



Environment Canada **Environnement Canada**

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17 March, 2004

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Nunavut Water Board

MAR 17 2004

Public Registry

Our File 4703 003 016

Fax: (867) 360-6369

Re: NWB2CHW – Water Licence Application – Shear Minerals – Churchill West Diamond Project.

EPB's contribution to your request for specialist advice is based on the mandated responsibilities for the enforcement of Section 36(3) of the *Fisheries Act*, the *Canadian Environmental Protection Act* (CEPA), and the *Migratory Birds Convention Act* (MBCA) *Regulations* and the *Species at Risk Act*. On the basis of the information provided, EC believes that the above noted project has the potential to affect fish pursuant to the *Fisheries Act*.

The proponent has submitted a new water licence application for their Churchill West Diamond Project located at latitude 63°20'N, longitude 92°30'W. The water licence application will cover the following activities:

- domestic water supply for a 40-person camp
- water for diamond drilling through-out the area of the exploration program during the period of March 1 to November 30, 2004
- drilling and camp programs for 2005 and 2006.

Environment Canada supports the mitigation measures proposed by Shear Minerals Ltd., and would like to add the following comments and recommendations.

Comments and Recommendations

- The proponent shall insure that any chemicals, fuel or wastes associated with the proposed projects do not enter waters frequented by fish. It is a requirement of Section 36(3) of the *Fisheries Act* that all effluent discharged into water frequented by fish, be non-deleterious.
- Drip pans should be used when refuelling equipment.
- Winter stream crossings shall be constructed entirely of ice and/or snow materials, and stream crossings shall be removed or notched prior to spring break-up.
- If artesian flow is encountered, drill holes shall be immediately plugged and permanently sealed.
- All fuel containers must be properly sealed and stacked in an upright position to prevent the possibility of spills and leaks. Fuel containers should be stored on flat, stable terrain or in natural depressions well away from water bodies and inspected periodically for leaks.
- When storing barrelled fuel at a location, EC encourages the use of a secondary containment rather than relying on "natural depressions." Self supporting insta-berms are available from various suppliers within Canada.
- Provide to my attention, when known, coordinates in degrees, minutes and seconds for fuel cache and drill site locations.

- 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 demonstrated to be non-toxic.
- 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).
- Operational practices for the handling of fuels and hazardous fluids should be posted and made available to all personnel required to work on site and include:
 - * a spill contingency plan outlining a clear path of response
 - * contact list of persons to be contacted in the event of a spill and assigned responsibilities of company staff and contractors
 - * location of equipment, both on and off site to be used in the event of a spill
 - * state that "all spills" are to be documented and reported to the NWT/Nunavut - 24 Hour Spill Report Line at (867) 920-8130
 - * an appropriate spill kit with absorbent material should be located at all fuel transfer sites
 - * a dedicated area should be used for refuelling equipment with measures taken to ensure capture and containment of drips and spills.

EPB 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,



Ron Bujold
Environmental Assessment Technician

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB)
Mike Fournier (Northern Environmental Assessment Coordinator, A&M, EPB)