



Environment Environnement
Canada Canada

Environmental Protection Branch
Qimugjuk Building 969 P.O. Box 1870
Iqaluit, NU X0A 0H0
Tel: (867) 975-4639
Fax: (867) 975-4645

November 22, 2004

Our file: 4703 001 028

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

Via Email at licensing@nwb.nunavut.ca

RE: NWB2MEL – Comaplex Minerals Corp. – Meliadine Project Renewal

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been 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*.

Complex Minerals Corp. is proposing to conduct a mineral exploration project at the Meliadine Lake, near Rankin Inlet, NU. Previously operated by WMC International Ltd., the property has recently come under the ownership of Comaplex Minerals. The proposed exploration activities include the establishment of a 25-40 person seasonal camp, and on-ice and land based drilling. Proposed activities would occur from January 1, 2005 through December 31, 2005.

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

- The proponent shall not deposit, nor permit the deposit of any fuel, drill cuttings, chemicals, wastes or sediment into any water body. According to the Fisheries Act, Section 36(3), the deposition 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, is prohibited.
- Land based drilling should not occur within 30 m of the high water mark of any water body. Drilling wastes from land based drilling shall be disposed of in a sump such that the contents do not enter any water body.
- For "on-ice" drilling, return water released must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100mg/L).
- Environment Canada would like to inform the proponent that the *Canadian Environmental Protection Act* lists CaCl as a toxic substance. The proponent shall therefore ensure that if CaCl is used as a drill additive on site, all sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any water body.
- If drilling additives or muds are to be used in association with this project, they shall not



- be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or demonstrated to be non-toxic.
- Environment Canada recommends that if an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed.
 - The proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
 - Species at risk as defined by the Species at Risk Act may be encountered in this area. While conducting their operations, the proponent should make themselves aware of these species and their special status and minimize disturbance or contact with these species. Species that may be encountered in this area include, but are not limited to, peregrine falcon, wolverine, and polar bear, listed as species of Special Concern under Schedule 3 of the Species at Risk Act.
 - The proponent shall ensure that all non-combustible and hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.
 - Section 2.3 “Obligations Register” of the Environmental Management Plan included with the application should include mention of the following legislation administered by Environment Canada:
 - Section 36(3) of the Fisheries Act, which prevents the deposition of deleterious substances into waters frequented by fish
 - The Species at Risk Act, which serves to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened.
 - All sumps, including those for grey water, camp sewage, and drill wastes, shall be located above the high water mark of any water body and in such a manner as to prevent the contents from entering any water body frequented by fish. Further, all sumps shall be backfilled and contoured to match the surrounding landscape at the end of each field season.
 - Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes.
 - All fuel caches shall be located above the high water mark of any water body. Environment Canada also recommends the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on location.
 - **All spills** are to be documented and reported to the 24 hour Spill Line at (867) 920-8130.
 - Environment Canada recommends the use of drip pans, or other similar preventative measure, when refueling equipment on site.

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) 975-4639 or by email at colette.meloche@ec.gc.ca.

Yours truly,

Original signed by

Colette (Meloche) Spagnuolo
Environmental Assessment / Contaminated Sites Specialist

cc: (Mike Fournier, Northern Environmental Assessment Coordinator, Environment Canada, Yellowknife)