



Environment Canada
Environnement Canada

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May 19, 2005

Licensing Administrator
Nunavut Water Board
P.O. Box 119
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Nunavut Water
Board

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Public Registry

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Via facsimile

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**Re: NWB2BAF – North Central Baffin Project, Type "B" Water License Renewal Application
Proponent – De Beers Canada Inc., Sudbury, Ontario**

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned Water License Renewal Application. The following comments are 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*.

De Beers Canada Inc. has submitted a Water License Renewal Application to facilitate diamond exploration work on Baffin Island. The proposed work program is scheduled to begin in mid May 2005 and continue until the end of August 2005. There will be a tent camp to accommodate between 15-30 people. The program will involve airborne and ground geophysics followed by a drilling program to begin in June. Geological sampling will take place in July and August with transport to sites via helicopter. Fuel caches will be established and De Beers has indicated that they intend to leave a fuel cache in place at the base camp over the winter period.

1. Meeting the requirements of the *Fisheries Act* is mandatory, irrespective of any other regulatory or permitting system. Section 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 legal definition of deleterious substance provided in subsection 34(1) of the *Fisheries Act*, in conjunction with court rulings, provides a very broad interpretation of deleterious and includes any substance with a potentially harmful chemical, physical or biological effect on fish or fish habitat.
2. Environment Canada recommends the use of secondary containment with an impervious liner, such as self-supporting insta-berms, for storage of all barreled fuel rather than relying on natural depressions to contain spills.
3. Except for immediate use, the permittee shall not erect camps or store materials on the surface ice of any water body.
4. The proponent shall have a Spill Contingency Plan in place prior to establishing any fuel caches.
5. Fuel caches shall also be inspected on a regular basis.
6. A supply of spill kits, shovels, barrels, sorbents, pumps, etc. shall be consistently maintained and readily available onsite.
7. Environment Canada recommends the use of drip pans, or other similar preventative measures, when refueling equipment on site.

8. The proponent shall ensure that any fuel or hazardous wastes associated with the proposed project are properly handled, transported and disposed of.
9. The proponent has stated that they intend to maintain a fuel cache through the winter of 2005-2006 in anticipation of the 2006 field season. Environment Canada would like to advise the proponent that this is not an acceptable practice and that **ALL** fuel and hazardous materials must be removed at the end of the 2005 field season.
10. Please note that any spill of fuel or hazardous materials adjacent to, or into a water body, **regardless of quantity**, shall be reported immediately to the NWT 24-hour Spill Line, (867) 920-8130.
11. Environment Canada's contact number is (867) 920-5131, a 24-hour emergency pager monitored by Emergency and Enforcement Officers.

With respect to waste disposal at this site, Environment Canada has the following recommendations:

12. All equipment and material brought to site for this project should be packed out on project completion.
13. For disposal of combustible material that cannot be shipped out, Environment Canada recommends the use of an approved Incinerator.
14. All non-combustible solid wastes (e.g., potable water bottles) shall be disposed of at an appropriate facility, e.g., Yellowknife, NT or Iqaluit, NU. The proponent is encouraged to make use of recycling facilities for all recyclable materials.
15. 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.

With respect to exploration and drilling activities, Environment Canada recommends that the following conditions be applied through all stages of the project:

16. Drilling wastes from land-based drilling should be disposed of in a sump such that they do not enter any body of water.
17. Where drilling additives (CaCl) are used in substantial quantities, return water should be contained and **not** returned to source.
18. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.
19. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated, contained such that they do not enter the water, or are demonstrated to be non-toxic.
20. The permittee shall not erect camps or store materials on the surface ice of any water body, other than for immediate use.
21. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.

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).

22. Section 6 (a) of the *Migratory Birds Regulations* states that no one shall disturb or destroy the nests or eggs of migratory birds. Therefore, CWS recommends that all activities be conducted outside the migratory bird breeding season, which extends from approximately June 1 to Aug 1. 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).

23. If activities are permitted to occur during the breeding season, CWS 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 until nesting is completed (i.e., the young have left the vicinity of the nest).
24. In order to reduce disturbance to nesting birds, CWS recommends that aircraft used in conducting project activities maintain a flight altitude of at least 610 m during horizontal (point to point) flight.
25. In order to reduce disturbance to resting, feeding, or moulting birds, CWS 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.
26. Also, please note that 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. If harmful substances do come into contact with bodies of water that are frequented by migratory birds during the open water season, then these must be completely cleaned up following the procedures identified by the proponent and subject to final approval by an Inspector.
27. 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.
28. 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.
29. The *Species at Risk Act* (SARA) came into full effect on June 1, 2004. Species at risk that may be encountered in this area include, but are not limited to: Peregrine falcon (subspecies *tundrius*) and Short-eared Owl, both of which are listed as species of Special Concern on Schedule 3 of SARA. In addition, the Grizzly Bear and Wolverine (Western Population) are both listed as species of Special Concern by COSEWIC. While conducting their operations, the proponent should be aware of the special status, and minimize disturbance to, or contact with, these species.

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) 669-4708 or by email at ivy.stone@ec.gc.ca.

Sincerely,


Ivy Stone
Environmental Assessment

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB, Environment Canada, Yellowknife, NT)
Mike Fournier (Northern Environmental Assessment Coordinator, EPB, Environment Canada, Yellowknife, NT)