



Environment
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Environmental Protection Operations Directorate (EPOD)
Prairie and Northern Region (PNR)
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March 19th, 2015

EC file: 6200 000 035 /001
NIRB File: 14QN039

Solomon Amuno
Technical Advisor
Nunavut Impact Review Board
P.O. Box 119
Cambridge Bay, NU X0B 0C0

Via: info@nirb.ca

RE: City of Iqaluit's "Northwest Granular Deposit Road and Quarry Development" 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*.

The City of Iqaluit is proposing to extract aggregate materials from the Northwest Iqaluit Aggregate Area, and additionally the access road to this resource to be used for development of community projects, housing services and maintenance of municipal roads.

For further clarification on any aspect of the submission, please contact me at (867) 975-4982 or john.price@ec.gc.ca.

Sincerely,

John Price
Environmental Assessment Officer

Attachment(s) – Environment Canada's Comments

cc: Dave Fox, A/Head, Environmental Assessment North (NT & NU), EPOD-PNR, EC
Michael Mohammed, Senior Environmental Assessment Coordinator, EPOD-PNR, EC
Myra Robertson, Head, Western Arctic Unit, CWS, EC



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. In the definition of deleterious substance, Section 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.
2. 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.

Culverts/Road Construction

3. Abutment construction materials shall be clean and contaminant free; gravel/construction materials are not to be gathered from below the high water mark of any watercourse.
4. Suitable erosion control measures shall be implemented. The Proponent shall not deposit nor permit the deposit of sediment into any fish bearing waters. Clearing adjacent to streams should be done without disturbing the organic layer Stream bank disturbances must be minimized and all disturbed areas stabilized upon completion of the project.

Wildlife

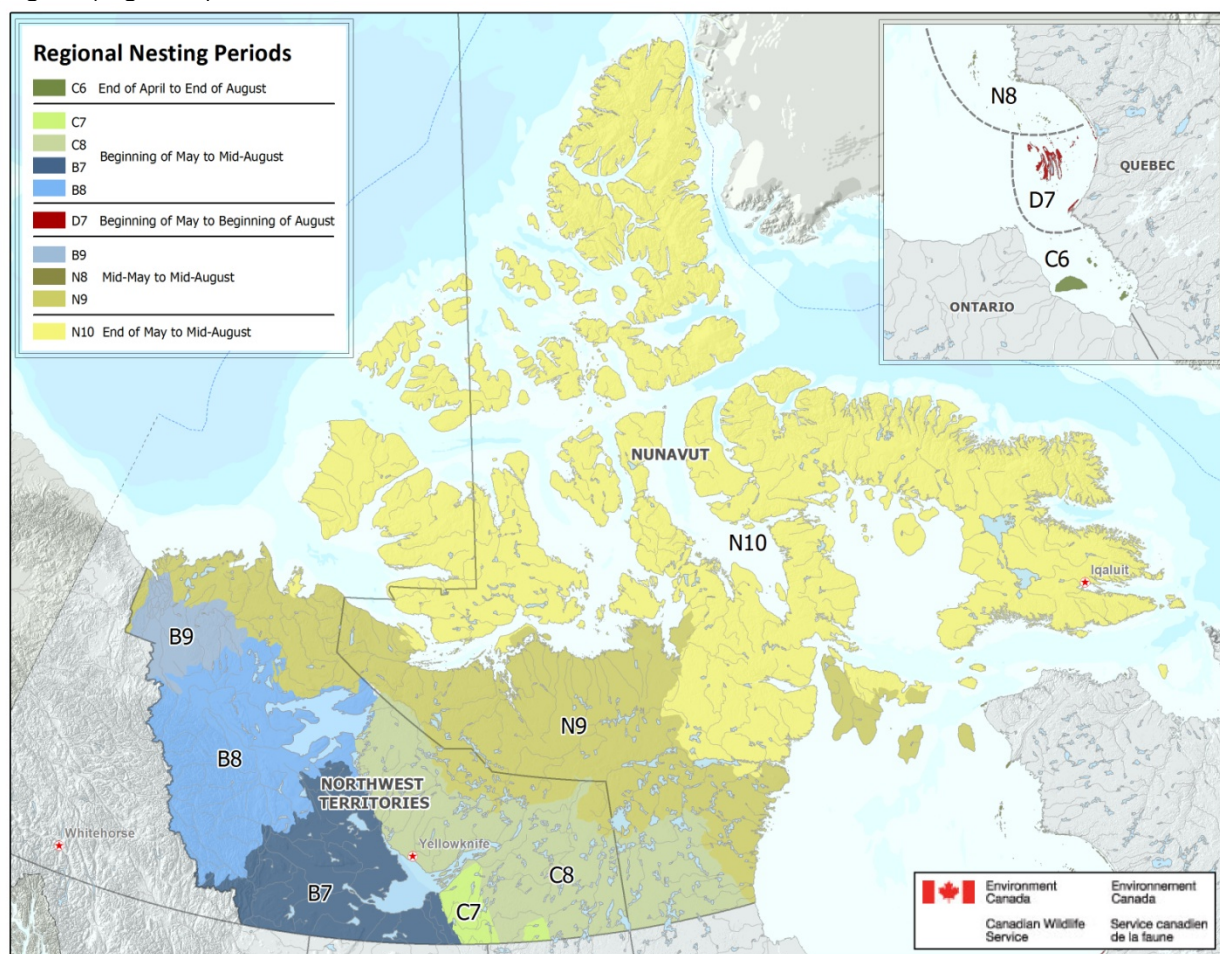
5. Environment Canada is responsible for implementing the Migratory Birds Convention Act, which provides for the protection of migratory birds through the Migratory Birds Regulations, and to develop and implement policies and regulations to ensure the protection of migratory birds, their eggs, and their nests. Paragraph 6(a) of the Migratory Bird Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities including but not limited to clearing trees and other vegetation, draining or flooding land, or using fishing gear. The inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is known as incidental take. Incidental take, in addition to harming individual birds, nests or eggs, can have long-term consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidents.

Currently the regulations do not provide for authorizations or permits for the incidental take of migratory birds or their nests or eggs in the course of industrial or other activities. As such, to minimize the possibility of contravening the law, taking reasonable care, and avoidance are the best approaches to take when contemplating any activity or decision that has the potential to impact migratory birds, nests or eggs. Project proponents are responsible for taking appropriate measures to ensure that they comply with the legislation and regulations.

To prevent detrimental effects on migratory birds, nests and eggs and help maintain sustainable populations of migratory birds, Environment Canada recommends that proponents know their legal obligations; avoid engaging in potential destructive or disruptive activities in key sensitive periods and locations; and develop and implement appropriate preventative and mitigation measures to minimize the risk of incidental take.

The following nesting periods are provided as general guidance to assist proponents in planning their field activities. It is important to note that breeding periods may vary from year to year due to climatic conditions and some species may nest outside the dates provided if conditions are favourable.

In Nesting Zone N10, migratory birds may be found nesting from the end of May until mid-August (Figure 1).





The following setback distances are recommended to define buffer zones to minimize disturbance to nests for different bird groups nesting in tundra habitat (see footnotes for adjustments to setbacks for sensitive species and species at risk):

Migratory Bird Species Group	Setback Distance for Pedestrians / ATVs (m)	Setback Distance for Roads / Construction / Industrial Activities (m)
Songbirds	30	100
Shorebirds	50 ^a	100 ^a
Terns/Gulls	200 ^b	300 ^b
Ducks	100	150
Geese	300	500
Swans/Loons/Cranes	500	750

^a If project activities are within the breeding ranges of American Golden Plover or Ruddy Turnstone, these setbacks should be increased to 150 m for Pedestrians/ATVs and 300 m for Roads/Construction/Industrial Activities respectively. If project activities are within the breeding ranges of Black-bellied Plover, Whimbrel or Red Knot (listed on Schedule 1 of the *Species at Risk Act*), these setbacks should be increased to 300m for Pedestrians/ATVs and 500m for Roads/Construction/Industrial Activities. If field crew are trained in the identification of these species then these higher setbacks need only apply to these more sensitive species, and lower setbacks can be used for the remaining shorebird species. In areas where several species are nesting in proximity, setbacks for the most sensitive species should be used.

^b If project activities are in proximity to breeding colonies of Ross's Gull (listed on Schedule 1 of the *Species at Risk Act*) these setbacks should be increased to 500m Pedestrians/ATVs and 750m for Roads/Construction/Industrial Activities. For Ivory Gull (listed on Schedule 1 of the *Species at Risk Act*) a buffer of 2 km around breeding colonies should be used for all activities.

For further information on how to protect migratory birds and their nests and eggs when planning or carrying out project activities, consult Environment Canada's Incidental Take web page and the fact sheet "**Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and their Nests and Eggs**" at: www.ec.gc.ca/paom-itmb/

6. Environment Canada recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.
7. 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.
8. The following comments are pursuant to the Species at Risk Act (SARA). The Species at Risk Act is directed towards preventing wildlife species from becoming extinct or lost from the wild, helping in the recovery of species that are at risk as a result of human activities, and promoting stewardship. The killing, harming or harassing of listed species; the damage and destruction of their residences; and the destruction of critical habitat is prohibited under SARA. The prohibitions apply to all Threatened, Endangered and Extirpated species listed on Schedule 1 of SARA on federal lands and to Migratory Birds (as defined under the Migratory Birds Convention Act) and aquatic species (as defined under the Fisheries Act) everywhere they are found.



Subsection 79 (2) of SARA, states that during an assessment of a project, the adverse effects of the project on listed wildlife species and their critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This subsection applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that similar consideration be given to 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).

The Table below lists species that may be encountered in the project area that have been designated as at risk by COSEWIC as well as their current listing on Schedules 1, 2 and 3 of SARA (and designation if different from that of COSEWIC). This list may not include all species identified as at risk by the Territorial Government. It does not include aquatic species, which are under the responsibility of Fisheries and Oceans Canada.

Terrestrial Species at Risk ¹	COSEWIC Designation	SARA Status	Government Organization with Primary Management Responsibility ²	Recovery Strategy, Action Plan or Management Plan posted on the Species at Risk Public Registry
Ivory Gull	Endangered	Schedule 1, Endangered	EC	Recovery Strategy - Final
Red Knot (<i>rufa</i> subspecies)	Endangered	Schedule 1, Endangered	EC	
Porsild's Bryum	Threatened	Schedule 1, Threatened	GN	
Wolverine	Special Concern	No Status	GN	
Polar Bear	Special Concern	Schedule 1, Special Concern	GN	
Peary Caribou	Endangered	Schedule 1, Endangered	GN	
Harlequin Duck (Eastern population)	Special Concern	Schedule 1, Special Concern	EC	Management Plan – Final
Peregrine Falcon (<i>anatum-tundrius</i> complex)	Special Concern	Schedule 1, Special Concern	GN	
Notes: ¹ Fisheries and Oceans Canada has responsibility for aquatic species. ² Environment Canada (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 <i>Migratory Birds Convention Act</i> (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Government of Nunavut (GN). Populations that exist in National Parks are managed under the authority of the Parks Canada Agency.				

- 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 for information on specific species (as well as the booklet “Species at Risk in the Northwest Territories” (2014 Edition) available at www.nwtspeciesatrisk.com/en/Documents. As new species may have been assessed by COSEWIC or added to Schedule 1 of SARA since the booklet was last published, Proponents should always check the Species at Risk registry to obtain the most current information}.

- 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.
 - The Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize project effects to species under their management responsibility.
 - Mitigation and monitoring measures must be taken in a way that is consistent with applicable species at risk recovery strategies and action/management plans.
9. 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.
10. 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.