

Phyllis Beaulieu
Manager of Licencing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU
X0B 1J0

September 13th, 2013

Re: Update to Management Plans (NWB Licence No. 2AM-MRY1325)

Dear Phyllis,

In accordance with Part B, Item 15 of the recently issued NWB Type A Licence No. 2AM-MRY1325, attached are the updated Management Plans (by post: one hard copy and one electronic on a USB stick) and concordance tables (attached) for review. These plans have been updated to reflect the Construction work planned and currently being executed in 2013 as well as taking into account, where appropriate, the new Type A Licence.

The Management Plans and concordance tables attached to this letter are as follows:

- Surface Water and Aquatic Ecosystems Management Plan, dated September 2013;
- Fresh Water Supply, Sewage and Wastewater Management Plan, dated September 2013;
- Emergency Response & Spill Contingency Plan, dated March 28, 2013;
- Waste Management Plan for Construction, Operation and Closure, dated September 2013; and
- Hazardous Materials and Hazardous Waste Management Plan, dated September 2013;

Surface Water and Aquatic Ecosystems Management Plan (SWAEMP)

The SWAEMP has been updated to reflect conditions in the Type A licence (2AM-MRY1325). This plan should also be read in conjunction with the Aquatic Effects Monitoring Framework (February 2013) that details the monitoring locations and frequency in more detail than the SWAEMP. Further consultation meetings are planned and an update to the Aquatic Effects Monitoring Framework is due for 1 December, 2013. The SWAEMP outlines the processes and procedures to document the quality and quantity of water that will interact with Project components over the life of the project. It includes management practices to limit the potential for adverse impacts to receiving waters, aquatic ecosystems, fish and fish habitat.

Fresh Water Supply, Sewage and Wastewater Management Plan (FWSSWP)

The FWSSWP provides the basis for treatment of water (raw water, sewage and oily water) and the discharge of effluent to the receiving environment. The FWSSWP has been updated to support the 2013 Work Plan which spans the applicability between the existing Type B Water Licence (2BB-MRY1114), new Type B Water Licence (8BC-MRY1314) as well as the conditions in the Type A licence (2AM-MRY1325). Relevant effluent discharge criteria have been revised in accordance with the Type A Water Licence. Note that the Steensby port and rail aspects of the plan have been moved into an appendix as the construction of these facilities has been deferred for a few years. Prior to construction of these facilities, NWB will receive an update to the Management Plan as per the Annual report update requirements (Part B item 18).

Emergency Response and Spill Contingency Plan

This plan was previously updated to support the new Type B Water Licence as well as the Type A Water Licence. As the project evolves, this plan will undergo updates/revisions annually to reflect the evolving complexities and environmental risks associated with the Construction phase, Operation phase, and ultimately Closure phase of the Mary River Project. The current revision is still relevant and was updated recently to include relevant potential spill scenarios, emergency response management, and roles and responsibilities applicable to 2013 Work Plan phase of the Project. The next expected Revision will be completed in 2014 and submitted as part of the Annual Report (pursuant to Part B Item 18). This plan will need to be reviewed in conjunction with the updated Milne Port Oil Pollution Emergency Response Plan (June 2013) and the Explosives Management Plan. Included in this letter, Attachment 3.3 is the 2013 Milne Port OPEP update. While the scope of the OPEP is outside of NWB's jurisdiction, we have included it as it complements the Emergency Response and Spill Contingency Plan.

Waste Management Plan and the Hazardous Materials and Hazardous Waste Management Plan

These two plans have been updated to reflect conditions in the Type A licence (2AM-MRY1325) as well as the 2013 Work Plan.

Waste Rock Management Plan

An update to the Waste Rock Management Plan is also a requirement in the Type A licence (2AM-MRY1325). Although test work associated with the waste rock characterization plan is ongoing, an interim formal report is not planned until early 2014. Results from this work inform the waste rock runoff water quality and pit water quality modelling and so updates to both of these models will not be available until 2014.

A recent change in the mining plan means that mining and storage of waste rock will occur at a slower rate than originally planned. The waste rock dump and associated sedimentation ponds will be constructed in a phased approach. Mining for ore (the Operations Phase) is not planned to commence until September 2014. Therefore, Baffinland is requesting that the Board provide an extension to the submission of the Waste Rock Management Plan to the 31 March 2014, when any other updates are provided as part of the Annual Report (Part B Item 18).

Please do not hesitate to contact the undersigned should you have any questions, comments, or require any clarification.

Sincerely,



Oliver Curran
Director, Sustainable Development

Cc: David Hohnstein (NWB)
Sean Joseph (NWB)
Stephen Williamson Bathory (QIA)

Karen Costello (AANDC)
Andrew Keim (AANDC)

Attachment 1

- 1.1. Surface Water and Aquatic Ecosystems Management Plan, dated September 2013
- 1.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 2

- 2.1. Fresh Water Supply, Sewage and Wastewater Management Plan, dated September 2013;
- 2.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 3

- 3.1. Emergency Response & Spill Contingency Plan, dated March 28, 2013
- 3.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)
- 3.3. Milne Port OPEP, 2013
- 3.4. Transport Canada acknowledgement of OPEP letter (2013)

Attachment 4

- 4.1. Waste Management Plan for Construction, Operation and Closure, dated September 2013;
- 4.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 5

- 5.1. Hazardous Materials and Hazardous Waste Management Plan, dated September, 2013
- 5.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 1

- 1.1. Surface Water and Aquatic Ecosystems Management Plan, dated September 2013
(Presented in USB Stick)
- 1.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 1.2: Surface Water and Aquatic Ecosystems Management Plan – Concordance Table

The Concordance Table below shows a list of commitments identified in the Type A Water Licence (2AM-MRY1325), and the locations of the Corresponding Answers within the Surface Water and Aquatic Ecosystems Management Plan.

Concordance Table with Type A Water Licence (2AM-MRY1325)

Part	Number	Condition	Section
B	18	The Licensee shall review the Plans or Manuals referred to in this Licence as required by changes in operation and/or technology and modify the Plans or Manuals accordingly. Revisions to the Plans or Manuals are to be submitted in the form of an Addendum to be included with the Annual Report required by Part B, Item 4, complete with a revisions list detailing where significant content changes are made.	Update in the next revision of the Annual Report
D	2	The Licensee shall submit to the Board for review and acceptance, at least sixty (60) days prior to construction or in a timeframe otherwise approved by the Board in writing, final design and for-construction drawings, stamped and signed by a Professional Engineer, for all infrastructure and/or facilities designed to contain, withhold, divert or retain Water and/or Waste including the following: <ul style="list-style-type: none"> - Bulk Fuel Storage Facilities - Explosives Facilities - Incineration Systems - Landfarm Facility - Oily Water and/or Wastewater treatment Facilities - Sewage Treatment Facilities - Site Drainage and Surface Water Management Systems - Waste Management Facilities (including temporary and permanent structure for hazardous and non-hazardous waste) - Water Supply Facilities - Water crossings including, pipelines, bridges, and roads - Water course training, flood control, diversions 	6 (60 days prior to construction If more immediate timeline required, will issue letter to NWB with early drawings)
D	5	The Licensee shall implement sediment and erosion control measures, as required, prior to and during the Construction and Operation Phases of the Mary River Project to prevent and/or minimize sediment loading Water.	4, 4.1, 4.2, 4.3, 4.4 and 6
D	10	The licensee shall locate equipment storage areas on gravel, sand or other durable land at a distance of at least thirty-one (31) meters above the ordinary High Water Mark of any Water body in order to minimize impacts on surface drainage and Water quality.	4, 6.3.4

Part	Number	Condition	Section												
D	16	<p>All surface runoff during the Construction Phase of the Project, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following effluent quality limits:</p> <p>Table 1: Effluent quality limits for surface runoff during construction</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration of Any Grab Sample (mg/L)</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>Total Suspended Solids</td><td>50</td><td>100</td></tr><tr><td>Oil and Grease</td><td>No Visible Sheen</td><td>No Visible Sheen</td></tr><tr><td>pH</td><td>Between 6.0 and 9.5</td><td>Between 6.0 and 9.5</td></tr></table>	Parameter	Maximum Average Concentration of Any Grab Sample (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)	Total Suspended Solids	50	100	Oil and Grease	No Visible Sheen	No Visible Sheen	pH	Between 6.0 and 9.5	Between 6.0 and 9.5	9
Parameter	Maximum Average Concentration of Any Grab Sample (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)													
Total Suspended Solids	50	100													
Oil and Grease	No Visible Sheen	No Visible Sheen													
pH	Between 6.0 and 9.5	Between 6.0 and 9.5													
D	21	The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such that impacts on surface drainage are minimized.	4.1												
D	22	The Licensee shall undertake necessary corrective measures to mitigate impacts on surface drainage resulting from the Licensee's activities.	4, 6.1.3												
D	26	The Licensee shall prevent the deposition of debris or sediment from entering into or onto any water body, with respect to the construction of access roads, site laydown pads and areas or other earthworks. These materials shall be disposed of at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a manner that they do not enter the water.	4.1												
E	12	The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.	4.1												
E	13	The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.	4, 4.1, 4.2, 4.3, 4.4												
E	19	The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.	4, 7.1.1, 7.4.2 and 7.5.1												
E	20	The Licensee shall limit any in-stream activity, as much as possible, to low water periods. In-stream activity is prohibited during fish migration.	4.1, 4.4 and Table 4.3												
E	21	The Licensee shall locate stream crossings to minimize approach grades. Approaches shall be stabilized during construction and upon completion of the project, to control runoff, erosion and subsequent siltation to any water body.	4.3, Table 4.2 and 6.4.7												
F	13	The Licensee shall, unless otherwise approved by the Board in writing, discharge effluent at a distance of least thirty-one (31) metres above the Ordinary High Water Mark of any Water body, where direct flow into the Water body is not possible, such that surface erosion is minimized and no additional impacts are created.	4												

Part	Number	Condition	Section
J	8	The Licensee shall, unless otherwise identified within the approved Plan under Part J,item 1, remove all Culverts and open the natural drainage channel. In carrying out this activity, measures shall be implemented to minimize erosion and sedimentation.	4 for sedimentation and erosion control measures

Attachment 2

- 2.1. Fresh Water Supply, Sewage and Wastewater Management Plan, dated September 2013 (Presented in USB Stick);
- 2.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 2.2: Fresh Water Supply, Sewage and Wastewater Management Plan – Concordance Table

The Concordance Table below shows a list of commitments identified in the Type A Water Licence (2AM-MRY1325), and the locations of the Corresponding Answers within the Fresh Water Supply, Sewage and Wastewater Management Plan.

Concordance Table with Type A Water Licence (2AM-MRY1325)

Part	Number	Condition	Section
D	2	<p>The Licensee shall submit to the Board for review and acceptance, at least sixty (60) days prior to construction or in a timeframe otherwise approved by the Board in writing, final design and for-construction drawings, stamped and signed by a Professional Engineer, for all infrastructure and/or facilities designed to contain, withhold, divert or retain Water and/or Waste including the following:</p> <ul style="list-style-type: none"> - Bulk Fuel Storage Facilities - Explosives Facilities - Incineration Systems - Landfarm Facility - Oily Water and/or Wastewater treatment Facilities - Sewage Treatment Facilities - Site Drainage and Surface Water Management Systems - Waste Management Facilities (including temporary and permanent structure for hazardous and non-hazardous waste) - Water Supply Facilities - Water crossings including, pipelines, bridges, and roads - Water course training, flood control, diversions 	<p>60 days prior to construction</p> <p>If more immediate timeline required, will issue letter to NWB with early drawings</p>
D	3	<p>The Licensee shall submit to the Board for approval, at least sixty (60) days prior to completion of construction, an addendum to the Fresh Water Supply, Sewage and Wastewater Management Plan that addresses operational aspects of the Sewage Treatment Facilities and Wastewater Treatment Facilities, prepared in accordance with the “Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories, 1996”, where applicable. This Manual shall include contingency measures in the event of facility malfunction, disposal of sludge and any other operational and maintenance procedures for those facilities.</p>	Appendix D

Part	Number	Condition	Section																												
E	3	<p>The Licensee shall obtain all fresh Water for domestic camp use and industrial purposes, during the Construction Phase of the Project, in the amount and from the sources as listed in following table, or from sources otherwise approved by the Board in writing. In addition to the source-specific limits prescribed in the table, the Licensee shall not exceed one thousand five hundred and eighty-nine (1,589) cubic metres per day or five hundred and eighty thousand (580,000) cubic metres per year total water use from all sources during the Construction Phase of the Project.</p> <table border="1"> <thead> <tr> <th>Site</th><th>Source</th><th>Volume</th><th>Combined Volume</th></tr> </thead> <tbody> <tr> <td rowspan="2">Milne Port (Milne Inlet)</td><td>Phillips Creek (summer)</td><td rowspan="2">68.5 m³/day</td><td rowspan="2">25,000 m³/year</td></tr> <tr> <td>Km 32 Lake (winter)</td></tr> <tr> <td>Mine Site (Mary River)</td><td>Camp Lake</td><td>³ 657.5 m /day</td><td>240,000 m³/year</td></tr> <tr> <td rowspan="2">Steensby Port (Steensby Inlet)</td><td>ST 347 Km Lake</td><td>³ 435.8 m /day</td><td rowspan="2">³ 155,400 m /year</td></tr> <tr> <td>3 km Lake</td><td></td></tr> <tr> <td>Ravn River</td><td>Camp Lake</td><td>145.2 m³/day</td><td></td></tr> <tr> <td rowspan="2">Mid-Rail</td><td>Nivek Lake (summer)</td><td rowspan="2">79.5 m³/day</td><td rowspan="2"></td></tr> <tr> <td>Ravn Camp Lake (winter)</td></tr> </tbody> </table>	Site	Source	Volume	Combined Volume	Milne Port (Milne Inlet)	Phillips Creek (summer)	68.5 m ³ /day	25,000 m ³ /year	Km 32 Lake (winter)	Mine Site (Mary River)	Camp Lake	³ 657.5 m /day	240,000 m ³ /year	Steensby Port (Steensby Inlet)	ST 347 Km Lake	³ 435.8 m /day	³ 155,400 m /year	3 km Lake		Ravn River	Camp Lake	145.2 m ³ /day		Mid-Rail	Nivek Lake (summer)	79.5 m ³ /day		Ravn Camp Lake (winter)	Table 4-1
Site	Source	Volume	Combined Volume																												
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E	5	The Licensee may recycle water and use reclaimed water from the various Treatment Facilities, surface water management ponds and embankment dams and approved discharge locations under the licence if such waters meet appropriate discharge criteria for those facilities.	5.2																												
E	6	The Licensee shall equip all Water intake hoses with screens of an appropriate mesh size, consistent with the requirements of Fisheries and Ocean Canada's (DFO) Freshwater Intake End-of-Pipe Fish Screen Guidelines (1995), to prevent the entrainment of fish and shall withdraw Water at a rate such that fish do not become impinged on the screen.	4.1.1.2																												
E	8	Streams cannot be used as a water source unless authorized and approved by the Board in writing.	4.2																												
E	10	The Licensee shall update or revise annually following the commencement of the Operations Phase, the Project Blockflow Diagram Water Supply Balance information for the various Project sites, provided with the Application and submit for review of the Board. The submission shall be included with the Annual Report under Part B, Item 4.	The Plan is updated to include the planned construction numbers as well as the 2013 work plan. Updates will be provided as required to include the Operations																												

Part	Number	Condition	Section																				
			Phase																				
E	12	The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.	4.2																				
F	10	The Licensee shall treat oily water and wastewater generated by the Project at the Oily Water/Wastewater Treatment Facilities allowed under the scope of the Licence.	6.3																				
F	13	The Licensee shall, unless otherwise approved by the Board in writing, discharge effluent at a distance of least thirty-one (31) metres above the Ordinary High Water Mark of any Water body, where direct flow into the Water body is not possible, such that surface erosion is minimized and no additional impacts are created.																					
F	15	The Licensee shall direct all Sewage generated from the relevant Project sites to the Sewage Treatment Facilities or as otherwise approved by the Board in writing.	5.2																				
F	16	The Licensee shall treat all Sewage waste generated at the Ravn River and Mid-Rail camps and Sewage generated at the Cockburn North and Cockburn South camps at either the Mine Site Sewage Treatment Facility or the Steensby Port Sewage Treatment Facility, unless otherwise approved by the Board in writing.	Appendix E																				
F	18	<div>All discharge from the Sewage Treatment Facilities including the Polishing Waste Stabilization Ponds directly into fresh Water bodies at Monitoring Stations MP-01, MP-01a, MP-MRY-04, MP-MRY-04a, MS-01, MS-01a, MS-MRY-04, MS-MRY-04a, must not exceed the following Effluent quality limits</div> <table><tr><th>Parameter</th><th>Maximum Concentration of Any Grab Sample</th></tr><tr><td>BOD₅</td><td>30 mg/L</td></tr><tr><td>Total Suspended Solids</td><td>35</td></tr><tr><td>Faecal Coliform</td><td>1000 CFU/100 mL</td></tr><tr><td>Oil and Grease</td><td>No visible sheen</td></tr><tr><td>pH</td><td>Between 6.0 and 9.5</td></tr><tr><td>Ammonia (NH₃-N)</td><td>4.0 mg/L</td></tr><tr><td>Total Phosphorous (MS-01)</td><td>4.0 mg/L</td></tr><tr><td>Total Phosphorous (MS-01a)</td><td>1.0 mg/L</td></tr><tr><td>Toxicity</td><td>Not acutely toxic</td></tr></table>	Parameter	Maximum Concentration of Any Grab Sample	BOD ₅	30 mg/L	Total Suspended Solids	35	Faecal Coliform	1000 CFU/100 mL	Oil and Grease	No visible sheen	pH	Between 6.0 and 9.5	Ammonia (NH ₃ -N)	4.0 mg/L	Total Phosphorous (MS-01)	4.0 mg/L	Total Phosphorous (MS-01a)	1.0 mg/L	Toxicity	Not acutely toxic	Table 5.2
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Faecal Coliform	1000 CFU/100 mL																						
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Total Phosphorous (MS-01a)	1.0 mg/L																						
Toxicity	Not acutely toxic																						

Part	Number	Condition	Section																												
F	19	<p>All discharge from the Sewage Treatment Facilities including Polishing Waste Stabilization Ponds at Monitoring Stations SP-01, SP-01a directly into the ocean or to ditches flowing into the ocean shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>BOD₅</td><td>100 mg/L</td></tr><tr><td>Total Suspended Solids</td><td>120 mg/L</td></tr><tr><td>Faecal Coliform</td><td>10,000 CFU/100 mL</td></tr><tr><td>Oil and Grease</td><td>No visible sheen</td></tr><tr><td>pH</td><td>Between 6.0 and 9.5</td></tr><tr><td>Toxicity</td><td>Not acutely toxic</td></tr></table>	Parameter	Maximum Concentration of Any Grab Sample (mg/L)	BOD ₅	100 mg/L	Total Suspended Solids	120 mg/L	Faecal Coliform	10,000 CFU/100 mL	Oil and Grease	No visible sheen	pH	Between 6.0 and 9.5	Toxicity	Not acutely toxic	Table 5-2														
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Oil and Grease	No visible sheen																														
pH	Between 6.0 and 9.5																														
Toxicity	Not acutely toxic																														
F	20	<p>Sludge generated from the Sewage Treatment Facilities or any other facilities shall be confirmed to be non-hazardous and the results provided to the Board for review prior to disposal at any Landfill Facility or as otherwise approved by the Board in writing.</p>	5.2																												
F	21	<p>All discharge from the Oily Water/Wastewater Treatment Facilities at Monitoring Stations MP-02, MS-02, SP-02 must not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th></tr><tr><td>pH range</td><td>6 – 9.5</td></tr><tr><td>TSS</td><td>35</td></tr><tr><td>Ammonia</td><td>4</td></tr><tr><td>Phosphorous</td><td>4</td></tr><tr><td>Benzene</td><td>0.370</td></tr><tr><td>Ethylbenzene</td><td>0.090</td></tr><tr><td>Toluene</td><td>0.002</td></tr><tr><td>Oil and Grease</td><td>15 and no visible sheen</td></tr><tr><td>Arsenic</td><td>0.50</td></tr><tr><td>Copper</td><td>0.30</td></tr><tr><td>Lead</td><td>0.20</td></tr><tr><td>Nickel</td><td>0.50</td></tr><tr><td>Zinc</td><td>0.50</td></tr></table>	Parameter	Maximum Average Concentration (mg/L)	pH range	6 – 9.5	TSS	35	Ammonia	4	Phosphorous	4	Benzene	0.370	Ethylbenzene	0.090	Toluene	0.002	Oil and Grease	15 and no visible sheen	Arsenic	0.50	Copper	0.30	Lead	0.20	Nickel	0.50	Zinc	0.50	Table 6-1
Parameter	Maximum Average Concentration (mg/L)																														
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Part	Number	Condition	Section																		
F	22	<p>All discharge from the Landfill Facilities at Monitoring Stations MS-MRY-13a, MSMRY-13b and SP-08 must not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th></tr><tr><td>pH</td><td>6.0-9.5</td></tr><tr><td>Total As</td><td>0.5</td></tr><tr><td>Total Cu</td><td>0.3</td></tr><tr><td>Total Pb</td><td>0.2</td></tr><tr><td>Total Ni</td><td>0.5</td></tr><tr><td>Total Zn</td><td>0.5</td></tr><tr><td>Total Suspended Solids</td><td>15</td></tr><tr><td>Oil and Grease</td><td>No</td></tr></table>	Parameter	Maximum Average Concentration (mg/L)	pH	6.0-9.5	Total As	0.5	Total Cu	0.3	Total Pb	0.2	Total Ni	0.5	Total Zn	0.5	Total Suspended Solids	15	Oil and Grease	No	Table 5-4
Parameter	Maximum Average Concentration (mg/L)																				
pH	6.0-9.5																				
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Total Zn	0.5																				
Total Suspended Solids	15																				
Oil and Grease	No																				
F	23	<p>All discharge from the Bulk Fuel Storage Facilities at Monitoring Stations MP-03, MPMRY-7, MS-03, MS-04, MS-MRY-6, SP-04 and SP-05 must not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Concentration of Any Grab Sample (ug/L)</th></tr><tr><td>Benzene</td><td>370</td></tr><tr><td>Toluene</td><td>2</td></tr><tr><td>Ethylbenzene</td><td>90</td></tr><tr><td>Lead</td><td>1</td></tr><tr><td>Oil and Grease</td><td>15,000 and no visible sheen</td></tr></table>	Parameter	Maximum Concentration of Any Grab Sample (ug/L)	Benzene	370	Toluene	2	Ethylbenzene	90	Lead	1	Oil and Grease	15,000 and no visible sheen	Table 5-5						
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F	24	<p>All discharge from the Landfarm Facilities at Monitoring Stations MP-04, MS-05 and SP-06 must not exceed the following Effluent quality limits:</p> <table><tr><th>Parameters</th><th>Maximum Average Concentration (mg/L)</th></tr><tr><td>pH</td><td>6.0-9.0</td></tr><tr><td>Total Suspended Solids</td><td>15</td></tr><tr><td>Oil and Grease</td><td>15 and no sheen</td></tr><tr><td>Total Lead</td><td>0.001</td></tr><tr><td>Benzene</td><td>0.370</td></tr><tr><td>Toluene</td><td>0.002</td></tr><tr><td>Ethylebenzene</td><td>0.090</td></tr></table>	Parameters	Maximum Average Concentration (mg/L)	pH	6.0-9.0	Total Suspended Solids	15	Oil and Grease	15 and no sheen	Total Lead	0.001	Benzene	0.370	Toluene	0.002	Ethylebenzene	0.090	Table 5-6		
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Ethylebenzene	0.090																				

Part	Number	Condition	Section																				
F	25	<p>All discharge from the Bulk Sample Open Pit, Bulk Sample Weathered Ore Stockpile, Bulk Sample Processing Stockpile Area and Bulk Sample Stockpile Area Seepage at Monitoring Stations MS-MRY-09, MS-MRY-10, MS-MRY-11, MP-MRY-12 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>Total Arsenic</td><td>0.50</td></tr><tr><td>Total Copper</td><td>0.30</td></tr><tr><td>Total Lead</td><td>0.20</td></tr><tr><td>Total Nickel</td><td>0.50</td></tr><tr><td>Total Zinc</td><td>0.50</td></tr><tr><td>Total Suspended Solids</td><td>15.0</td></tr><tr><td>Oil and Grease</td><td>No visible sheen</td></tr><tr><td>Toxicity</td><td>Not acutely toxic</td></tr><tr><td colspan="2">The waste discharge shall have a pH of between 6.0 and 9.5</td></tr></table>	Parameter	Maximum Concentration of Any Grab Sample (mg/L)	Total Arsenic	0.50	Total Copper	0.30	Total Lead	0.20	Total Nickel	0.50	Total Zinc	0.50	Total Suspended Solids	15.0	Oil and Grease	No visible sheen	Toxicity	Not acutely toxic	The waste discharge shall have a pH of between 6.0 and 9.5		Table 5-7
Parameter	Maximum Concentration of Any Grab Sample (mg/L)																						
Total Arsenic	0.50																						
Total Copper	0.30																						
Total Lead	0.20																						
Total Nickel	0.50																						
Total Zinc	0.50																						
Total Suspended Solids	15.0																						
Oil and Grease	No visible sheen																						
Toxicity	Not acutely toxic																						
The waste discharge shall have a pH of between 6.0 and 9.5																							
F	26	All discharge from the Ponds associated with the Run of Mine Ore Stockpile, Ore Stockpile, West and East Sediment Ponds at Monitoring stations MS-06+, MS-07, MS-08 MS-09 and SP-07 shall not exceed the Effluent quality limits of Part F, Item 25	5.3 and Table 5-7																				

Attachment 3

- 3.1. Emergency Response & Spill Contingency Plan, dated March 28, 2013 (Presented in USB Stick)
- 3.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)
- 3.3. Milne Port OPEP, 2013 (Presented in USB Stick)
- 3.4. Transport Canada acknowledgement of OPEP letter (2013)

Attachment 3.2: Emergency Response & Spill Contingency Plan – Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

The Concordance table below shows a list of commitments identified in the Type A Water Licence (2AM-MRY1325), and the locations of the Corresponding Answers within the Emergency Response & Spill Contingency Plan.

Concordance Table with Type A Water Licence (2AM-MRY1325)

Part	Number	Condition	Section Ref.
H	3	The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.	7.1 (secondary containment, includes ref. to applicable design standards)
H	4	The Licensee shall perform weekly inspections of fuel containment facilities for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request.	Weekly inspections of the sites are recorded for Fuel storage and management, water, waste management and camp facilities 2.4 (log book)
H	5	The Licensee shall maintain and service any equipment in designated areas and shall implement special procedures (such as the use of drip pans) to manage waste and contain potential spills.	See Construction Environmental Protection Plan (H349000-1000-07-126-0001)
H	6	If the Licensee provides notification under Part J, Item 13, the Licensee shall submit to the Board, an Addendum to the Emergency Response Plan and the Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.	60 days prior to entering a Care and Maintenance Phase, BIM will provide notice, as per Section J Item 13 of the Type A.
H	7	The Licensee shall keep a copy of the Emergency Response Plan and the Spill Contingency Plan at each site of operations.	2.4
H	8	The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste and prevent and contain spills.	4.5.3.3
H	9	If, during the period of this Licence, an unauthorized Discharge of Waste and/or Effluent occurs, or if such Discharge is foreseeable, the Licensee shall: a. Employ as required, the Emergency Response Plan and the Spill Contingency Plan; b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130 and to the Inspector at (867) 975-4295; and c. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain, clean up and restore the spill site.	4.0 (response actions); Appendix 1 (Emergency Response Plan activation flowchart); 2.7.2 (external communications); Section 8 (reporting);

Part	Number	Condition	Section Ref.
H	10	The Licensee shall, in addition to Part H, Item 9, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.	Section 8 Site will report to NWT/NU Spill Line if the release is near or into a water body.

Attachment 3.4: Transport Canada acknowledgement of OPEP letter (2013)



Transport Canada Transports Canada
Safety and Security Sécurité et sûreté

Transport Canada
Marine Safety and Security
Technical Services
344 Edmonton Street
Winnipeg, Manitoba
R3T 6C9

Date: July 25, 2013

To: Todd Mitchell
Navenco Marine Inc
350 boul. Ford, Suite 130
Chateauguay, Quebec
J6J 4Z2

Subject: Compliance Review of Milne Inlet Oil Pollution Emergency Plan.

Thank you for your cooperation in allowing Transport Canada Marine Safety and Security (TCMSS) the opportunity to conduct a regulatory review of your 2013 Level 1 OHF OPEP submission. Transport Canada has reviewed the revised OPEP and found the additional information provided to be satisfactory and compliant with the regulatory requirements.

Please update the emergency plan annually and after every oil pollution incident and exercise, taking into account changes in regulatory requirements, environmental factors, facility characteristics and policy, and to ensure it reflects the knowledge that is acquired through exercises and actual spill response experience.

TCMSS looks forward to your positive and professional approach to compliance of the regulations and the safety of the Milne Inlet operation.

Yours sincerely,

Jaideep Johar
Manager, Technical Services
Marine Safety
Prairie and Northern Region
(204) 984-8618

Canada 

www.tc.gc.ca

21-0019 (0401-04)

Attachment 4

- 4.1. Waste Management Plan for Construction, Operation and Closure, dated September 2013 (Presented in USB Stick);
- 4.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 4.2: Waste Management Plan for Construction, Operation and Closure – Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

The Concordance table below shows a list of commitments identified in the Type A Water Licence (2AM-MRY1325), and the locations of the Corresponding Answers within the Waste Management Plan for Construction, Operation and Closure.

Concordance Table with Type A Water Licence (2AM-MYR1325) Conditions

Part	Number	Condition	Section
D	18	The Licensee shall submit a Construction Monitoring Report to the Board, within ninety (90) days following the completion of any structure designed to contain, withhold, divert or retain Waters or Wastes. The construction summary report shall be prepared by an Engineer(s) in accordance with Schedule D, Item 1.	Within 90 days the completion of any structure designed to contain, withhold, divert or retain Waters or Wastes
D	20	The Licensee shall prevent any chemicals, fuel or wastes associated with the undertaking from entering any Water body.	Section 4.3.3 Section 4.3.4
F	1	The Board has approved with the issuance of the licence, the Plan entitled "Baffinland Iron Mines Corporation Mary River Project Waste Management Plan for Construction Operation, and Closure", dated April 2013.	N/A
F	4	The Licensee shall provide a revised Waste Management Plan, as required under Part B, Item 15(d), that takes into consideration for this and future revisions under this Licence, the following: a. A Quality Assurance and Quality Control Plan for open burning procedures under this Licence; b. Provide a section and information on the proposed land disposal of dredging waste for the purposes of construction at Milne Port Site and Steensby Port Site, with information on location, amount of materials, method of disposal and any mitigation measures required for the protection of water.	a) Section 8.9 b) Prior to dredging an update of the management plan will be done and provided to the NWB as per the annual reporting requirements
F	6	The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.	Section 4.3.3 Section 4.3.4
F	7	The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an Incinerator System;	Section 4.2 Section 4.5
F	8	The Licensee shall test the bottom ash generated by all Incinerator Systems, by using the acceptable test procedures for analyzing residuals, prior to being disposed of at any Landfill Facility. If the composition of the ash makes it unsuitable for disposal at the Landfill facilities, the Licensee shall direct the Waste to an appropriate facility for disposal. The records of analysis results and volumes of ash shall be maintained and provided to an Inspector upon request.	Section 4.5.3

Part	Number	Condition	Section
F	9	The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood, to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.	Section 4.4.3
F	11	The Licensee shall submit to the Board and the Inspector, thirty (30) days prior to the removal and transfer of waste, a declaration of authorization from any community receiving waste from the project, which clearly states that authorization has been granted for the deposit by the Licensee at the Hamlet's appropriately licensed facilities.	Section 4.3.3 Section 4.3.4
F	12	The Licensee shall provide at least ten (10) days' notice to the Inspector prior to planned Discharges from any Waste Management Facility, Oily Water/Wastewater Treatment Facilities, Sewage Treatment Facilities, and any other relevant facilities associated with the Project. The notice shall include the estimated volume proposed for Discharge and the location and description of the receiving environment.	Section 4.3.4
F	14	The Licensee shall remove any waste generated from temporary and permanent shelters along the tote road and along the railway corridor for treatment at appropriately licenced Waste Management Facilities.	Section 4.3.3
F	30	The Licensee shall maintain records of all Waste backhauled from the Mary River Project and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment. These records shall be made available upon request, to an Inspector or the Board.	Section 4.3.3 Section 4.3.4

Attachment 5

5.1. Hazardous Materials and Hazardous Waste Management Plan, dated September, 2013 (Presented in USB Stick)

5.2. Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

Attachment 5.2: Hazardous Materials and Hazardous Waste Management Plan – Concordance Table with NWB Type A Water Licence (2AM-MRY1325)

The Concordance table below shows a list of commitments identified in the Type A Water Licence (2AM-MRY1325), and the locations of the Corresponding Answers within the Hazardous Materials and Hazardous Waste Management Plan.

Concordance Table with Type A Water Licence (2AM-MYR1325) Conditions

Part	Number	Condition	Section
D	20	The Licensee shall prevent any chemicals, fuel or wastes associated with the undertaking from entering any Water body.	Section 4.4.2
F	5	The Board has approved with the issuance of the licence, the Plan entitled “Baffinland Iron Mines Corporation Mary River Project Hazardous Materials and Hazardous Waste Management Plan”, dated April 22, 2013.	N/A
F	6	The Licensee shall locate areas designated for waste disposal at a minimum distance of thirty-one (31) meters from the ordinary High Water Mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.	Section 4.4.2
F	11	The Licensee shall submit to the Board and the Inspector, thirty (30) days prior to the removal and transfer of waste, a declaration of authorization from any community receiving waste from the project, which clearly states that authorization has been granted for the deposit by the Licensee at the Hamlet's appropriately licensed facilities.	Section 4.5
F	14	The Licensee shall remove any waste generated from temporary and permanent shelters along the tote road and along the railway corridor for treatment at appropriately licenced Waste Management Facilities.	Section 4.4
F	29	The Licensee shall remove from the project site, all hazardous wastes generated through the course of the Construction and Operations Phases, for disposal at an approved Waste Disposal Facility.	Section 4.5
F	30	The Licensee shall maintain records of all Waste backhauled from the Mary River Project and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut, Department of Environment. These records shall be made available upon request, to an Inspector or the Board.	Section 4.5