



Environment Environnement
Canada Canada

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Our file:

Via Email: licensing@nwb.nunavut.ca

**Re: NWB 2BE-MCG – MIE Exploration Project Proposal
Proponent – 5050 Nunavut Limited (Adriana Resources Inc.), Vancouver, BC**

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned 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*.

5050 Nunavut proposes to set up a camp on the southwest shore of McGregor Lake to support their staking, prospecting and exploration work covered under KIA Land Use License KTL104C033, as well as to conduct a drilling project on their MIE property. Activities will include fuel mobilization, camp setup and a spring geophysical program with drilling to take place in the summer. Project drilling would be helicopter supported in summer and snowmobile supported in winter. Access to the property will be via floatplane in summer and via ski plane in winter.

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

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.

With respect to the transport, handling and storage of fuels and hazardous materials, Environment Canada has the following recommendations.

2. All sumps, pits, spill basins and fuel caches shall be located above the high water mark of any waterbody and in such a manner as to prevent the contents from entering any waterbody frequented by fish. Therefore, please note that maintaining a buffer of 30 m may not always be an adequate preventative measure.
3. 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.
4. The proponent shall have a Spill Contingency Plan in place prior to establishing any fuel caches.
5. Locations of fuel caches shall be provided to Environment Canada and these shall 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. Please note that fuels or hazardous materials cached for this study must be removed at the end of the project.
10. To ensure compliance with Section 36(3) of the *Fisheries Act* and Section 35 of the *Migratory Birds Regulations* all spills of fuel or hazardous materials, **regardless of quantity**, shall be reported immediately to the NWT 24-hour Spill Line where the release:
 - a. Is near or into a water body (including frozen)
 - b. Is near or into a designated sensitive wildlife habitat
 - c. Poses a threat to a listed species at risk or its critical habitat
11. Except for immediate use, the permittee shall not erect camps or store materials on the surface ice of any water body.
12. Environment Canada's contact number is (867) 920-5131, a 24-hour emergency pager monitored by Emergency and Enforcement Officers.

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

13. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.
14. If ice-based drilling occurs, the Interim guidelines for On-Ice drilling will apply. Return water released to the lake must be non-toxic. Return water release must not result in an increase in total suspended solids in the waters of the lake that exceeds Canadian Council of Ministers of the Environment (CCME) 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).
15. 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.
16. Drilling waste from land-based drilling should be disposed of in such that they do not enter any body of water.
17. Effluent water quality limits should be set such that the limits will be protective of the receiving environment.
18. Please note that drilling waste water and mine water should be contained in an area (e.g., sump) that is adequate for that purpose.
19. Except for immediate use, the permittee shall not erect camps or store materials on the surface ice of any water body.
20. All equipment and material brought to site for this project should be packed out on project completion.

With respect to waste management, Environment Canada recommends that the following conditions be applied through all stages of the project:

21. All sumps shall be backfilled upon completion of the project and recontoured to match the surrounding landscape.
22. Environment Canada recommends that equipment and material brought to site for this project should be packed out on project completion.
23. For disposal of combustible material that cannot be shipped out, Environment Canada recommends the use of an approved incinerator.
24. All non-combustible solid wastes (e.g., potable water bottles) shall be disposed of at an appropriate facility, e.g., Iqaluit, NU. The proponent is encouraged to make use of recycling facilities for all recyclable materials.
25. 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. Incineration of camp waste is a recommended option.

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).

26. 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 May 1 to July 15. 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).
27. 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).
28. 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. Therefore, CWS recommends that sumps be backfilled or made otherwise inaccessible to migratory birds prior to their arrival in spring and that the proponent ensure all spills are thoroughly cleaned up.
29. 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.
30. 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.
31. 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.
32. 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.
33. 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: Peregrine falcon (subspecies *tundrius*) and Short-eared Owl are listed as species of Special Concern on Schedule 3 of SARA. The wolverine, barren ground caribou (Bluenose West and Bathurst herds) and barren ground grizzly are in the SARA listing process, but no determination has yet been made on their status under SARA. 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 / Contaminated Sites Specialist

cc: Steve Harbicht (Head, Environmental Assessment, North, EPOD, Environment Canada, Yellowknife, NT)
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