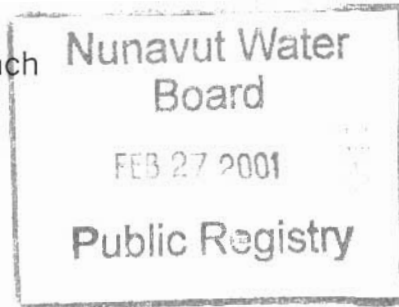


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Feb. 25, 2001

Our File: 4703 001 016

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**Re: Hope Bay Joint Venture - Water Licence Renewal - NWB1BOS9801 NIRB File
01WR008 - Mineral Exploration - Boston Gold Project**

The Hope Bay Joint Venture is seeking a five year licence renewal to conduct advanced exploration drilling from the underground decline as well as from surface. The site has an approximately 50 man camp in support of operations, a bulk fuel storage site, and an existing airstrip. I have reviewed the above water licence application on behalf of Environment Canada (EC), and offer the following comments for your consideration.

Drilling Activity:

The application contains the proponent's requests with respect to wording of the water licence. EC would like to clarify the intent of Part E Sec. 3 which deals with setbacks from water for drilling, and recommends that this clause remain in the renewal as worded previously. The maintenance of a 30 metre undisturbed area adjacent to the high water mark of any water body is intended to prevent shoreline disturbance and subsequent erosion into the shallow, productive areas of the lakes. These littoral areas are important for the life stages of fish and their food sources, and warrant protection.

The main additive in use is calcium chloride, which is currently in the last stages of assessment as a toxic substance under the *Canadian Environmental Protection Act*. It is recommended that this additive not be used in connection with on-ice drilling unless all return water is recirculated and disposed such that it does not enter any water body. Any land disposal should be done such that there is no movement of the sump contents out to surface waters. EC recommends that chlorides be included in the parameters measured for SNP station 1652-2.

Spills Reporting:

The applicant suggests that under Part H: Conditions Applying to Spill Prevention and Contingency Planning, section 5, that there be a threshold for reporting spills. Under the Spills Agreement there is no provision for such a threshold, and all spills must be reported. Environment Canada supports this practice, as the effects of numerous small spills over time must be considered.

Submission of Plans:

Wherever plans are required under the licence the applicant has requested clauses be re-written to reflect current ownership. As the requirement for plans pertaining to items such as Spill Contingency Planning, Abandonment and Restoration, and QA/QC are not specific to proponent, it is not clear what exactly the applicant is seeking. EC recommends that providing current plans be included in the renewal licence as for the previous licence.

Acid Rock Drainage:

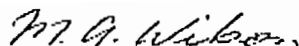
In Question 25 of the Water Licence Questionnaire, the proponent is asked to describe geochemical tests and provide results. No details are provided for future testwork at the project site. This is concern that the ore stockpiles contain significant sulphide mineralization and may be acid-generating. EC recommends acid base accounting be done for the ore stockpile, and that an SNP station be added which monitors runoff from the pile for pH and metals. Periodic testing of waste rock should also be ongoing.

Decline Extension:

The existing underground development will be extended to continue underground diamond drilling, and it is not shown where the decline will ultimately go in relation to the lake. The proponent is relying on the presence of permafrost in stating that there will be no minewater, however at some point it is likely the decline could intersect the talik, or unfrozen area, adjacent to the lake and that minewater will be an issue. It is recommended that the licence include a condition relating to integrity and maintenance of the two minewater ponds which are shown on Figure 1. The applicant should have a contingency plan in place against the event that water quantities are encountered which exceed the pond capacity (unless it can be demonstrated by the applicant that this geology would not conduct flow).

Please do not hesitate to contact me at (867) 669-4735 with any questions or comments regarding the foregoing.

Yours truly,



Anne Wilson
Water Pollution Specialist

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB)
Lawrence Ignace (Environmental Assessment Specialist, EC Iqaluit)
Wade Comin (Inspector, EC Iqaluit)