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Your file - Votre référence  
2BE-HAK0406

Our file - Notre référence  
IQA-N 9545-1-2HAKG UNC / #80479

May 23, 2006

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Via Email

**Re: 2BE-HAK0406 - Sabina Silver Corporation - Hackett River Project - Type B Licence  
Renewal**

On behalf of Indian and Northern Affairs Canada (INAC) I have reviewed the above-mentioned application. The following specialist advice has been provided pursuant to INAC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NW&NSRT), *Arctic Waters Pollution Prevention Act* (AWPPA), and the *Department of Indian Affairs and Northern Development Act* (DIAND Act).

#### Background Information

Sabina Silver Corporation is applying for a Type B water licence renewal for water use and disposal of wastes associated with its Hackett River Project. The proponent intends to continue searching for lead zinc and gold deposits in its project area by means of a diamond drilling program and associated geological mapping and geophysical survey activities. A seasonally occupied field camp situated on the western shore of Camp Lake will support project activities. This camp has a coordinate of 65°55'N, 108°22'W and is approximately 75 km southwest of the community of Bathurst Inlet and 375 km south of Cambridge Bay. The camp will accommodate an average of 25 people throughout its exploration seasons which take place from April 1 to October 31.

The proponent has requested that its licence permit the daily use of 0.15 m<sup>3</sup> of freshwater per person for domestic purposes and 198.7 m<sup>3</sup> to support its drilling operations. Domestic water will be acquired from Camp Lake and drill water will be acquired from sources nearby selected drill sites. Camp gray water and drilling wastes (i.e., cuttings, sludge, and waste water) will be directed to sumps located at least 31 m from nearby water bodies. These sumps will be backfilled and contoured to resemble the surrounding landscape prior to exiting the project area at the end of each field season. Sewage will be placed in Pacto toilet bags and incinerated on-site along with other combustible wastes. Remaining ash and residue will be delivered to Yellowknife for proper disposal along with non-combustible wastes and hazardous wastes. Empty steel fuel drums will be returned to Yellowknife for recycling.

Included in the proponent's licence application are copies of recently revised Spill Contingency and Abandonment and Reclamation (A&R) Plans. Liquid fuel products will be stored in 205 L steel drums and cached in the field camp area. Hazardous material spills will be reported to the 24-hour Spill Line at (867) 920-8130. The project will have a total of 227,500 L of diesel (1,100 drums), 1,025 L of gasoline (5 drums), 3,550 L of aviation fuel (310 drums), 2,500 lb of propane (25 tanks), and 50 lb of acetylene (one tank). Liquid fuels will be stored in geomembrane impermeable berms to prevent the contamination of soil and water from spills.

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## Recommendations

### CAMPS

- All sumps, whether for the disposal of gray water or drilling wastes, shall be positioned at least 30 m from the high water mark of nearby water bodies and contoured in such a manner that their contents will not be released into the surrounding environment in any manner other than downward percolation.
- The proponent shall not store materials on the surface of lakes or streams, except that which is for immediate use.

### DRILLING OPERATIONS

- Artesian wells shall be immediately plugged and permanently sealed so as to prevent the release of groundwater and the erosion of the affected ground surface.

### SPILL CONTINGENCY / HAZARDOUS MATERIALS

- Before INAC can finalize its review of the Hackett River Project's licence renewal application, it is requested that the proponent provide clarification concerning the methods that will be used for treating soils contaminated with hazardous material. It is indicated in the Spill Contingency Plan, section 4.6: Disposal, that fuel contaminated soil will be remediated on site through land farming, incineration, or thermal desorption. The proponent should provide a detailed description of each method of soil remediation and which circumstances will trigger their use. If the proponent intends to establish a land farm facility, the land farm must have an impermeable liner and be capable of accommodating (and treating) precipitation runoff. Such facilities should have Operation Manuals. As for the incineration of contaminated soils, INAC recommends that any remaining residue be properly contained and delivered to an appropriate treatment facility.
- It is recommended that the proponent's Spill Contingency Plan be revised to include summaries of the spill response methods used for hazardous material spills in applicable environmental conditions (i.e., tundra, water, snow, and ice). These summaries should list any equipment that will be used to carry-out the required spill response measures.
- All fuel caches shall be located above the high water mark of any water body. It is recommended that the fuel cache have an impermeable liner capable of holding 110% of the total fuel volume.
- All fuel caches shall be situated at least 30 m from the high water mark of any nearby water bodies.
- The proponent shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved facility.

### ABANDONMENT AND RECLAMATION

- It is recommended that the proponent identify both seasonal and final abandonment and reclamation procedures in its project's A&R Plan.

If there are any changes in the proposed project, INAC should be notified, as further review may be necessary. Please do not hesitate to contact me if you have any questions or comments with regards to the foregoing by telephone (867) 975-4555 or by email via [abernethyd@inac-ainc.gc.ca](mailto:abernethyd@inac-ainc.gc.ca).

Sincerely,

David W. Abernethy  
Water Resources Coordinator

cc. Jim Rogers - Manager of Water Resources, Indian and Northern Affairs Canada, Iqaluit