

Environment  
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Canada

Northern Division  
Environmental Protection Branch  
Prairie and Northern Region  
#301 - 5204 - 50<sup>th</sup> Ave  
Yellowknife, NT X1A 1E2  
Ph, (867) 669-4700

Nunavut Water

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Feb. 12, 2001

Our File: 4703 001 001

Gladys Joudrey  
Environmental Assessment Officer  
Nunavut Impact Review Board  
P.O. Box 2379  
Cambridge Bay, NT X0E 0C0

By Facsimile: (867) 983-2594

Dionne Filiatrault  
Technical Advisor  
Nunavut Water Board  
P.O. Box 119,  
Gjoa Haven, NT X0E 1J0

By Facsimile: (867) 360-6369

Re: **WMC International Renewal Application - NIRB File 01WR005; Water Licence  
NWB2MEL01 - Meliadine Lake Project**

I have reviewed the above application on behalf of Environment Canada (EC), and offer the following comments for your consideration.

WMC International proposes to continue delineation drilling using three small diameter diamond drills, based from their existing camp to the south of Meliadine Lake. Proposed mitigation addresses concerns which pertain largely to waste management, including:

- treatment of drill effluent with removal of cuttings to a landfill, for all lake-based drilling;
- sump disposal of land-based drilling cuttings, with subsequent remedial measures;
- spill contingency planning and availability of spill cleanup kits at drilling sites and fuel storage locations;
- incineration of sewage and camp wastes, with non-combustibles disposed to a landfill;
- sump disposal of greywater;
- removal of waste oil and hazardous wastes to Rankin Inlet for disposal;

#### Comments and Recommendations

Two additives are listed for use in drilling operations. It should be noted that an assessment of CaCl as a toxic substance under the *Canadian Environmental Protection Act* in the final stages, and that its use for ice-based drilling is discouraged. For use on land-based drilling, it is recommended that sump closure measures include documentation of effects on vegetation for holes which used CaCl as an additive. It should be ensured that any such sumps are a sufficient distance from water that runoff into streams or lakes doesn't occur.

Canada



No details are provided at this time on drilling and sump locations. The following standard conditions should address concerns with siting and general operations.

1. The applicant shall ensure that any drill cuttings, chemicals, fuel or wastes associated with the proposed project do not enter waters frequented by fish. All sumps, spill basins and fuel caches should be located a minimum of thirty (30) meters from the normal high water mark of any such waterbody.
2. EC encourages exploration companies, when storing barreled fuel at a location, to use a secondary container rather than relying on "natural depressions". There are self supporting instant berms now available from various suppliers within Canada and if these "insta-berms" are used properly it will virtually eliminate the possibility of ever having to deal with petroleum contaminated soils.
3. Drilling additives or mud shall not be used in connection with holes drilled through the lake ice unless they are recirculated or contained such that they do not enter the water, or demonstrated to be non-toxic.
4. With respect to access road construction, pad construction or other earthworks, the deposition of slash, debris or sediment into any waterbody is prohibited. These materials shall be disposed of above the high water mark in such a fashion that they do not enter the water.
5. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.
6. The permittee shall not erect camps or store material on the surface ice of streams or lakes.

Please do not hesitate to contact me at (867) 669-4735 with any questions or comments regarding the foregoing.

Yours truly,



Anne Wilson  
Water Pollution Specialist

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB)  
Paula Pacholek (Coordinator, EPB)  
Wade Comin (Inspector, EPB Iqaluit)