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Your file - Votre référence
2BE-HOP

Our file - Notre référence
9545-1-2HOPG / #91302

July 12, 2006

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Via Email

Re: 2BE-HOP - Miramar Hope Bay Ltd. - Hope Bay Project - 2005 Annual Report

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 Information

Miramar Hope Bay Ltd. (Miramar) has submitted an annual report of water use and waste disposal associated with exploration activities in its Hope Bay Joint Venture Project for the 2005 field season, as per Part B of its water licence. This licence allows a daily freshwater consumption of 50 m³ from Windy Lake for domestic purposes (Windy Lake Camp has a general coordinate of 68°15'N, 106°45'W). INAC is unsure as to whether or not the use of freshwater for drilling operations is permitted. The licence indicates that if exploratory drilling should require water in sufficient volume that the source water body may be drawn down the proponent must submit a request for approval from the Board at least 30 days prior to drilling (Part C, Item 6). This request must identify the volume of water required, the hydrological overview of the water body, details of impacts, and proposed mitigation measures.

An Environmental Management Report (2005) was prepared in response to the site inspection conducted by Scott Stewart, INAC Water Resources Inspector, on July 22, 2005. This Report addresses concerns related to water use, waste disposal, and general conditions pertaining to the proponent's licence. Miramar has indicated that a new flow meter was installed to monitor water consumption. INAC is pleased to note that monthly reports of water use are now being submitted to the Board along with information pertaining to water sampling data and waste management.

Miramar has submitted an Environmental Protection Plan for Exploration Activities in the Hope Bay Belt (2006) for review. This is a positive initiative which demonstrates that efforts are being made to conduct a responsible mining exploration program. This Plan is fairly comprehensive and gives a concise overview of how various project activities and mitigation measures will be undertaken (e.g., management of drill sites and spill contingency plans).

INAC Comments

INAC recommends that the following comments be taken into consideration when reviewing this annual report.

SPILL CONTINGENCY / HAZARDOUS MATERIALS

- INAC strongly recommends that a stand-alone Spill Contingency Plan be provided to the Nunavut Water Board for review. This Plan should address the recommendations provided by Phyllis Beaulieu, Manager of Licensing, in her October 27, 2005 letter addressed to Matthew H. Kawei of Miramar Hope Bay Ltd. Specifically, this Plan should include information for all sites within the project area, appropriate maps, contingency plans for the Windy Lake and treatment area, confirmation of the facilities established at Patch Lake, and applicable Material Safety Data Sheets.
- INAC recommends that certain revisions be made to the project's Environmental Protection Plan's spill contingency section as well as the requested stand-alone Spill Contingency Plan. These recommendations are as follows:
 - ▶ Provide individual summaries of spill response measures on applicable environmental media (i.e., land, water, snow, ice, and muskeg).
 - ▶ The contact information for INAC's Water Resources Inspector based in Iqaluit should be changed. All spills should be reported to Peter Kusugak, Manager of Field Operations. Kusugak can be reached by office telephone at (867) 975-4289 and fax at (867) 979-6445.
 - ▶ The number of spill kits and their places of storage should be communicated in the spill contingency plan. INAC recommends that the locations of spill response equipment be indicated on a detailed map of the Windy Lake Camp and any other exploration camps within the project area. This will allow project personnel to have a visual reference of where response equipment are mobilized.
 - ▶ The 24-hour Spill Response Form should be replaced with the Nunavut version (as opposed to the NWT version that is currently provided). This form can be accessed from the Nunavut Water Board on the <http://ftp.nunavut.ca> website.
- INAC recommends that the proponent brief the Board on operational status of its Patch Lake secondary containment berm. Until this secondary containment facility is activated, INAC advises that all fuel caches be positioned in some form of secondary containment facility, such as self-supporting insta-berms, positioned at least 30 m above the high water mark of any surrounding water bodies.

WASTE DISPOSAL

- INAC recommends that all hazardous waste materials identified in the project area be delivered to an approved disposal/treatment facility. Furthermore, measures taken to establish a secure hazardous waste storage facility in the project area for items being temporarily kept on-site. The 2005 Annual Report does not specify whether this has been completed, as recommended by the INAC Water Resource Inspector's July 22, 2005 Industrial Water Use Inspection Report.
- INAC recommends that the project's monthly report gray water analysis include an ICP metal scan as a required parameter. Beaulieu's October 27, 2005 letter requests that this parameter be analyzed on all processed water prior to discharge. If the proponent feels that including this parameter in its gray water analyses is unnecessary, a written explanation should be provided to the Board.

- INAC requests that the proponent inform the Board on how it intends to improve the quality of its sewage treatment system. The 2005 Annual Report states that it is looking for ways to reduce the microbiological organisms in the release effluent.
- INAC requests that the proponent confirm whether all sludge generated at the Windy Lake Camp is being collected in 45 gallon drums and transported to the Boston Camp for proper disposal unless otherwise approved by the Board (Part E, Item 6).

GENERAL RECOMMENDATIONS

- INAC requests that the Board communicate which forms of water use and waste disposal are covered under the 2BE-HOP licence. The 2005 Annual Report states that exploratory drilling activities have commenced in the project area and that the Windy Lake Camp has a land treatment area for the remediation of soils contaminated with petroleum hydrocarbons. The project's licence permits water use for domestic purposes only. In light of these water use activities, INAC recommends that the project's licence be revised to incorporate the terms and conditions necessary for the water use and waste disposal activities practiced by the proponent.
- Drill holes that penetrate below the permafrost layer should be permanently sealed and capped to prevent induced contamination of groundwater or salinization of surface waters due to artesian flows.
- 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.
- INAC requests that the proponent clarify the name of its Project Name attributed to the 2BE-HOP licence. The 2005 Annual Report is labeled under the Madrid Project name whereas the licence has a project name of Hope Bay Joint Venture. This can be a source of confusion for licence reviewers.

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.

Sincerely,

Original signed

David W. Abernethy
Water Resources Coordinator

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