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Your file
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Our file:
NU-03-0109

Ms. Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Via electronic mail to:
licensing@nunavutwaterboard.org

Dear Ms. Beaulieu:

**Subject: Fisheries and Oceans Canada Technical Review of the Tehek Lake Access
Road Type B Water License Application Renewal and Amendment**

Fisheries and Oceans Canada (DFO) would like to thank the Nunavut Water Board (NWB) for providing an opportunity to review the Type B Water License application renewal and amendment for the Tehek Lake Access Road by Agnico-Eagle Mines Limited (AEM).

DFO would like to bring to the Board's attention that the amendment process under the *Metal Mining Effluent Regulations* (MMER) is still underway. It is DFO's understanding that the proposed works within the Type B water license application have no direct relationship to the construction or operation of the Tailings Impoundment Area or the MMER amendment process. AEM has committed to taking any legal and financial risk associated with the completion of the road and the responsibility to fully reclaim the site in the event that AEM does not receive the remaining approvals for the components of the Meadowbank site that still need to be constructed.

With this understanding, DFO offers the following technical comments with respect to the water license application and the supporting documents as it relates to our mandate. The areas of concern for DFO are as follows:

- Tear Drop Lake;
- Western channel crossing;
- Fish Habitat Compensation; and
- Closure and Reclamation

Tear Drop Lake

In the Type B water license amendment for the Tehek Lake Access Road, a sewage treatment plant for the pre-development work is proposed. The sewage treatment plant involves a lift station and pump to transfer treated overflow effluent from the final settling tank to Tear Drop Lake. AEM has stated that this waterbody is non-fish bearing according to the technical memorandum dated March 17, 2008. The water depth is 2.5 metres and the outlet channel is poorly defined. With the information provided in the March 17, 2008 technical memorandum and the March 31, 2008 annual report for the Nunavut Water Board, DFO confirms that Tear Drop Lake is non-fish bearing. A site visit was also conducted on April 17, 2008 which has also confirmed that the natural outlet of Tear Drop Lake would not facilitate fish passage, thus, Tear Drop Lake would not be fish frequented.

Westernmost Channel Culvert and No Net Loss Plan

Pre-development work involves the installation of four corrugated steel pipe culverts (1.2 metres in diameter); three placed beside each other and one installed above the three pipes as an additional outlet for freshet flows. The crossing is part of the access road to the south zone starter pit and connects the plant site area to the zone of predevelopment. As the temporary culvert will be installed prior to the proposed construction of the east dike, this infilling of fish habitat in the westernmost channel will result in the harmful alteration, disruption, or destruction (HADD) of fish habitat. Therefore, compensation measures will be required to offset the loss of habitat at this crossing. On April 10, 2008, AEM provided DFO with a technical memorandum regarding the No Net Loss Plan which includes fish habitat compensation for the loss of habitat resulting from the culvert installation.

AEM proposed to compensate the loss of fish habitat from the culvert installation with a ratio of 2:1 through the creation of a Portage Island reef or an extension on the East Dike habitat finger. The fish habitat compensation for the HADD of fish habitat resulting from the western crossing is independent of the permitting process in relation to the Type A Water License or Fisheries Act authorization for loss of habitat related to the Meadowbank Gold Mine Project. DFO recommends that the fish habitat feature be created outside of any potential future footprints of the proposed mine development.

DFO also recommends that the construction phasing, scheduling, detailed design drawings, and monitoring plan for the fish habitat compensation in Second Portage Lake be provided for review and approval as soon as possible in order to allow DFO sufficient time to assess the proposed plans and issue an authorization without delaying the proposed work schedule.

In the waste and water management plan, AEM states that the culvert will be set in the ground to allow for unobstructed fish passage. Since the channel can be used by the fish population within Second Portage and Third Portage Lakes as a migratory route on an opportunistic basis, DFO recommends that AEM provide indication within their detailed plan drawing that the crossing will facilitate fish passage and how this would be achieved.

DFO also recommends that the construction schedule and phasing be included in the construction plans for the culvert installation.

Closure and Reclamation

In the event that the site needs to be secured and placed on care and maintenance, it is DFO's understanding that the pre-development facilities and disturbances will be reclaimed and the site remediated. The on site road culverts will be removed and the sides where the culverts are removed will be laid back to a minimum of 3:1 slope angle and armoured with coarse rock to prevent erosion. DFO recommends that the placement of coarse rock be the minimum extent required to stabilize the banks.

Should you have any questions, please contact me by telephone at (867) 979-8007 or by fax at (867) 979-8039.

Yours sincerely,

Original signed by:

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