nunavut.ca/nirb/NIRB_ADMINISTRATION/ or DFO's ftp site at http://www.dfo-mpo.gc.ca/canwaters-eauxcan/index_e.asp

14. If any of the DFO OS apply to the project proposal, does the Proponent agree to meet the conditions and incorporate the measures to protect fish and fish habitat as outlined in the applicable OS? If yes, please provide a signed statement of confirmation.
    N.A.
15. Provide a schedule for the above activities
    N.A.

Geophysical

16. Indicate on map the boundary subject to air and/or ground geophysical work.

    See map attached to this submission for general location of ground geophysical surveys.

17. Provide flight altitudes and locations where flight altitudes are below 300m.

    N/A

Drilling

18. The number of drill holes and number of meters (provide estimates and maximums where possible).

    Approximately 10 drill holes per year for the life of the permit is anticipated. Each drill hole is likely not to exceed 250 metres. The total metreage per year of the permit is not likely to exceed 2500 metres.

19. Drill additives used.

    See MSDS sheets included as Attachment 1 to the "Fuel Spill Contingency Plan.

20. Describe method for dealing with drill cuttings.

    As per DIAND Land Use Application. All drill sludges will be collected in a hand dug collection sump or natural depression located no less than 30 metres from the ordinary high water mark of any water body. These sludges will be allowed to settle. After settling and prior to sealing off the drill hole a scintillometer (a device calibrated to read radiation) will be used to determine whether or not the sludges contain any uranium mineralization. The Best Management Practices (BMP-010) developed as part of the Mineral Exploration Guidelines for Saskatchewan will be followed. BMP-010 states that all drill cuttings containing >0.05% uranium (1000 counts per second on a callibrated Scintillometer) will be placed back down the drill hole and the drill hole will be sealed with grout. Additionally, any drill hole intersecting uranium mineralization >1% over a length of >1 metre and with a

metre-percent concentration > 5.0 will be grouted over the entire length of the mineralized zone and not less than 10 metres above or below each mineralized zone. All land based artesian holes (drill holes which produce water after completion) will be documented, plugged and sealed with grout. As virtually 95% of the rock cored is brought to the surface and transported to camp (and then to the laboratory), the volume of drill waste created for a 100 meter long hole is only 0.14 cubic meters.

21. Describe method for dealing with drillwater.

    As per item 20 above.

22. Describe how drill equipment will be mobilized.

    As per DIAND Land Use Application: The drill will be moved by helicopter between hole locations. All crews will also be shuttled daily between camp and work areas by helicopter. The foot print of each drill pad will be kept to a minimum size of approximately 10 metres by 10 metres. Pad construction will involve the placement of two parallel wooden timbers (6" x 6" x 10-12') onto the ground on which the frame of the drill and shack will be placed. The only ground clearing needed for this type of drill set-up will involve the removal of any larger, protruding boulders by hand and/or minor brush clearing. Absorbant matting will be used to collect any oils and lubricants which may be sourced from operating the drill. Drip trays will be used at all fueling and refueling areas. Once drilling at a particular site is completed the timbers will be removed for use at the next drill site. All used absorbant matting, garbage and fuel drums will be backhauled off the property and transported via Kasba Lake to an approved disposal facility.

23. Describe how drill holes will be abandoned.

    All drill cuttings, water return and sludge will be disposed of in a properly constructed sump or natural depression no closer than 30 metres from the ordinary high water mark of any waterbody.

    The uranium or gamma radiation count for these sludges and drill cuttings will be monitored an properly managed. In the event that significant uranium mineralization is intersected in any drill hole, the Best Management Practises (BMP-010) developed for mineral exploration in Saskatchewan, specific to uranium will be implemented. In accordance with these Best Management Practices all drill cuttings containing >0.05% uranium (1000 counts per second on a callibrated Scintillometer) will be placed back down the drill hole and the drill hole will be sealed with grout. Additionally, any drill hole intersecting uranium mineralization >1% over a length of >1 metre and with a metre-percent concentration > 5.0 will be grouted over the entire length of the mineralized zone and not less than 10 metres above or below each mineralized zone. All land based artesian holes (drill holes which produce water after completion) will be documented, plugged and sealed with grout. Saskatchewan's Best Management Practices - Drilling

Operations and the Handling of Uranium Mineralization are found in Attachments 2 and 3 of the Water Licence Application Form..

24. If project proposal involves uranium exploration drilling, consider the potential for radiation exposure and radiation protection measures. Please refer to the *Canadian Guidelines for Naturally Occurring Radioactive Materials* for more information.

    Uranium North has also adopted the Saskatchewan's Best Management Practice BMP-011 for additional safety and protection measures. See Attachment I of the DIAND Land Use Permit application.

Transportation

25. Describe how the site will be accessed and how supplies will be brought to site. (show route on map)

    Fuel supplies will be sourced from Baker Lake using either a Twin or Turbo Single Otter aircraft. Once the program is operational a bi-weekly flight is anticipated to bring in supplies and food and backhaul empty drums, garbage and samples on a regular routine thereby performing progressive reclamation as the project continues. The majority of the more frequent flights will occur at the beginning and end of the program as camp material fuel and personnel will be mobilized in prior to actual operations while conversely all remaining samples, equipment and personnel will be demobilized at the end of the program

26. If an airstrip is being used or constructed provide a description and its location. (show location on map)
    N.A. Eskers or lakes to be used for landing strips.

27. Describe expected flight altitudes.

    Flight altitudes will be determined by the fixed-wing pilots as per weather and safety conditions. When feasible all flights for servicing the camp will be over 1000 metres above ground level to maintain operational safety, and mitigate disturbance to any wildlife in the area.

Camp Site

28. A list of existing and proposed camp structures and infrastructure.

    Camp site located in NT was constructed and occupied in 2007. It consists of 12 tents one outhouse, one generator shack, one burning barrel one temporary fuel cache and one helicopter pad.

29. Describe the type of camp:
    a. Mobile **N.A**.
    b. Temporary **YES**
    c. Seasonal **YES**
    d. Permanent **NO**
    e. Other **N.A**.

30. Maximum number of people expected on site.

10-12persons per season

31. Describe the source of power for the camp.

A 10-12 kW diesel powered generator as supplied by expeditor.

Equipment

32. A list of equipment indicating uses and approximate dimensions.

1 Bell 206 Long Ranger	206 LR
1 diamond drill	Boyles JKS 300
1 water pump	1.5" discharge
1 water pump	Honda 5 hp

33. If possible, provide digital photos of equipment.

N.A.

34. Method of moving equipment within the project site.

Helicopter

Water

35. Location of water source(s) (show on map).

Domestic water source from Dubawnt Lake, which is camp location (see map). Water sources for drilling operations to be forwarded when actual drill sites are known.

36. The estimated rate of water consumption (L/d).

Directly from water licence application:
Domestic Use: <10-20 m3/day Water Source: Dubawnt Lake
Drilling: <60m3/day Water Source: surface lakes where needed

37. Describe water intakes. Describe methods for the prevention of fish entrapment.

Camp: Either a lakeshore-based pump-house with ½ HP electrical pump (1.25" suction & .75" discharge) directly drawing water and pressuring the plumbing system or a gas-engine pump intermittently used to fill an indoor water tank (from which the plumbing is subsequently pressurised).

All (camp and drill) water intakes will be equipped with a screen with an appropriate mesh size to ensure no entrapment of fish as per DFO's 1995 Freshwater Intake End-of-Pipe Fish Screen Guidelines.

Waste (Grey water, Sewage, Other)

38. Describe the characteristics, quantities, treatment, storage, transportation, and disposal methods for the following:

As previously described in Water Licence application and Remote Camp Questionnaire.

- Sewage;

Latrine pits using bacterial reducing agent or chloride of lime. All pits to be over 30 metres from water and backfilled when finished.

- Camp grey water;

Kitchen and dry greywater will be gravity fed to a natural depression or a properly constructed sump.

- Combustible solid waste;

Burnable solid waste will be burnt in a vented base fuel fed burning barrel, the ashes will be barreled and transported to an approved disposal site via Kasba Lake.

- Non-combustible solid waste;

All non-burnable garbage or debris will be stockpiled at camp and flown to an approved disposal facility via Kasba Lake, NT

- Bulky items/ scrap metal;

All non-burnable garbage or debris will be stockpiled at camp and flown to an approved disposal facility via Kasba Lake.

- Waste oil/ hazardous waste;

All waste oil and hazardous wastes will be collected and properly stored at camp until such time that it can be transported to an approved disposal/recycling site via Kasba Lake.

- Empty barrels/ fuel drums;

Empty barrels and fuel drums will be returned to the fuel supplier to be recycled or they will be transported to an approved disposal facility.

- Other.

N.A.

Fuel

39. The types, quantities (number of containers, type of containers and capacity of containers), method of storage, method of containment, location of storage (show on map) and uses.

    As per Water Licence Application:
    Heating Oil: 20 – 205 L drums, 4,100 L total (Camp)
    Diesel: 40 205 L drums, 8200 L total (Camp and at drill sites; 2- per hole)
    Propane: 25 100 lb cylinders, 2,500 lbs total (Camp and at drill sites)
    Helicopter Jet A fuel: 130 205 L drums 26,650 L (Camp)

    All fuel caches to have spill kits supplied and placed no closer than 30 metres from any high water mark on sandy substrate. The main fuel cache at camp will be placed in Insta-berms. At least one empty container of equal or greater quantity of the fullest fuel container to be in placed at each cache in case of the necessity of fuel transfer. Location of fuel cache the same as camp as shown on map. Only 2-3 drums of fuel will be located at each drill site while the rig is operating.

    Propane cylinders will be stored upright in the appropriate storage areas. Opened diesel drums will also be stored upright. Full unopened diesel and Helicopter Jet A fuel will be stored on their side in the designated fuel cache on sandy substrate or within the Insta-berm.

40. Describe secondary containment measures including the type of material or system used. If no secondary containment is required, please provide justification.

    At least one empty container of equal or greater quantity of the fullest fuel container to be in place ate ach cache in case of the necessity of fuel transfer. Spill kits will be placed with each fuel cache. Drip trays with absorbent matting to be located beneath each drum used for heating tents.

41. Describe the method of fuel transfer and the method of refueling.

    Fuel drums will be brought to camp or main fuel cache via fixed wing aircraft or helicopter. A helicopter will be used to transport fuel from fuel cache to drill sites.

    Fuel at the temporary camp and at the drill sites will be transferred by gravity feed or with the assistance of a manual pump. Helicopter fuel will be transferred with a conventional DC electric barrel pump.

    Drip trays will be in place at all fueling stations.

Chemicals and Hazardous Materials (i.e. oils, greases, drill mud, antifreeze, calcium or sodium chloride salt, lead acid batteries, cleaners)

42. The types, quantities (number of containers, the type of container and capacity of containers), method of storage, method of containment, location of storage (show on map), and uses.

    These items to be stored within the camp itself.
    Refer to the MSDS sheets attached to The Land Use permit Application submitted to DIAND for types and quantities and uses of hazardous materials used in diamond drilling. Storage of these substances will be with the fuel cache within "Insta-berms" described previously or within the "dry" tent both of which are located in camp. Only limited amounts of these materials will be transported to the drill site and will be removed at the end of each drill hole.

43. Describe any secondary containment measures including the type of material or system used.

    Insta-berms will be used.

44. Describe the method of chemical transfer.

    Diesel transfer from drum to drill fuel tank will be by gravity feed as will transfer from drum to tent heaters and generator. Gasoline transfer by manual pump. Oil changes will occur on the drill rig and the generator with absorbent matting place directly beneath the machinery. Drill additives will be transferred according to the manufacturers guidelines and the operating procedure of the drill contractor, with due regard for spill mitigation.

Explosives

45. Describe the explosive type(s), hazard class, volumes, uses, location of storage (show on map), method of storage.
    N.A.

Public Involvement/ Traditional Knowledge

46. Describe the level of public involvement, a summary of public involvement measures, a summary of concerns expressed, and methods of addressing the concerns.

    As part of the Land Use Permit Application submitted to DIAND Uranium North has supplied a non-technical executive summary in both English and Inuktitut that has been distributed to the community of Baker Lake as well as other government agencies and stakeholders with no comments returned. As was stated in the DIAND Land Use Permit Uranium North has offered to meet with any concerned parties.

    The Department of Culture, Language, Elders and Youth has also been contacted to access the Archaeological database to ensure no significant cultural or archaeological sites will be disturbed.

A comprehensive review of the migratory paths and calving grounds of both the Beverly and Qamanirjuaq Caribou herds has been undertaken and the project area does not fall within any of these important regions. Migration paths and nesting and brooding areas for birds have been studied and none fall within the project area either.

3. DESCRIPTION OF THE EXISTING ENVIRONMENT

1. Describe the existing environment, including physical, biological and socioeconomic aspects. For guidance see Appendix A.

The project area is located immediately to the east of Dubawnt Lake and covers many smaller lakes and rivers that eventually flow northward and eastward to Chesterfield Inlet. The project area is not located near or within any designated environmentally sensitive areas including wildlife sanctuaries or calving grounds.

Physical Environment

The project area is dominated by an abundant amount of interconnected lakes and rivers. Maximum elevation in the area is approximately 300 metres ASL and the lowest point measures 275 metres ASL. As the area has been glaciated there is till cover in the lower lying areas between the bedrock outcrops and northwest trending esker systems.

Geologically the area is underlain by Lower Proterozoic metavolcanic and metasedimentary rocks referred to as the "Thelon Group".

Biological Environment

Vegetation in the project area is referred to as low Arctic tundra and includes willow and birch shrubs, Labrador tea, white heather, berries, grass and sedge, moss and lichen. Many Arctic flowers grow within the area. Wildlife includes caribou, musk ox, wolf, grizzly bear, arctic foxes and hares and wolverines. Arctic char, grayling and lake trout are common in the lakes and rivers. Canada gees, ptarmigan, ducks falcons and owls are some of the species of birds that can be found in the area.

Socio-Economic Environment

As the project area is located approximately 300 kms southwest of Baker Lake all socio-economic impacts will be positive. Uranium North will continue its practice of purchasing goods and services from local supplies whenever possible. Uranium North will also encourage all contractors operating on the project to hire locally. Due to the remote nature of the project site no conflicts with traditional land use and harvesting is expected.

Note: The detailed provided in the description of the existing environment should be appropriate for the type of project proposal and its scope.

4. IDENTIFICATION OF IMPACTS

1. Please complete the attached Table 1 – Identification of Environmental Impacts, taking into consideration the components in Appendix A. Identify impacts in Table 1 as either positive (P), negative and mitigable (M), negative and non- mitigable (N), or unknown (U).
2. Discuss the impacts identified in the above table.

   Referring to Table 1 attached. The project activities listed under Construction will be short lived (approximately one week) and be of a very localized nature therefore noise levels of planes for fuel caching and mobilization of camp will be the only aspects that are non-mitigatable. All temporary structures will be set on timbers and have insulated floors to avoid damage to the permafrost. Sumps (2x3x1 metres) will be backfilled when the work season is completed and the disturbance to permafrost will be temporary in nature.

   The Operation activities are all considered mitigatable as they will have no or very little impact to wildlife and the environment as per the steps taken to avoid such impacts stated throughout this Form. Non-evasive forms of the program include mapping, sampling and geophysics. The drilling component will be short lived as the drill will only be on each site for 2-3 days and all sites will be restored as near as possible to their original state. Noise levels of the drill, generator, water pump, helicopter and supply planes will be the only activities that will be non- mitigatable.

3. Discuss potential socioeconomic impacts, including human health.

   As the project area is located approximately 300 kms southwest of Baker Lake all socio-economic impacts will be modestly positive. Uranium North will continue its practice of purchasing goods and services from local supplies whenever possible. Uranium North will also encourage all contractors operating on the project to hire/buy locally. Due the remote nature of the project site no conflicts with traditional land use and harvesting is expected. Uranium North possesses and maintains a current Emergency Response Plan including a Fuel Spill Contingency Plan that all employees and contractors are required to adhere to. These policies also include safety, emergency, fire and medi-vac procedures and are described in detail in Attachment II Uranium North's Safety Manual/Field Guide submitted with the DIAND Land Use Permit application. Also radiation protection for workers in uranium exploration is based on reducing the workers exposure to radiation to As Low As Reasonably Achievable (ALARA). Uranium North has adopted and encorporated this principal into their worker health and Safety and Radiation Protection Policy by directly adobting the Radiation protection Guidelines for uranium Exploration developed by Saskatchewan department of Labour.

4. Discuss potential for transboundary effects related to the project.

Not applicable

5. Identify any potentially adverse effects of the project proposal on species listed under the Species at Risk Act (SARA) and their critical habitats or residences, what measures will be taken to avoid or lessen those effects and how the effects will be monitored.

A review of Schedule I of the Species at Risk Act shows that no species on the list occur in the project area.

5. MITIGATION OF IMPACTS

1. Describe measures to mitigate impacts to the physical, biological and socioeconomic environment as identified in Section 4.

All potential environmental effects associated with this proposed program are minor, localized effects which can be mitigated. No long term impacts to the environment or wildlife are expected to occur as a result of the implementation of this program.

Uranium North Resources Ltd. is fully committed to implementing its proposed uranium exploration project on the South Baker Project in an environmentally responsible manner to protect and sustain the environmental and cultural resources of the project area. The exploration program described above will have no to very low impact to the environment and/or wildlife. Water usage will be minimal (60-80 cubic metres/day) and restricted to drill and domestic use at the temporary camp only. Drill operations will be conducted in an environmentally friendly manner and fuel caches will be checked daily for potential leakage. Helicopter usage for purposes of supporting drilling operations is and has been the standard practice of many exploration companies now and in the past with no impact to wildlife or the environment. Pilots will be instructed to avoid wildlife during operations. Congregations of wildlife are not expected in the area but will be avoided should any be encountered.

The total estimated surface disturbance for all of the drill sites (approximately 10 for each year of the permit) is estimated to be a maximum of 0.01 ha/year. The small quantities of benign drill cuttings (0.14 m3/ 100 m drilled) generated at each drill site will be deposited in natural depressions or sumps and will affect small areas of sparsely vegetated tundra within the footprint of the disturbed area at each drill site. All garbage, fuel drums and equipment will be removed from each drill site.

There will be no deleterious effects to water quality due to the protection measures outlined by DIAND which includes restrictions as to how close to water bodies the drill, sumps and fuel caches are allowed.

Additionally, the following mitigation measures will be undertaken to reduce, control and/or eliminate all together, potential environmental effects.

1. Adhering to the Caribou Protection Measures; specifically not working in any core calving areas.
2. Avoiding low level flights over areas known for waterfowl nesting.
3. Adhering to the Recommended Environmentally Acceptable Minimum Flight Altitudes.
4. Equipping all water intake hoses with an appropriate screen mesh size to ensure no entrapment of fish.
5. Provide necessary controls to prevent sedimentation and/or erosion of water bodies or adjacent land.
6. Using only lake water for drilling operations.
7. All drill cuttings will be disposed of and contained in natural depressions or hand dug sumps located at least 30 meters from any high water mark such that the cuttings do not enter any water bodies. As virtually 95% of the rock cored is brought to the surface and transported to camp (and then to the laboratory), the volume of drill waste created for a 100 meter long hole is only 0.14 cubic meters. Saskatchewan's Best Management Practices for mineral exploration (BMP-010 and BMP-011) will be adhered to when uranium mineralization is encountered.
8. All trenches/pits/sumps will be backfilled and contoured when operations are complete.
9. Only environmentally acceptable and approved muds and additives (as per DIAND regulations) are to be used during drilling operations.
10. Drill holes to be plugged and permanently sealed if artesian flow or uranium mineralization is encountered.
11. All fuel caches will be located a minimum of 30 meters from the normal high water mark. Spill kits will be present at all fuel caches and drilling operations.
12. Uranium North possesses and maintains a current Emergency Response Plan including a Fuel Spill Contingency Plan that all employees and contractors are required to adhere to. These policies also include safety, emergency, fire and medi-vac procedures and are described in detail in Attachment II Uranium North's Safety Manual/Field Guide.
13. Construction of a raised platform to elevate the burn barrel will mitigate problems with heat affecting the soil and permafrost.

It is also recognized that portions of the claim areas may contain significant archaeological, cultural and historic sites. Any archaeological sites encountered will not be disturbed. If a site is found during operations, work in that vicinity will stop, a 30 metre buffer around the area will be established, the site will be photographed and GPS coordinates will be recorded. This information will then be reported to the Department of Culture, Language, Elders and Youth.

As the project area is located approximately 300 kms southwest of Baker Lake socio-economic impacts will be modestly positive. Uranium North will continue its practice of purchasing goods and services from local supplies whenever possible.. Uranium North will also encourage all contractors operating on the project to hire locally.

In total, the residual environmental effects of Uranium North's entire program on the South Baker Project are expected to be negligible. No other mineral exploration activities or other industrial development projects are currently known or planned for the area, which eliminates the potential for cumulative environmental effects.

6. CUMULATIVE EFFECTS

1. Discuss how the effects of this project interact with the effects of relevant past, present and reasonably foreseeable projects in a regional context.

Cumulative environmental effects result from the combination of environmental effects from a number of different developments and/or activities. In determining possible cumulative effects, the Canadian Environmental Assessment Agency (CEAA 1999) recommends that three basic premises be considered:

- **There must be an environmental, biophysical, social or cultural impact related to the project.**
- **The effect must be demonstrated to operate cumulatively, additively or synergistically with impacts from other projects or activities.**
- **The other projects or activities exist or are likely to be carried out and are not hypothetical.**

All potential environmental effects associated with this proposed program are minor, localized effects which can be mitigated. No long term impacts to the environment or wildlife are expected to occur as a result of the implementation of this program.

The campsite, while located in NT, will cover approximately 0.5 hectares and will be fully restored to its natural condition at the end of the permit life.

The total estimated surface disturbance for all of the drill sites (approximately 10 per year of the life of the permit) on the South Baker Project is estimated to be a maximum of 0.01 ha. The limited terrain disturbance that will occur at any of the exploration sites will be backfilled (if necessary) and reclaimed as near as possible to their natural state.

The small quantities of relatively benign drilling wastes (0.14 m^3/ 100 m drilled) generated at each drill site will be deposited in natural depressions and will affect small areas of sparsely vegetated tundra within the footprint of the disturbed area at each drill site. Some tundra vegetation will be covered and the salt content of the drilling waste will cause localized increases in salt loading to the till soil and associated tundra vegetation.

Any environmental impacts as a result of the proposed exploration activities can be mitigated. In total, the residual environmental effects of Uranium North's entire exploration program on the South Baker Project are expected to be

negligible. No other mineral exploration activities or other industrial development projects are currently known or planned for the area, which further reduces the potential for cumulative effects. As a result, based on CEAA's premises, the proposed Uranium North exploration program on the South Baker Project is not expected to result in a cumulative effect.

7. SUPPORTING DOCUMENTS

1. Please provide the following supporting documents:
   - Abandonment and Decommissioning Plan

     A & R Plan is included in this Application

   - Existing site photos with descriptions

     N.A. as Uranium North personnel have not visited site.

   - Emergency Response and Spill Contingency Plan.

   - **Included with this application**

APPENDIX A

Physical Environment

- Proximity to designated environmental areas, including parks, heritage sites, sensitive areas and other protected areas.
- Eskers and other unique landscapes (e.g. sandhills, marshes, wetlands, floodplains).
- Evidence of ground, slope or rock instability, seismicity.
- Evidence of thermokarsts
- Evidence of ice lenses
- Surface and bedrock geology.
- Topography.
- Permafrost (e.g. stability, depth, thickness, continuity, taliks).
- Sediment and soil quality.
- Hydrology/ limnology (e.g. watershed boundaries, lakes, streams, sediment geochemistry, surface water flow, groundwater flow, flood zones).
- Tidal processes and bathymetry in the project area.
- Water quality and quantity.
- Air quality.
- Climate conditions and predicted future climate trends.
- Noise levels.

- Other physical Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

Biological Environment

- Vegetation.
- Wildlife, including habitat and migration patterns.
- Birds, including habitat and migration patterns.
- Species of concern as identified by federal or territorial agencies, including any wildlife species listed under the *Species at Risk Act (SARA)*, its critical habitat or the residences of individuals of the species.
- Aquatic (freshwater and marine) species, including habitat and migration/spawning patterns.
- Other biological Valued Ecosystem Components (VEC) as determined through community consultation and/or literature review.

Socioeconomic Environment

- Archaeological and culturally significant sites (e.g. pingos, soap stone quarries) in the project and adjacent areas.
- Palaeontological component of surface and bedrock geology.
- Land and resource use in the area, including subsistence harvesting, tourism, trapping and guiding operations.
- Local and regional traffic patterns.
- Human Health, broadly defined as a complete state of wellbeing (including physical, social, psychological, and spiritual aspects).
- Other Valued Socioeconomic Components (VSEC) as determined through community consultation and/or literature review.