



April 2, 2012

NRCan File #NT-056

NIRB File No. 08MN053

NWB File No.: 2AM-MRY

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Sent via email: [licensing@nunavutwaterboard.org](mailto:licensing@nunavutwaterboard.org)

**Subject: Natural Resources Canada's (NRCan) Information Requests regarding the Final Environmental Impact Statement (FEIS) and Type A water licence for the Baffinland Iron Mine Corporation's proposed Mary River Project**

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In response to your February 29, 2012 letter regarding the Acceptance of the FEIS and Next Steps in the NIRB's Review and the NWB's Water Licensing Process for Baffinland Iron Mines Corp's Mary River Project, Natural Resources Canada staff has reviewed the Final EIS and Nunavut Water Board water licence application. NRCan is providing the attached comments to the Nunavut Water Board, directed to the proponent. The comments have been cross-referenced with NRCan's IRs to NIRB sent on April 2, 2012.

If you have any questions concerning our comments, or if I may be of further assistance, please call me at (613) 943-0773.

Sincerely,

*Original signed by*

John Clarke  
Director  
Environmental Assessment Division  
Science and Policy Integration  
Natural Resources Canada

cc: Rob Johnstone, Minerals and Metals Sector, NRCan



**Areas of Expertise:** Acid Rock Drainage and Metal Leaching

**Documents Reviewed:**

FEIS, Volume 6, Appendix 6B-1

NWB Type A Water Licence Application. Attachment 5, Annex 3: Waste Rock Geological and Geochemical Characterization Program, Mary River Project (2012)

NWB Type A Water Licence Application. Attachment 5: Waste Rock Management Plan. Appendix 10D-5. Section 3.1.3.4 Kinetic Testing

**Comment #:1 (See also Information Request #2 to NIRB)**

**Issue:** There is missing information regarding management of Potential Acid Generating (PAG) waste rock, specifically segregation of PAG and non-PAG material.

**Reference:**

FEIS, Volume 6, Appendix 6B-1

NWB Type A Water Licence Application. Attachment 5, Annex 3: Waste Rock Geological and Geochemical Characterization Program, Mary River Project (2012)

The PAG waste rock and waste overburden are to be encapsulated within the waste rock pile with progressive encapsulation of the PAG waste rock and overburden within the chemically and physically stable non-PAG waste rock. The strategy is that the PAG core material will be permanently frozen.

**Request:**

Further information is requested on the segregation criteria for PAG and non-PAG. The FEIS notes that additional geochemical studies are underway to better understand the kinetics of potential acid leaching behaviour, and to refine the expected drainage quality and metal leaching behaviour from materials. However, this information should be provided for evaluation of the waste rock management plan.

**Comment#:2**

**Issue:** Further information on field lysimeters requested.

**Reference:**

NWB Type A Water Licence Application. Attachment 5: Waste Rock Management Plan. Appendix 10D-5. Section 3.1.3.4 Kinetic Testing



***Request:***

NRCan notes that two field lysimeters are in operation. The most recent monitoring information for these tests was not located in the documents provided. NRCan requests that this information be provided for geochemical evaluation of waste rock material.