



Resource Management
Nunavut Regional Office
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Your file – Votre référence
2AM-MRY1325

November 14, 2017

Richard Dwyer
Licence Administrator
Nunavut Water Board
P.O. Box 119
GJOA HAVEN, NU X0B 1J0

Re: 2AM-MRY1325 Mine Site Crusher Pad Sedimentation Pond Expansion (Modification Request)

Dear Mr. Dwyer,

As a supplement to the results of our review previously sent on November 10th, 2017 we (INAC) would like to provide the following comments.

1. In general, Baffinland will certainly benefit from integrating updated meteorological data in their current design approach for the expansion of the existing sedimentation pond. In our opinion, the most recent rainfall data collected since 2013 should be thoroughly analyzed in order to provide adequate containment components required for the life cycle performance of the mentioned above pond. In the event that freshet flows must also be taken into consideration in this process, we would recommend consequently Baffinland to resubmit a new design brief including among others details of construction considerations and materials specification.
2. From our consultant (ARCADIS) most recent geotechnical inspection report we read: "An area of the perimeter ditch east of the crusher pad sedimentation pond was observed to have experienced subsidence, likely due to the presence of a weak soil zone under the berm and ditch. It is recommended that this area be repaired so as to restore the design grade within the ditch. BIMC should investigate the area of subsidence to determine the cause of the subsidence. If in fact the cause of the subsidence is a zone of weak soil under the berm and ditch, a possible solution would be to excavate the soft soils to expose a competent subgrade, and then restore grade with suitable backfill." From our November 8th, 2017 site visit we were not able to



estimate the extent of the indicated subsidence as described on the August 24th, 2017 (Photo: 3 – ARCADIS Geotechnical Inspection Report) picture showing the area of concern due to snow coverage. We would recommend Baffinland to provide a discussion outlining the results of their investigation with respect the indicated subsidence issue and the lessons learned practices adopted for the expansion of the sedimentation pond.

Please do not hesitate to contact me at 867-975-4657 or wajid.daouda@canada.ca should you have any questions or comments.

Regards,

Wajid Daouda, P.Eng
Senior Engineer – Major Projects
Resource Management

Cc:

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Jonathan Mesher, Water Resource Officer