



Environment Canada
Environnement Canada

Environmental Protection Operations
5204 - 50th Avenue Suite 301
Yellowknife NT X1A 1E2

February 16, 2009

Our file: 4703 001 106
Your File: 2BE-GOO0510

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven NU X0B 1J0

licensing@nunavutwaterboard.org

RE: NWB 2BE-GOO0510 – Amendment – Dundee Precious metals Inc. – Goose Lake Project

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 arising from *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

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

1. The proponent shall not deposit, nor permit the deposit of any fuel, chemicals, wastes, drill cuttings 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.
2. For any "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).
3. Drilling additives or muds 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 are demonstrated to be non-toxic.
4. The proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
5. Land based drilling should occur a sufficient distance from the high water mark of any water body, to ensure that no deleterious substances enter any water bodies. Drilling wastes from land based drilling shall be disposed of in a sump, such that the contents do not enter any water body.
6. Environment Canada would like to inform the proponent that the *Canadian Environmental Protection Act* has listed CaCl as a toxic substance. If CaCl is to be used as a drill additive during land based drilling, the proponent shall ensure that sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any water body.
7. If an artesian flow is encountered, the drill hole shall be immediately plugged and permanently sealed upon project termination.

8. The proponent should follow and comply with Canada Wide Standards for Dixons and Furans, and the Canada Wide Standards for Mercury emissions with respect to burning or incineration. In order for these guidelines to be met, at a minimum, an incinerator with dual chamber and forced air to allow for sufficient residence time and temperature to maximize combustion should be used.
9. Environment Canada recommends the use of sumps for the disposal of drilling cuttings and sludges, camp greywater and sewage, including sludge. All sumps 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 upon completion of the field season and contoured so as to match the surrounding landscape.
10. The proponent should be aware 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. Comments and recommendations provided by the Canadian Wildlife Service (CWS) relating to the *Migratory Birds Convention Act*, the *Migratory Birds Regulations*, and the *Species at Risk Act* in the letter submitted by David Abernethy on behalf of Environment Canada on March 24, 2006 for the amendment 2BE-GOO0150/GA, would also apply to this amendment.
12. Once available, please forward the locations of any drill holes.

Environmental Protection Operations (EPO) should be notified of changes in the proposed or permitted activities associated with this application. Please do not hesitate to contact me at (867) 669-4744 or ron.bujold@ec.gc.ca with any questions or comments.

Yours truly,

Jane Fitzgerald
Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Assessment & Monitoring, EPO)