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Your file - Votre référence  
2BE-BAF

Our file - Notre référence  
9545-3-2BAF / #88039

June 23, 2006

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*Via Email*

**Re: 2BE-BAF - De Beers Canada Inc. - Baffin North Central Project -  
licence application**

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).

#### Project Background

De Beers Canada Inc. is applying for a Type B licence for fresh water use and disposal of wastes associated with domestic and exploratory drilling operations in its Baffin North Central Project. It has requested a licence which allows the daily use of 5 m<sup>3</sup> of freshwater from June 1, 2006 to September 1, 2007. Of this amount, 2.5 m<sup>3</sup> will be consumed for the domestic needs of project personnel and 2.5 m<sup>3</sup> will be used for the drilling purposes. The proponent intends to perform prospecting, geological mapping, a geophysical survey, diamond drilling, and reverse circulation drilling in its project area with the aim of locating diamond bearing kimberlite deposits.

A camp capable of accommodating 25 people will be established on the eastern shore of an un-named lake (coordinate of 70°56'04"N, 80°11'03"W). The project area is situated 181 km northeast of Igloolik and will be supported by Twin Otter airplanes and helicopter. Camp gray water, sewage, and drilling wastes will be directed to sumps positioned at least 30 m away from the high water mark of any water body. Combustible wastes will be incinerated on-site and non-combustible

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wastes will be delivered to an approved disposal facility. All hazardous wastes will be properly contained and delivered to an appropriate treatment facility.

A main fuel cache will be established at the main camp site. This cache will contain liquid fuels stored in 205 L steel drums as well as propane bottles. A total of 10,250 L of Jet-A fuel (50 drums), 10,250 L of diesel fuel (50 drums), 820 L of gasoline (4 drums), and eight (8) 100 lb propane bottles are to be made available for this mining exploration project. Spill response kits will be mobilized at all fuel caches and whenever fuel products are transferred to equipment.

The proponent has submitted copies of its Spill Contingency and Abandonment and Restoration Plans for review.

### INAC Comments

INAC recommends that the following comments be taken into consideration when reviewing this licence application.

#### CAMP OPERATIONS

- INAC recommends that the ashes of burned combustible wastes be raked to remove non-combustible items (e.g., iron nails and tinfoil). Raked ashes should either be buried on-site or delivered to an approved waste disposal facility.
- All sumps shall be backfilled and contoured to match the surrounding landscape prior to the end of the project's field program.

#### DRILLING OPERATIONS

- Prior to releasing any water into the surrounding environment, the parameters for analysis must meet the CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life.
- Should a drill hole penetrate below the permafrost layer, the drill hole should be permanently sealed and capped to prevent induced contamination of groundwater or salinization of surface waters due to an artesian flow.
- If the proponent penetrates below the permafrost layer, INAC requests that the proponent notify the Nunavut Water Board and itself of permafrost depth for future reference and data management purposes.

#### SPILL CONTINGENCY / HAZARDOUS MATERIALS

- All fuel caches shall be located above the high water mark of any water body. Furthermore, INAC recommends the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on location rather than relying on natural depressions.
- The proponent shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved treatment facility.

- INAC recommends that the proponent submit a revised Spill Contingency Plan for review by the Nunavut Water Board. This Plan should clearly identify the 24-Hour Spill Report Line, provide a copy of the form that must be submitted when reporting hazardous material spills to the Spill Report Line, discuss initial spill response actions, provide spill response procedures for spills in environmental conditions that are relevant to the project area (e.g., spills on land, snow, water, and ice), and provide Material Safety Data Sheets for all hazardous material substances used in this project.

#### ABANDONMENT AND RECLAMATION

- INAC recommends that the proponent revise its Abandonment and Reclamation (A&R) Plan to ensure that it is project specific. This Plan should include both seasonal and final A&R procedures for matters relevant to the project area. For example, the restoration of waste water sumps, sewage latrines, drill sites, and ash disposal can be addressed in this plan. The Plan currently addresses issues which are not relevant to the Baffin North Central Project, (e.g., acid generation of tailings and waste rock piles).

Indian and Northern Affairs Canada requests notification of any changes in the proposed project, 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,

***Original signed***

David W. Abernethy  
Water Resources Coordinator

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