



WATER LICENCE INSPECTION FORM

☒ Original  
☐ Follow-Up Report

Licensee	Licensee Representative
Baffinland Iron Mines Corporation (BIMC)	Jim MILLARD/Allan KNIGHT/Trevor MYERS
Licence No. / Expiry	Representative's Title
2AM-MRY1325	Environmental Manager
Land / Other Authorizations	Land / Other Authorizations
8BC-MRY1416, 2BE-MRY1421	N2014X0012, N2014Q0016, N2014C0013
Date of Inspection	Inspector
March 9-12, 2015	Justin HACK
Activities Inspected	
<input checked="" type="checkbox"/> Camp <input checked="" type="checkbox"/> Roads/Hauling	<input type="checkbox"/> Drilling <input type="checkbox"/> Other: <input checked="" type="checkbox"/> Mining <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Other: <input type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage

Conditions:		A - Acceptable	C - Concern	U - Unacceptable	NA – Not Applicable	NI – Not Inspected		
Water Use	Condition	Comment	Site Conditions	Condition	Comment	Haz/Mat Management	Condition	Comment
Intake/Screen	NI		Water Management Structures	A		Storage	A	
Flow Measure. Device	NI		Culverts / Bridges	A		Spills	A	
Source:	A		Drainage	C		Spill Plan	A	
Water Use:	A		Erosion / Sediment	A				
Recirculation ( y /n)	NA		Mitigation Measures	C		Administrative		
			Reclamation Activities	A		Records	A	
			Materials Storage	C		Reports	A	
Waste Disposal			Signage	A		Plans	A	
Waste Water	A					Notifications	A	
Solid Waste	A		Monitoring			Other		
Hazardous Waste	A		Sample Collection / Analysis	NA				
*The number in the comments field will correspond with specific comments provided below.								
Samples taken by Inspector:			Location(s): Sewage and Waste Water Treatment Plant at Mine Site and Milne Inlet.					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Sample locations: MS-01, and MP-01					

SECTION 1	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
Inspectors Statement			
On March 9-12, a water licence inspection was conducted at the Mary River Project, Qikiqtani Region, Nunavut. Sites inspected included the Mary River Mine Site, the Tote Road, and the Milne Port area.			
Background			
At the time of inspection, the Licensee was undertaking activities related to the construction and operation of an open-pit iron ore mine at the Milne Port (Milne Inlet), Mine site (Mary River), and Tote Road. Given that different licence conditions apply to the project depending on what Phase the project is in, and that the project is in both construction and operation phases, Aboriginal Affairs and Northern Development Canada’s (AANDC) Water Resource Officer’s are working with the Licensee to ensure all relevant conditions are being met.			
Major construction activities on site included the continued development of the Ore Stockpile conveyor belt system, the construction of the Milne Inlet Ore Dock, the re-grading and/or upgrades of the Tote Road at KM38.			
Major activities occurring on site under the scope of the operations phase include the mining, crushing, screening and transportation of ore from Deposit 1 to the Ore Stockpile area at Milne Inlet.			
Conditions on Site			
All surface water on site was frozen.			
SECTION 2	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
Mary River Site			
Observations:			
1. Open Burn Facility			
• No Concerns. The area was free of ash, and waste was contained, such that risk of waste to water was minimized.			
2. Landfill			
• No concerns noted.			
3. Sewage and Waste Water Treatment Facility			





- Samples were taken and results will be provided to BIMC when available.
- 4. Contractor Lay-Down Area
  - Due to the frozen conditions on site, and the difficulty delineating the exact location of the watercourse, BIMC is reminded to be mindful of equipment storage areas. These areas will be targeted at the next inspection.

#### **Milne Port Site**

##### *Observations:*

1. Open Burn Facility
  - No concerns. The area was free of ash, and waste was contained, such that risk of waste to water was minimized.
2. Hazardous Waste Berm
  - No concerns with the hazardous waste berms on site.
3. Landfarm and Contaminated Snow Facility
  - Ensure that discarded geotechnical liner is disposed of in the appropriate manner.
4. Sewage and Waste Water Treatment Facility
  - Samples were taken and the results will be provided to BIMC when available.
5. Treated effluent Discharge Location (MP-01)
  - No concerns. Liner was being used to diffuse energy to prevent sedimentation and erosion at discharge location.
6. Ore Stockpile Area
  - No concerns.
7. Milne Dock
  - No concerns.

#### ***Sites of Concern Managed by a Compliance Action Plan***

1. Drilling/Road Salt (Calcium Chloride)
  - Since the August 21-25 2014 Inspection, BIMC has submitted a plan to address concerns AANDC Water Resource Officers had with the storage of Calcium Chloride near the quarry site at Milne Inlet.
  - As per the plan, BIMC has segregated salt bags and debris that have the potential to become windblown to prevent them from becoming displaced around site. Further work is planned for the 2015 season and AANDC will monitor deliverables as they become due.
2. Surface drainage (yard swale) to Camp Lake near MS-MRY-1.
  - A final design plan was submitted by BIMC, on October 30 2014, to address some concerns identified by AANDC Water Inspector's pertaining to the sediment loading of surface drainage into Camp Lake near MS-MRY-1a.
  - Implementation of the new plan will be monitored by AANDC Water Resource Officer's as they become due.
  - If the plan changes, BIMC will provide justification for modifications to existing plan.
3. Waste Ash in barrels near incinerator
  - On February 2, 2015, BIMC requested an extension to the schedules related to waste ash from the incinerators plan, specifically to extend the disposal of the Category 1 Ash until July 31, 2015 and to extend the due date of the Soil Monitoring Report and Final Summary Report until September 30, 2015.
  - AANDC has approved this request on February 3, 2015 considering BIMC's efforts to minimize risk by containing the ash, their plan to characterize contamination by conducting a soil sampling program of the impacted area, and their positive compliance history.

#### ***Sites of Concern noted during Inspection:***

1. Construction Activities
  - No active construction was occurring at the Mine Site at the time of inspection. However, construction has occurred through the winter and sedimentation and erosion is likely due to activity from these areas. Sites of major concern are the Road to Deposit 1, and the Tote Road.
  - Following the inspection, Jim Millard outlined that there will be rip-rap and other control measures on-site to address any issues of sedimentation during freshet.
2. Debris or Sediment pushed into watercourse at MS-MRY-1.
  - It was observed that snow containing gravel and dirt was pushed into the Camp Lake drainage ditch near MS-MRY-1.
  - After the inspection, Jim Millard proposed to address this concern by conducting the




following:

- i. Baffinland Environment division will immediately communicate with Site Services to address their snow removal practices.
- ii. The snow will be removed from the drainage ditch by **May 1, 2015**. Photo documentation will be provided.
- iii. There was discussion an on-site Snow Removal Management Plan.

3. Spill into Water Course at KM38 of Tote Road

- A spill (~1L) occurred under equipment that was not in secondary containment on a frozen stream during a culvert installation at KM38.
- The proper protocol was not in place to prevent that spill from leaking directly on the stream bed.
- In a follow-up to this spill, BIMC must provide why this spill occurred and measures to be taken to prevent this error from happening again.

Inspector's Name	
Justin Hack	
Signature	
	
Date	
March 17, 2015	

CC: Erik Allain, Manager of Field Operations, AANDC  
Phyllis Beaulieu, Manager of Licensing, Nunavut Water Board