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EC File: 4703 003 013
NWB File: 2AM-DOH0713

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Via email: licensing@nunavutwaterboard.org

RE: 2AM-DOH0713 F1 Interim Water Management Plan

Environment Canada (EC) has reviewed the above-mentioned Interim Water Management Plan (the Plan) submitted to the Nunavut Water Board (NWB). The following specialist advice has been provided pursuant to the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Hope Bay Mining Ltd. has submitted an Interim Water Management Plan to the NWB as a requirement of Part F, Item 1 of Water License 2AM-DOH0713. The plan addresses short-term water management requirements of the Doris North Project and is effective from 1 January 2011 through until the Tail Lake tailings impoundment area (TIA) has been constructed and integrated into the Project's overall Water Management Plan. As it is an interim plan, the Plan does not address all criteria in the water license and so will be updated and submitted to the NWB following construction and in advance of diversion of run-off to the TIA.

Upon review of the Plan, EC provides the following comments and recommendations for the NWB's consideration:

- The storage capacity (in m³) of the Sedimentation and Pollution Control Ponds have not been provided anywhere in this Plan. This information is critical to determining the adequacy of this Plan. EC recommends providing this information in Figure 1 (areas are currently provided in Figure 1). This information should also be added to Sections 7.2.2 and 7.2.3 so comparisons can be made between anticipated annual runoff volumes and the respective storage capacities of each Pond.
- According to Section 4.3 of the Plan, the mine area is expected to generate ~38 000 m³ of runoff annually. However the Plan indicates the Pollution Control Pond has only been designed to manage 14 700 m³ of runoff. Will the remaining 23 300 m³ of runoff water report to the Sedimentation Pond? In any event, the amount of water reporting to the Sedimentation Pond should be conveyed in Section 7.2.2.
- Section 7.2.1 makes reference to the area of land being drained by the Sedimentation and Pollution Control Ponds. For clarity, it would be helpful if volumes of water reporting to each Pond were also provided so it can be easily determined if capacities are exceeded and by what amount.

- With respect to mitigation option 3 under Section 7.2.3, the storage capacity (in m³) of the landfill should be provided. If this option is exercised, what measures are in place to ensure landfarm water won't seep and how will water from the landfarm be extracted for future treatment and discharge?
- Section 9 indicates that discharge from the RO Plant will be monitored for quality once daily while discharging. Will similar accommodations be made for water discharged to the tundra from the Sedimentation Pond? Also, how many water samples are taken from the Sedimentation Pond to confirm compliance with water license conditions prior to discharge?

If there are any changes in the project EC should be notified as further review may be necessary. Comments previously submitted on behalf of EC regarding water license 2AM-DOH would still apply to this project. Please do not hesitate to contact the undersigned with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at

Paula.C.Smith@ec.gc.ca

Yours truly,



Paula C. Smith

Environmental Assessment Coordinator

cc: Carey Ogilvie (Head, Environmental Assessment-North, EPO, EC, Yellowknife, NT)
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