Aboriginal Affairs and Northern Development Canada
Affaires autochtones et Développement du Nord Canada

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Your file - Votre référence
08MN053
Our file - Notre référence
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June 13, 2013

Amanda Hanson
Director, Technical Services
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU, X0B 0C0
Via electronic mail to: infor@nirb.ca

Re: Comment Request for Baffinland Iron Mines Corporation's *Mary River Project 2013 Annual Monitoring Report*

Dear Ms. Hanson,

On April 10, 2014, as per Section 12.7 of the Nunavut Land Claims Agreement (NLCA) and the Mary River Project Certificate [# 005], the Nunavut Impact Review Board (NIRB) requested parties to review Baffinland Iron Mines Corporation (BIMC) 2013 Annual Report with respect to effects and compliance monitoring. Aboriginal Affairs and Northern Development Canada (AANDC) has conducted a review in areas under our mandate as they pertain to compliance monitoring and AANDC's responsibilities for the Type 'A' Water Licence and land use authorizations. We would like to provide comments for NIRB's consideration as follows:

1) Effects Monitoring

a. ***Whether the conclusions reached by AEM in the 2013 Annual Report are valid;***
b. ***Any areas of significance requiring further studies; and***
c. ***Changes to the monitoring program which may be required.***

AANDC has no concerns with regard to effects monitoring associated with the Mary River project at this time.

2) Compliance Monitoring

a. ***Provide any compliance monitoring and/or site inspection reports to the NIRB including the following information:***
    i. ***How the authorizing agency has incorporated the terms and conditions from the Project Certificate into their permits, certificates, licenses or other government approvals, where applicable;***

AANDC has a broad mandate for the co-management of water resources and the management of Crown Land in Nunavut under the following applicable acts and regulations:

- The *Department of Indian Affairs and Northern Development Act (DIAND Act);*
- The *Nunavut Land Claims Agreement Act;*
- The *Arctic Waters Pollution Prevention Act* and *Regulations;*
- The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and *Regulations; and*
- The *Territorial Lands Act* and *Regulations.*

In terms of water management in Nunavut, AANDC has a number of different responsibilities. The Minister of AANDC has a decision making role with regard to the Nunavut Water Board's (NWB) issuance of any water licences associated with a project. Further, AANDC participates as an intervener in the water licensing process, providing advice and expertise. As well, when a proposed project is approved to proceed, the Department is responsible for inspecting and enforcing any terms and conditions (T&C) contained within any water licence associated with a project. However, the decision to implement the T&Cs of a Project Certificate, from the perspective of water management, rests with the Nunavut Water Board.

Although we are not responsible for implementing water related T&Cs, we have reviewed the Type 'A' water licence associated with the Mary River project (2AM-MRY1325) with respect to Project Certificate # 005 and have included a concordance table (Appendix A) that outlines how these T&Cs have been incorporated in the water licence.

In July of 2007, AANDC issued a land use permit (N2007F0004) for the portion of the tote road that is not on Inuit Owned Land as well as an accompanying quarry permit (2013QP0086). The land use permit for the tote road was issued prior to NIRB issuing Project Certificate #005 so the implementation of T&Cs was not considered when preparing this regulatory document. However, the land use and quarry permits will be renewed in the next few weeks and AANDC will work towards implementing appropriate T&Cs into the updated regulatory documents.

AANDC has worked collaboratively with BIMC and the Government of Nunavut to develop a socio-economic monitoring program that is anticipated to address (but is not limited to) conditions 129, 131, 133, 145, 148, 154, 159 168, and 169. It is expected that work towards a comprehensive program will continue throughout 2014.

ii. A summary of any inspections conducted during the 2013 reporting period, and the results of these inspections; and

iii. A summary of AEM's compliance status with regard to authorizations that have been issued for the project.

A Water Resource Officer from AANDC's Field Operations Division performed an inspection of water licence compliance of the Mary River Project at both the Mary River and Milne Inlet camp sites on the 4th and 5th of May 2013. As outlined on pages 50 and 51 of BIMC's Mary River Project annual report, there were no issues of non-compliance with regards to BIMC's water licence requirements at either site that resulted from this inspection. The inspection report produced by the AANDC Resource Officer has been submitted by BIMC to the NIRB and can be found in Appendix L.1 of BIMC 2013 Annual Report. Comments and guidance provided by the Field Operations staff member during the inspection is outlined in this report.

From August 15 to 17, 2013 a second inspection of water licence compliance by an AANDC Water Resource Officer was conducted at the Mary River, Milne Inlet and Steensby Camp sites. Again, as outlined on pages 50 and 51 of Baffinland's annual report, there were no major issues of non-compliance reported by AANDC inspectors; however, there were some minor issues documented. BIMC responses to the inspector's concerns are outlined in Appendix L. 3 of the 2013 Annual Report. AANDC is satisfied with BIMC's response to our inspector's concerns and we will continue to work with BIMC to ensure compliance with all water license requirements associated with this project.

On page 52 of the Mary River 2013 annual report BIMC has reported two terms and conditions that they "*will be unable to comply with in the foreseeable future* "(Section 5.6.3 and Table 5.6). These include T&C # 173 and # 68 from Project Certificate # 005. T&C # 173 involves the use of containment booms during ship-to-shore transfers of fuel and T&C # 68 involves the installation of lights and guy wire deterrents on communications towers.

The effectiveness of the environmental assessment process in Nunavut hinges on the realization of mitigation measures described and committed to during the NIRB Review process and the implementation of and compliance with T&Cs outlined in the Project Certificate. Where a proponent has concerns with a particular T&C, section 12.8.2 of the NLCA allows for a T&C to be reconsidered pursuant to the criteria outlined in sub-sections (a), (b), and (c). As you know, this section of the NLCA has been employed by BIMC recently and T&C #173, among others, has been amended following the review of the "Early Revenue Phase" proposal. As a result, the utilization of containment booms during the offloading of fuel is no longer considered necessary. AANDC encourages BIMC to work with regulators to find a way to implement T&C # 68. In the alternative, it has the option to apply to NIRB to have this T&C amended pursuant to section 12.8.2 of the NLCA.

In conclusion, AANDC very much appreciates the opportunity to review Baffinland Iron Mines Corporation's Mary River Project 2013 Annual Monitoring Report. Should you have any questions, please do not hesitate to contact me at 867-975-4549 or by email at james.neary@aandc-aadnc.gc.ca.

Sincerely,

[Original signed by]

James Neary
A/Manager of Environment
Aboriginal Affairs and Northern Development Canada

Appendix A: Terms and Conditions (T&C) carried over from the Project Certificate into the Water Licence

T&C	Description	Implemented in Water Licence
2	The Proponent shall provide the results of any new or revised assessments and studies done to validate and update climate change impact predictions for the Project and the effects of the Project on climate change in the Local Study Area and Regional Study Area as defined in The Proponent's Final Environmental Impact Statement.	No but if there are predicted impacts to freshwater, an Inspector may impose additional monitoring requirements (Part I, Item 26). Also, changes to the Monitoring Program can be requested and the NWB can modify the Monitoring Program without a public hearing (Part I, Item 28).
8	The Proponent shall demonstrate through monitoring of air quality at the mine site and at the Steensby Inlet Port site that SO2 and NO2 emissions remain within predicted levels and, where applicable, within limits established by all applicable guidelines and regulations. In cases where exceedances are manifested, the Proponent shall provide an explanation for the exceedance, a description of planned mitigation, and shall conduct additional monitoring to evaluate the effectiveness of mitigative measures.	No but in cases where an exceedance is manifested and additional monitoring of freshwater may be required, an Inspector may impose additional monitoring requirements (Part I, Item 26). Also, changes to the Monitoring Program can be requested and the NWB can modify the Monitoring Program without a public hearing (Part I, Item 28).
10	The Proponent shall update its Dust Management and Monitoring Plan to address and/or include the following additional items: a) Outline the specific plans for monitoring dust along the first few kilometres of the rail corridor leaving the Mary River mine site. b) Identify the specific adaptive management measures to be considered should monitoring indicate that dust deposition from trains transporting along the rail route is greater than initially predicted.	Potential but not yet a requirement.
11	The Proponent shall develop and implement an Incineration Management Plan that takes into consideration the recommendations provided in Environment Canada's Technical Document for Batch Waste Incineration (2010).	Partial. Part F (the Incineration Plan was approved under the Waste Management Plan and the WL requires testing/disposal of bottom ash and records of analysis results and volumes of ash).
13	The Proponent is encouraged to work with Fisheries and Oceans Canada at the regulatory phase and to take a precautionary approach when selecting the overpressure threshold to be applied to explosives use for the protection of fish and aquatic life.	Potential but not yet a requirement.
16	The Proponent shall ensure that the water related infrastructure or facilities that are designed and constructed, including the modification of culverts, diversion of watercourses, and diversion of runoff into watercourses along the railway, access roads,	Yes. Part D.

	the Milne Tote Road, and other areas of the Project site, are consistent with those proposed in the FEIS in terms of type, location, and scope and that the requirements of all relevant regulatory authorities are satisfied advance of constructing those facilities.	
17	The Proponent shall develop and implement effectives measures to ensure that effluent from project-related facilities and/or activities, including sewage treatment plants, ore stockpiles, and mine pit, satisfies all discharge criteria requirement established by the relevant regulatory agencies prior to being discharged into the receiving environment.	Yes. Parts F and I.
18	The Proponent shall carry out continued analyses over time to confirm and update, accordingly, the approximate fill time for the mine pit lake identified in the FEIS.	Yes. Part F, Item 3.
19	The Proponent shall ensure that it develops and implement adequate monitoring and maintenance procedures to ensure that the culverts and other conduits that may be prone to blockage do not significantly hinder or alter the natural flow of water from areas associated with the proposed mine. In addition, the Proponent shall monitor, document and report the withdrawal rates for water removed and utilized for all domestic and industrial purposes.	Yes. Parts B, D, E, and I.
20	The Proponent shall monitor the effects of explosives residue and related by-products from project-related blasting activities as well as develop and implement effective preventative and mitigation measures, including treatment, if necessary, to ensure that the effects associated with the manufacturing, storage, transportation and use of explosives do not negatively impact the Project and surrounding areas.	Yes. There is a requirement to submit a Blasting Management Plan 30 days prior to implementation (Part E, Item 24). The Licensee is also required to monitor runoff from borrow pits and rock quarry sites (Part I, Item 23) and to monitor for sediment and explosives residue release from construction areas (Part D, Item 18, g).
21	The Proponent shall ensure that the scope of the Aquatic Effects Monitoring Plan (AEMP) includes, at a minimum, monitoring of non-point sources of discharge, selection of appropriate reference sites, measures to ensure the collection of adequate baseline data and the mechanisms proposed to monitor and treat runoff, and sample sediments.	Yes. Part I.
22	The Proponent shall develop a detailed Sediment and Erosion Management Plan to prevent and/or mitigate sediment loading into surface water within the Project area.	There is no requirement for a plan but there is a requirement to implement sediment and control measures (Part D, Item 5).
23	The Proponent shall develop and implement a Groundwater Monitoring and Management Plan to monitor, prevent and mitigate the potential effects of the Project on groundwater within the Project area.	There is no requirement for a plan but there is a requirement to conduct opportunistic monitoring on any observed seepage (Part I, Item 14).
24	The Proponent shall monitor as required the	Yes. Parts E and F.

	relevant parameters of the effluent generated from Project activities and facilities and shall carryout treatment if necessary to ensure that discharge conditions are met at all times.	
25	The Proponent shall undertake the additional geotechnical investigations to identify sensitive landforms, modify engineering design for Project infrastructure and develop mitigation and monitoring measures to minimize the impacts of the Project's activities and infrastructure on sensitive landforms.	Yes. Part D, Item 19 (Part I, Item 12 for water infrastructure).
26	The Proponent shall develop and implement a comprehensive erosion management plan to prevent or minimize the effects of destabilization and erosion that may occur due to the Project's construction and operation.	There is no requirement for a plan but there are requirements throughout the licence to prevent or minimize erosion (Parts D, E, F)
28	The Proponent shall monitor the effects of the Project on the permafrost along the railway and all other Project affected areas and must implement effective preventative measures to ensure that the integrity of the permafrost is maintained.	There is a requirement to minimize disturbance to permafrost (as well as terrain and drainage) around the site, including the railway corridor (Part D, Item 11).
29	The Proponent shall provide to the respective regulatory authorities, for review and acceptance, for-construction engineering design and drawings, specifications and engineering analysis to support design in advance for constructing those facilities. Once project facilities are constructed, the Proponent shall provide copies of the as-built drawings and design to the appropriate regulatory authorities	Yes. Part D, Item 2 and Part E, Item 23.
30	The Proponent shall develop site-specific quarry operation and management plans in advance of the development of any potential quarry site or borrow pit.	Yes. Part D, Item 7.
31	The Proponent shall ensure that Project activities are planned and conducted in such a way as to minimize the Project footprint.	Yes. The water licence generally ensures that the footprint is minimized.
33	The Proponent shall include relevant Monitoring and Management Plans within its Environmental Management System, Terrestrial Environment Management and Monitoring Plan (TEMMP).	Yes. Part J, Item 11 requires the implementation of progressive reclamation including re-vegetation and update of all management plans.
34	The Proponent shall conduct soil sampling to determine metal levels of soils in areas with berry-producing plants near any of the potential development areas, prior to commencing operations.	Potential. No requirement to conduct soil sampling for metal levels.
39	The Proponent shall develop a progressive revegetation program for disturbed areas that are no longer required for operations, such program to incorporate measures for the use of test plots, reseeding and replanting of native plants as necessary. It is further recommended that this program be directly associated with the management plans for erosion control	There is a requirement to implement progressive reclamation including revegetation (Part J, Item 10) but there is no requirement to use test plots for reseeding and replanting.

	established for the Project.	
40	The Proponent shall include revegetation strategies in its Site Reclamation Plan that support progressive reclamation and that promote natural revegetation and recovery of disturbed areas compatible with the surrounding natural environment	Yes. Part J, Items 10 and 11.
41	Unless otherwise approved by regulatory authorities, the Proponent shall maintain a minimum 100-metre naturally-vegetated buffer between the high-water mark of any fish-bearing water bodies and any permanent quarries with potential for acid rock drainage or metal leaching	Yes. Part D requires the Licensee to maintain a minimum of 31 m buffer zone between quarries and water bodies (Item 14) and to use fill material from a source that has been demonstrated to not produce ARD or ML properties (Item 13). The two T&Cs combined prohibit the Licensee to using any quarry with potential for ARD or ML.
42	The Proponent shall maintain minimum a 30-metre naturally-vegetated buffer between the mining operation and adjacent water bodies	Yes. Parts, D, E, F, and H.
43	Prior to the start of construction, the Proponent must submit a Site Drainage and Silt Control Plan to the appropriate regulatory authorities for approval.	Yes. Part D, Item 2.
44	The Proponent shall meet or exceed the guidelines set by Fisheries and Oceans Canada for blasting thresholds and implement practical and effective measures to ensure that residue and by-products of blasting do not negatively affect fish and fish habitat.	Partial. The Licensee is required to submit a Blasting Management Plan (Part E, Item 24) and a Construction Monitoring Report (Part D, Item 18) to ensure such measures are implemented.
46	The Proponent shall ensure that runoff from fuel storage and maintenance facility areas, sewage and wastewater other facilities responsible for generating liquid effluent and runoff meet discharge requirements.	Yes. Part F.
47	The Proponent shall ensure that all Project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams and rivers.	Yes. Part E, Item 23 requires that stream culverts and bridges are designed using DFO's guidelines to facilitate the passage of fish.
48	The Proponent shall engage with Fisheries and Oceans Canada and Qikiqtani Inuit Association in exploring possible Project specific thresholds for blasting that would exceed the requirements of Fisheries and Oceans Canada's Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (D.G. Wright and G.E. Hopky, 1998).	No but Part E, Item 24 requires the Licensee to submit Blasting Management Plans.
64	The Proponent shall ensure that its Environment Protection Plan incorporates waste management provisions to prevent carnivores from being attracted to the Project site(s). Consideration must be given to the following measures: a. installation of an incinerator beside the kitchen that will help to keep the food waste management process simple and will minimize	Partial. Part F, Item 7 authorizes the incineration of all acceptable food waste.

	the opportunity for human error (i.e. storage of garbage outside, hauling in a truck (odours remain in truck), hauling some distance to a landfill site, incomplete combustion at landfill, fencing of landfill, etc.) b. installation of solid carnivore-proof skirting on all kitchen and accommodation buildings (i.e., heavy-duty steel mesh that would drop down from the edge of the buildings/trailers and buried about a half meter into the ground to prevent animals from digging under the skirting).	
92	The Proponent shall ensure that it maintains the necessary equipment and trained personnel to respond to all sizes of potential spills associated with the Project in a self sufficient manner.	Yes. Part H, Item 5 requires the Licensee to maintain and service any equipment and to implement special procedures to manage waste and contain spills (includes training).
99	The Proponent, working with the Marine Environment Working Group, shall consider and identify priorities for conducting the following supplemental baseline assessments: e. Establish an all-season, inter-annual baseline in Steensby Inlet that enables effective monitoring of physical and chemical effects of ballast water releases, sewage outfall, and bottom scour by ship props, particularly downslope and downstream from the docks. This shall include the selection and identification of physical, chemical, and biological community/indicator components. The biological indicators shall include both pelagic and benthic species but with emphasis on relatively sedentary benthic species (e.g., sculpins). f. The collection of additional baseline data in Steensby Inlet on walrus, beluga, bearded seal anadromous Arctic Char abundance, distribution ecology and habitat use. g. Enhance baseline data on marine wildlife (fish, invertebrates, birds, mammals, etc.) and to provide more details on species abundance and distribution found in the Project area. This shall include, but not be limited to the following: i. Aerial surveys for basking ringed seals throughout the landfast ice of Steensby Inlet and at appropriate control location; ii. Shore-based observations of pre-Project narwhal behavior in Milne Inlet. Enhance the baseline for affected freshwater systems, which includes control sites to detect Project-related changes before they cause significant harm.	Baseline for freshwater systems will be included in the Aquatic Effects Monitoring Program (AEMP) Framework. A plan is required 60 days prior to commencing the Operations Phase (Part I, Item 2).
117	The Proponent shall ensure that that blasting in,	No.

	and near, marine water shall only occur during periods of open water. Blasting in, and near, fresh water shall to the greatest degree possible, only occur in open water. If blasting is required during ice-covered periods, it must meet requirements established by Fisheries and Oceans Canada.	
165	The Proponent is strongly encouraged to provide buildings along the rail line and Milne Inlet Tote Road for emergency shelter purposes, and shall make these available for all employees and any land users travelling through the Project area. In the event that these buildings cannot, for safety or other reasons be open to the public, the Proponent shall set up emergency shelters (e.g. seacans outfitted for survival purposes) every 1 kilometre along the rail line and Milne Inlet Tote Road. These shelters must be placed along Tote Road and rail routing prior to operation of either piece of infrastructure, and must be maintained for the duration of project activities, including the closure phase.	There is no requirement to have shelters along the tote road or railway but it is expected given that Part F, Item 14 requires the removal of waste generated from shelters along the tote road and along the railway corridor.