



Environmental Protection Operations Directorate  
Prairie and Northern Region (PNR)  
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Nunavut Impact Review Board  
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Via e-mail: [info@nirb.ca](mailto:info@nirb.ca)

Attention: Ms. Bolt

**RE: Notice of Part 4 Screening for URU Metals Ltd.'s "Nueltin Lake Project" project proposal**

Environment Canada (EC) has reviewed the information submitted to the Nunavut Impact Review Board (NIRB) regarding the above-mentioned project proposal and is submitting comments on mitigation measures as well as other matters of importance to the project proposal as requested by the NIRB. EC's specialist advice is provided pursuant to the *Canadian Environmental Protection Act 1999*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

URU Metals Ltd. (the proponent) is proposing to undertake uranium exploration project approximately 345 kilometres southwest of Arviat. The program is proposed to take place from July to September 2013, with a larger drill program to take place in 2014 dependent upon 2013 results. The proposed project activities include geological mapping and prospecting; on land drilling; use of helicopter and/or fixed wing aircraft; transportation, storage and use of fuel; transportation, storage and use of chemicals and hazardous materials; use of water for drilling purposes; and the production of wastes. The proponent has proposed to share Prosperity Goldfields' Kiyuk Lake camp for the initial exploration program.

The application materials submitted for this project proposal includes a general reference to the potential for a future 25 person camp. The development of a camp has not been included in the scope of the project activities to be assessed by the Board at this time and as such EC has not included the development of a camp as part of this review.

Based on a review of the license application and supporting materials, EC provides the following comments for the NIRB's consideration:



## **General**

1. Subsection 36(3) of the Fisheries Act specifies that, unless authorized by federal regulation, no person shall deposit or permit the deposit 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. The definition of a deleterious substance (Subsection 34(1) of the Fisheries Act) includes "any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water." Subsection 36(3) makes no allowance for a mixing or dilution zone at the point of deposit.

## **Use of Fuel or Hazardous Substances**

2. EC offers the following comments for fuel transfer and storage:
  - A dedicated area should be used for refueling equipment with measures taken to ensure capture and containment of drips and potential spills; and
  - Secondary containment or a surface liner (drip pans, etc.) should be used when refueling any equipment on site and should also be used at all fuel drum locations. Secondary containment should be of adequate size and volume to contain and hold fluids for the purpose of preventing spills (the worst-case scenario). An appropriate spill kit with absorbent material should be located at all fuel storage and transfer sites.
3. 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 (odour-free to prevent animal attraction) and safely transported to a facility that is authorized for the treatment and disposal of industrial hazardous wastes.

## **Spill Contingency Planning**

4. Please note that according to the Aboriginal Affairs and Northern Development Canada's (AANDC) "Guidelines for Spill Contingency Planning" (April 2007), available at <http://www.aadnc-aandc.gc.ca/eng/1100100024236/1100100024253>, all releases of harmful substances, regardless of quantity are to be reported to the NWT / NU 24-hour Spill Line, (867) 920-8130 if the release is near or into a water body, is near or into a designated sensitive environment or sensitive wildlife habitat, poses imminent threat to human health or safety, poses imminent threat to a listed species at risk or its critical habitat, or is uncontrollable.
5. The Plan should include a set of procedures to ensure a prompt response, notification, and cleanup in the event of a hazardous substance spill or threat of release. Identification of any reasonable environmental emergencies expected to occur should also be outlined in the Plan.



6. The spill plan should identify what specific and potential risks are involved in the different stages of clean-up and provide specific guidance for response.
7. EC recommends that a shovel be included in the contents of the spill kit to assist with the removal of contaminated snow and soil.
8. Spill contingency plans should include locations of disposal sites approved to accept wastes and means of storage prior to disposal.
9. EC notes that the proponent intends to dispose of waste fuel by incineration. The burning of waste products releases numerous contaminants to the air, many of them persistent, bio-accumulative and toxic (e.g. polycyclic aromatic hydrocarbons - PAH's - heavy metals, chlorinated organics – dioxins and furans). These contaminants can result in harmful impacts to human and wildlife health through direct inhalation and they can also be deposited to land and water, where they bio-accumulate through food chains affecting wildlife and country foods. Therefore, burning should only be considered after all other alternatives for waste disposal have been explored and the devices used for incineration meet the emission limits established under the CCME Canada-wide Standards (CWS) for Dioxins and Furans and the CWS for Mercury Emissions, available at : [http://www.ccme.ca/ourwork/environment.html?category\\_id=108](http://www.ccme.ca/ourwork/environment.html?category_id=108). The Government of Canada, the Governments of the Northwest Territories, Nunavut and the Yukon are signatories to these standards and are required to implement them according to their respective jurisdictional responsibilities.

### **Drilling**

10. To ensure that Project activities do not impact water quality of surface waters the proponent should ensure the use of appropriate sediment / erosion control measures. Control measures should be monitored as necessary to ensure water quality is protected. Drilling from land adjacent to the lake shore should be conducted in such a manner that no materials enter the water and surface erosion will not occur.
11. All drilling effluent should be directed to a sump that is properly constructed and adequately sized to ensure there is no runoff and that water bodies downstream of drilling activities are not affected. All efforts shall be made to prevent drill mud, drill additives, return water and cuttings from migrating from the drill site.

### **Wildlife**

12. Paragraph 6(a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. If active nests are encountered during project activities, the nesting area should be avoided until nesting is complete (i.e., the young have left the vicinity of the nest). The proponent should consult the fact sheet "Planning Ahead to Reduce Risks to Migratory Bird Nests" available at: <http://www.ec.gc.ca/paom-itmb/> for further guidance.
13. Section 5.1 of the Migratory Birds Convention Act prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by



migratory birds or in a place from which the substance may enter such waters or such an area.

14. In order to reduce aircraft disturbance to migratory birds, EC recommends the following, safety permitting:

- Fly at times when few birds are present (e.g., early spring, late fall, winter)
- If flights cannot be scheduled when few birds are present, plan flight paths that minimize flights over habitat likely to have birds and maintain a minimum flight altitude of 650 m (2100 feet).
- Minimize flights during periods when birds are particularly sensitive to disturbance such as migration, nesting, and moulting.
- Plan flight paths to avoid known concentrations of birds (e.g., bird colonies, moulting areas) by a lateral distance of at least 1.5 km. If avoidance is not possible, maintain a minimum flight altitude of 1100 m (3500 feet) over areas where birds are known to concentrate.
- Avoid areas used by flocks of migrating waterfowl by 3 km.
- Avoid excessive hovering or circling over areas likely to have birds.
- Inform pilots of these recommendations and areas known to have birds.

15. The following comments are pursuant to the *Species at Risk Act* (SARA). Subsection 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, EC 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. The Table below lists species that may be encountered in the project area that have been assessed by COSEWIC as well as their current listing on Schedules 1-3 of SARA (and designation if different from that of COSEWIC). Project impacts could include species disturbance and destruction of habitat.

Terrestrial Species at Risk potentially within project area <sup>1</sup>	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility <sup>2</sup>
Horned Grebe (Western population)	Special Concern	Pending	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 1	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western population)	Special Concern	Pending	Government of Nunavut

<sup>1</sup> The Department of Fisheries and Oceans has responsibility for aquatic species.

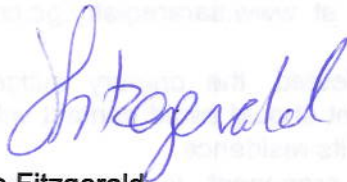
<sup>2</sup> EC has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the *Migratory Birds Convention Act* (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility 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.



- For any Species at Risk that could be encountered or affected by the project, the proponent should note any potential adverse effects of the project to the species, its habitat, and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the Species at Risk registry at [www.sararegistry.gc.ca](http://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.
  - Monitoring should be undertaken by the proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.
  - For species primarily managed by 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 species at risk recovery strategies and action/management plans.
16. 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. EC 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.
17. Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds and Species at Risk, but will not necessarily ensure that the proponent remains in compliance with the Migratory Birds Convention Act, Migratory Birds Regulations, and the Species at Risk Act. The proponent must ensure they remain in compliance during all phases and in all undertakings related to the project.

Should you require further information, please do not hesitate to contact me at 867-669-4746 or jane.fitzgerald@ec.gc.ca.

Sincerely,



Jane Fitzgerald  
Environmental Assessment Coordinator

cc: Yongshu Fan, Senior EA Coordinator, Environmental Assessment and Marine Programs-PNR, EC