

Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

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



June 24, 2020

via email at: licensing@nwb-oen.ca

Richard Dwyer
Manager Licencing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Richard Dwyer:

RE: 2AM-MRY1325 – Baffinland Iron Mines Corp. – Mary River Project – Submission of Quarry D1Q2 Closure Memo

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Nunavut Water Board (NWB) regarding the above-mentioned Memo for 2AM-MRY1325 Type A Water Licence by Baffinland Iron Mines Corp. (The Proponent).

ECCC's specialist advice is based on our mandate pursuant to the *Canadian Environmental Protection Act* and the pollution prevention provisions of the *Fisheries Act*.

ECCC has the following comments:

1. Waste Rock Water Treatment Plant

Reference(s)

- Baffinland Attachment No. 2, Construction Summary Report, Waste Rock Water Treatment Plant Figure 16 – Intake from Waste Rock Facility Sedimentation pond (June 2018)

Comment

ECCC notes that Figure 16 shows what could be acid rock drainage (ARD) activities. However, there was no mention of what the figure is showing, the source, or proposed mitigation by the proponent to address that potential ARD activity.



ECCC Recommendation(s)

ECCC recommends that the proponent clarify whether the red stain in Figure 16 is ARD. ECCC also recommends that the proponent clarify what is the source of the stain, and what mitigation is proposed.

2. Required Maintenance

Reference(s)

- Baffinland Attachment No. 2, Construction Summary Report, Waste Rock Water Treatment Plant, Section 12 Required Maintenance. Also Figure 18 – Geotubes filtering processed water (June 2018)

Comment

The proponent stated “*When the geotubes are filled with sediments, they need to be replaced. To avoid interruption of water treatment process second geotube pond need to be build. Geotube intake lines should be switched from old pond geotubes to the new geotubes to continue water treatment process.*” The proponent also provided Figure 18 – Geotubes filtering processed water (June 2018).

ECCC notes that it is not clear how and where the proponent disposes of the sediments that fill the geotubes, and what are the implications to the environment of this disposal.

ECCC Recommendation(s)

ECCC recommends that the proponent provide clarification on how and where they dispose of the sediments in the geotubes, and what are the implications to the environment of this disposal.

3. Waste Rock Management Plan

Reference(s)

- Attachment No. 2, Construction Summary Report Waste Rock Water Treatment Plant -APPENDIX D-WASTE ROCK MANAGEMENT PLAN: - PHASE 1 WASTE ROCK MANAGEMENT PLAN- BAF-PH1-830-P16-0029 Rev 2, Date: Dec. 31, 2019

Comment

ECCC notes that this is the same waste rock management plan that was reviewed previously, and ECCC provided comments on the rock characterization criteria. The proponent has yet to resolve ECCC's earlier comments .

ECCC Recommendation(s)

ECCC recommends that the proponent provide the updated plan for review.

If you need more information, please contact Eva Walker at (867) 669-4744 or Eva.Walker@Canada.ca.

Sincerely,

[Original signed by]

Eva Walker
Acting Senior Environmental Assessment Officer
Prairie and Northern Region, Environment Climate Change Canada

Cc John Olyslager, Acting Head, Environmental Assessment North (NT and NU)