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Environmental Protection Operations (EPO)
Prairie and Northern Region
5019 – 52nd St,
P.O. Box 2310
Yellowknife, NT X1A 2P7

September 12, 2014

EC File: 6100 000 011/004
NWB File: 2AM-MRY1325

Phyllis Beaulieu, Manager of Licensing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU X0B 1J0

Via email: licensing@nunavutwaterboard.org

RE: 2AM-MRY1325 - Baffinland Iron Mines Corporation. – Interim Mine Closure and Reclamation Plan

Environment Canada has reviewed the above mentioned Interim plan submitted by Baffinland. The specialist advice in the attached table is provided pursuant to EC's mandated responsibilities arising from the *Canadian Environmental Protection Act, 1999*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act* and the *Species at Risk Act*.

If there are any changes to the provided plan and/or more information becomes available, EC should be notified as further review may be necessary. Should you have any questions or wish clarification on any aspect of this submission, please contact me at (204) 983 4815 or at mark.dahl@ec.gc.ca.

Sincerely,

Mark Dahl
EA and Marine Programs Division

cc: Loretta Ransom A/Head Environmental Assessment North (NT & NU), EPO
EC Review Team

Topic and Reference	Background	Request/Comment
Section 6.8 CONTROL OF EFFLUENTS (page 35)	Baffinland Iron Mines Corporation (the Proponent) states “The drainage system established during operation will be retained and surface water will continue to collect in existing settlement ponds and, where required by the Licence, waters will be prior to discharge to the receiving environment.”	It would appear that some words are missing from this sentence which makes the meaning unclear. EC requests that the proponent clarify their intention regarding the management of effluents.
Section 8.3 REMOVAL OF BUILDINGS AND INFRASTRUCTURE (Page 46)	<p>Environment Canada notes that the removal of building and infrastructure is discussed in the plan but no schedule for these activities is provided.</p> <p>Paragraph 6(a) of the <i>Migratory Bird Regulations</i> states that no one shall disturb or destroy the nests or eggs of migratory birds. Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities that could occur during building and infrastructure removal. The inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is known as incidental take</p> <p>Currently the regulations do not provide for authorizations or permits for the incidental take of migratory birds or their nests or eggs in the course of industrial or other activities. To minimize the possibility of contravening the law, reasonable care and avoidance are the best approaches to take when contemplating any activity that has the potential to impact migratory birds, nests or eggs. Project proponents are responsible for taking appropriate measures to ensure that they comply with the legislation and regulations.</p>	<p>To prevent detrimental effects on migratory birds, nests and eggs and to help maintain sustainable populations of migratory birds, Environment Canada recommends that proponents know their legal obligations; avoid engaging in potential destructive or disruptive activities in key sensitive periods and locations; and develop and implement appropriate preventative and mitigation measures to minimize the risk of incidental take.</p> <p>To reduce the risk of incidental take of nests and eggs of migratory birds, Environment Canada recommends that demolition activities be avoided during the migratory bird nesting season. It is important to note that breeding periods may vary from year to year due to climatic conditions. If nests containing eggs or young of migratory birds are found, all disruptive activities in the nesting area should be halted until nesting is completed. Any nest found should be protected with a buffer zone appropriate for the species and the surrounding habitat until the young have naturally left the vicinity of the nest. Moreover, if there are migratory bird nests where work is proposed, options like avoiding, adapting, rescheduling or relocating activities that could disturb or destroy the nests should be considered. EC recommends the Proponent consult the fact sheet “Planning Ahead to Reduce Risks to Migratory Bird Nests” available at: http://www.ec.gc.ca/paom-itmb/ for further guidance.</p>

<p>8.11 WASTE ROCK STOCKPILE (Page 52)</p>	<p>Proponent states that “The surficial “active” zone, which will be subject to seasonal freeze-thaw, will not reach the 50m thickness of non-PAG material in the long-term (within 200 years) under the influence of climate change (Intergovernmental Panel on Climate Change, 2007). Therefore, over the long term, runoff water quality which is influenced by contact water that flows through the active layer in the waste rock stockpile will not be affected.”</p>	<p>The proponent should be prepared to remediate unacceptable runoff water quality from the ore stockpile should it occur. EC, therefore, suggests that the proponent proactively develop a contingency plan to manage contaminated runoff from the waste rock stockpile.</p>
<p>8.11.1 WASTE ROCK CHARACTERIZATION PROGRAM</p>	<p>This program has been reviewed with guidance by independent experts. The objective of this program is to inform prediction of expected runoff quality over time. Contingencies will be put into place if there are acid rock drainage issues and treatment if necessary. The characterization program will be ongoing for the Life of the Project and will guide the development of adaptive management strategies for waste rock management. Regular updates on waste rock characterization and prediction of runoff water quality will be provided in future updates of the Life-of-Mine Waste Rock Management Plan (BAF-PH1-830-P16-0031) as they are developed.</p>	<p>EC acknowledges and welcomes the planned implementation of contingency measures and the development of adaptive management strategies. EC would appreciate the opportunity to review these plans and updates when they are available.</p>