



Indian and Northern
Affairs Canada
www.inac.gc.ca

Affaires indiennes
et du Nord Canada
www.ainc.gc.ca

Water Resources
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0
Tel. (867) 975-4555
Email: abernethyd@inca-ainc.gc.ca

Your file - Votre référence
2BE-MRY

Our file - Notre référence
CIDMS 115515 / 9545-3-2MRYG

December 1, 2006

Richard Dwyer
Licensing Trainee
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Email: licensingtrainee@nwb.nunavut.ca

Sent via email

Re: 2BE-MRY - Baffinland Iron Mines Corporation - Mary River Project - licence renewal and amendment application

On behalf of Indian and Northern Affairs Canada (INAC) I have reviewed the above-mentioned application. The following specialist advice has been provided pursuant to INAC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NW&NSRT), *Arctic Waters Pollution Prevention Act* (AWPPA), and the *Department of Indian Affairs and Northern Development Act* (DIAND Act).

Background Information

Baffinland Iron Mines Corporation (Baffinland) is submitting a renewal and amendment application for its Mary River Project's Type B licence which authorizes the use of freshwater and disposal of wastes in Nunavut freshwater sources. The submitted application requests a five-year licence which permits the daily consumption of 475 cubic metres (m³) of freshwater to support diamond drilling and domestic activities. Furthermore, the proponent intends to cross various watercourses in an effort to analyze the geophysical and geotechnical properties of its project area.

The Mary River Project is situated approximately 160 kilometers south of Pond Inlet in the Qikiqtani Region, having a coordinate of 71°18'30"N, 79°23'30"W. Baffinland wants to expand its 80-person base camp to accommodate 100-people and establish 8-12 person occupancy exploration camps at Mile Inlet, Steensby Inlet, and Deposit No. 4. Anticipated freshwater consumption entails 20 m³ domestic and 455 m³ diamond drilling demands on a daily basis.

Intervention

Indian and Northern Affairs Canada recommends that the following comments be considered when reviewing this licence application.

-Schedule 4 of the Northwest Territories Waters Regulations, Licensing Criteria for Industrial Undertakings, applicable to the Nunavut Water and Surface Rights Tribunal Act, states that the use of 300 m³ or more freshwater per day requires a Type A licence (refer to Item 1b). Due to Baffinland's application to consume a daily maximum of 475 m³ of freshwater per day, INAC strongly recommends that the proponent be required to submit a Type A licence application for this undertaking.

-Baffinland has made reference to the practice of crossing watercourses in its licence application form. However, detailed information on these project activities was not provided for review. Item 6.2c of the Northwest Territories Waters Regulations states,

an application... shall also include... where the proposed undertaking consists of a watercourse crossing, (I) a plan of the crossing showing cross-section and elevations, (II) a description of the existing beds and banks of the watercourse, and (III) any available data on the water flow of the water course

Therefore, INAC recommends that the proponent's water use intentions be made known and should these include watercourse crossings, the proponent must submit all required information for review.

-In R. Cooper's (Baffinland representative) letter addressed to the Nunavut Water Board, dated October 6, 2006, reference is made to the option of disposing sewage at Pond Inlet's wastewater treatment facility. INAC recommends that the proponent be required to submit a letter of approval from the Hamlet's senior administrative officer and justification that the wastewater treatment facility is capable of accommodating this increased loading of sewage.

-Section 19 of the submitted Supplementary Questionnaire states that diamond drilling will occur within 30 metres of freshwater sources. Part F, Item 1 of the project's current licence holds that *no land-based drilling is to be done within thirty (30) metres of the ordinary high water mark of any water body, unless otherwise approved by the Board*. INAC recommends that this licence condition be maintained due to the risk of project activities negatively impacting the quality of nearby freshwater sources.

-Section 19 of the submitted Supplementary Questionnaire states that when drilling on land away from nearby water courses, drill cuttings will be left on the ground next to the hole. INAC recommends that the proponent be required to analyze the geochemical properties of drill cores to determine whether the excavated material is acid generating and susceptible to leaching metals. If this is the case, all drill cuttings should be properly handled, as approved by the Nunavut Water Board, to protect the quality of freshwater sources.

-Drill holes which penetrate beneath the permafrost layer should be permanently sealed and capped to prevent induced contamination of groundwater or salinization of surface waters. Furthermore, INAC requests notification of recorded permafrost depths for data management purposes.

-INAC recommends that the project's Spill Contingency Plan be revised to clearly indicate the time-frame for which it is applicable. Baffinland must ensure that all information included in the Plan is current. The volumes of fuel resources required for project activities are not consistent with those presented in section 25 of the Supplementary Questionnaire.

-INAC recommends that copies of Material Safety Data Sheets for all hazardous materials to be used in project activities be appended to the Spill Contingency Plan.

-INAC recommends that a copy of the Nunavut Spill Report Form be included in the project's Spill Contingency Plan.

-The submitted Abandonment and Restoration Plan's seasonal shutdown section indicates that bulky wastes will be either moved to the bone yard or will be taken off-site. The proponent should specify what treatment will take at the 'bone-yard.'

-The submitted Abandonment and Restoration Plan's final abandonment section should clearly communicate that all gray water sumps will be backfilled and contoured to match their surrounding landscapes.

Indian and Northern Affairs Canada requests notification of any changes in the proposed project, as further review may be necessary. Please do not hesitate to contact me if you have any questions or comments with regards to the foregoing.

Sincerely,
Original signed

David W. Abernethy
Water Resources Coordinator

Cc. Jim Rogers - Manager of Water Resources, Indian and Northern Affairs Canada, Iqaluit